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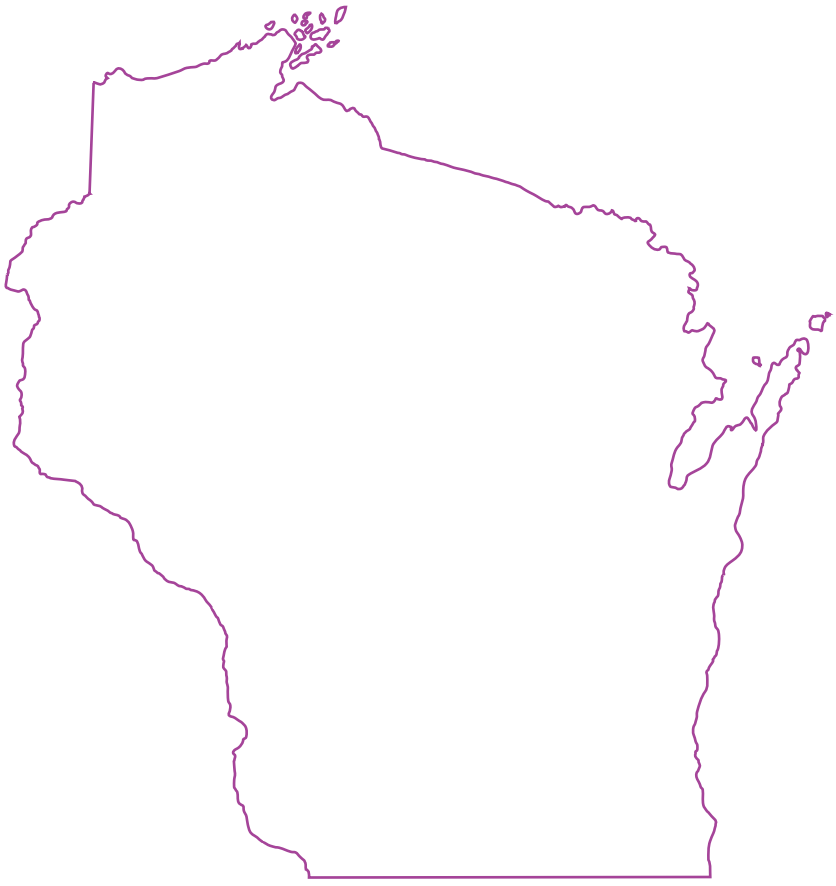
Water Resources Data
Wisconsin
Water Year 2004

Water-Data Report WI-04-1



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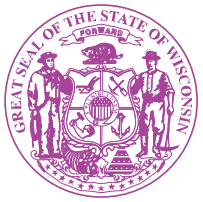

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U. S. DEPARTMENT OF THE INTERIOR
GALE A NORTON, Secretary

U. S. GEOLOGICAL SURVEY
CHARLES G. GROAT, Director

Prepared in cooperation with

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PREFACE

This volume of the annual hydrologic data report of Wisconsin is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Territories. These records of streamflow, ground-water levels, and water quality provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources.

This report is the culmination of a concerted effort by a number of people who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. The author had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines. Most of the data were collected, computed and processed from area field offices. Technicians-in-charge of the field offices are:

Thomas J. Popowski, Rice Lake, northwest
Thomas J. Popowski, Merrill, northeast
Steven A. March, Middleton, southwest

The data were collected, computed, and processed by the following personnel:

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Additional assistance in data processing and preparation of the report was provided by R.B. Bodoh, M.M. Greenwood, G.W. Gill, and H.R. House.

This report was prepared under the general supervision of Charles A. Peters, Center Director; Herbert S. Garn, Asst. Center Director; Peter E. Hughes, Asst. Center Director; and Charles P. Dunning, Asst. Center Director.

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Water-resources data for the 2004 water year for Wisconsin include records of streamflow at gaging stations, partial-record stations, and miscellaneous sites, records of precipitation, and records of chemical, biological, and physical characteristics of surface water. In addition, water levels in observation wells are reported. These data were collected by the U.S. Geological Survey in cooperation with State and local agencies and other Federal agencies in Wisconsin.

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*Wisconsin, *Hydrologic data, *Surface water, *Ground water, *Water quality, Flow rate, Gaging stations, Lakes, Chemical analyses, Sediment, Water levels

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[Letters after station names designate type of data: (c) chemical, (d) discharge, (g) gage height, (m) microbiological, (pr) precipitation, (r) radiochemical, (sd) secchi-depth, (s) sediment, (t) water temperature]

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[Letters after station names designate type of data: (c) chemical, (d) discharge, (g) gage height, (m) microbiological, (pr) precipitation, (r) radiochemical, (sd) secchi-depth, (s) sediment, (t) water temperature]

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[Letters after station names designate type of data: (c) chemical, (d) discharge, (g) gage height, (m) microbiological, (pr) precipitation, (r) radiochemical, (sd) secchi-depth), (s) sediment, (t) water temperature]

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The following continuous-record surface-water discharge stations in Wisconsin have been discontinued. Daily streamflow records were collected and published for the period of record, expressed in water years, shown for each station. Those stations with an asterisk (*) after the station number are currently operated as crest-stage partial-record stations. Some of the discontinued project stations with less than 3 years of record have not been included. Information regarding these stations may be obtained from the District Office at the address given on the back side of the title page of this report.

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Station name	Station number	Drainage area (mi^2)	Period of record
STREAMS TRIBUTARY TO LAKE SUPERIOR			
Tower Avenue at Superior, WI	04024080	0.034	1993–95
Little Balsam Creek at Patzau, WI	04024314	4.89	1976–78
Little Balsam Creek near Patzau, WI	04024315	5.05	1976–78
Little Balsam Creek Tributary near Patzau, WI	04024318	0.60	1976–78
Little Balsam Creek near Foxboro, WI	04024320	6.27	1977–78
Amnicon River near Poplar (Amnicon Falls), WI	04025000	110	1914–16
Bois Brule (Brule) River near Brule, WI	04026000	160	1914–17
Sioux River near Washburn, WI	04026300*	33.9	1965–66
Pine Creek at Moquah, WI	04026347	6.20	1976–78
Pine Creek Tributary at Moquah, WI	04026348	0.48	1976–78
Pine Creek near Moquah, WI	04026349	19.9	1976–78
Bad River near Mellen, WI	04026450*	82.0	1971–75
Bad River at Mellen, WI	04026500	98.3	1948–55
Alder Creek near Upson, WI	04026870	22.2	1972–77
Montreal River near Kimball, WI	04028500	100	1924–26
West Fork Montreal River at Gile, WI	04029000	75.0	1918–26, 1943–47
West Fork Montreal River near Kimball, WI	04029500	86.2	1924–26
STREAMS TRIBUTARY TO LAKE MICHIGAN			
North Branch Pine River at Windsor Dam nr Alvin, WI	04063640*	27.8	1967–68
Pine River near Florence, WI	04064000	510	1914–23
Menominee River, at Mouth, at Marinette, WI	04067651	4,070	1988–90, 1994–95
Peshtigo River at High Falls near Crivitz, WI	04068000	537	1912–57
Pensaukee River near Krakow, WI	04071795	35.8	1993–95
Pensaukee River near Pensaukee, WI	04071858	134	1973-96
Suamico River at Suamico, WI	04072000	60.7	1951–52
Lawrence Creek near Westfield, WI	04072750	13.4	1968–73
Grand River near Kingston, WI	04073050	73.5	1968–75
West Branch White River near Wautoma, WI	04073405	38.9	1964–65
Silver Creek at South Koro Road near Ripon, WI	040734644	36.2	1987-96
Wolf River near White Lake, WI	04075000	485	1935–38
Evergreen Creek near Langlade, WI	04075200*	8.09	1964–73
Wolf River above West Branch Wolf River, WI	04075500	616	1928–62
West Branch Wolf River at Neopit, WI	04076000	93.2	1911–17
West Branch Wolf River near Keshena, WI	04076500	163	1928–32
Wolf River near Shawano, WI	04077400	816	1907–09, 1910–2001
Little Wolf River near Galloway, WI	04079602	22.6	1974–79
Spaulding Creek near Big Falls, WI	04079700*	5.57	1964–66
Little Wolf River at Royalton, WI	04080000	507	1914–70, 1983–85
Tomorrow River near Nelsonville, WI	04080798	44.0	1993–95
Emmons Creek near Rural, WI	04080950	25.1	1968–74
Storm Sewer to Mirror Lake at Waupaca, WI	04080976	0.04	1971–74
Waupaca River near Waupaca, WI	04081000	265	1916–66, 1983–85
Daggets Creek at Butte Des Morts, WI	04081800	10.6	1977
West Branch Fond du Lac River at Fond du Lac, WI	04083000	83.1	1939–54
Parsons Creek, Upstream Site, near Fond du Lac, WI	04083420	5.3	1997–2001
Parsons Creek, Downstream Site, near Fond du Lac, WI	04083425	5.7	1997–2001
East Branch Fond du Lac River near Fond du Lac, WI	04083500	78.4	1939–54
Brothertown Creek at Brothertown, WI	04084200	5.10	1976–77
East River at Midway Road near De Pere, WI	04085109	47.0	1993–95

Station name	Station number	Drainage area (mi^2)	Period of record
Bower Creek, at County MM, near De Pere, WI	04085119	14.8	1991–95,1996–97
STREAMS TRIBUTARY TO LAKE MICHIGAN--CONTINUED			
East Twin River at Mishicot, WI	04085281	110	1972-96
Otter Creek, at Willow Road, near Plymouth, WI	040857005	9.5	1991–2002
Onion River at Hingham, WI	04085813	37.2	1979–80
Onion River near Sheboygan Falls, WI	04085845	94.1	1979–82
Milwaukee River at Kewaskum, WI	04086150	138	1968–81
North Branch Milwaukee River near Random Lake, WI	040863075	51.4	1993–95
Mud Lake Outlet near Decker Corner, WI	04086488	7.36	1983–84
Lincoln Creek, at 47th Street, at Milwaukee, WI	040869415	9.56	1993–1995, 1997[1]
Milwaukee River above North Ave Dam at Milwaukee, WI	04087010	702	1982–84
Menomonee River at Germantown, WI	04087018	19.0	1975–77
Jefferson Park Drainageway at Germantown, WI	04087019	1.82	1976–78
Menomonee River at Butler, WI	04087040	60.6	1975–79
Little Menomonee River near Freistadt, WI	04087050	8.0	1975–79
Noyes Creek at Milwaukee, WI	04087060	1.94	1975–80, 1990
Schoonmaker Creek at Wauwatosa, WI	04087125	1.94	1975–79
Hawley Road Storm Sewer at Milwaukee, WI	04087130	1.83	1975–77
Menomonee River at Milwaukee, WI	04087138	134	1982–84
Kinnickinnic River at Milwaukee, WI	04087160	20.4	1976–83
Milwaukee River at Mouth at Milwaukee, WI	04087170	872	1994–96
ST. CROIX RIVER BASIN			
Namekagon River at Leonards, WI	05331833	126	1996–2001
Namekagon River at Trego, WI	05332000	433	1914–27
Loon Creek near Danbury, WI	05335010	17.6	1970–71
Bashaw Brook near Shell Lake, WI	05335380	26.6	1964–66
Clam River near Webster, WI	05335500	361	1941–42
St. Croix River near Grantsburg, WI	05336000	2,980	1923–70
Wood River near Grantsburg, WI	05339000	185	1939–40
Rice Creek near Balsam Lake, WI	05341375	12.5	1988–89
Balsam Branch at Balsam Lake, WI	05341402	52.8	1988–90
Deer Lake Tributary #1, Upstream Site, near Centuria, WI	05341404	0.04	1998–99,2000–01
Deer Lake Tributary #1, Downstream Site, near Centuria, WI	05341405	0.38	1998–2001
CHIPPEWA RIVER BASIN			
West Fork Chippewa River at Lessards, nr Winter, WI	05355500	474	1912–16
Couderay River near Couderay, WI	05356121	169	1981–83
Flambeau River at Flambeau Flowage (Flambeau Reservoir), WI	05357500	622	1927–61
Flambeau River near Butternut, WI	05358000	688	1914–39
Pine Creek near Oxbo, WI	05358300	38.9	1971–75
Flambeau River at Babbs Island near Winter, WI	05358500	967	1929–75
South Fork Flambeau River near Phillips, WI	05359500	609	1929–75
Price Creek near Phillips, WI	05359600*	16.9	1964–66
Flambeau River near (at) Ladysmith, WI	05360000	1,790	1903–06, 1914–61
Chippewa River near Holcombe, WI	05361000	3,720	1944–49
South Fork Jump River near Ogema, WI	05361500	327	1944–54
Chippewa River at Holcombe, WI	05362500	4,680	1943–49
Fisher River at (near) Holcombe, WI	05363000	81.5	1944–45
O'Neil Creek near Chippewa Falls, WI	05363500	78.1	1944–45
Yellow River near Hannibal, WI	05363700	86.7	1962–63
Yellow River at Cadott, WI	05364000*	364	1943–61
Duncan Creek at Bloomer, WI	05364500*	50.3	1944–52
Duncan Creek Tributary near Tilden, WI	05364850	4.17	1987–89
Duncan Creek at Chippewa Falls, WI	05365000	117	1943–55
Eau Claire River near Augusta, WI	05366000	509	1914–26
Bridge Creek at Augusta, WI	05366300	35.0	1980

Station name	Station number	Drainage area (mi^2)	Period of record
Eau Claire River near Fall Creek, WI	05366500*	760	1943–55
CHIPPEWA RIVER BASIN--CONTINUED			
Chippewa River at (near) Eau Claire, WI	05367000	6,620	1903–09, 1944–54
Red Cedar River at Cty Trunk Highway D at Birchwood, WI	06367102	70.8	2000–01
Sucker Creek at Loch Lamond Blvd near Birchwood, WI	05367154	12.3	2000–01
Hemlock Creek at Cty Trunk Highway F near Mikana, WI	05367190	20.4	2000–01
Red Cedar River at Red Cedar Lake Outlet at Mikana, WI	05367202	151	2000–01
Red Cedar River near Cameron, WI	05367425	442	1966–70
Red Cedar River near Cameron, WI	05367426	443	1971–73
Red Cedar River near Colfax, WI	05367500	1,100	1914–61, 1990
Eau Galle River near Woodville	05369900	39.4	1978–1983, 2001–03
Eau Galle River at Low-Water Bridge at Spring Valley, WI	05369945	47.9	1982–83, 1986–96
French Creek near Spring Valley, WI	05369955	6.03	1981–83
Lousy Creek near Spring Valley, WI	05369970	5.97	1981–83
Lohn Creek near Spring Valley, WI	05369985	2.53	1981–83
Eau Galle River at Elmwood, WI	05370500	91.6	1943–54
BUFFALO RIVER BASIN			
Buffalo River near Tell, WI	05372000	406	1933–51
TREMPEALEAU RIVER BASIN			
Bruce Valley Creek near Pleasantville, WI	05379288	10.1	1980
Elk Creek near Independence, WI	05379305	108	1980
Trempealeau River near Trempealeau, WI	05380000	719	1932–34
BLACK RIVER BASIN			
Black River at Medford, WI	05380806	48.1	1984–87
Poplar River near Owen, WI	05380900*	155	1964–66
LA CROSSE RIVER BASIN			
Little LaCrosse River near Leon, WI	05382500	76.9	1934–61, 1979–81
LaCrosse River near West Salem, WI	05383000	396	1914–70
COON CREEK BASIN			
Spring Coulee Creek near Coon Valley, WI	05386490	9.01	1979–81
Coon Creek at Coon Valley, WI	05386500	77.2	1934–40, 1978–81
Coon Creek near Stoddard, WI	05386999	120	1934–40, 1979–81
BAD AXE RIVER BASIN			
North Fork Bad Axe River near Genoa, WI	05387100*	80.8	1964–66
WISCONSIN RIVER BASIN			
Wisconsin River at Conover, WI	05390180	177	1967–71
Pelican River near Rhinelander, WI	05391226	101	1976–79
Wisconsin River at Whirlpool Rapids, nr Rhinelander, WI	05392000	1,220	1906–61
Bearskin Creek near Harshaw, WI	05392350*	31.1	1964–66
Tomahawk River near Bradley, WI	05392400	422	1915–27, 1929
Tomahawk River at Bradley, WI	05393000	544	1930–73
New Wood River near Merrill, WI	05394000	82.2	1953–61
Rib River at Rib Falls, WI	05396000	303	1925–57
Little Rib River near Wausau, WI	05396500	79.1	1914–16
East Branch Eau Claire River near Antigo, WI	05397000	81.5	1949–55
Eau Claire River near Antigo, WI	05397110	185	1975–81
Bull Junior Creek (Bull Creek Junior) nr Rothschild, WI	05398500	27.4	1944–52
Big Eau Pleine River near Colby, WI	05399000	78.1	1941–54
Hamann Creek near Stratford, WI	05399431	11.3	1977–79
Wisconsin River at Knowlton, WI	05400000	4,530	1921–42
Plover River near Stevens Point, WI	05400500	145	1914–20, 1944–52

Station name	Station number	Drainage area (mi^2)	Period of record
Little Plover River near Arnott, WI	05400600	2.24	1959–75
CHIPPEWA RIVER BASIN--CONTINUED			
Little Plover River at Plover, WI	05400650	19.0	1959–87
Fourmile Creek near Kellner, WI	05400870	75.0	1964–67
Buena Vista Creek near Kellner, WI	05400853	53.1	1964–67
Tenmile Creek Ditch 5 near Bancroft, WI	05401020	9.73	1964–73
Fourteenmile Creek near New Rome, WI	05401100	91.1	1964–79
Wisconsin River near Necedah, WI	05401500	5,990	1903–14, 1944–50
Big Roche a Cri Creek near Hancock, WI	05401510	9.61	1964–67
Big Roche a Cri Creek near Adams, WI	05401535	52.8	1964–78
Yellow River at Sprague, WI	05402500	392	1927–40
Yellow River at Necedah, WI	05403000	491	1941–57
Lemonweir River at New Lisbon, WI	05403500	507	1944–87, 1994
Hulbert Creek near Wisconsin Dells, WI	05403630	11.2	1971–77
Dell Creek near Lake Delton, WI	05403700	44.9	1957–65, 1971–80
Narrows Creek at Loganville, WI	05404200	40.1	1964–66
Wisconsin River at Prairie du Sac, WI	05406000	9,180	1946–54
Black Earth Creek at Cross Plains, WI	05406460	12.8	1985–86, 1990–93
Brewery Creek, Upstream Site, at Cross Plains, WI	05406469	10.1	2000–02
Brewery Creek at Cross Plains, WI	05406470	10.5	1985–86, 1990–2002
Black Earth Creek at Mills Street at Cross Plains, WI	05406476	25.5	1990-95
Garfoot Creek near Cross Plains, WI	05406491	5.39	1985–86, 1990–94, 1994–98
Black Earth Creek at South Valley Road nr Black Earth, WI	05406497	40.6	1990–93
Trout Creek at Confluence with Arneson Creek near Barneveld, WI	05406573	8.37	1976–78
Trout Creek at Twin Parks Dam 8 nr Barneveld, WI	05406574	9.02	1976–79
Trout Creek at County Highway T nr Barneveld, WI	05406575	12.1	1976–78
Trout Creek near Ridgeway, WI	05406577	13.5	1976–79
Knight Hollow Creek near Arena, WI	05406590	7.57	1976–78
Otter Creek near Highland, WI	05406640	16.8	1968–69, 1970–75
Kickapoo River at Ontario, WI	05407500	151	1939, 1973–77
Knapp Creek near Bloomingdale, WI	05408500	8.44	1955–69
West Fork Kickapoo River near Readstown, WI	05409000	106	1939
Kickapoo River at Soldiers Grove, WI	05409500	530	1939
North Fork Nederlo Creek near Gays Mills, WI	05409830	2.21	1968–79
Nederlo Creek near Gays Mills, WI	05409890	9.46	1968–80
Kickapoo River at Gays Mills, WI	05410000	617	1914–34, 1964–77
GRANT RIVER BASIN			
Pigeon Creek near Lancaster, WI	05413400*	6.93	1964–66
Kuenster Creek at Muskellunge Road nr North Andover, WI	054134435	9.59	1982–96
Rattlesnake Creek near North Andover, WI	05413449	42.4	1987–96
Rattlesnake Creek near Beetown, WI	05413451	45.2	1990–91
PLATTE RIVER BASIN			
Little Platte River near Platteville, WI	05414213	79.7	1987–90
GALENA RIVER BASIN			
Sinsinawa River near Hazel Green, WI	05414800	24.9	1987–90
Pats Creek near Belmont, WI	05414894	5.42	1981–82
Madden Branch Tributary near Belmont, WI	05414915	2.83	1981–82
Madden Branch near Meekers Grove, WI	05414920	15.04	1981–82
Galena River at Buncombe, WI	05415000	125	1939–92
Apple River near Shullsburg, WI	05418731	9.34	1981–82
ROCK RIVER BASIN			
West Branch Rock River near Waupun, WI	05423000	40.7	1949–70, 1978–81

Station name	Station number	Drainage area (mi^2)	Period of record
West Branch Rock River at County Trunk Highway D near Waupun, WI	05423100	43.9	1978–81
West Branch Rock River at State Highway 49 nr Waupun,WI	05423510	113	1998–2001
East Branch Rock River near Mayville, WI	05424000	179	1949–70,1998–2001
Rubicon River near Slinger, WI	05424095	7.97	1999–2001
Rubicon River at Pike Lake Outlet near Hartford, WI	054240957	12.31	1999–2001
Johnson Creek near Johnson Creek, WI	05425537	1.13	1978–80
Johnson Creek near Johnson Creek, WI	05425539	13.3	1978–80
Pratt Creek near Juneau, WI	05425928	3.54	1978–80
Rock River at Jefferson, WI	05426031	1,850	1978–94[2]
Whitewater Creek near Whitewater, WI	05426500	11.8	1926–28, 1946–54
Whitewater Creek at Millis Road near Whitewater, WI	05426900	20.6	1978–81
Whitewater Creek at Whitewater, WI	05427000	22.8	1926–28, 1946–54 1978–80
Koshkonong Creek near Rockdale, WI	05427507	150	1977–82
Token Creek near Madison, WI	05427800	24.3	1964–66, 1976–81
Sixmile Creek near Waunakee, WI	05427900	41.1	1976–82
South Fork Pheasant Branch at Highway 14 near Middleton, WI	05427945	5.74	1978–81
Pheasant Branch at Century Avenue at Middleton, WI	05427950	20.8	1977–81
Pheasant Branch at mouth at Middleton, WI	05427952	24.5	1978–81
Willow Creek at Madison, WI	05427970	3.15	1974–83
Olbrich Park Storm Ditch at Madison, WI	05428665	2.57	1976–80
Manitou Way Storm Sewer at Madison, WI	05429040	0.23	1971–77
Nakoma Storm Sewer at Madison, WI	05429050	2.30	1972–77
Lake Wingra Outlet at Madison, WI	05429120	6.00	1971–77
Nine Springs Creek Storm Sewer Tributary at Madison, WI	05429268	0.18	1991–93
Door Creek near Cottage Grove, WI	05429580	15.3	1976–79
Yahara River near Edgerton, WI	05430000	430	1917–18
Oregon Branch at Oregon, WI	05430030	9.93	1979–81
Badfish Creek at County Highway A near Stoughton, WI	05430095	40.9	1956–66, 1986–88
Badfish Creek near Stoughton, WI	05430100	41.3	1956–66
Delavan Lake Trib at South Shore Drive at Delavan, WI	05431018	7.66	1985–86, 1989–91
Jackson Creek at Petrie Road near Elkhorn, WI	05431014	8.96	1984–95
PECATONICA RIVER BASIN			
Livingston Branch Pecatonica River nr Livingston, WI	05432055	16.4	1987–91
Yellowstone River near Blanchardville, WI	05433500*	28.5	1954–65, 1978–79
Pecatonica River at Dill, WI	05434000	944	1914–19
Steiner Branch near Waldwick, WI	05433510	5.9	1978–79
Skinner Creek at Skinner Hollow Road near Monroe, WI	05434235	32.6	1978–81
Skinner Creek at Klondyke Road near Monroe, WI	05434240	35.0	1978–81
SUGAR RIVER BASIN			
West Branch Sugar River near Mount Vernon, WI	05435980	32.7	1979–80
Mount Vernon Creek near Mount Vernon, WI	05436000	16.4	1954–65, 1976–80
ILLINOIS RIVER BASIN			
Fox River, at Watertown Road, near Waukesha	05543800	77.4	1992-2000
White River near Burlington, WI	05545300	110	1964–66, 1973–82
Unnamed Lauderdale Lakes Trib No. 2 near Lauderdale, WI	05544793	0.19	1999–2001
Birches Creek at Lackey Lane near Lake Geneva, WI	05545133	2.07	1998–2001

[1] No winter record in water year 1997
[2] No winter record in water years 1993 and 1994

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS

The following daily- or continuous-record surface-water-quality stations were discontinued prior to the 2004 water year. Discontinued stations with less than 1 year of record or where data collection frequency was less than daily are not included. Some of the stations in the list are still in operation for purposes other than collection of daily or continuous water-quality data. Information regarding these stations may be obtained from the District Office at the address given on the back of the title page of this report.

[Type of record: T (water tempeature), SC (specific conductance,), DO (dissolved-oxygen concentration), PH (pH), SED (daily sediment discharge), C (daily discharge of one or more chemical constituents)]

Station name	Station number	Drainage area (mi^2)	Type of record	Period of record
STREAMS TRIBUTARY TO LAKE SUPERIOR				
Little Balsam Creek at Patzau, WI	04024314	5.00	SED	1976–78
Little Balsam Creek near Patzau, WI	04024315	4.57	SED	1976–78
Little Balsam Creek Tributary near Patzau, WI	04024318	0.64	SED	1976–78
Little Balsam Creek near Foxboro, WI	04024320	6.27	SED	1977–78
Nemadji River near South Superior, WI	04024430	420	SED	1974–78
North Fish Creek near Benoit, WI	04026346	36	SED	1990–91
Pine Creek at Moquah, WI	04026347	5.90	SED	1976–78
Pine Creek Tributary at Moquah, WI	04026348	0.57	SED	1976–78
Pine Creek near Moquah, WI	04026349	21.5	SED	1976–78
North Fish Creek near Moquah, WI	040263491	65.4	SED	1990–91
North Fish Creek near Ashland, WI	04026350	74.4	SED	1990–91
Bad River near Odanah, WI	04027000	597	T,SC	1976–78
White River near Mason, WI	04027080	--	T	1970–72
Sadjak Springs Trib to White River near Mason, WI	04027086	1.00	T	1970–72
Bad River at Odanah, WI	04027595	970	T,SC	1978–81
STREAMS TRIBUTARY TO LAKE MICHIGAN				
Escanaba River at mouth at Escanaba, MI	040590345	928	SED	1988–90
Menominee River near McAllister, WI	04067500	3,930	T,SC	1979–80
			SED	1988–90
Menominee River at mouth at Marinette, WI	04067651	4,070	SED	1988–90
Peshtigo River at Peshtigo, WI	04069500	1,080	T	1989–90
			SED	1988–90
Peshtigo River at mouth near Peshtigo, WI	04069530	1,100	SED	1988–90
Oconto River near Oconto, WI	04071765	966	SED	1989–90
Oconto River at mouth at Oconto, WI	04071775	982	SED	1989–90
Duck Creek near Howard, WI	04072150	108	C	1992
Parsons Creek, Upstream Site, near Fond du Lac, WI	04083420	5.3	T	1998–2001
			C	1997–99,2000–01
Parsons Creek, Middle Site, near Fond du Lac, WI	04083423	5.6	C	1997–99,2000–01
Parsons Creek, Downstream Site, near Fond du Lac, WI	04083425	5.7	T	1997–2001
			C	1997–99,2000–01
Fox River at Appleton, WI	04084445	5,950	T	1987–90
			SED	1986–90
Fox River at State Highway 55 at Kaukauna, WI	04084475	5,980	SED	1989–90
Fox River at Wrightstown, WI	04085000	6,050	T,SC	1975–81
Fox River at Little Rapids, WI	04085054	6,100	SED	1989–90
Fox River at De Pere, WI	04085059	6,110	SED	1989–90
Bower Creek at Sunnyview Road near De Pere, WI	04085118	4.82	SED,C	1985–86
Bower Creek at Highway MM near DePete, WI	04085119	14.8	T,C	1991-97[2]
Fox River at mouth at Green Bay, WI	04085139	6,330	T,SC,DO,PH	1989–90
Manitowoc River at Manitowoc, WI	04085427	526	T,SC	1979–80
Cedar Lake near Kiel, WI	04085500	1.43	T	1974–77
Otter Creek #3A at County Hgihway J near Plymouth, WI	0408570045	9.10	C	1994–97[2]
Otter Creek at Laack Farm near Plymouth, WI	0408570047	9.16	C	1994–97[2]
Otter Creek, at Willow Road, near Plymouth, WI	040857005	9.5	T	1991–2002
			C, SED	1991–97,1999–2002
			DO	1991–97
Onion River at Hingham, WI	04085813	37.2	T,SC,SED	1979–80
			C	1980

Station name	Station number	Drainage area (mi^2)	Type of record	Period of record
STREAMS TRIBUTARY TO LAKE MICHIGAN--CONTINUED				
Onion River near Sheboygan Falls, WI	04085845	94.1	T,SC,SED	1979–80
			C	1980
Parnell Creek near Dundee, WI	04086175	9.35	T	1997
Milwaukee River near Cedarburg, WI	04086600	607	SED	1982–84
Lincoln Creek at 47th Street at Milwaukee, WI	040869415	9.56	T	1993-97[2]
			DO	1994-97[2]
Milwaukee River at Milwaukee, WI	04087000	696	SED	1982–84
Milwaukee River above North Avenue Dam at Milwaukee, WI	04087010	702	SED	1982–84
Menomonee River at Germantown, WI	04087018	19	SED	1975–77
Jefferson Park Drain at Germantown, WI	04087019	1.82	SED	1977–78
Menomonee River at Menomonee Falls, WI	04087030	34.7	SED	1975–77, 1982–84
Menomonee River at Butler, WI	04087040	60.64	SED	1975–77
Little Menomonee River near Freistadt, WI	04087050	8.0	SED	1975–77
Noyes Creek at Milwaukee, WI	04087060	1.94	SED	1975–77
Little Menomonee River at Milwaukee, WI	04087070	19.7	SED	1975–77
Underwood Creek at Wauwatosa, WI	04087088	18.2	SED	1975–77
Honey Creek at Wauwatosa, WI	04087119	10.3	SED	1975–77
Menomonee River at Wauwatosa, WI	04087120	123	SED	1975–77, 1982–84
Schoonmaker Creek at Wauwatosa, WI	04087125	1.94	SED	1975–77
Hawley Road Storm Sewer at Wauwatosa, WI	04087130	1.83	SED	1975–77
Menomonee River at Milwaukee, WI	04087138	134	SED	1983–84
Menomonee River at Falk Corp at Milwaukee, WI	04087140	133.82	SED	1975–77, 1982
Kinnickinnic River at South 11th Street at Milwaukee, WI	04087159	20.2	SED	1983–84
ST. CROIX RIVER BASIN				
Round Lake near Gordon, WI	461342091561002	--	T	1981–85
Namekagon River at Leonards, WI	05331833	126	T,SC	1996–2001
St. Croix River at St. Croix Falls, WI	05340500	6,240	SC	1975–81
			SED	1982
Rice Creek near Balsam Lake, WI	05341375	12.5	C	1988–89
Balsam Branch at Balsam Lake, WI	05341402	52.8	C	1988–89
Deer Lake Tributary #1, Downstream Site, near Centuria, WI	05341405	0.38	T	1998,1999–2001
CHIPPEWA RIVER BASIN				
Bear River near Manitowish Waters, WI	05357335	81.3	SED,C	1991–94
Duncan Creek Tributary near Tilden, WI	05364850	4.17	T,C,SED	1987–89
			DO	1987–88[1]
Red Cedar River at Cty Trunk Highway D at Birchwood, WI	05367102	70.8	SED,C	2000–01
Sucker Creek at Loch Lamond Blvd near Birchwood, WI	05367154	12.3	SED,C	2000–01
Hemlock Creek near Mikana, WI	05367190	20.4	SED,C	2000–01
Red Cedar River at Mikana, WI	05367202	151	C	2000–01
Red Cedar River near Colfax, WI	05367500	1,090	C	1959, 1990
Hay River at Wheeler, WI	05368000	418	C	1959, 1990
Chippewa River at Durand, WI	05369500	9,010	T,SC	1975–81[2]
			SED	1974–79
Eau Galle River near Woodville, WI	05369900	39.4	T,SC	1978–83[2]
Eau Galle River at Low-Water Bridge at Spring Valley, WI	05369945	47.9	T	1982–83, 1987–93
			SC	1983
Eau Galle River at Spring Valley, WI	05370000	64.1	T,SC	1978–90
WAUMANDEE CREEK BASIN				
Joos Valley Creek near Fountain City, WI	05378183	5.89	DO	1990-92
Eagle Creek at County Highway G near Fountain City,WI	05378185	14.3	DO	1990-92
TREMPEALEAU RIVER BASIN				
Bruce Valley Creek near Pleasantville, WI	05379288	10.1	T,SC,SED,C	1980
Elk Creek near Independence, WI	05379305	108	T,SC,SED,C	1980
BLACK RIVER BASIN				
Black River near Galesville, WI	05382000	2,080	SED	1976–79

Station name	Station number	Drainage area (mi^2)	Type of record	Period of record
WISCONSIN RIVER BASIN				
Lake Clara near Tomahawk, WI	453100089343002	0.46	T	1982–86
Little Rock Lake near Woodruff, WI	455946089415704	--	T	1984–87
Prairie River near Merrill, WI	05394500	184	T	1998–2003
Buena Vista Creek near Kellner, WI	05400853	53.1	T	1965–67
Tenmile Creek Ditch 5 near Bancroft, WI	05401020	9.73	T	1965–72
Dell Creek near Lake Delton, WI	05403700	44.9	T,SED	1958–65
Black Earth Creek at Cross Plains, WI	05406460	12.8	C,SED	1985–86
			T,DO	1985–86, 1990–95
Brewery Creek, Upstream Site, at Cross Plains	05406469	10.1	T	2000–02
Brewery Creek at Cross Plains, WI	05406470	10.5	T	1985–86, 1990–98, 2000–02
			SED	1985–86, 1990–98
			C	1985–86, 1990–98
			DO	1990–91
Black Earth Creek at Mills Street at Cross Plains, WI	05406476	25.5	T,DO	1990–95
Garfoot Creek near Cross Plains, WI	05406491	5.39	SED	1985–86, 1992–98
			DO	1984–85, 1990–98
			T,C	1985–86, 1990–98
Black Earth Creek at South Valley Rd near Black Earth, WI	05406497	40.6	T,DO	1990–98
Black Earth Creek at Black Earth, WI	05406500	45.6	T	1954–65, 1985–86
			DO	1986[1]
			SED	1956–65, 1985–86
			C	1985–86
Trout Creek Confluence Arneson Creek near Barneveld, WI	05406573	8.37	T,SC	1976–79
Trout Creek at Twin Parks Dam 8 near Barneveld, WI	05406574	9.02	SED	1976–79
Trout Creek at CTH T near Barneveld, WI	05406575	12.1	T,SED	1976–78
Trout Creek near Ridgeway, WI	05406577	13.5	T,SED	1976–79
Wisconsin River at Muscoda, WI	05407000	10,400	T,SC	1975–80[1], 1981
			SED	1975–79
Kickapoo River at Hwy 33 at Ontario, WI	05407470	117	T,SED	1973
Kickapoo River at Ontario, WI	05407500	150	T	1974–77
			SED	1973–77
Kickapoo River near Rockton, WI	05407920	260	T,SED	1972–77
Kickapoo River at LaFarge, WI	05408000	266	T,SC	1971–77
			SED	1972–77
North Fork Nederlo Creek at mouth near Gays Mills, WI	05409842	2.31	T	1970[1], 1974–78
South Fork Nederlo Creek near Gays Mills, WI	05409860	4.11	T	1970[1], 1974–78
Nederlo Creek at Utica Town Hall near Gays Mills, WI	05409870	6.70	T	1968–78
GRANT RIVER BASIN				
Kuenster Creek at Muskellunge Road near North Andover, WI	054134435	9.59	T,DO	1992-96
			C	1993-96
Rattlesnake Creek near North Andover, WI	05413449	42.4	T,DO	1987-96
			C	1992-94
PLATTE RIVER BASIN				
Little Platte River near Platteville, WI	05414213	79.7	T	1987–90
GALENA RIVER BASIN				
			DO	1987–90[1]
Sinsinawa River near Hazel Green, WI	05414800	24.9	T	1987–90
			DO	1987–90[1]
Pats Creek near Belmont, WI	05414894	5.42	T,SC,C	1981–82
			DO	1982[1]
Madden Branch Tributary near Belmont, WI	05414915	2.83	T,SC,C	1981–82
			DO	1981[1]
Madden Branch near Meekers Grove, WI	05414920	15.06	T,SC,C	1981–82
			DO	1981–82[1]
			PH	1982[1]
Apple River near Shullsburg, WI	05418731	9.34	T,SC,C	1981–82
			DO	1981[1]

Station name	Station number	Drainage area (mi^2)	Type of record	Period of record
ROCK RIVER BASIN				
Rock River at Horicon, Wi	05424057	456	C	1998–2003
Dead Creek near Hustisford, WI	05424075	26.1	C	2002–03
Rock River at Hustisford, WI	05424082	511	C	1999–2003
Rubicon River near Slinger, WI	05424095	7.79	C	1998–2000
Rubicon River at Pike Lake Outlet near Hartford, WI	054240957	12.31	C	1998–2000
Crawfish River at Milford, WI	05426000	762	SED	1980–82
Rock River at Indianford, WI	05427570	2,630	T	1975–78
			SC,DO,PH	1976–78
South Fork Pheasant Branch at Hwy 14 near Middleton, WI	05427945	5.74	SED	1978–81
Pheasant Branch at Centruy Avenue at Middleton, WI	05427950	20.8	SED	1978–81
Pheasant Branch at mouth at Middleton, WI	05427952	24.5	SED	1978–81
Willow Creek at Madison, WI	05427970	3.15	SED	1973–84
Rock River at Afton, WI	05430500	3,340	T	1955–83
Jackson Creek at Petrie Road near Elkhorn, WI	05431014	8.96	C,SED	1984–85
				1993–95
Delavan Lake Trib at South Shore Drive at Delavan, WI	05431018	9.99	SED,C	1984–85, 1990–91
PECATIONICA RIVER BASIN				
Livingston Branch Pecatonica River near Livingston, WI	05432055	16.4	T	1987–91
			DO	1987–91[1]
Yellowstone River near Blanchardville, WI	05433500	28.5	T	1954–60
			SED	1958–60, 1978–79
Steiner Branch near Waldwick, WI	05433510	5.90	T,SC,SED,C	1978–79
Pecatonica River at Martintown, WI	05434500	1,034	SED	1980–82
SUGAR RIVER BASIN				
Mount Vernon Creek near Mount Vernon, WI	05436000	16.4	T	1954–60
			SED	1956–60
Sugar River near Brodhead, WI	05436500	523	SED	1978–86
ILLINOIS RIVER BASIN				
Birches Creek at Lackey Lane near Lake Geneva, WI	05545133	2.07	T	1998–2000
			SED,C	1997–1999
Powers Lake Tributary at Powers Lake, WI	05548163	1.83	C	1987

[1] Seasonal record, non-freezing periods
[2] Numerous periods of missing record

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with local, State and Federal agencies, obtains a large amount of data pertaining to the water resources of Wisconsin each year. These data, accumulated during many years, constitute a valuable data base for developing an improved understanding of the water resources of the state. To make these data readily available to interested parties outside the Geological Survey, the data are published annually in this report series entitled "Water Resources Data - Wisconsin." Lake stage and in-lake water-quality data previously published in this series are now published annually in a report series "Water-Quality and Lake-Stage Data for Wisconsin Lakes." This Open-File Report series began in 1994; 2004 water year data for lakes are published in OFR 2005-1147.

Water-resources data for Wisconsin for the 2004 water year includes records of streamflow at gaging stations, partial-record stations, and miscellaneous sites; stage and contents of lakes and reservoirs; chemical, physical, and biological characteristics of surface and ground water; and water levels in observation wells. Records from several stations in bordering states are also included. This report contains discharge records from 188 gaging stations and peak stage and discharge from 82 crest-stage stations; stage for 9 lakes and contents for 24 reservoirs; water-quality data from 59 streams and from 3 lakes; precipitation from 23 sites; and water-level records from 107 observation wells. Additional water data were collected at various sites not involved in the systematic data-collection program, and are published in this report as miscellaneous measurements.

This series of annual reports for Wisconsin began in the 1961 water year with streamflow data, the 1964 water year with water-quality data, and the 1971 water year with ground-water data. Beginning with the 1975 water year, streamflow, water-quality, and ground-water data for each state were published in present format. These annual reports are for sale, in paper copy or microfiche, by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 2216l. Recent versions of these reports can be found online. Visit : http:/wi.water.usgs.gov/pubs and then click on "online publications".

Prior to introduction of this series and for several water years concurrent with it, water-resources data for Wisconsin were published in U.S. Geological Survey Water-Supply Papers. Records of stream discharges and of water levels in lakes and reservoirs were published annually through 1960 and then for the 5-year periods 1961-65 and 1966-70 in the series "Surface-Water Supply of the United States". Chemical-quality, water-temperature, and suspended-sediment data were published annually, from 1941 to 1970, in the series "Quality of Surface Waters of the United States." Records of ground-water levels were published annually from 1935 to 1974, in the series "Ground-Water Levels in the United States." The above mentioned Water-Supply Papers may be consulted in the libraries of the principal cities of the United States and may be purchased from U.S. Geological Survey, Box 25425, Federal Center, Denver, CO 80225.

Publications similar to this report are published annually by the Geological Survey for all states. These official Survey reports have an identification number consisting of the two-letter state abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report WI-04-1." For archiving and general distribution, the reports for 1971-74 water years also are identified as water-data reports. These water-data reports are for sale in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161.

Additional information, including current prices for ordering specific reports, may be obtained from the District Chief at the address given on the back of the title page, or by telephone (608)828-9901.

Water-resources data, including stage and discharge data at most streamflow-gaging stations, water levels in selected wells, and some water-quality data, are available through the World Wide Web on the Internet. Current and historical data provided in water-data reports are available. The Universal Resource Locator (URL) to the Wisconsin District's home page is: **http:/wi.water.usgs.gov/.** Information on all U.S. Geological Survey reports and products (including maps, images, and computerized data) is available by calling **1-888-ASK-USGS**. Additional earth science information is available by accessing the U.S. Geological Survey Home Page at **http://www.usgs.gov**.

COOPERATION

The U.S. Geological Survey and the State of Wisconsin have worked under cooperative agreements since 1913 collecting streamflow data, since 1955 collecting water-quality data, and since 1964 collecting ground-water level data. Agencies that worked cooperatively with the Survey during this year collecting data are:

Bad River Band of Lake Superior Chippewa Indians
Bayfield County
Black River Falls Municipal Utilities
City of Barron
City of Beaver Dam
City of Delafield
City of Fond du Lac
City of Hillsboro
City of Madison
City of Middleton
City of Muskego
City of Peshtigo
City of Sparta
City of Thorp
City of Waupun

Dane County Department of Planning and Development
Dane County Department of Public Works
Dane County Regional Planning Commission:
    City of Madison
    City of Middleton
    Village of Westport
Department of Agriculture, Trade and Consumer Protection
Federal Energy Regulatory Commission Licensees:
    Appleton Papers
    Dairyland Power Cooperative
    Excel Energy (NSP)
    Stora Enso
    Wisconsin Electric Power Company
    Wisconsin Public Service Corporation
    Wisconsin Valley Improvement Company
Fontana/Walworth Water Pollution Control Commission
Geneva Lake Environmental Agency
Green Bay Metropolitan Sewerage District
Green Lake Sanitary District
Illinois Department of Natural Resources
Kickapoo Valley Reserve
Lac du Flambeau Band of Lake Superior Chippewa
Little Muskego Lake District
Little St. Germain Lake District
Madison Metropolitan Sewerage District
Menominee Indian Tribe of Wisconsin
Milwaukee County
Oneida Indian Tribe of Wisconsin
Price County
Rock County Public Works Department
Sokaogon Chippewa Community, Mole Lake Band
Southeastern Wisconsin Regional Planning Commission:
    Milwaukee Metropolitan Sewerage District
    Waukesha County
    City of Racine
    Kenosha Water Utility
Stockbridge/Munsee Indian Tribe
The University of Wisconsin-Extension, Geological and Natural History Survey
Town of Delavan
U.S. Army Corps of Engineers
U.S. Department of Agriculture, Dairy Forage Research Center
Village of Wittenberg
Walworth County Metropolitan Sewerage District
Wisconsin Department of Natural Resources
Wisconsin Department of Transportation
Wisconsin Historical Society, Wade House Historic Site

The following organizations aided in collecting streamflow records: Appleton Papers, Excel Energy (NSP) and Wisconsin Valley Improvement Co. Organizations that provided data are acknowledged in station descriptions.

SUMMARY OF HYDROLOGIC CONDITIONS

Streamflow

The statewide average precipitation for the 2004 water year was 34.65 inches, which was 2.01 inches above the normal annual precipitation of 32.64 inches for water years 1971-2000. Average precipitation values affecting streamflow conditions ranged from 95 percent in northwest and north central Wisconsin to 122 percent in southwest Wisconsin with a statewide average of 106 percent. February and March were wet months and May was extremely wet with many locations reporting record rainfall for the month. Sites that reported record rainfall for the month included Baraboo (9.88”), Beaver Dam (10.55”), Fond du Lac (13.47”), Madison (10.84”), Monroe (8.57”), Montello (11.83”), Portage (10.12”), Prairie du Sac (8.63”), Racine (13.55”), Reedsburg (11.31”), Sheboygan (10.94”), Watertown (9.70”), and West Bend (10.75”) (National Weather Service, 2004 web citation). These totals are in the range of 2.5 to 3.3 times normal. Central and southern Wisconsin followed this exceptionally wet May with a wet June, although not nearly so extreme. The June precipitation totals for central and southern Wisconsin were about 1.3 to 1.8 of normal. By the middle of August and into September it began to get dry (summary tables provided by Ed Hopkins, State Climatology Office, University of Wisconsin, Madison, written commun., 2004).

The record setting May rainfall led to extensive flooding in the southern half of the state during May and June which was the dominant hydrologic event of water year 2004. Over 20 stations were near or over flood stage during this period. On June 16th, Governor Doyle asked President Bush to delcare 12 counties in southern Wisconsin major diaster areas (Wisconsin State Journal, 6/17/04) and on June 19th the President complied (Wisconsin State Journal, 6/29/04). By the end of July, the counties eligible for Federal disaster aid had expanded to 44 counties and $8.6 million in federal disaster assistance had been approved (FEMA, 7/30/04).

Runoff for rivers in the state ranged from 69 percent of the average annual runoff (1985-2004) at the Nemadji River station near Superior in the far northwest part of the state to 205 percent of the average annual runoff (1916-1924 and 1950-2004) at the Sheboygan River station near Sheboygan in the east central part of the state. Runoff in the 2004 water year for stations with drainage areas greater than 150 square miles and at least 20 years of record is shown in figure 1. In certain parts of the state there is an insufficient density of gages meeting the drainage area and duration of record criterion to draw the runoff areas with sufficient precision. This can be seen in the southeast part of the state where there are adjacent runoff areas that are missing an intermediate runoff category between them.

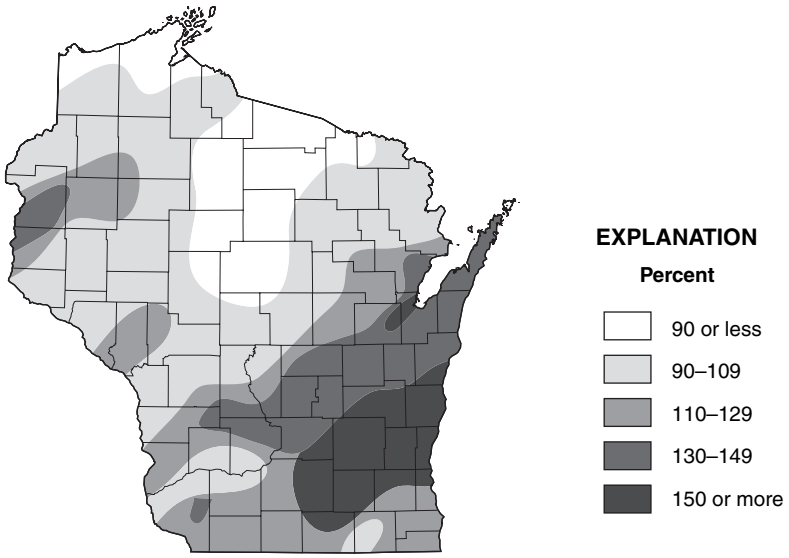

Figure 1. 2004 runoff as percentage of long-term average runoff.

Annual discharges for the individual water years (1916-2004) at the Oconto River near Gillett, Jump River at Sheldon, and Sugar River near Brodhead are shown in Figure 2. Comparisons between the monthly and annual discharges for the 2004 water year and an 89-year period at the same three gaging stations are shown in Figure 3.

Six stations had annual minimum 7-consecutive day average flows (Q7) that equaled or exceeded their 10-year recurrence intervals. Three of them were the lowest on record, and were all clustered inthe north central part of the state. The Q7 values, the date of occurrence and the recurrence intervals for these stations are listed in table 1.

Table 1. Stations where the lowest mean discharge for 7 consecutive days (Q7) had recurrence intervals of 10 or more years

Station number	Station name	Years of Record	Date	Q7 (cfs)	Approximate recurrence interval (years)
04087159	Kinnickinnic River - Milwaukee	29	Jan. 27	3.6	12
04087240	Root River at Racine	42	Oct. 9	2.1	12
05357225	Stevenson Cr. near Boulder Jct.	13	Oct. 18	0.69*	30
05357245	Trout River near Boulder Jct.	13	Aug. 30	10*	20
05357335	Bear River - Manitowish Waters	14	Oct. 9	2.8*	30
055401050	Tenmile Creek near Nekoosa	28	Feb. 8	15	10

* indicates the lowest Q7 on record

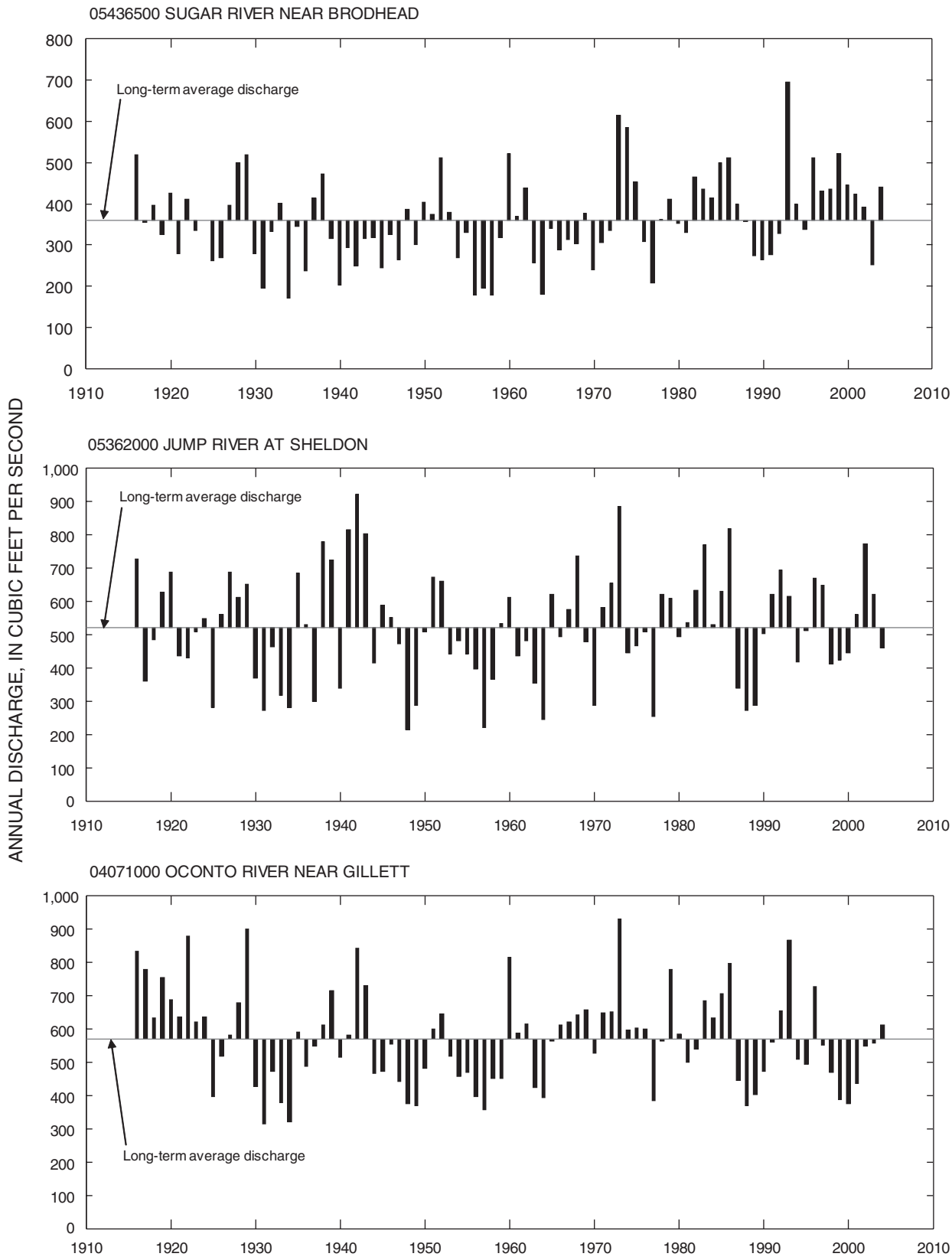

Figure 2. Comparison of annual discharge at representative gaging stations to their long-term average discharge for water years 1916–2004.

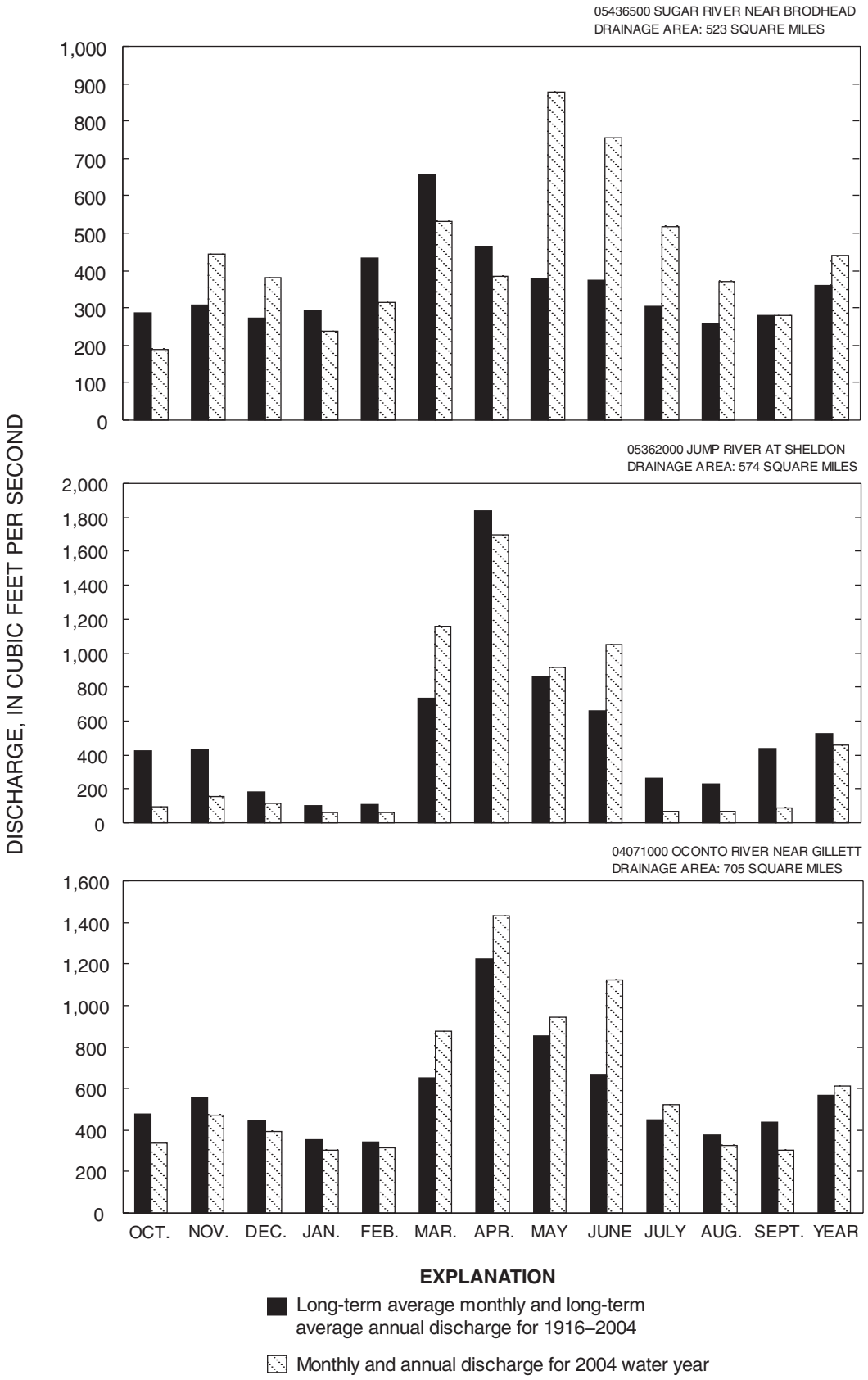

Figure 3. Comparison of discharge at representative gaging stations during the 2004 water year with discharge for water years 1916–2004.

Water year 2004 had major flooding in the southern half of the state during May and June. Of the continuously gaged rivers in the state, 5 had record flood discharges. Stations that recorded a peak discharge that equaled or exceeded the 10-year recurrence interval are listed in table 2.

Table 2. Stations that recorded a peak discharge that equaled or exceeded the 10-year recurrence interval during water year 2004.

Station number	Station name	Drainage area (mi^2)	Date	Instantaneous peak discharge (ft^3/s)	Peak of record (y/n)	Approximate recurrence interval (years)
04069500	Peshtigo River at Peshtigo	1080	Mar. 30	8110	n	35
04071700	N. Br. Little River nr Coleman	21.4	Mar. 28	656	y	75
04073468	Green Lake Inlet nr Gree Lake	53.5	June 13	682*	n	40
04073500	Fox River at Berlin	1340	June 18	5680	n	15
0407809265	Middle Br. Embarrass River nr Wittenberg	76.3	Mar. 29	878	n	20
04084445	Fox River at Appleton	5950	June 17	16,600*	n	15
04086000	Sheboygan River at Sheboygan	418	June 12	6860	n	20
04086600	Milwaukee River nr Cedarburg	607	May 23	5720	y	40
04087233	Root River Canal nr Franklin	57	May 23	1430	n	45
04087257	Pike River nr Racine	38.5	May 23	1650	y	50
05356000	Chippewa River nr Winter	790	Apr. 21	6050	n	15
05357225	Stevenson Cr. nr Boulder Jct.	7.96	June 27	35	n	40
05364000	Yellow River at Cadott	364	Mar. 27	11,700	n	20
053674464	Yellow River at Barron	153	Mar. 28	2660	y	35
05371800	Buffalo River Tributary nr Osseo	1.44	June 9	130	n	15
05382325	La Crosse River at Sparta	167	June 17	2260	y	100
05397500	Eau Claire River at Kelly	375	Mar. 29	5820	n	10
05401050	Tenmile Creek nr Nekoosa	73.3	June 18	420	n	30
05425500	Rock River at Watertown	969	June12	4730	n	35
05425912	Beaverdam River at Beaver Dam	157	June 14	1140	y	100
05426250	Bark River nr Rome	122	May 23	408	n	15
05427570	Rock River at Indianford	2630	June 4	9200	n	15
05429500	Yarhara River at McFarland	327	May 23	657	n	15
05430175	Yahara River nr Fulton	518	May 23	2670	n	20
05545200	White River Tributary nr Burlington	2.42	June 17	310	n	45

* mean daily Q

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Water Quality

Suspended-sediment yields from four watersheds in southern Wisconsin in water year 2004 ranged from 103 to 261 percent of normal, as indicated by loads measured at relatively long-term monitoring sites on these watersheds. Sediment yields at Grant River in southwestern Wisconsin were 261 percent of normal. The high yields at Grant River were associated with three large storm-runoff events in May and June.

Sediment yields during runoff from these three storms accounted for 82 percent of the total yield in 2004. Yahara River at Windsor in south-central Wisconsin experienced a 187 percent of normal sediment yield, and corresponding annual discharge, which was 110 percent of normal. Sediment yield at Jackson Creek Tributary near Elkhorn in southeastern Wisconsin was 103 percent of normal and discharge was 110 percent of normal. At Green Lake Inlet (Silver Creek) near Green Lake sediment yield was 222 percent of normal, whereas, discharge was 205 percent of normal.

Phosphorus yields in water year 2004 from three watershed in southern Wisconsin, on which there are long-term monitoring sites, generally were greater than normal. Yields at these sites ranged from 97 to 184 percent of normal. The phosphorus yield for Yahara River at Windsor was 137 percent of normal, the yield for Jackson Creek Tributary was 97 percent of normal, and the yield for Green Lake Inlet was 184 percent of normal.

Ground-Water Levels

In general, shallow ground-water levels during the first 6 months of the 2004 water year (October through March) were below normal to normal for most of the wells in the State. During this time some wells in Waukesha and Manitowoc Counties experienced record low levels for their period of record. The general deviations from normal levels appear to be consistent with precipitation patterns over the period. Specifically, water levels were already generally below normal following less than average rainfall the last three months of water year 2003, followed by generally less than average rainfall in October. Relatively normal precipitation occurred November through January and water levels slowly recovered. For the second half of the water year, shallow ground-water levels were generally normal to above normal for most of the wells in the State. This is consistent with generally above normal precipitation, particularly during February, March, and a very wet May statewide. An exception to these trends is parts of northwestern Wisconsin (Washburn County, for example) where shallow ground-water levels were generally normal for the entire year.

DOWNSTREAM ORDER AND STATION NUMBER

Since October 1, 1950, hydrologic-station records in USGS reports have been listed in order of downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary entering between two main-stream stations is listed between those stations. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is located with respect to the stream to which it is immediately tributary is indicated by an indention in that list of stations in the front of this report. Each indentation represents one rank. This downstream order and system of indentation indicates which stations are on tributaries between any two stations and the rank of the tributary on which each station is located.

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These station numbers are in the same downstream order used in this report. In assigning a station number, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list composed of both types of stations. Gaps are consecutive. The complete 8-digit (or 10-digit) number for each station such as 09004100, which appears just to the left of the station name, includes a 2-digit part number “09” plus the 6-digit (or 8-digit) downstream order number “004100.” In areas of high station density, an additional two digits may be added to the station identification number to yield a 10-digit number. The stations are numbered in downstream order as described above between stations of consecutive 8-digit numbers.

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

The USGS well and miscellaneous site-numbering system is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, and the next 7 digits denote degrees, minutes, and seconds of longitude; the last 2 digits are a sequential number for wells within a 1-second grid. In the event that the latitude-longitude coordinates for a well and miscellaneous site are the same, a sequential number such as “01,” “02,” and so forth, would be assigned as one would for wells (see fig. 6).

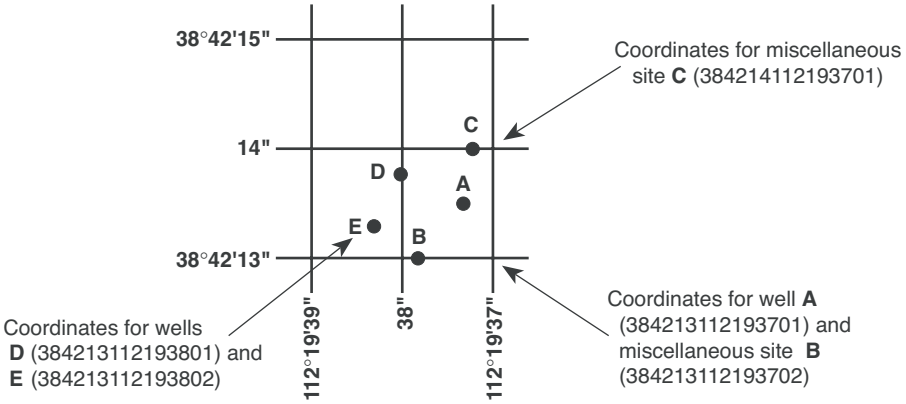


Figure 6. System for numbering wells and miscellaneous sites (latitude and longitude).

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Benchmark Network is a network of 61 sites in small drainage basins in 39 States that was established in 1963 to provide consistent streamflow data representative of undeveloped watersheds nationwide, and from which data could be analyzed on a continuing basis for use in comparison and contrast with conditions observed in basins more obviously affected by human activities. At selected sites, water-quality information is being gathered on major ions and nutrients, primarily to assess the effects of acid deposition on stream chemistry. Additional information on the Hydrologic Benchmark Program may be accessed from *http://water.usgs.gov/hbn/*.

National Stream-Quality Accounting Network (NASQAN) is a network of sites used to monitor the water quality of large rivers within the Nation's largest river basins. From 1995 through 1999, a network of approximately 40 stations was operated in the Mississippi, Columbia, Colorado, and Rio Grande River basins. For the period 2000 through 2004, sampling was reduced to a few index stations on the Colorado and Columbia Rivers so that a network of 5 stations could be implemented on the Yukon River. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment (NAWQA) Program; (3) to characterize processes unique to large-river systems such as storage and re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals. Additional information about the NASQAN Program may be accessed from *http://water.usgs.gov/nasqan/*.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) is a network of monitoring sites that provides continuous measurement and assessment of the chemical constituents in precipitation throughout the United States. As the lead Federal agency, the USGS works together with over 100 organizations to provide a long-term, spatial and temporal record of atmospheric deposition generated from this network of 250 precipitation-chemistry monitoring sites. The USGS supports 74 of these 250 sites. This long-term, nationally consistent monitoring program, coupled with ecosystem research, provides critical information toward a national scorecard to evaluate the effectiveness of ongoing and future regulations intended to reduce atmospheric emissions and subsequent impacts to the Nation's land and water resources. Reports and other information on the NADP/NTN Program, as well as data from the individual sites, may be accessed from *http://bqs.usgs.gov/acidrain/*.

The USGS National Water-Quality Assessment (NAWQA) Program is a long-term program with goals to describe the status and trends of water-quality conditions for a large, representative part of the Nation's ground- and surface-water resources; to provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and to provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Assessment activities are being conducted in 42 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents is measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for water-resources managers to use in making decisions and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

Communication and coordination between USGS personnel and other local, State, and Federal interests are critical components of the NAWQA Program. Each study unit has a local liaison committee consisting of representatives from key Federal, State, and local water-resources agencies, Indian nations, and universities in the study unit. Liaison committees typically meet semiannually to discuss their information needs, monitoring plans and progress, desired information products, and opportunities to collaborate efforts among the agencies. Additional information about the NAWQA Program may be accessed from *http://water.usgs.gov/nawqa/*.

The USGS National Streamflow Information Program (NSIP) is a long-term program with goals to provide framework streamflow data across the Nation. Included in the program are creation of a permanent Federally funded streamflow network, research on the nature of streamflow, regional assessments of streamflow data and databases, and upgrades in the streamflow information delivery systems. Additional information about NSIP may be accessed from *http://water.usgs.gov/nsip/*.

EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS

Data Collection and Computation

The base data collected at gaging stations (fig. 1) consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and volume of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from a water-stage recorder that is either downloaded electronically in the field to a laptop computer or similar device or is transmitted using telemetry such as GOES satellite, land-line or cellular-phone modems, or by radio transmission. Measurements of discharge are made with a current meter or acoustic Doppler current profiler, using the general methods adopted by the USGS. These methods are described in standard textbooks, USGS Water-Supply Paper 2175, and the Techniques of Water-Resources Investigations of the United States Geological Survey (TWRIs), Book 3, Chapters A1 through A19 and Book 8, Chapters A2 and B2, which may be accessed from *http://water.usgs.gov/pubs/twri/*. The methods are consistent with the American Society for Testing and Materials (ASTM) standards and generally follow the standards of the International Organization for Standardization (ISO).

For stream-gaging stations, discharge-rating tables for any stage are prepared from stage-discharge curves. If extensions to the rating curves are necessary to express discharge greater than measured, the extensions are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, or computation of flow over dams and weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharges are computed from the daily values. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features of the stream channel, the daily mean discharge is computed by the shifting-control method in which correction factors based on individual discharge measurements and notes by engineers and observers are used when applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the controlling section, the daily mean discharge is computed by the shifting-control method.

The stage-discharge relation at some stream-gaging stations is affected by backwater from reservoirs, tributary streams, or other sources. Such an occurrence necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage at some distance from the base gage.

An index velocity is measured using ultrasonic or acoustic instruments at some stream-gaging stations and this index velocity is used to calculate an average velocity for the flow in the stream. This average velocity along with a stage-area relation is then used to calculate average discharge.

At some stations, stage-discharge relation is affected by changing stage. At these stations, the rate of change in stage is used as a factor in computing discharge.

At some stream-gaging stations in the northern United States, the stage-discharge relation is affected by ice in the winter; therefore, computation of the discharge in the usual manner is impossible. Discharge for periods of ice effect is computed on the basis of gage-height record and occasional winter-discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge from other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the volume or contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly changes are computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys, the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some stream-gaging stations, periods of time occur when no gage-height record is obtained or the recorded gage height is faulty and cannot be used to compute daily discharge or contents. Such a situation can happen when the recorder stops or otherwise fails to operate

properly, the intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records from other stations in the same or nearby basins. Likewise, lake or reservoir volumes may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

Data Presentation

The records published for each continuous-record surface-water discharge station (stream-gaging station) consist of five parts: (1) the station manuscript or description; (2) the data table of daily mean values of discharge for the current water year with summary data; (3) a tabular statistical summary of monthly mean flow data for a designated period, by water year; (4) a summary statistics table that includes statistical data of annual, daily, and instantaneous flows as well as data pertaining to annual runoff, 7-day low-flow minimums, and flow duration; and (5) a hydrograph of discharge.

Station Manuscript

The manuscript provides, under various headings, descriptive information, such as station location; period of record; historical extremes outside the period of record; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments follow that clarify information presented under the various headings of the station description.

LOCATION.—Location information is obtained from the most accurate maps available. The location of the gaging station with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileages, given for only a few stations, were determined by methods given in "River Mileage Measurement," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council or were provided by the U.S. Army Corps of Engineers.

DRAINAGE AREA.—Drainage areas are measured using the most accurate maps available. Because the type of maps available varies from one drainage basin to another, the accuracy of drainage areas likewise varies. Drainage areas are updated as better maps become available.

PERIOD OF RECORD.—This term indicates the time period for which records have been published for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not and whose location was such that its flow reasonably can be considered equivalent to flow at the present station.

REVISED RECORDS.—If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

GAGE.—The type of gage in current use, the datum of the current gage referred to a standard datum, and a condensed history of the types, locations, and datums of previous gages are given under this heading.

REMARKS.—All periods of estimated daily discharge either will be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily discharge table. (See section titled Identifying Estimated Daily Discharge.) Information is presented relative to the accuracy of the records, to special methods of computation, and to conditions that affect natural flow at the station. In addition, information may be presented pertaining to average discharge data for the period of record; to extremes data for the period of record and the current year; and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, the outlet works and spillway, and the purpose and use of the reservoir.

COOPERATION.—Records provided by a cooperating organization or obtained for the USGS by a cooperating organization are identified here.

EXTREMES OUTSIDE PERIOD OF RECORD.—Information here documents major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by the USGS.

REVISIONS.—Records are revised if errors in published records are discovered. Appropriate updates are made in the USGS distributed data system, NWIS, and subsequently to its Web-based National data system, NWISWeb (*http://water.usgs.gov/nwis/nwis*). Users are encouraged to obtain all required data from NWIS or NWISWeb to ensure that they have the most recent data updates. Updates to NWISWeb are made on an annual basis.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because no current or, possibly, future station manuscript would be published for these stations to document the revision in a REVISED RECORDS entry, users of data for these stations who obtained the record from previously published data reports may wish to contact the District Office (address given on the back of the title page of this report) to determine if the published records were revised after the station was discontinued. If, however, the data for a discontinued station were obtained by computer retrieval, the data would be current. Any published revision of data is always accompanied by revision of the corresponding data in computer storage.

Manuscript information for lake or reservoir stations differs from that for stream stations in the nature of the REMARKS and in the inclusion of a stage-capacity table when daily volumes are given.

Peak Discharge Greater than Base Discharge

Tables of peak discharge above base discharge are included for some stations where secondary instantaneous peak discharge data are used in flood-frequency studies of highway and bridge design, flood-control structures, and other flood-related projects. The base discharge value is selected so an average of three peaks a year will be reported. This base discharge value has a recurrence interval of approximately 1.1 years or a 91-percent chance of exceedence in any 1 year.

Data Table of Daily Mean Values

The daily table of discharge records for stream-gaging stations gives mean discharge for each day of the water year. In the monthly summary for the table, the line headed TOTAL gives the sum of the daily figures for each month; the line headed MEAN gives the arithmetic average flow in cubic feet per second for the month; and the lines headed MAX and MIN give the maximum and minimum daily mean discharges, respectively, for each month. Discharge for the month is expressed in cubic feet per second per square mile (line headed CFSM); or in inches (line headed IN); or in acre-feet (line headed AC-FT). Values for cubic feet per second per square mile and runoff in inches or in acre-feet may be omitted if extensive regulation or diversion is in effect or if the drainage area includes large noncontributing areas. At some stations, monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversion data or reservoir volumes are given. These values are identified by a symbol and a corresponding footnote.

Statistics of Monthly Mean Data

A tabular summary of the mean (line headed MEAN), maximum (MAX), and minimum (MIN) of monthly mean flows for each month for a designated period is provided below the mean values table. The water years of the first occurrence of the maximum and minimum monthly flows are provided immediately below those values. The designated period will be expressed as FOR WATER YEARS __-__, BY WATER YEAR (WY), and will list the first and last water years of the range of years selected from the PERIOD OF RECORD paragraph in the station manuscript. The designated period will consist of all of the station record within the specified water years, including complete months of record for partial water years, and may coincide with the period of record for the station. The water years for which the statistics are computed are consecutive, unless a break in the station record is indicated in the manuscript.

Summary Statistics

A table titled SUMMARY STATISTICS follows the statistics of monthly mean data tabulation. This table consists of four columns with the first column containing the line headings of the statistics being reported. The table provides a statistical summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year and for a designated period, as appropriate. The designated period selected, WATER YEARS __-__, will consist of all of the station records within the specified water years, including complete months of record for partial water years, and may coincide with the period of record for the station. The water years for which the statistics are computed are consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (see line headings below), except for the ANNUAL 7-DAY MINIMUM statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

The date or water year, as appropriate, of the first occurrence of each statistic reporting extreme values of discharge is provided adjacent to the statistic. Repeated occurrences may be noted in the REMARKS paragraph of the manuscript or in footnotes. Because the designated period may not be the same as the station period of record published in the manuscript, occasionally the dates of occurrence listed for the daily and instantaneous extremes in the designated-period column may not be within the selected water years listed in the heading. When the dates of occurrence do not fall within the selected water years listed in the heading, it will be noted in the REMARKS paragraph or in footnotes. Selected streamflow duration-curve statistics and runoff data also are given. Runoff data may be omitted if extensive regulation or diversion of flow is in effect in the drainage basin.

The following summary statistics data are provided with each continuous record of discharge. Comments that follow clarify information presented under the various line headings of the SUMMARY STATISTICS table.

ANNUAL TOTAL.—The sum of the daily mean values of discharge for the year.

ANNUAL MEAN.—The arithmetic mean for the individual daily mean discharges for the year noted or for the designated period.

HIGHEST ANNUAL MEAN.—The maximum annual mean discharge occurring for the designated period.

LOWEST ANNUAL MEAN.—The minimum annual mean discharge occurring for the designated period.

(*For Accuracy of Field Data and Computed Records see page 12.)

HIGHEST DAILY MEAN.—The maximum daily mean discharge for the year or for the designated period.

LOWEST DAILY MEAN.—The minimum daily mean discharge for the year or for the designated period.

ANNUAL 7-DAY MINIMUM.—The lowest mean discharge for 7 consecutive days for a calendar year or a water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1-March 31). The date shown in the summary statistics table is the initial date of the 7-day period. This value should not be confused with the 7-day 10-year low-flow statistic.

MAXIMUM PEAK FLOW.—The maximum instantaneous peak discharge occurring for the water year or designated period. Occasionally the maximum flow for a year may occur at midnight at the beginning or end of the year, on a recession from or rise toward a higher peak in the adjoining year. In this case, the maximum peak flow is given in the table and the maximum flow may be reported in a footnote or in the REMARKS paragraph in the manuscript.

MAXIMUM PEAK STAGE.—The maximum instantaneous peak stage occurring for the water year or designated period. Occasionally the maximum stage for a year may occur at midnight at the beginning or end of the year, on a recession from or rise toward a higher peak in the adjoining year. In this case, the maximum peak stage is given in the table and the maximum stage may be reported in the REMARKS paragraph in the manuscript or in a footnote. If the dates of occurrence of the maximum peak stage and maximum peak flow are different, the REMARKS paragraph in the manuscript or a footnote may be used to provide further information.

INSTANTANEOUS LOW FLOW.—The minimum instantaneous discharge occurring for the water year or for the designated period.

ANNUAL RUNOFF.—Indicates the total quantity of water in runoff for a drainage area for the year. Data reports may use any of the following units of measurement in presenting annual runoff data:

> Acre-foot (AC-FT) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.
>
> Cubic feet per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming the runoff is distributed uniformly in time and area.
>
> Inches (INCHES) indicate the depth to which the drainage area would be covered if all of the runoff for a given time period were uniformly distributed on it.

10 PERCENT EXCEEDS.—The discharge that has been exceeded 10 percent of the time for the designated period.

50 PERCENT EXCEEDS.—The discharge that has been exceeded 50 percent of the time for the designated period.

90 PERCENT EXCEEDS.—The discharge that has been exceeded 90 percent of the time for the designated period.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first table lists annual maximum stage and discharge at crest-stage stations, and the second table lists discharge measurements at low-flow partial-record stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are often made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for a special reason are called measurements at miscellaneous sites.

Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables of annual State data reports are identified. This identification is shown either by flagging individual daily values with the letter “e” and noting in a table footnote, “e–Estimated,” or by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Accuracy of Field Data and Computed Results

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretations of records.

The degree of accuracy of the records is stated in the REMARKS in the station description. “Excellent” indicates that about 95 percent of the daily discharges are within 5 percent of the true value; “good” within 10 percent; and “fair,” within 15 percent. “Poor” indicates that daily discharges have less than “fair” accuracy. Different accuracies may be attributed to different parts of a given record.

Values of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft^3/s; to the nearest tenths between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures above 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharge values listed for partial-record stations.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, values of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other Data Records Available

Information of a more detailed nature than that published for most of the stream-gaging stations such as discharge measurements, gage-height records, and rating tables is available from the District office. Also, most stream-gaging station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the District office (see address that is shown on the back of the title page of this report).

EXPLANATION OF PRECIPITATION RECORDS

Data Collection and Computation

Rainfall data generally are collected using electronic data loggers that measure the rainfall in 0.01-inch increments every 15 minutes using either a tipping-bucket rain gage or a collection well gage. Twenty-four hour rainfall totals are tabulated and presented. A 24-hour period extends from just past midnight of the previous day to midnight of the current day. Snowfall-affected data can result during cold weather when snow fills the rain-gage funnel and then melts as temperatures rise. Snowfall-affected data are subject to errors. Missing values are indicated by this symbol "---" in the table.

Data Presentation

Precipitation records collected at surface-water gaging stations are identified with the same station number and name as the stream-gaging station. Where a surface-water daily-record station is not available, the precipitation record is published with its own name and latitude-longitude identification number.

Information pertinent to the history of a precipitation station is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, period of record, and general remarks.

The following information is provided with each precipitation station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.—See Data Presentation in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

PERIOD OF RECORD.—See Data Presentation in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

INSTRUMENTATION.—Information on the type of rainfall collection system is given.

REMARKS.—Remarks provide added information pertinent to the collection, analysis, or computation of records.

EXPLANATION OF WATER-QUALITY RECORDS

Collection and Examination of Data

Surface-water samples for analysis usually are collected at or near stream-gaging stations. The quality-of-water records are given immediately following the discharge records at these stations.

The descriptive heading for water-quality records gives the period of record for all water-quality data; the period of daily record for parameters that are measured on a daily basis (specific conductance, water temperature, sediment discharge, and so forth); extremes for the current year; and general remarks.

For ground-water records, no descriptive statements are given; however, the well number, depth of well, sampling date, or other pertinent data are given in the table containing the chemical analyses of the ground water.

Water Analysis

Most of the methods used for collecting and analyzing water samples are described in the TWRIs, which may be accessed from *http://water.usgs.gov/pubs/twri/*.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross-section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled at several verticals to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum and minimum values (and sometimes mean or median values) for each constituent measured, and are based on 15-minute or 1-hour intervals of recorded data beginning at 0000 hours and ending at 2400 hours for the day of record.

SURFACE-WATER-QUALITY RECORDS

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because discharge data are useful in the interpretation of surface-water quality. Records of surface-water quality in this report involve a variety of types of data and measurement frequencies.

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A *continuous-record station* is a site where data are collected on a regularly scheduled basis. Frequency may be one or more times daily, weekly, monthly, or quarterly. A *partial-record station* is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A *miscellaneous sampling site* is a location other than a continuous- or partial-record station, where samples are collected to give better areal coverage to define water-quality conditions in the river basin.

A careful distinction needs to be made between *continuous records* as used in this report and *continuous recordings* that refer to a continuous graph or a series of discrete values recorded at short intervals. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently.

Accuracy of the Records

One of four accuracy classifications is applied for measured physical properties at continuous-record stations on a scale ranging from poor to excellent. The accuracy rating is based on data values recorded before any shifts or corrections are made. Additional consideration also is given to the amount of publishable record and to the amount of data that have been corrected or shifted.

Rating classifications for continuous water-quality records

[≤, less than or equal to; ±, plus or minus value shown; °C, degree Celsius; >, greater than; %, percent; mg/L, milligram per liter; pH unit, standard pH unit]

Measured physical property	Rating			
	Excellent	Good	Fair	Poor
Water temperature	≤ ±0.2 °C	> ±0.2 to 0.5 °C	> ±0.5 to 0.8 °C	> ±0.8 °C
Specific conductance	≤ ±3%	> ±3 to 10%	> ±10 to 15%	> ±15%

Rating classifications for continuous water-quality records

[≤, less than or equal to; ±, plus or minus value shown; °C, degree Celsius; >, greater than; %, percent; mg/L, milligram per liter; pH unit, standard pH unit]

Measured physical property	Rating			
	Excellent	Good	Fair	Poor
Dissolved oxygen	≤ ±0.3 mg/L	> ±0.3 to 0.5 mg/L	> ±0.5 to 0.8 mg/L	> ±0.8 mg/L
pH	≤ ±0.2 unit	> ±0.2 to 0.5 unit	> ±0.5 to 0.8 unit	> ±0.8 unit
Turbidity	≤ ±5%	> ±5 to 10%	> ±10 to 15%	> ±15%

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream-order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites.

On-Site Measurements and Sample Collection

In obtaining water-quality data, a major concern is assuring that the data obtained represent the naturally occurring quality of the water. To ensure this, certain measurements, such as water temperature, pH, and dissolved oxygen, must be made on site when the samples are taken. To assure that measurements made in the laboratory also represent the naturally occurring water, carefully prescribed procedures must be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in TWRIs Book 1, Chapter D2; Book 3, Chapters A1, A3, and A4; and Book 9, Chapters A1-A9. Most of the methods used for collecting and analyzing water samples are described in the TWRIs, which may be accessed from *http://water.usgs.gov/pubs/twri/*. Also, detailed information on collecting, treating, and shipping samples can be obtained from the USGS District office (see address that is shown on the back of title page in this report).

Water Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at the time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are published. Water temperatures measured at the time of water-discharge measurements are on file in the District office.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross section.

During periods of rapidly changing flow or rapidly changing concentration, samples may be collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily discharges of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples are collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observation, such data are useful in establishing seasonal relations between quality and streamflow and in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of suspended-sediment discharge, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included for some stations.

Laboratory Measurements

Samples for biochemical oxygen demand (BOD) and indicator bacteria are analyzed locally. All other samples are analyzed in the USGS laboratory in Lakewood, Colorado, unless otherwise noted. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chapter C1. Methods used by the USGS laboratories are given in the TWRIs, Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4. The TWRI publications may be accessed from *http://water.usgs.gov/pubs/twri/*. These methods are consistent with ASTM standards and generally follow ISO standards.

Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily are presented first. Tables of "daily values" of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.—See Data Presentation information in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

DRAINAGE AREA.—See Data Presentation information in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

PERIOD OF RECORD.—This indicates the time periods for which published water-quality records for the station are available. The periods are shown separately for records of parameters measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for the parameters individually.

INSTRUMENTATION.—Information on instrumentation is given only if a water-quality monitor temperature record, sediment pumping sampler, or other sampling device is in operation at a station.

REMARKS.—Remarks provide added information pertinent to the collection, analysis, or computation of the records.

COOPERATION.—Records provided by a cooperating organization or obtained for the USGS by a cooperating organization are identified here.

EXTREMES.—Maximums and minimums are given only for parameters measured daily or more frequently. For parameters measured weekly or less frequently, true maximums or minimums may not have been obtained. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.—Records are revised if errors in published water-quality records are discovered. Appropriate updates are made in the USGS distributed data system, NWIS, and subsequently to its Web-based National data system, NWISWeb (*http://waterdata.usgs.gov/nwis*). Users of USGS water-quality data are encouraged to obtain all required data from NWIS or NWISWeb to ensure that they have the most recent updates. Updates to the NWISWeb are made on an annual basis.

The surface-water-quality records for partial-record stations and miscellaneous sampling sites are published in separate tables following the table of discharge measurements at miscellaneous sites. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

Remark Codes

The following remark codes may appear with the water-quality data in this section:

Printed Output	Remark
E	Value is estimated.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
M	Presence of material verified, but not quantified.
N	Presumptive evidence of presence of material.
U	Material specifically analyzed for, but not detected.
A	Value is an average.
V	Analyte was detected in both the environmental sample and the associated blanks.
S	Most probable value.

Water-Quality Control Data

The USGS National Water Quality Laboratory collects quality-control data on a continuing basis to evaluate selected analytical methods to determine long-term method detection levels (LT-MDLs) and laboratory reporting levels (LRLs). These values are re-evaluated each year on the basis of the most recent quality-control data and, consequently, may change from year to year.

This reporting procedure limits the occurrence of false positive error. Falsely reporting a concentration greater than the LT-MDL for a sample in which the analyte is not present is 1 percent or less. Application of the LRL limits the occurrence of false negative error. The chance of falsely reporting a non-detection for a sample in which the analyte is present at a concentration equal to or greater than the LRL is 1 percent or less.

Accordingly, concentrations are reported as less than LRL for samples in which the analyte was either not detected or did not pass identification. Analytes detected at concentrations between the LT-MDL and the LRL and that pass identification criteria are estimated. Estimated concentrations will be noted with a remark code of “E.” These data should be used with the understanding that their uncertainty is greater than that of data reported without the E remark code.

Data generated from quality-control (QC) samples are a requisite for evaluating the quality of the sampling and processing techniques as well as data from the actual samples themselves. Without QC data, environmental sample data cannot be adequately interpreted because the errors associated with the sample data are unknown. The various types of QC samples collected by this District office are described in the following section. Procedures have been established for the storage of water-quality-control data within the USGS. These procedures allow for storage of all derived QC data and are identified so that they can be related to corresponding environmental samples. These data are not presented in this report but are available from the District office.

Blank Samples

Blank samples are collected and analyzed to ensure that environmental samples have not been contaminated in the overall data-collection process. The blank solution used to develop specific types of blank samples is a solution that is free of the analytes of interest. Any measured value signal in a blank sample for an analyte (a specific component measured in a chemical analysis) that was absent in the blank solution is believed to be due to contamination. Many types of blank samples are possible; each is designed to segregate a different part of the overall data-collection process. The types of blank samples collected in this district are:

Field blank—A blank solution that is subjected to all aspects of sample collection, field processing preservation, transportation, and laboratory handling as an environmental sample.

Trip blank—A blank solution that is put in the same type of bottle used for an environmental sample and kept with the set of sample bottles before and after sample collection.

Equipment blank—A blank solution that is processed through all equipment used for collecting and processing an environmental sample (similar to a field blank but normally done in the more controlled conditions of the office).

Sampler blank—A blank solution that is poured or pumped through the same field sampler used for collecting an environmental sample.

Filter blank—A blank solution that is filtered in the same manner and through the same filter apparatus used for an environmental sample.

Splitter blank—A blank solution that is mixed and separated using a field splitter in the same manner and through the same apparatus used for an environmental sample.

Preservation blank—A blank solution that is treated with the sampler preservatives used for an environmental sample.

Reference Samples

Reference material is a solution or material prepared by a laboratory. The reference material composition is certified for one or more properties so that it can be used to assess a measurement method. Samples of reference material are submitted for analysis to ensure that an analytical method is accurate for the known properties of the reference material. Generally, the selected reference material properties are similar to the environmental sample properties.

Replicate Samples

Replicate samples are a set of environmental samples collected in a manner such that the samples are thought to be essentially identical in composition. Replicate is the general case for which a duplicate is the special case consisting of two samples. Replicate samples are collected and analyzed to establish the amount of variability in the data contributed by some part of the collection and analytical process. Many types of replicate samples are possible, each of which may yield slightly different results in a dynamic hydrologic setting, such as a flowing stream. The types of replicate samples collected in this district are:

Concurrent samples—A type of replicate sample in which the samples are collected simultaneously with two or more samplers or by using one sampler and alternating the collection of samples into two or more compositing containers.

Sequential samples—A type of replicate sample in which the samples are collected one after the other, typically over a short time.

Split sample—A type of replicate sample in which a sample is split into subsamples, each subsample contemporaneous in time and space.

Spike Samples

Spike samples are samples to which known quantities of a solution with one or more well-established analyte concentrations have been added. These samples are analyzed to determine the extent of matrix interference or degradation on the analyte concentration during sample processing and analysis.

EXPLANATION OF GROUND-WATER-LEVEL RECORDS

Generally, only ground-water-level data from selected wells with continuous recorders from a basic network of observation wells are published in this report. This basic network contains observation wells located so that the most significant data are obtained from the fewest wells in the most important aquifers.

Site Identification Numbers

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is produced for local needs. (See NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES in this report for a detailed explanation.)

Data Collection and Computation

Measurements are made in many types of wells, under varying conditions of access and at different temperatures; hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Most methods for collecting and analyzing water samples are described in the TWRIs referred to in the On-site Measurements and Sample Collection and the Laboratory Measurements sections in this report. In addition, TWRI Book 1, Chapter D2, describes guidelines for the collection and field analysis of ground-water samples for selected unstable constituents. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in TWRIs Book 1, Chapter D2; Book 3, Chapters A1, A3, and A4; and Book 9, Chapters A1 through A9. The TWRI publications may be accessed from *http://water.usgs.gov/pubs/twri/*. The values in this report represent water-quality conditions at the time of sampling, as much as possible, and that are consistent with available sampling techniques and methods of analysis. These methods are consistent with ASTM standards and generally follow ISO standards. Trained personnel collected all samples. The wells sampled were pumped long enough to ensure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, possibly metal, comprising the casings.

Water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. If known, the elevation of the land-surface datum above sea level is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (EOM).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth of water of several hundred feet, the error in determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

Data Presentation

Water-level data are presented in alphabetical order by county. The primary identification number for a given well is the 15-digit site identification number that appears in the upper left corner of the table. The secondary identification number is the local or county well number. Well locations are shown in figure X*;* each well is identified on the map by its local well or county well number.

Each well record consists of three parts: the well description, the data table of water levels observed during the water year, and, for most wells, a hydrograph following the data table. Well descriptions are presented in the headings preceding the tabular data.

The following comments clarify information presented in these various headings.

LOCATION.—This paragraph follows the well-identification number and reports the hydrologic-unit number and a geographic point of reference. Latitudes and longitudes used in this report are reported as North American Datum of 1927 unless otherwise specified.

AQUIFER.—This entry designates by name and geologic age the aquifer that the well taps.

WELL CHARACTERISTICS.—This entry describes the well in terms of depth, casing diameter and depth or screened interval, method of construction, use, and changes since construction.

INSTRUMENTATION.—This paragraph provides information on both the frequency of measurement and the collection method used, allowing the user to better evaluate the reported water-level extremes by knowing whether they are based on continuous, monthly, or some other frequency of measurement.

DATUM.—This entry describes both the measuring point and the land-surface elevation at the well. The altitude of the land-surface datum is described in feet above the altitude datum; it is reported with a precision depending on the method of determination. The measuring point is described physically (such as top of casing, top of instrument shelf, and so forth), and in relation to land surface (such as 1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above National Geodetic Vertical Datum of 1929 (NGVD 29); it is reported with a precision depending on the method of determination.

REMARKS.—This entry describes factors that may influence the water level in a well or the measurement of the water level, when various methods of measurement were begun, and the network (climatic, terrane, local, or areal effects) or the special project to which the well belongs.

PERIOD OF RECORD.—This entry indicates the time period for which records are published for the well, the month and year at the start of publication of water-level records by the USGS, and the words “to current year” if the records are to be continued into the following year. Time periods for which water-level records are available, but are not published by the USGS, may be noted.

EXTREMES FOR PERIOD OF RECORD.—This entry contains the highest and lowest instantaneously recorded or measured water levels of the period of published record, with respect to land-surface datum or sea level, and the dates of occurrence.

Water-Level Tables

A table of water levels follows the well description for each well. Water-level measurements in this report are given in feet with reference to either sea level or land-surface datum (lsd). Missing records are indicated by dashes in place of the water-level value.

For wells not equipped with recorders, water-level measurements were obtained periodically by steel or electric tape. Tables of periodic water-level measurements in these wells show the date of measurement and the measured water-level value.

Hydrographs

Hydrographs are a graphic display of water-level fluctuations over a period of time. In this report, current water year and, when appropriate, period-of-record hydrographs are shown. Hydrographs that display periodic water-level measurements show points that may be connected with a dashed line from one measurement to the next. Hydrographs that display recorder data show a solid line representing the mean water level recorded for each day. Missing data are indicated by a blank space or break in a hydrograph. Missing data may occur as a result of recorder malfunctions, battery failures, or mechanical problems related to the response of the recorder's float mechanism to water-level fluctuations in a well.

GROUND-WATER-QUALITY DATA

Data Collection and Computation

The ground-water-quality data in this report were obtained as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some wells within a county but not for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality Statewide.

Most methods for collecting and analyzing water samples are described in the TWRIs, which may be accessed from *http://water.usgs.gov/pubs/twri/*. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in TWRI, Book 1, Chapter D2; Book 5, Chapters A1, A3, and A4; and Book 9, Chapters A1-A6. Also, detailed information on collecting, treating, and shipping samples may be obtained from the USGS District office (see address shown on back of this CD-ROM).

Laboratory Measurements

Analysis for sulfide and measurement of alkalinity, pH, water temperature, specific conductance, and dissolved oxygen are performed on site. All other sample analyses are performed at the USGS laboratory in Lakewood, Colorado, unless otherwise noted. Methods used by the USGS laboratory are given in TWRI, Book 1, Chapter D2 and Book 5, Chapters A1, A3, and A4, which may be accessed from *http://water.usgs.gov/pubs/twri/*.

ACCESS TO USGS WATER DATA

The USGS provides near real-time stage and discharge data for many of the gaging stations equipped with the necessary telemetry and historic daily mean and peak-flow discharge data for most current or discontinued gaging stations through the World Wide Web (WWW). These data may be accessed from *http://water.usgs.gov*.

Water-quality data and ground-water data also are available through the WWW. In addition, data can be provided in various machine-readable formats on various media. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each Water Discipline District Office (See address that is shown on the back of the title page of this report.

Definition of terms

Specialized technical terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. Terms such as algae, water level, and precipitation are used in their common everyday meanings, definitions of which are given in standard dictionaries. Not all terms defined in this alphabetical list apply to every State. See also table for converting English units to International System (SI) Units. Other glossaries that also define water-related terms are accessible from *http://water.usgs.gov/glossaries.html*.

Acid neutralizing capacity (ANC) is the equivalent sum of all bases or base-producing materials, solutes plus particulates, in an aqueous system that can be titrated with acid to an equivalence point. This term designates titration of an "unfiltered" sample (formerly reported as alkalinity).

Acre-foot (AC-FT, acre-ft) is a unit of volume, commonly used to measure quantities of water used or stored, equivalent to the volume of water required to cover 1 acre to a depth of 1 foot and equivalent to 43,560 cubic feet, 325,851 gallons, or 1,233 cubic meters. (See also "Annual runoff")

Adenosine triphosphate (ATP) is an organic, phosphate-rich compound important in the transfer of energy in organisms. Its central role in living cells makes ATP an excellent indicator of the presence of living material in water. A measurement of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter.

Adjusted discharge is discharge data that have been mathematically adjusted (for example, to remove the effects of a daily tide cycle or reservoir storage).

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample. (See also "Biomass" and "Dry weight")

Alkalinity is the capacity of solutes in an aqueous system to neutralize acid. This term designates titration of a "filtered" sample.

Annual runoff is the total quantity of water that is discharged ("runs off") from a drainage basin in a year. Data reports may present annual runoff data as volumes in acre-feet, as discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches.

Annual 7-day minimum is the lowest mean value for any 7-consecutive-day period in a year. Annual 7-day minimum values are reported herein for the calendar year and the water year (October 1 through September 30). Most low-flow frequency analyses use a climatic year (April 1-March 31), which tends to prevent the low-flow period from being artificially split between adjacent years. The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day, 10-year low-flow statistic.)

Aroclor is the registered trademark for a group of poly-chlorinated biphenyls that were manufactured by the Monsanto Company prior to 1976. Aroclors are assigned specific 4-digit reference numbers dependent upon molecular type and degree of substitution of the biphenyl ring hydrogen atoms by chlorine atoms. The first two digits of a numbered aroclor represent the molecular type, and the last two digits represent the percentage weight of the hydrogen-substituted chlorine.

Artificial substrate is a device that purposely is placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is collected. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multiplate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection. (See also "Substrate")

Ash mass is the mass or amount of residue present after the residue from a dry-mass determination has been ashed in a muffle furnace at a temperature of 500 °C for 1 hour. Ash mass of zooplankton and phytoplankton is expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2). (See also "Biomass" and "Dry mass")

Aspect is the direction toward which a slope faces with respect to the compass.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, whereas others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Bankfull stage, as used in this report, is the stage at which a stream first overflows its natural banks formed by floods with 1- to 3-year recurrence intervals.

Base discharge (for peak discharge) is a discharge value, determined for selected stations, above which peak discharge data are published. The base discharge at each station is selected so that an average of about three peak flows per year will be published. (See also "Peak flow")

Base flow is sustained flow of a stream in the absence of direct runoff. It includes natural and human-induced streamflows. Natural base flow is sustained largely by ground-water discharge.

Bed material is the sediment mixture of which a stream-bed, lake, pond, reservoir, or estuary bottom is composed. (See also "Bedload" and "Sediment")

Bedload is material in transport that primarily is supported by the streambed. In this report, bedload is considered to consist of particles in transit from the bed to the top of the bedload sampler nozzle (an elevation ranging from 0.25 to 0.5 foot). These particles are retained in the bedload sampler. A sample collected with a pressure-differential bedload sampler also may contain a component of the suspended load.

Bedload discharge (tons per day) is the rate of sediment moving as bedload, reported as dry weight, that passes through a cross section in a given time. NOTE: Bedload discharge values in this report may include a component of the suspended-sediment

discharge. A correction may be necessary when computing the total sediment discharge by summing the bedload discharge and the suspended-sediment discharge. (See also "Bedload," "Dry weight," "Sediment," and "Suspended-sediment discharge")

Benthic organisms are the group of organisms inhabiting the bottom of an aquatic environment. They include a number of types of organisms, such as bacteria, fungi, insect larvae and nymphs, snails, clams, and crayfish. They are useful as indicators of water quality.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as mass per unit area or volume of habitat.

Biomass pigment ratio is an indicator of the total proportion of periphyton that are autotrophic (plants). This also is called the Autotrophic Index.

Blue-green algae (*Cyanophyta*) are a group of phytoplankton and periphyton organisms with a blue pigment in addition to a green pigment called chlorophyll. Blue-green algae can cause nuisance water-quality conditions in lakes and slow-flowing rivers; however, they are found commonly in streams throughout the year. The abundance of blue-green algae in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic micrometers per milliliter (μm^3/mL). The abundance of blue-green algae in periphyton samples is given in cells per square centimeter (cells/cm^2) or biovolume per square centimeter ($\mu m^3/cm^2$). (See also "Phytoplankton"and "Periphyton")

Bottom material (See "Bed material")

Bulk electrical conductivity is the combined electrical conductivity of all material within a doughnut-shaped volume surrounding an induction probe. Bulk conductivity is affected by different physical and chemical properties of the material including the dissolved-solids content of the pore water, and the lithology and porosity of the rock.

Canadian Geodetic Vertical Datum 1928 is a geodetic datum derived from a general adjustment of Canada's first order level network in 1928.

Cell volume (biovolume) determination is one of several common methods used to estimate biomass of algae in aquatic systems. Cell members of algae are used frequently in aquatic surveys as an indicator of algal production. However, cell numbers alone cannot represent true biomass because of considerable cell-size variation among the algal species. Cell volume (μm^3) is determined by obtaining critical cell measurements or cell dimensions (for example, length, width, height, or radius) for 20 to 50 cells of each important species to obtain an average biovolume per cell. Cells are categorized according to the correspondence of their cellular shape to the nearest geometric solid or combinations of simple solids (for example, spheres, cones, or cylinders). Representative formulae used to compute biovolume are as follows:

$$\text{sphere } 4/3\ \pi r^3 \quad \text{cone } 1/3\ \pi r^2 h \quad \text{cylinder } \pi r^2 h.$$

pi (π) is the ratio of the circumference to the diameter of a circle; pi = 3.14159….

From cell volume, total algal biomass expressed as biovolume (μm^3/mL) is thus determined by multiplying the number of cells of a given species by its average cell volume and then summing these volumes for all species.

Cells/volume refers to the number of cells of any organism that is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample volume, and generally are reported as cells or units per milliliter (mL) or liter (L).

Cfs-day (See "Cubic foot per second-day")

Channel bars, as used in this report, are the lowest prominent geomorphic features higher than the channel bed.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with BOD or with carbonaceous organic pollution from sewage or industrial wastes. [See also "Biochemical oxygen demand (BOD)"]

Clostridium perfringens *(C. perfringens)* is a spore-forming bacterium that is common in the feces of human and other warm-blooded animals. Clostridial spores are being used experimentally as an indicator of past fecal contamination and the presence of microorganisms that are resistant to disinfection and environmental stresses. (See also "Bacteria")

Coliphages are viruses that infect and replicate in coliform bacteria. They are indicative of sewage contamination of water and of the survival and transport of viruses in the environment.

Color unit is produced by 1 milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Confined aquifer is a term used to describe an aquifer containing water between two relatively impermeable bound-aries. The water level in a well tapping a confined aquifer stands above the top of the confined aquifer and can be higher or lower than the water table that may be present in the material above it. In some cases, the water level can rise above the ground surface, yielding a flowing well.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Continuous-record station is a site where data are collected with sufficient frequency to define daily mean values and variations within a day.

Control designates a feature in the channel that physically affects the water-surface elevation and thereby determines the stage-discharge relation at the gage. This feature may be a constriction of the channel, a bedrock outcrop, a gravel bar, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure, as used in this report, is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of saltwater.

Cubic foot per second (CFS, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point in 1 second. It is equivalent to approximately 7.48 gallons per second or approximately 449 gallons per minute, or 0.02832 cubic meters per second. The term "second-foot" sometimes is used synonymously with "cubic foot per second" but is now obsolete.

Cubic foot per second-day (CFS-DAY, Cfs-day, [$(ft^3/s)/d$]) is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.98347 acre-feet, 646,317 gallons, or 2,446.6 cubic meters. The daily mean discharges reported in the daily value data tables numerically are equal to the daily volumes in cfs-days, and the totals also represent volumes in cfs-days.

Cubic foot per second per square mile [CFSM, $(ft^3/s)/mi^2$] is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming the runoff is distributed uniformly in time and area. (See also "Annual runoff")

Daily mean suspended-sediment concentration is the time-weighted mean concentration of suspended sediment passing a stream cross section during a 24-hour day. (See also "Sediment" and "Suspended-sediment concentration")

Daily record station is a site where data are collected with sufficient frequency to develop a record of one or more data values per day. The frequency of data collection can range from continuous recording to data collection on a daily or near-daily basis.

Data collection platform (DCP) is an electronic instrument that collects, processes, and stores data from various sensors, and transmits the data by satellite data relay, line-of-sight radio, and/or landline telemetry.

Data logger is a microprocessor-based data acquisition system designed specifically to acquire, process, and store data. Data usually are downloaded from onsite data loggers for entry into office data systems.

Datum is a surface or point relative to which measurements of height and/or horizontal position are reported. A vertical datum is a horizontal surface used as the zero point for measurements of gage height, stage, or elevation; a horizontal datum is a reference for positions given in terms of latitude-longitude, State Plane coordinates, or Universal Transverse Mercator (UTM) coor-

dinates. (See also "Gage datum," "Land-surface datum," "National Geodetic Vertical Datum of 1929," and "North American Vertical Datum of 1988")

Diatoms *(Bacillariophyta)* are unicellular or colonial algae with a siliceous cell wall. The abundance of diatoms in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic micrometers per milliliter (μm^3/mL). The abundance of diatoms in periphyton samples is given in cells per square centimeter (cells/cm^2) or biovolume per square centimeter ($\mu m^3/cm^2$). (See also "Phytoplankton" and "Periphyton")

Diel is of or pertaining to a 24-hour period of time; a regular daily cycle.

Discharge, or **flow**, is the rate that matter passes through a cross section of a stream channel or other water body per unit of time. The term commonly refers to the volume of water (including, unless otherwise stated, any sediment or other constituents suspended or dissolved in the water) that passes a cross section in a stream channel, canal, pipeline, and so forth, within a given period of time (cubic feet per second). Discharge also can apply to the rate at which constituents, such as suspended sediment, bedload, and dissolved or suspended chemicals, pass through a cross section, in which cases the quantity is expressed as the mass of constituent that passes the cross section in a given period of time (tons per day).

Dissolved refers to that material in a representative water sample that passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal and State agencies that collect water-quality data. Determinations of "dissolved" constituent concentrations are made on sample water that has been filtered.

Dissolved oxygen (DO) is the molecular oxygen (oxygen gas) dissolved in water. The concentration in water is a function of atmospheric pressure, temperature, and dissolved-solids concentration of the water. The ability of water to retain oxygen decreases with increasing temperature or dissolved-solids concentration. Photosynthesis and respiration by plants commonly cause diurnal variations in dissolved-oxygen concentration in water from some streams.

Dissolved-solids concentration in water is the quantity of dissolved material in a sample of water. It is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. In the mathematical calculation, the bicarbonate value, in milligrams per liter, is multiplied by 0.4917 to convert it to carbonate. Alternatively, alkalinity concentration (as mg/L $CaCO_3$) can be converted to carbonate concentration by multiplying by 0.60.

Diversity index (H) (Shannon index) is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = -\sum_{i \approx 1}^{s} \frac{n_i}{n} \log_2 \frac{n_i}{n},$$

where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

Drainage area of a stream at a specific location is that area upstream from the location, measured in a horizontal plane, that has a common outlet at the site for its surface runoff from precipitation that normally drains by gravity into a stream. Drainage areas given herein include all closed basins, or noncontributing areas, within the area unless otherwise specified.

Drainage basin is a part of the Earth's surface that contains a drainage system with a common outlet for its surface runoff. (See "Drainage area")

Dry mass refers to the mass of residue present after drying in an oven at 105 °C, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry-mass values are expressed in the same units as ash mass. (See also "Ash mass," "Biomass," and "Wet mass")

Dry weight refers to the weight of animal tissue after it has been dried in an oven at 65 °C until a constant weight is achieved. Dry weight represents total organic and inorganic matter in the tissue. (See also "Wet weight")

Embeddedness is the degree to which gravel-sized and larger particles are surrounded or enclosed by finer-sized particles. (See also "Substrate embeddedness class")

Enterococcus bacteria commonly are found in the feces of humans and other warmblooded animals. Although some strains are ubiquitous and not related to fecal pollution, the presence of enterococci in water is an indication of fecal pollution and the possible presence of enteric pathogens. Enterococcus bacteria are those bacteria that produce pink to red colonies with black or reddish-brown precipitate after incubation at 41 °C on mE agar (nutrient medium for bacterial growth) and subsequent transfer to EIA medium. Enterococci include *Streptococcus feacalis, Streptococcus feacium, Streptococcus avium,* and their variants. (See also "Bacteria")

EPT Index is the total number of distinct taxa within the insect orders Ephemeroptera, Plecoptera, and Trichoptera. This index summarizes the taxa richness within the aquatic insects that generally are considered pollution sensitive; the index usually decreases with pollution.

Escherichia coli *(E. coli)* are bacteria present in the intestine and feces of warmblooded animals. *E. coli* are a member species of the fecal coliform group of indicator bacteria. In the laboratory, they are defined as those bacteria that produce yellow or yellow-brown colonies on a filter pad saturated with urea substrate broth after primary culturing for 22 to 24 hours at 44.5 °C on mTEC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

Estimated (E) value of a concentration is reported when an analyte is detected and all criteria for a positive result are met. If the concentration is less than the method detection limit (MDL), an E code will be reported with the value. If the analyte is identified qualitatively as present, but the quantitative determination is substantially more uncertain, the National Water Quality Laboratory will identify the result with an E code even though the measured value is greater than the MDL. A value reported with an E code should be used with caution. When no analyte is detected in a sample, the default reporting value is the MDL preceded by a less than sign (<). For bacteriological data, concentrations are reported as estimated when results are based on non-ideal colony counts.

Euglenoids (*Euglenophyta*) are a group of algae that usually are free-swimming and rarely creeping. They have the ability to grow either photosynthetically in the light or heterotrophically in the dark. (See also "Phytoplankton")

Extractable organic halides (EOX) are organic compounds that contain halogen atoms such as chlorine. These organic compounds are semivolatile and extractable by ethyl acetate from air-dried streambed sediment. The ethyl acetate extract is combusted, and the concentration is determined by microcoulometric determination of the halides formed. The concentration is reported as micrograms of chlorine per gram of the dry weight of the streambed sediment.

Fecal coliform bacteria are present in the intestines or feces of warmblooded animals. They often are used as indicators of the sanitary quality of the water. In the laboratory, they are defined as all organisms that produce blue colonies within 24 hours when incubated at 44.5 °C plus or minus 0.2 °C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

Fecal streptococcal bacteria are present in the intestines of warmblooded animals and are ubiquitous in the environment. They are characterized as gram-positive, cocci bacteria that are capable of growth in brain-heart infusion broth. In the laboratory, they are defined as all the organisms that produce red or pink colonies within 48 hours at 35 °C plus or minus 1.0 °C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

Filtered pertains to constituents in a water sample passed through a filter of specified pore diameter, most commonly 0.45 micrometer or less for inorganic analytes and 0.7 micrometer for organic analytes.

Filtered, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that has passed through a filter has been extracted. Complete recovery is not achieved by the extraction procedure and thus the analytical determination represents something less than 95 percent of the total constituent concentration in the sample. To achieve comparability of analytical data, equivalent extraction procedures are required of all laboratories performing such analyses because different procedures are likely to produce different analytical results.

Fire algae (*Pyrrhophyta*) are free-swimming unicells characterized by a red pigment spot. (See also "Phytoplankton")

Flow-duration percentiles are values on a scale of 100 that indicate the percentage of time for which a flow is not exceeded. For example, the 90th percentile of river flow is greater than or equal to 90 percent of all recorded flow rates.

Gage datum is a horizontal surface used as a zero point for measurement of stage or gage height. This surface usually is located slightly below the lowest point of the stream bottom such that the gage height is usually slightly greater than the maximum depth of water. Because the gage datum is not an actual physical object, the datum is usually defined by specifying the elevations of permanent reference marks such as bridge abutments and survey monuments, and the gage is set to agree with the reference marks. Gage datum is a local datum that is maintained independently of any national geodetic datum. However, if the elevation of the gage datum relative to the national datum (North American Vertical Datum of 1988 or National Geodetic Vertical Datum of 1929) has been determined, then the gage readings can be converted to elevations above the national datum by adding the elevation of the gage datum to the gage reading.

Gage height (G.H.) is the water-surface elevation, in feet above the gage datum. If the water surface is below the gage datum, the gage height is negative. Gage height often is used interchangeably with the more general term "stage," although gage height is more appropriate when used in reference to a reading on a gage.

Gage values are values that are recorded, transmitted, and/or computed from a gaging station. Gage values typically are collected at 5-, 15-, or 30-minute intervals.

Gaging station is a site on a stream, canal, lake, or reservoir where systematic observations of stage, discharge, or other hydrologic data are obtained.

Gas chromatography/flame ionization detector (GC/FID) is a laboratory analytical method used as a screening technique for semivolatile organic compounds that are extractable from water in methylene chloride.

Geomorphic channel units, as used in this report, are fluvial geomorphic descriptors of channel shape and stream velocity. Pools, riffles, and runs are types of geomorphic channel units considered for National Water-Quality Assessment (NAWQA) Program habitat sampling.

Green algae *(Chlorophyta)* are unicellular or colonial algae with chlorophyll pigments similar to those in terrestrial green plants. Some forms of green algae produce mats or floating "moss" in lakes. The abundance of green algae in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic micrometers per milliliter (μm^3/mL). The abundance of green algae in periphyton samples is given in cells per square centimeter (cells/cm^2) or biovolume per square centimeter ($\mu m^3/cm^2$). (See also "Phytoplankton" and "Periphyton")

Habitat, as used in this report, includes all nonliving (physical) aspects of the aquatic ecosystem, although living components like aquatic macrophytes and riparian vegetation also are usually included. Measurements of habitat typically are made over a wider geographic scale than are measurements of species distribution.

Habitat quality index is the qualitative description (level 1) of instream habitat and riparian conditions surrounding the reach sampled. Scores range from 0 to 100 percent with higher scores indicative of desirable habitat conditions for aquatic life. Index only applicable to wadable streams.

Hardness of water is a physical-chemical characteristic that commonly is recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations (primarily calcium and magnesium) and is expressed as the equivalent concentration of calcium carbonate ($CaCO_3$).

High tide is the maximum height reached by each rising tide. The high-high and low-high tides are the higher and lower of the two high tides, respectively, of each tidal day. See NOAA Web site:
http://www.csc.noaa.gov/text/glossary.html (see "High water")

Hilsenhoff's Biotic Index (HBI) is an indicator of organic pollution that uses tolerance values to weight taxa abundances; usually increases with pollution. It is calculated as follows:

$$HBI = sum\frac{(n)(a)}{N},$$

where n is the number of individuals of each taxon, a is the tolerance value of each taxon, and N is the total number of organisms in the sample.

Horizontal datum (See "Datum")

Hydrologic index stations referred to in this report are continuous-record gaging stations that have been selected as representative of streamflow patterns for their respective regions. Station locations are shown on index maps.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as defined by the former Office of Water Data Coordination and delineated on the State Hydrologic Unit Maps by the USGS. Each hydrologic unit is identified by an 8-digit number.

Inch (IN., in.), in reference to streamflow, as used in this report, refers to the depth to which the drainage area would be covered with water if all of the runoff for a given time period were distributed uniformly on it. (See also "Annual runoff")

Instantaneous discharge is the discharge at a particular instant of time. (See also "Discharge")

International Boundary Commission Survey Datum refers to a geodetic datum established at numerous monuments along the United States-Canada boundary by the International Boundary Commission.

Island, as used in this report, is a mid-channel bar that has permanent woody vegetation, is flooded once a year, on average, and remains stable except during large flood events.

Laboratory reporting level (LRL) generally is equal to twice the yearly determined long-term method detection level (LT-MDL). The LRL controls false negative error. The probability of falsely reporting a nondetection for a sample that contained an analyte at a concentration equal to or greater than the LRL is predicted to be less than or equal to 1 percent. The value of the LRL will be reported with a "less than" (<) remark code for samples in which the analyte was not detected. The National Water Quality Laboratory (NWQL) collects quality-control data from selected analytical methods on a continuing basis to determine LT-MDLs and to establish LRLs. These values are reevaluated annually on the basis of the most current quality-control data and, therefore, may change. The LRL replaces the term 'non-detection value' (NDV).

Land-surface datum (lsd) is a datum plane that is approximately at land surface at each ground-water observation well.

Latent heat flux (often used interchangeably with latent heat-flux density) is the amount of heat energy that converts water from liquid to vapor (evaporation) or from vapor to liquid (condensation) across a specified cross-sectional area per unit time. Usually expressed in watts per square meter.

Light-attenuation coefficient, also known as the extinction coefficient, is a measure of water clarity. Light is attenuated according to the Lambert-Beer equation:

$$I = I_o e^{-\lambda L},$$

where I_o is the source light intensity, I is the light intensity at length L (in meters) from the source, λ is the light-attenuation coefficient, and e is the base of the natural logarithm. The light-attenuation coefficient is defined as

$$\lambda = -\frac{1}{L}\log_e \frac{I}{I_o}.$$

Lipid is any one of a family of compounds that are insoluble in water and that make up one of the principal components of living cells. Lipids include fats, oils, waxes, and steroids. Many environmental contaminants such as organochlorine pesticides are lipophilic.

Long-term method detection level (LT-MDL) is a detection level derived by determining the standard deviation of a minimum of 24 method detection limit (MDL) spike-sample measurements over an extended period of time. LT-MDL data are collected on a continuous basis to assess year-to-year variations in the LT-MDL. The LT-MDL controls false positive error. The chance of falsely reporting a concentration at or greater than the LT-MDL for a sample that did not contain the analyte is predicted to be less than or equal to 1 percent.

Low tide is the minimum height reached by each falling tide. The high-low and low-low tides are the higher and lower of the two low tides, respectively, of each tidal day. See NOAA Website: *http://www.csc.noaa.gov/text/glossary.html* (see "Low water")

Macrophytes are the macroscopic plants in the aquatic environment. The most common macrophytes are the rooted vascular plants that usually are arranged in zones in aquatic ecosystems and restricted in the area by the extent of illumination through the water and sediment deposition along the shoreline.

Mean concentration of suspended sediment (Daily mean suspended-sediment concentration) is the time-weighted concentration of suspended sediment passing a stream cross section during a given time period. (See also "Daily mean suspended-sediment concentration" and "Suspended-sediment concentration")

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period. (See also "Discharge")

Mean high or **low tide** is the average of all high or low tides, respectively, over a specific period.

Mean sea level is a local tidal datum. It is the arithmetic mean of hourly heights observed over the National Tidal Datum Epoch. Shorter series are specified in the name; for example, monthly mean sea level and yearly mean sea level. In order that they may be recovered when needed, such datums are referenced to fixed points known as benchmarks. (See also "Datum")

Measuring point (MP) is an arbitrary permanent reference point from which the distance to water surface in a well is measured to obtain water level.

Megahertz is a unit of frequency. One megahertz equals one million cycles per second.

Membrane filter is a thin microporous material of specific pore size used to filter bacteria, algae, and other very small particles from water.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

Method code is a one-character code that identifies the analytical or field method used to determine a value stored in the National Water Information System (NWIS).

Method detection limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99-percent confidence that the analyte concentration is greater than zero. It is determined from the analysis of a sample in a given matrix containing the analyte. At the MDL concentration, the risk of a false positive is predicted to be less than or equal to 1 percent.

Method of Cubatures is a method of computing discharge in tidal estuaries based on the conservation of mass equation.

Methylene blue active substances (MBAS) indicate the presence of detergents (anionic surfactants). The determination depends on the formation of a blue color when methylene blue dye reacts with synthetic anionic detergent compounds.

Micrograms per gram (UG/G, µg/g) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

Micrograms per kilogram (UG/KG, µg/kg) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the constituent per unit mass (kilogram) of the material analyzed. One microgram per kilogram is equivalent to 1 part per billion.

Micrograms per liter (UG/L, µg/L) is a unit expressing the concentration of chemical constituents in water as mass (micrograms) of constituent per unit volume (liter) of water. One thousand micrograms per liter is equivalent to 1 milligram per liter. One microgram per liter is equivalent to 1 part per billion.

Microsiemens per centimeter (US/CM, µS/cm) is a unit expressing the amount of electrical conductivity of a solution as measured between opposite faces of a centimeter cube of solution at a specified temperature. Siemens is the International System of Units nomenclature. It is synonymous with mhos and is the reciprocal of resistance in ohms.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in water as the mass (milligrams) of constituent per unit volume (liter) of water. Concentration of suspended sediment also is expressed in milligrams per liter and is based on the mass of dry sediment per liter of water-sediment mixture.

Minimum reporting level (MRL) is the smallest measured concentration of a constituent that may be reliably reported by using a given analytical method.

Miscellaneous site, miscellaneous station, or miscellaneous sampling site is a site where streamflow, sediment, and/or water-quality data or water-quality or sediment samples are collected once, or more often on a random or discontinuous basis to provide better areal coverage for defining hydrologic and water-quality conditions over a broad area in a river basin.

Most probable number (MPN) is an index of the number of coliform bacteria that, more probably than any other number, would give the results shown by the laboratory examination; it is not an actual enumeration. MPN is determined from the distribution of gas-positive cultures among multiple inoculated tubes.

Multiple-plate samplers are artificial substrates of known surface area used for obtaining benthic invertebrate samples. They consist of a series of spaced, hardboard plates on an eyebolt.

Nanograms per liter (NG/L, ng/L) is a unit expressing the concentration of chemical constituents in solution as mass (nanograms) of solute per unit volume (liter) of water. One million nanograms per liter is equivalent to 1 milligram per liter.

National Geodetic Vertical Datum of 1929 (NGVD 29) is a fixed reference adopted as a standard geodetic datum for elevations determined by leveling. It formerly was called "Sea Level Datum of 1929" or "mean sea level." Although the datum was derived from the mean sea level at 26 tide stations**,** it does not necessarily represent local mean sea level at any particular place. *See NOAA Web site: http://www.ngs.noaa.gov/faq.shtml#WhatVD29VD88* (See "North American Vertical Datum of 1988")

Natural substrate refers to any naturally occurring immersed or submersed solid surface, such as a rock or tree, upon which an organism lives. (See also "Substrate")

Nekton are the consumers in the aquatic environment and consist of large, free-swimming organisms that are capable of sustained, directed mobility.

Nonfilterable refers to the portion of the total residue retained by a filter.

North American Datum of 1927 (NAD 27) is the horizontal control datum for the United States that was defined by a location and azimuth on the Clarke spheroid of 1866.

North American Datum of 1983 (NAD 83) is the horizontal control datum for the United States, Canada, Mexico, and Central America that is based on the adjustment of 250,000 points including 600 satellite Doppler stations that constrain the system to a geocentric origin. NAD 83 has been officially adopted as the legal horizontal datum for the United States by the Federal government.

North American Vertical Datum of 1988 (NAVD 88) is a fixed reference adopted as the official civilian vertical datum for elevations determined by Federal surveying and mapping activities in the United States. This datum was established in 1991 by minimum-constraint adjustment of the Canadian**,** Mexican, and United States first-order terrestrial leveling networks.

Open or **screened interval** is the length of unscreened opening or of well screen through which water enters a well, in feet below land surface.

Organic carbon (OC) is a measure of organic matter present in aqueous solution, suspension, or bottom sediment. May be reported as dissolved organic carbon (DOC), particulate organic carbon (POC), or total organic carbon (TOC).

Organic mass or **volatile mass** of a living substance is the difference between the dry mass and ash mass and represents the actual mass of the living matter. Organic mass is expressed in the same units as for ash mass and dry mass. (See also "Ash mass," "Biomass," and "Dry mass")

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meter (m^2), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliter (mL) or liter (L). Numbers of planktonic organisms can be expressed in these terms.

Organochlorine compounds are any chemicals that contain carbon and chlorine. Organochlorine compounds that are important in investigations of water, sediment, and biological quality include certain pesticides and industrial compounds.

Parameter code is a 5-digit number used in the USGS computerized data system, National Water Information System (NWIS), to uniquely identify a specific constituent or property.

Partial-record station is a site where discrete measurements of one or more hydrologic parameters are obtained over a period of time without continuous data being recorded or computed. A common example is a crest-stage gage partial-record station at which only peak stages and flows are recorded.

Particle size is the diameter, in millimeters (mm), of a particle determined by sieve or sedimentation methods. The sedimentation method uses the principle of Stokes Law to calculate sediment particle sizes. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube, sedigraph) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification, as used in this report, agrees with the recommendation made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay	>0.00024 - 0.004	Sedimentation
Silt	>0.004 - 0.062	Sedimentation
Sand	>0.062 - 2.0	Sedimentation/sieve
Gravel	>2.0 - 64.0	Sieve
Cobble	>64 - 256	Manual measurement
Boulder	>256	Manual measurement

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. For the sedimentation method, most of the organic matter is removed, and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native water analysis.

Peak flow (peak stage) is an instantaneous local maximum value in the continuous time series of streamflows or stages, preceded by a period of increasing values and followed by a period of decreasing values. Several peak values ordinarily occur in a year. The maximum peak value in a year is called the annual peak; peaks lower than the annual peak are called secondary peaks. Occasionally, the annual peak may not be the maximum value for the year; in such cases, the maximum value occurs at midnight at the beginning or end of the year, on the recession from or rise toward a higher peak in the adjoining year. If values are recorded at a discrete series of times, the peak recorded value may be taken as an approximation of the true peak, which may occur between the recording instants. If the values are recorded with finite precision, a sequence of equal recorded values may occur at the peak; in this case, the first value is taken as the peak.

Percent composition or **percent of total** is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, weight, mass, or volume.

Percent shading is a measure of the amount of sunlight potentially reaching the stream. A clinometer is used to measure left and right bank canopy angles. These values are added together, divided by 180, and multiplied by 100 to compute percentage of shade.

Periodic-record station is a site where stage, discharge, sediment, chemical, physical, or other hydrologic measurements are made one or more times during a year but at a frequency insufficient to develop a daily record.

Periphyton is the assemblage of microorganisms attached to and living upon submerged solid surfaces. Although primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton are useful indicators of water quality.

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

pH of water is the negative logarithm of the hydrogen-ion activity. Solutions with pH less than 7.0 standard units are termed "acidic," and solutions with a pH greater than 7.0 are termed "basic." Solutions with a pH of 7.0 are neutral. The presence and concentration of many dissolved chemical constituents found in water are affected, in part, by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms also are affected, in part, by the hydrogen-ion activity of water.

Phytoplankton is the plant part of the plankton. They usually are microscopic, and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment and commonly are known as algae. (See also "Plankton")

Picocurie (PC, pCi) is one-trillionth (1×10^{-12}) of the amount of radioactive nuclide represented by a curie (Ci). A curie is the quantity of radioactive nuclide that yields 3.7×10^{10} radioactive disintegrations per second (dps). A picocurie yields 0.037 dps, or 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers. Concentrations are expressed as a number of cells per milliliter (cells/mL) of sample.

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Polychlorinated naphthalenes (PCNs) are industrial chemicals that are mixtures of chlorinated naphthalene compounds. They have properties and applications similar to polychlorinated biphenyls (PCBs) and have been identified in commercial PCB preparations.

Pool, as used in this report, is a small part of a stream reach with little velocity, commonly with water deeper than surrounding areas.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photo-synthetic and chemosynthetic activity of producer organisms (chiefly, green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated (carbon method) by the plants.

Primary productivity (carbon method) is expressed as milligrams of carbon per area per unit time [mg C/(m^2/time)] for periphyton and macrophytes or per volume [mg C/(m^3/time)] for phytoplankton. The carbon method defines the amount of carbon dioxide consumed as measured by radioactive carbon (carbon-14). The carbon-14 method is of greater sensitivity than the oxygen light- and dark-bottle method and is preferred for use with unenriched water samples. Unit time may be either the hour or day, depending on the incubation period. (See also "Primary productivity")

Primary productivity (oxygen method) is expressed as milligrams of oxygen per area per unit time [mg O/(m^2/time)] for periphyton and macrophytes or per volume [mg O/(m^3/time)] for phytoplankton. The oxygen method defines production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light- and dark-bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period. (See also "Primary productivity")

Radioisotopes are isotopic forms of elements that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus; for example, ordinary chlorine is a mixture of isotopes having

atomic weights of 35 and 37, and the natural mixture has an atomic weight of about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron. There are 275 isotopes of the 81 stable elements, in addition to more than 800 radioactive isotopes.

Reach, as used in this report, is a length of stream that is chosen to represent a uniform set of physical, chemical, and biological conditions within a segment. It is the principal sampling unit for collecting physical, chemical, and biological data.

Recoverable is the amount of a given constituent that is in solution after a representative water sample has been extracted or digested. Complete recovery is not achieved by the extraction or digestion and thus the determination represents something less than 95 percent of the constituent present in the sample. To achieve comparability of analytical data, equivalent extraction or digestion procedures are required of all laboratories performing such analyses because different procedures are likely to produce different analytical results. (See also "Bed material")

Recurrence interval, also referred to as return period, is the average time, usually expressed in years, between occurrences of hydrologic events of a specified type (such as exceedances of a specified high flow or nonexceedance of a specified low flow). The terms "return period" and "recurrence interval" do not imply regular cyclic occurrence. The actual times between occurrences vary randomly, with most of the times being less than the average and a few being substantially greater than the average. For example, the 100-year flood is the flow rate that is exceeded by the annual maximum peak flow at intervals whose average length is 100 years (that is, once in 100 years, on average); almost two-thirds of all exceedances of the 100-year flood occur less than 100 years after the previous exceedance, half occur less than 70 years after the previous exceedance, and about one-eighth occur more than 200 years after the previous exceedance. Similarly, the 7-day, 10-year low flow ($7Q_{10}$) is the flow rate below which the annual minimum 7-day-mean flow dips at intervals whose average length is 10 years (that is, once in 10 years, on average); almost two-thirds of the nonexceedances of the $7Q_{10}$ occur less than 10 years after the previous nonexceedance, half occur less than 7 years after, and about one-eighth occur more than 20 years after the previous nonexceedance. The recurrence interval for annual events is the reciprocal of the annual probability of occurrence. Thus, the 100-year flood has a 1-percent chance of being exceeded by the maximum peak flow in any year, and there is a 10-percent chance in any year that the annual minimum 7-day-mean flow will be less than the $7Q_{10}$.

Replicate samples are a group of samples collected in a manner such that the samples are thought to be essentially identical in composition.

Return period (See "Recurrence interval")

Riffle, as used in this report, is a shallow part of the stream where water flows swiftly over completely or partially submerged obstructions to produce surface agitation.

River mileage is the curvilinear distance, in miles, measured upstream from the mouth along the meandering path of a stream channel in accordance with Bulletin No. 14 (October 1968) of the Water Resources Council and typically is used to denote location along a river.

Run, as used in this report, is a relatively shallow part of a stream with moderate velocity and little or no surface turbulence.

Runoff is the quantity of water that is discharged ("runs off") from a drainage basin during a given time period. Runoff data may be presented as volumes in acre-feet, as mean discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches. (See also "Annual runoff")

Salinity is the total quantity of dissolved salts, measured by weight in parts per thousand. Values in this report are calculated from specific conductance and temperature. Seawater has an average salinity of about 35 parts per thousand (for additional information, refer to: Miller, R.L., Bradford, W.L., and Peters, N.E., 1988, Specific conductance: theoretical considerations and application to analytical quality control: U.S. Geological Survey Water-Supply Paper 2311, 16 p.)

Sea level, as used in this report, refers to one of the two commonly used national vertical datums (NGVD 1929 or NAVD 1988). See separate entries for definitions of these datums.

Sediment is solid material that originates mostly from disintegrated rocks; when transported by, suspended in, or deposited from water, it is referred to as "fluvial sediment." Sediment includes chemical and biochemical precipitates and decomposed organic

material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are affected by environmental and land-use factors. Some major factors are topography, soil characteristics, land cover, and depth and intensity of precipitation.

Sensible heat flux (often used interchangeably with latent sensible heat-flux density) is the amount of heat energy that moves by turbulent transport through the air across a specified cross-sectional area per unit time and goes to heating (cooling) the air. Usually expressed in watts per square meter.

Seven-day, 10-year low flow ($7Q_{10}$) is the discharge below which the annual 7-day minimum flow falls in 1 year out of 10 on the long-term average. The recurrence interval of the $7Q_{10}$ is 10 years; the chance that the annual 7-day minimum flow will be less than the $7Q_{10}$ is 10 percent in any given year. (See also "Annual 7-day minimum" and "Recurrence interval")

Shelves, as used in this report, are streambank features extending nearly horizontally from the flood plain to the lower limit of persistent woody vegetation.

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Sodium hazard in water is an index that can be used to evaluate the suitability of water for irrigating crops.

Soil heat flux (often used interchangeably with soil heat-flux density) is the amount of heat energy that moves by conduction across a specified cross-sectional area of soil per unit time and goes to heating (or cooling) the soil. Usually expressed in watts per square meter.

Soil-water content is the water lost from the soil upon drying to constant mass at 105 °C; expressed either as mass of water per unit mass of dry soil or as the volume of water per unit bulk volume of soil.

Specific electrical conductance (conductivity) is a measure of the capacity of water (or other media) to conduct an electrical current. It is expressed in microsiemens per centimeter at 25 °C. Specific electrical conductance is a function of the types and quantity of dissolved substances in water and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is from 55 to 75 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stable isotope ratio (per MIL) is a unit expressing the ratio of the abundance of two radioactive isotopes. Isotope ratios are used in hydrologic studies to determine the age or source of specific water, to evaluate mixing of different water, as an aid in determining reaction rates, and other chemical or hydrologic processes.

Stage (See "Gage height")

Stage-discharge relation is the relation between the water-surface elevation, termed stage (gage height), and the volume of water flowing in a channel per unit time.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lives.

Substrate embeddedness class is a visual estimate of riffle streambed substrate larger than gravel that is surrounded or covered by fine sediment (<2 mm, sand or finer). Below are the class categories expressed as the percentage covered by fine sediment:

0	no gravel or larger substrate	3	26-50 percent
1	> 75 percent	4	5-25 percent
2	51-75 percent	5	< 5 percent

Surface area of a lake is that area (acres) encompassed by the boundary of the lake as shown on USGS topographic maps, or other available maps or photographs. Because surface area changes with lake stage, surface areas listed in this report represent those determined for the stage at the time the maps or photographs were obtained.

Surficial bed material is the upper surface (0.1 to 0.2 foot) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Surrogate is an analyte that behaves similarly to a target analyte, but that is highly unlikely to occur in a sample. A surrogate is added to a sample in known amounts before extraction and is measured with the same laboratory procedures used to measure the target analyte. Its purpose is to monitor method performance for an individual sample.

Suspended is the amount (concentration) of undissolved material in a water-sediment mixture. Most commonly refers to that material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer filter has been extracted or digested. Complete recovery is not achieved by the extraction or digestion procedures and thus the determination represents less than 95 percent of the constituent present in the sample. To achieve comparability of analytical data, equivalent extraction or digestion procedures are required of all laboratories performing such analyses because different procedures are likely to produce different analytical results. (See also "Suspended")

Suspended sediment is sediment carried in suspension by the turbulent components of the fluid or by the Brownian movement (a law of physics). (See also "Sediment")

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 foot above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L). The analytical technique uses the mass of all of the sediment and the net weight of the water-sediment mixture in a sample to compute the suspended-sediment concentration. (See also "Sediment" and "Suspended sediment")

Suspended-sediment discharge (tons/d) is the rate of sediment transport, as measured by dry mass or volume, that passes a cross section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft^3/s) x 0.0027. (See also "Sediment," "Suspended sediment," and "Suspended-sediment concentration")

Suspended-sediment load is a general term that refers to a given characteristic of the material in suspension that passes a point during a specified period of time. The term needs to be qualified, such as "annual suspended-sediment load" or "sand-size suspended-sediment load," and so on. It is not synonymous with either suspended-sediment discharge or concentration. (See also "Sediment")

Suspended solids, total residue at 105 °C concentration is the concentration of inorganic and organic material retained on a filter, expressed as milligrams of dry material per liter of water (mg/L). An aliquot of the sample is used for this analysis.

Suspended, total is the total amount of a given constituent in the part of a water-sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. Knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total." Determinations of "suspended, total" constituents are made either by directly analyzing portions of the suspended material collected on the filter or, more commonly, by difference, on the basis of determinations of (1) dissolved and (2) total concentrations of the constituent. (See also "Suspended")

Synoptic studies are short-term investigations of specific water-quality conditions during selected seasonal or hydro-logic periods to provide improved spatial resolution for critical water-quality conditions. For the period and conditions sampled, they assess the spatial distribution of selected water-quality conditions in relation to causative factors, such as land use and contaminant sources.

Taxa (Species) richness is the number of species (taxa) present in a defined area or sampling unit.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchial scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata,* is the following:

Kingdom:	Animal
Phylum:	Arthropeda
Class:	Insecta
Order:	Ephemeroptera
Family:	Ephemeridae
Genus:	*Hexagenia*
Species:	*Hexagenia limbata*

Thalweg is the line formed by connecting points of minimum streambed elevation (deepest part of the channel).

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term "temperature recorder" is used in the table descriptions and refers to any instrument that records temperature whether on a chart, a tape, or any other medium.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water resulting from the mixing of flow proportionally to the duration of the concentration.

Tons per acre-foot (T/acre-ft) is the dry mass (tons) of a constituent per unit volume (acre-foot) of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

Tons per day (T/DAY, tons/d) is a common chemical or sediment discharge unit. It is the quantity of a substance in solution, in suspension, or as bedload that passes a stream section during a 24-hour period. It is equivalent to 2,000 pounds per day, or 0.9072 metric ton per day.

Total is the amount of a given constituent in a representative whole-water (unfiltered) sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determined at least 95 percent of the constituent in the sample.)

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. This group includes coliforms that inhabit the intestine of warmblooded animals and those that inhabit soils. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria that ferment lactose with gas formation within 48 hours at 35 °C. In the laboratory, these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35 °C plus or minus 1.0 °C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 milliliters of sample. (See also "Bacteria")

Total discharge is the quantity of a given constituent, measured as dry mass or volume, that passes a stream cross section per unit of time. When referring to constituents other than water, this term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

Total in bottom material is the amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

Total length (fish) is the straight-line distance from the anterior point of a fish specimen's snout, with the mouth closed, to the posterior end of the caudal (tail) fin, with the lobes of the caudal fin squeezed together.

Total load refers to all of a constituent in transport. When referring to sediment, it includes suspended load plus bed load.

Total organism count is the number of organisms collected and enumerated in any particular sample. (See also "Organism count/volume")

Total recoverable is the amount of a given constituent in a whole-water sample after a sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data for whole-water samples, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures may produce different analytical results.

Total sediment discharge is the mass of suspended-sediment plus bed-load transport, measured as dry weight, that passes a cross section in a given time. It is a rate and is reported as tons per day. (See also "Bedload," "Bedload discharge," "Sediment," "Suspended sediment," and "Suspended-sediment concentration")

Total sediment load or **total load** is the sediment in transport as bedload and suspended-sediment load. The term may be qualified, such as "annual suspended-sediment load" or "sand-size suspended-sediment load," and so on. It differs from total sediment discharge in that load refers to the material, whereas discharge refers to the quantity of material, expressed in units of mass per unit time. (See also "Sediment," "Suspended-sediment load," and "Total load")

Transect, as used in this report, is a line across a stream perpendicular to the flow and along which measurements are taken, so that morphological and flow characteristics along the line are described from bank to bank. Unlike a cross section, no attempt is made to determine known elevation points along the line.

Turbidity is an expression of the optical properties of a liquid that causes light rays to be scattered and absorbed rather than transmitted in straight lines through water. Turbidity, which can make water appear cloudy or muddy, is caused by the presence of suspended and dissolved matter, such as clay, silt, finely divided organic matter, plankton and other microscopic organisms, organic acids, and dyes (ASTM International, 2003, D1889–00 Standard test method for turbidity of water, *in* ASTM International, Annual Book of ASTM Standards, Water and Environmental Technology, v. 11.01: West Conshohocken, Pennsylvania, 6 p.). The color of water, whether resulting from dissolved compounds or suspended particles, can affect a turbidity measurement. To ensure that USGS turbidity data can be understood and interpreted properly within the context of the instrument used and site conditions encountered, data from each instrument type are stored and reported in the National Water Information System (NWIS) using parameter codes and measurement reporting units that are specific to the instrument type, with specific instruments designated by the method code. The respective measurement units, many of which also are in use internationally, fall into two categories: (1) the designations NTU, NTRU, BU, AU, and NTMU signify the use of a broad spectrum incident light in the wavelength range of 400-680 nanometers (nm), but having different light detection configurations; (2) The designations FNU, FNRU, FBU, FAU, and FNMU generally signify an incident light in the range between 780-900 nm, also with varying light detection configurations. These reporting units are equivalent when measuring a calibration solution (for example, formazin or polymer beads), but their respective instruments may not produce equivalent results for environmental samples. Specific reporting units are as follows:

NTU (Nephelometric Turbidity Units): white or broadband [400-680 nm] light source, 90 degree detection angle, one detector.

NTRU (Nephelometric Turbidity Ratio Units): white or broadband [400-680 nm] light source, 90 degree detection angle, multiple detectors with ratio compensation.

BU (Backscatter Units): white or broadband [400-680 nm] light source, 30 ± 15 degree detection angle (backscatter).

AU (Attenuation Units): white or broadband [400-680 nm] light source, 180 degree detection angle (attenuation).

NTMU (Nephelometric Turbidity Multibeam Units): white or broadband [400-680 nm] light source, multiple light sources, detectors at 90 degrees and possibly other angles to each beam.

FNU (Formazin Nephelometric Units): near infrared [780-900 nm] or monochrome light source, 90 degree detection angle, one detector.

FNRU (Formazin Nephelometric Ratio Units): near infrared [780-900 nm] or monochrome light source, 90 degree detection angle, multiple detectors, ratio compensation.

FBU (Formazin Backscatter Units): near infrared [780-900 nm] or monochrome light source, 30±15 degree detection angle.

FAU (Formazin Attenuation Units): near infrared [780-900 nm] light source, 180 degree detection angle.

FNMU (Formazin Nephelometric Multibeam Units): near infrared [780-900 nm] or monochrome light source, multiple light sources, detectors at 90 degrees and possibly other angles to each beam.

For more information please see http://water.usgs.gov/owq/FieldManual/Chapter6/6.7_contents.html.

Ultraviolet (UV) absorbance (absorption) at 254 or 280 nanometers is a measure of the aggregate concentration of the mixture of UV absorbing organic materials dissolved in the analyzed water, such as lignin, tannin, humic substances, and various aromatic compounds. UV absorbance (absorption) at 254 or 280 nanometers is measured in UV absorption units per centimeter of path length of UV light through a sample.

Unconfined aquifer is an aquifer whose upper surface is a water table free to fluctuate under atmospheric pressure. (See "Water-table aquifer")

Unfiltered pertains to the constituents in an unfiltered, representative water-suspended sediment sample.

Unfiltered, recoverable is the amount of a given constituent in a representative water-suspended sediment sample that has been extracted or digested. Complete recovery is not achieved by the extraction or digestion treatment and thus the determination represents less than 95 percent of the constituent present in the sample. To achieve comparability of analytical data, equivalent extraction or digestion procedures are required of all laboratories performing such analyses because different procedures are likely to produce different analytical results.

Vertical datum (See "Datum")

Volatile organic compounds (VOCs) are organic compounds that can be isolated from the water phase of a sample by purging the water sample with inert gas, such as helium, and, subsequently, analyzed by gas chromatography. Many VOCs are human-made chemicals that are used and produced in the manufacture of paints, adhesives, petroleum products, pharmaceuticals, and refrigerants. They often are components of fuels, solvents, hydraulic fluids, paint thinners, and dry-cleaning agents commonly used in urban settings. VOC contamination of drinking-water supplies is a human-health concern because many are toxic and are known or suspected human carcinogens.

Water table is that surface in a ground-water body at which the water pressure is equal to the atmospheric pressure.

Water-table aquifer is an unconfined aquifer within which the water table is found.

Water year in USGS reports dealing with surface-water supply is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 2002, is called the "2002 water year."

Watershed (See "Drainage basin")

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports. (WRD was used as an abbreviation for "Water-Resources Data" in reports published prior to 1976.)

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

Wet mass is the mass of living matter plus contained water. (See also "Biomass" and "Dry mass")

Wet weight refers to the weight of animal tissue or other substance including its contained water. (See also "Dry weight")

WSP is used as an acronym for "Water-Supply Paper" in reference to previously published reports.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and often are large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers. (See also "Plankton")

TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS OF THE U.S. GEOLOGICAL SURVEY

The USGS publishes a series of manuals titled the "Techniques of Water-Resources Investigations" that describe procedures for planning and conducting specialized work in water-resources investigations. The material in these manuals is grouped under major subject headings called books and is further divided into sections and chapters. For example, section A of book 3 (Applications of Hydraulics) pertains to surface water. Each chapter then is limited to a narrow field of the section subject matter. This publication format permits flexibility when revision or printing is required.

Manuals in the Techniques of Water-Resources Investigations series, which are listed below, are available online at http://water.usgs.gov/pubs/twri/. Printed copies are available for sale from the USGS, Information Services, Box 25286, Federal Center, Denver, Colorado 80225 (an authorized agent of the Superintendent of Documents, Government Printing Office). Please telephone "1-888-ASK-USGS" for current prices, and refer to the title, book number, section number, chapter number, and mention the "U.S. Geological Survey Techniques of Water-Resources Investigations." Other products can be viewed online at http://www.usgs.gov/sales.html, or ordered by telephone or by FAX to (303)236-4693. Order forms for FAX requests are available online at http://mac.usgs.gov/isb/pubs/forms/. Prepayment by major credit card or by a check or money order payable to the "U.S. Geological Survey" is required.

Book 1. Collection of Water Data by Direct Measurement

Section D. Water Quality

1–D1. *Water temperature—Influential factors, field measurement, and data presentation*, by H.H. Stevens, Jr., J.F. Ficke, and G.F. Smoot: USGS–TWRI book 1, chap. D1. 1975. 65 p.

1–D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W.W. Wood: USGS–TWRI book 1, chap. D2. 1976. 24 p.

Book 2. Collection of Environmental Data

Section D. Surface Geophysical Methods

2–D1. *Application of surface geophysics to ground-water investigations,* by A.A.R. Zohdy, G.P. Eaton, and D.R. Mabey: USGS–TWRI book 2, chap. D1. 1974. 116 p.

2–D2. *Application of seismic-refraction techniques to hydrologic studies,* by F.P. Haeni: USGS–TWRI book 2, chap. D2. 1988. 86 p.

Section E. Subsurface Geophysical Methods

2–E1. *Application of borehole geophysics to water-resources investigations,* by W.S. Keys and L.M. MacCary: USGS–TWRI book 2, chap. E1. 1971. 126 p.

2–E2. *Borehole geophysics applied to ground-water investigations,* by W.S. Keys: USGS–TWRI book 2, chap. E2. 1990. 150 p.

Section F. Drilling and Sampling Methods

2–F1. *Application of drilling, coring, and sampling techniques to test holes and wells*, by Eugene Shuter and W.E. Teasdale: USGS–TWRI book 2, chap. F1. 1989. 97 p.

Book 3. Applications of Hydraulics

Section A. Surface-Water Techniques

3–A1. *General field and office procedures for indirect discharge measurements,* by M.A. Benson and Tate Dalrymple: USGS–TWRI book 3, chap. A1. 1967. 30 p.

3–A2. *Measurement of peak discharge by the slope-area method,* by Tate Dalrymple and M.A. Benson: USGS–TWRI book 3, chap. A2. 1967. 12 p.

3–A3. *Measurement of peak discharge at culverts by indirect methods,* by G.L. Bodhaine: USGS–TWRI book 3, chap. A3. 1968. 60 p.

3–A4. *Measurement of peak discharge at width contractions by indirect methods,* by H.F. Matthai: USGS-TWRI book 3, chap. A4. 1967. 44 p.

3–A5. *Measurement of peak discharge at dams by indirect methods,* by Harry Hulsing: USGS–TWRI book 3, chap. A5. 1967. 29 p.

3–A6. *General procedure for gaging streams,* by R.W. Carter and Jacob Davidian: USGS–TWRI book 3, chap. A6. 1968. 13 p.

3–A7. *Stage measurement at gaging stations,* by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A7. 1968. 28 p.

3–A8. *Discharge measurements at gaging stations,* by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A8. 1969. 65 p.

3–A9. *Measurement of time of travel in streams by dye tracing,* by F.A. Kilpatrick and J.F. Wilson, Jr.: USGS–TWRI book 3, chap. A9. 1989. 27 p.

3–Al0. *Discharge ratings at gaging stations,* by E.J. Kennedy: USGS–TWRI book 3, chap. A10. 1984. 59 p.

3–A11. *Measurement of discharge by the moving-boat method,* by G.F. Smoot and C.E. Novak: USGS–TWRI book 3, chap. A11. 1969. 22 p.

3–A12. *Fluorometric procedures for dye tracing*, Revised, by J.F. Wilson, Jr., E.D. Cobb, and F.A. Kilpatrick: USGS–TWRI book 3, chap. A12. 1986. 34 p.

3–A13. *Computation of continuous records of streamflow*, by E.J. Kennedy: USGS–TWRI book 3, chap. A13. 1983. 53 p.

3–A14. *Use of flumes in measuring discharge,* by F.A. Kilpatrick and V.R. Schneider: USGS–TWRI book 3, chap. A14. 1983. 46 p.

3–A15. *Computation of water-surface profiles in open channels,* by Jacob Davidian: USGS–TWRI book 3, chap. A15. 1984. 48 p.

3–A16. *Measurement of discharge using tracers*, by F.A. Kilpatrick and E.D. Cobb: USGS–TWRI book 3, chap. A16. 1985. 52 p.

3–A17. *Acoustic velocity meter systems,* by Antonius Laenen: USGS–TWRI book 3, chap. A17. 1985. 38 p.

3–A18. *Determination of stream reaeration coefficients by use of tracers,* by F.A. Kilpatrick, R.E. Rathbun, Nobuhiro Yotsukura, G.W. Parker, and L.L. DeLong: USGS–TWRI book 3, chap. A18. 1989. 52 p.

3–A19. *Levels at streamflow gaging stations*, by E.J. Kennedy: USGS–TWRI book 3, chap. A19. 1990. 31 p.

3–A20. *Simulation of soluble waste transport and buildup in surface waters using tracers*, by F.A. Kilpatrick: USGS–TWRI book 3, chap. A20. 1993. 38 p.

3–A21 *Stream-gaging cableways,* by C. Russell Wagner: USGS–TWRI book 3, chap. A21. 1995. 56 p.

Section B. Ground-Water Techniques

3–B1. *Aquifer-test design, observation, and data analysis,* by R.W. Stallman: USGS–TWRI book 3, chap. B1. 1971. 26 p.

3–B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G.D. Bennett: USGS–TWRI book 3, chap. B2. 1976. 172 p.

3–B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J.E. Reed: USGS–TWRI book 3, chap. B3. 1980. 106 p.

3–B4. *Regression modeling of ground-water flow,* by R.L. Cooley and R.L. Naff: USGS–TWRI book 3, chap. B4. 1990. 232 p.

3–B4. *Supplement 1. Regression modeling of ground-water flow—Modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems,* by R.L. Cooley: USGS–TWRI book 3, chap. B4. 1993. 8 p.

3–B5. *Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems—An introduction*, by O.L. Franke, T.E. Reilly, and G.D. Bennett: USGS–TWRI book 3, chap. B5. 1987. 15 p.

3–B6. *The principle of superposition and its application in ground-water hydraulics,* by T.E. Reilly, O.L. Franke, and G.D. Bennett: USGS–TWRI book 3, chap. B6. 1987. 28 p.

3–B7. *Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow,* by E.J. Wexler: USGS–TWRI book 3, chap. B7. 1992. 190 p.

3–B8. *System and boundary conceptualization in ground-water flow simulation,* by T.E. Reilly: USGS–TWRI book 3, chap. B8. 2001. 29 p.

Section C. Sedimentation and Erosion Techniques

3–C1. *Fluvial sediment concepts,* by H.P. Guy: USGS–TWRI book 3, chap. C1. 1970. 55 p.

3–C2. *Field methods for measurement of fluvial sediment*, by T.K. Edwards and G.D. Glysson: USGS–TWRI book 3, chap. C2. 1999. 89 p.

3–C3. *Computation of fluvial-sediment discharge,* by George Porterfield: USGS–TWRI book 3, chap. C3. 1972. 66 p.

Book 4. Hydrologic Analysis and Interpretation

Section A. Statistical Analysis

4–A1. *Some statistical tools in hydrology*, by H.C. Riggs: USGS–TWRI book 4, chap. A1. 1968. 39 p.

4–A2. *Frequency curves,* by H.C. Riggs: USGS–TWRI book 4, chap. A2. 1968. 15 p.

4–A3. *Statistical methods in water resources*, by D.R. Helsel and R.M. Hirsch: USGS–TWRI book 4, chap. A3. 1991. Available only online at http://water.usgs.gov/pubs/twri/twri4a3/. (Accessed August 30, 2002.)

Section B. Surface Water

4–B1. *Low-flow investigations,* by H.C. Riggs: USGS–TWRI book 4, chap. B1. 1972. 18 p.

4–B2. *Storage analyses for water supply*, by H.C. Riggs and C.H. Hardison: USGS–TWRI book 4, chap. B2. 1973. 20 p.

4–B3. *Regional analyses of streamflow characteristics,* by H.C. Riggs: USGS–TWRI book 4, chap. B3. 1973. 15 p.

Section D. Interrelated Phases of the Hydrologic Cycle

4–D1. *Computation of rate and volume of stream depletion by wells*, by C.T. Jenkins: USGS–TWRI book 4, chap. D1. 1970. 17 p.

Book 5. Laboratory Analysis

Section A. Water Analysis

5–A1. *Methods for determination of inorganic substances in water and fluvial sediments,* by M.J. Fishman and L.C. Friedman, editors: USGS–TWRI book 5, chap. A1. 1989. 545 p.

5–A2. *Determination of minor elements in water by emission spectroscopy,* by P.R. Barnett and E.C. Mallory, Jr.: USGS–TWRI book 5, chap. A2. 1971. 31 p.

5–A3. *Methods for the determination of organic substances in water and fluvial sediments*, edited by R.L. Wershaw, M.J. Fishman, R.R. Grabbe, and L.E. Lowe: USGS–TWRI book 5, chap. A3. 1987. 80 p.

5–A4. *Methods for collection and analysis of aquatic biological and microbiological samples,* by L.J. Britton and P.E. Greeson, editors: USGS–TWRI book 5, chap. A4. 1989. 363 p.

5–A5. *Methods for determination of radioactive substances in water and fluvial sediments,* by L.L. Thatcher, V.J. Janzer, and K.W. Edwards: USGS–TWRI book 5, chap. A5. 1977. 95 p.

5–A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments,* by L.C. Friedman and D.E. Erdmann: USGS–TWRI book 5, chap. A6. 1982. 181 p.

Section C. Sediment Analysis

5–C1. *Laboratory theory and methods for sediment analysis*, by H.P. Guy: USGS–TWRI book 5, chap. C1. 1969. 58 p.

Book 6. Modeling Techniques

Section A. Ground Water

6–A1. *A modular three-dimensional finite-difference ground-water flow model*, by M.G. McDonald and A.W. Harbaugh: USGS–TWRI book 6, chap. A1. 1988. 586 p.

6–A2. *Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model,* by S.A. Leake and D.E. Prudic: USGS–TWRI book 6, chap. A2. 1991. 68 p.

6–A3. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual,* by L.J. Torak: USGS–TWRI book 6, chap. A3. 1993. 136 p.

6–A4. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 2: Derivation of finite-element equations and comparisons with analytical solutions,* by R.L. Cooley: USGS–TWRI book 6, chap. A4. 1992. 108 p.

6–A5. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 3: Design philosophy and programming details,* by L.J. Torak: USGS–TWRI book 6, chap. A5. 1993. 243 p.

6–A6. *A coupled surface-water and ground-water flow model (MODBRANCH) for simulation of stream-aquifer interaction*, by Eric D. Swain and Eliezer J. Wexler: USGS–TWRI book 6, chap. A6. 1996. 125 p.

6–A7. *User's guide to SEAWAT: A computer program for simulation of three-dimensional variable-density ground-water flow*, by Weixing Guo and Christian D. Langevin: USGS–TWRI book 6, chap. A7. 2002. 77 p.

Book 7. Automated Data Processing and Computations

Section C. Computer Programs

7–C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments,* by P.C. Trescott, G.F. Pinder, and S.P. Larson: USGS–TWRI book 7, chap. C1. 1976. 116 p.

7–C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L.F. Konikow and J.D. Bredehoeft: USGS–TWRI book 7, chap. C2. 1978. 90 p.

7–C3. *A model for simulation of flow in singular and interconnected channels,* by R.W. Schaffranek, R.A. Baltzer, and D.E. Goldberg: USGS–TWRI book 7, chap. C3. 1981. 110 p.

Book 8. Instrumentation

Section A. Instruments for Measurement of Water Level

8–A1. *Methods of measuring water levels in deep wells,* by M.S. Garber and F.C. Koopman: USGS–TWRI book 8, chap. A1. 1968. 23 p.

8–A2. *Installation and service manual for U.S. Geological Survey manometers*, by J.D. Craig: USGS–TWRI book 8, chap. A2. 1983. 57 p.

8--A3. *Use of submersible pressure transducers in water-resources investigations,* by L.A. Freeman, M.C. Carpenter, D.O. Rosenberry, J.P. Rousseau, Randy Unger, and John S. McLean: USGS–TWRI Book 8, chap. A3. 2004. 50 p.

Section B. Instruments for Measurement of Discharge

8–B2. *Calibration and maintenance of vertical-axis type current meters,* by G.F. Smoot and C.E. Novak: USGS–TWRI book 8, chap. B2. 1968. 15 p.

Book 9. Handbooks for Water-Resources Investigations

Section A. National Field Manual for the Collection of Water-Quality Data

9–A1. *National field manual for the collection of water-quality data: Preparations for water sampling*, by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A1. 1998. 47 p.

9–A2. *National field manual for the collection of water-quality data: Selection of equipment for water sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A2. 1998. 94 p.

9–A3. *National field manual for the collection of water-quality data: Cleaning of equipment for water sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A3. 1998. 75 p.

9–A4. *National field manual for the collection of water-quality data: Collection of water samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A4. 1999. 156 p.

9–A5. *National field manual for the collection of water-quality data: Processing of water samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A5. 1999, 149 p.

9–A6. *National field manual for the collection of water-quality data: Field measurements*, edited by F.D. Wilde and D.B. Radtke: USGS–TWRI book 9, chap. A6. 1998. Variously paginated.

9–A7. *National field manual for the collection of water-quality data: Biological indicators*, edited by D.N. Myers and F.D. Wilde: USGS–TWRI book 9, chap. A7. 1997 and 1999. Variously paginated.

9–A8. *National field manual for the collection of water-quality data: Bottom-material samples*, by D.B. Radtke: USGS–TWRI book 9, chap. A8. 1998. 48 p.

9–A9. *National field manual for the collection of water-quality data: Safety in field activities*, by S.L. Lane and R.G. Fay: USGS–TWRI book 9, chap. A9. 1998. 60 p.

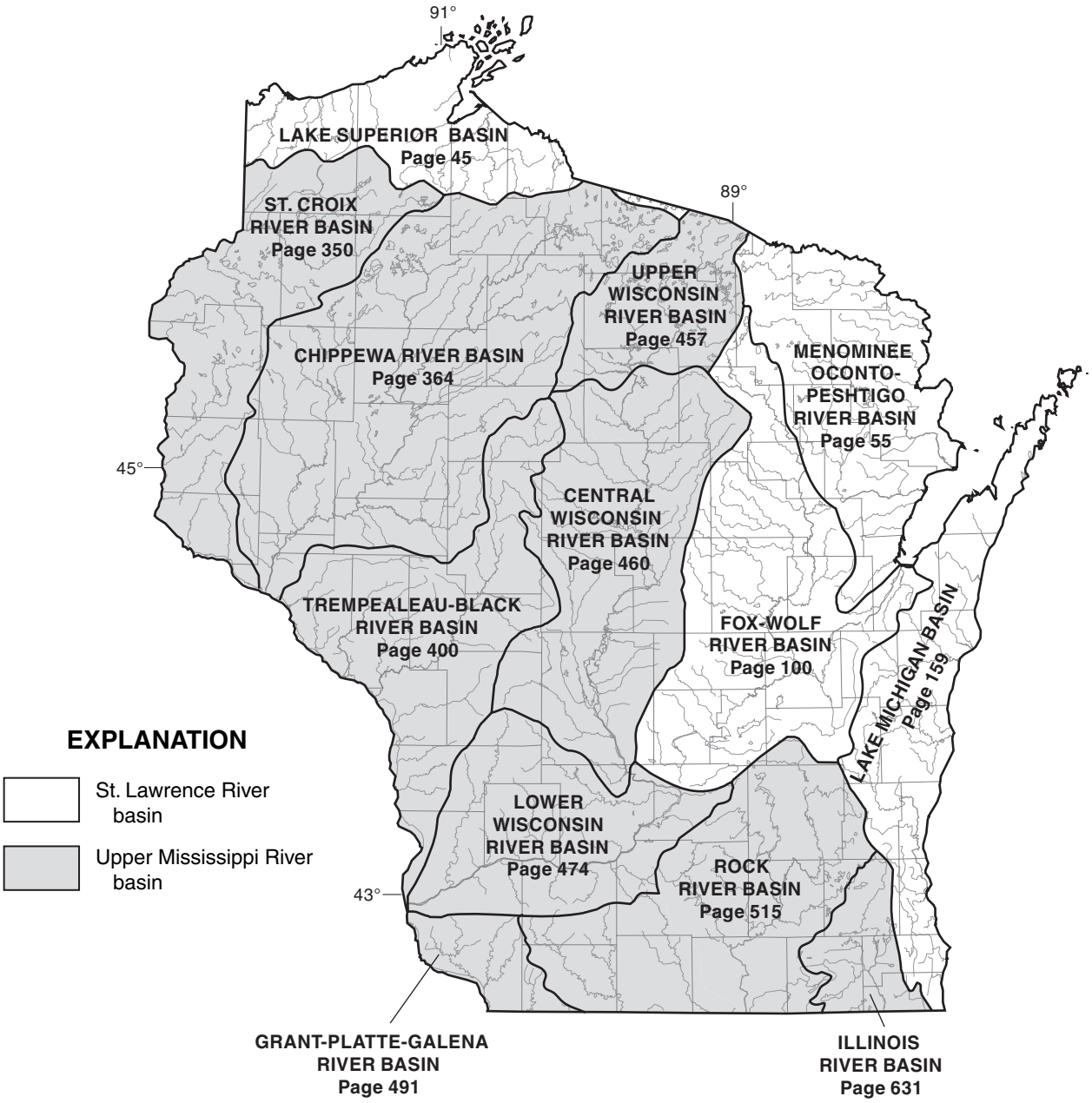
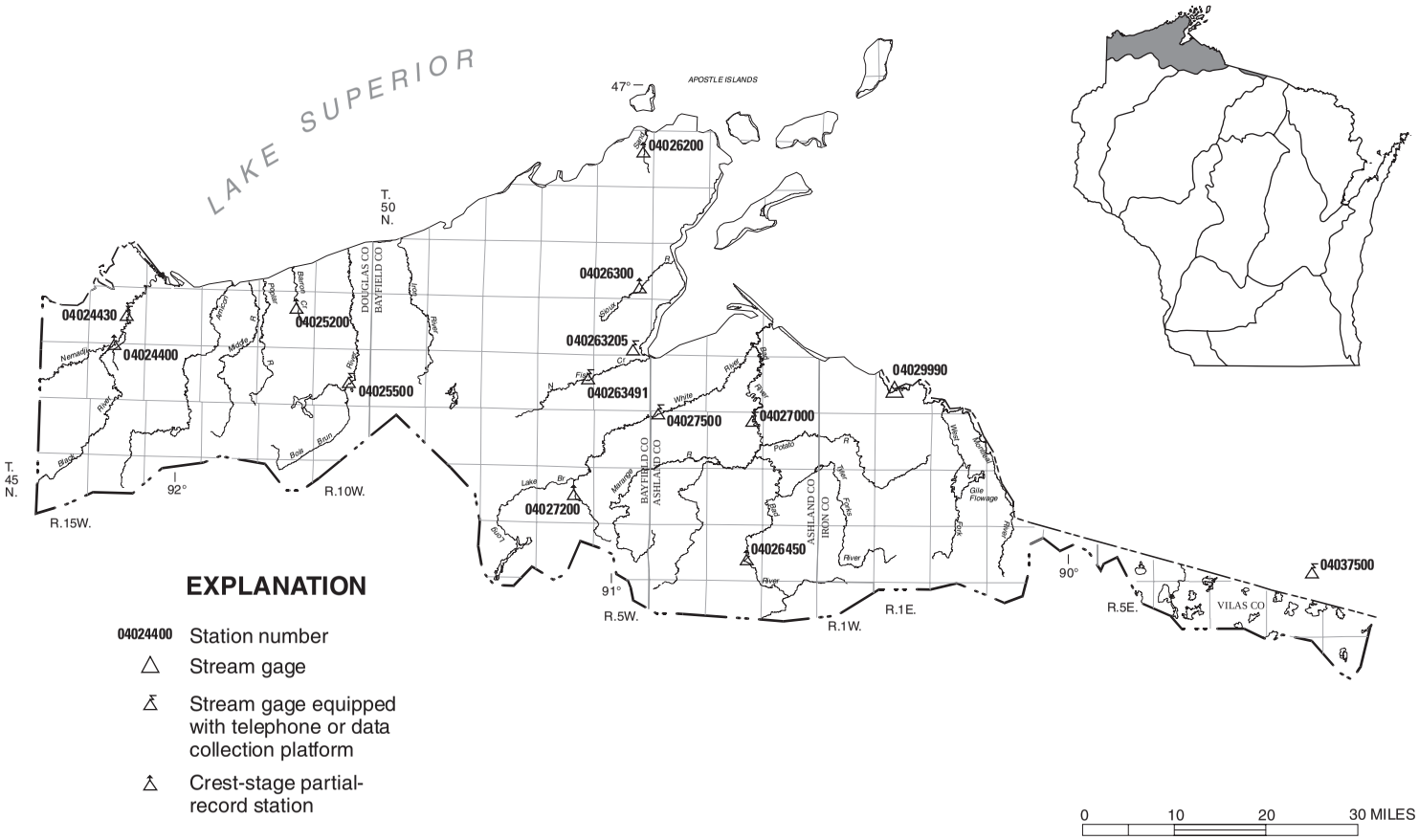


Figure 4. Major surface-water drainage basins and index of hydrologic records.

ST. LAWRENCE RIVER BASIN RECORDS



Base from U.S. Geological Survey 1:100,000 digital data; modified by Wisconsin Department of Natural Resources. Wisconsin Transverse Mercator projection.

LAKE SUPERIOR BASIN

04024430 NEMADJI RIVER NEAR SOUTH SUPERIOR, WI

LOCATION.--Lat 46°38'00", long 92°05'38", in SW ¼ sec.14, T.48 N., R.14 W., Douglas County, Hydrologic Unit 04010301, on right bank at downstream side of bridge on County Trunk Highway C, 2.0 mi south of South Superior and 7.8 mi downstream from Black River.

DRAINAGE AREA.--420 mi^2.

PERIOD OF RECORD.--November 1973 to current year.

REVISED RECORDS.--WDR WI-75-1: 1974(M). WDR WI-82-1: Drainage area and 1981.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 601.13 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

EXTREMES OUTSIDE THE PERIOD OF RECORD.--A flood of Aug. 17, 1972, may have exceeded floods at this location since then.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	128	e84	e67	e52	e79	e2,200	350	3,590	86	101	82
2	62	117	e84	e65	e53	e79	e2,200	304	1,840	80	89	79
3	61	107	e82	e63	e52	e79	e2,500	270	1,200	76	79	77
4	58	107	e82	e60	e52	e80	2,500	245	868	77	72	72
5	57	111	e85	e60	e52	e84	1,670	225	697	94	67	75
6	59	e110	e90	e60	e52	e87	1,340	207	713	117	62	348
7	56	e110	e90	e60	e52	e89	1,290	192	611	104	59	568
8	55	e100	e87	e60	e52	e89	1,190	e180	482	100	79	271
9	54	e100	e87	e61	e51	e90	976	e180	439	98	223	196
10	54	e110	e86	e62	e51	e92	772	e170	366	88	367	165
11	55	e110	e81	e62	e53	e92	619	160	307	298	438	150
12	69	e110	e75	e58	e53	e92	514	151	311	945	515	165
13	82	e120	e75	e56	e54	e92	452	148	357	522	358	160
14	84	e130	e80	e54	e51	e92	405	151	289	361	258	141
15	79	e120	e80	e53	e51	e92	368	150	245	279	206	149
16	81	e120	e80	e52	e51	e93	336	146	215	214	175	488
17	75	e130	e80	e52	e51	e93	321	782	204	178	153	383
18	69	e120	e77	e51	e52	e98	372	1,470	185	151	137	247
19	65	e110	e75	e51	e53	e100	1,810	825	163	237	123	198
20	64	e100	e70	e51	e53	e110	1,630	579	145	200	108	170
21	61	e90	e70	e51	e53	e110	1,070	456	132	154	98	156
22	60	e86	e76	e51	e53	e110	1,020	377	123	123	94	275
23	59	e86	e76	e49	e58	e110	786	638	114	106	91	374
24	59	e90	e76	e49	e61	e120	621	725	116	95	88	459
25	62	e89	e70	e49	e70	e140	565	638	121	85	82	497
26	62	e88	e70	e50	e77	e180	744	595	116	78	94	318
27	61	e87	e73	e49	e78	e400	609	494	106	71	128	238
28	70	e86	e76	e49	e79	e500	511	454	100	68	115	198
29	75	e85	e80	e48	e79	e1,100	470	388	94	99	99	179
30	86	e84	e76	e49	---	e3,000	409	519	89	131	91	163
31	107	---	e71	e50	---	e2,400	---	3,700	---	116	86	---
TOTAL	2,066	3,141	2,444	1,702	1,649	9,972	30,270	15,869	14,338	5,431	4,735	7,041
MEAN	66.6	105	78.8	54.9	56.9	322	1,009	512	478	175	153	235
MAX	107	130	90	67	79	3,000	2,500	3,700	3,590	945	515	568
MIN	54	84	70	48	51	79	321	146	89	68	59	72
CFSM	0.16	0.25	0.19	0.13	0.14	0.77	2.40	1.22	1.14	0.42	0.36	0.56
IN.	0.18	0.28	0.22	0.15	0.15	0.88	2.68	1.41	1.27	0.48	0.42	0.62

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2004, BY WATER YEAR (WY)

MEAN	305	295	137	80.2	99.5	440	1,393	606	474	354	217	316
MAX	1,082	1,200	418	177	336	1,088	3,474	1,355	1,357	1,145	1,047	1,485
(WY)	(1983)	(1992)	(1992)	(1984)	(1984)	(1995)	(2001)	(1979)	(1993)	(1999)	(1999)	(1986)
MIN	41.0	33.9	28.2	27.3	29.8	96.6	244	119	82.9	46.6	40.6	34.4
(WY)	(1977)	(1977)	(1977)	(1977)	(1977)	(2002)	(1987)	(1998)	(1988)	(1988)	(1976)	(1976)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1974 - 2004	
ANNUAL TOTAL	106,633		98,658			
ANNUAL MEAN	292		270		392	
HIGHEST ANNUAL MEAN					786	1986
LOWEST ANNUAL MEAN					200	1980
HIGHEST DAILY MEAN	3,670	May 10	3,700	May 31	11,900	Apr 24, 2001
LOWEST DAILY MEAN	(a)36	Feb 26, 27	(a)48	Jan 29	(a)19	Dec 8, 1976
ANNUAL SEVEN-DAY MINIMUM	(a)37	Feb 23	(a)49	Jan 23	(a)26	Dec 5, 1976
MAXIMUM PEAK FLOW			5,000	May 31	(b)15,800	Apr 23, 2001
MAXIMUM PEAK STAGE			19.15	May 31	(c)25.97	Sep 6, 1990
ANNUAL RUNOFF (CFSM)	0.696		0.642		0.934	
ANNUAL RUNOFF (INCHES)	9.44		8.74		12.69	
10 PERCENT EXCEEDS	739		610		951	
50 PERCENT EXCEEDS	89		98		146	
90 PERCENT EXCEEDS	40		53		56	

(a) Ice affected
(b) Gage height, 25.18 ft
(c) Discharge 13,700 ft^3/s, rating then in use
(e) Estimated due to ice effect or missing record

04025500 BOIS BRULE RIVER AT BRULE, WI

LOCATION.--Lat 46°32'16", long 91°35'43", in NW ¼ SW ¼ sec.23, T.47 N., R.10 W., Douglas County, Hydrologic Unit 04010301, on right bank, 1.4 mi southwest of Brule Post Office, 1.4 mi downstream from Nebagamon Creek, and 1.7 mi upstream from Little Bois Brule River.

DRAINAGE AREA.--118 mi^2.

PERIOD OF RECORD.--October 1942 to September 1981, January 1984 to current year. Prior to January 1943, monthly discharge published in WSP 1307. January 1984 to September 1994, incorrectly published as "near Brule."

REVISED RECORDS.--WSP 1337: 1943(M), 1944, 1945-50(M). WDR WI-92-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 948.49 ft above NGVD of 1929. Prior to October 1964, nonrecording gage at same site and datum, supplemented by water-stage recorder part of 1959-62.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	122	142	138	e130	e120	129	286	197	314	134	161	126
2	121	137	e140	e130	e120	129	284	189	285	129	149	125
3	120	133	e140	e130	e120	129	294	184	258	127	138	124
4	120	138	136	e130	e120	129	279	178	238	128	129	122
5	120	140	136	e130	e120	131	266	174	227	128	123	138
6	119	136	135	e120	e120	131	263	170	242	125	120	200
7	119	e130	135	e130	e120	132	261	165	233	129	119	196
8	120	e130	134	e130	e120	130	264	161	221	125	139	184
9	120	e130	134	e130	e120	129	251	158	207	121	148	171
10	121	129	134	e130	e120	132	236	156	197	120	156	158
11	124	133	e130	e130	e120	e120	223	152	191	172	178	148
12	143	145	e130	e130	e120	e120	213	152	198	188	184	141
13	139	148	e130	e130	e120	e120	206	161	196	177	174	138
14	132	143	e130	e130	e120	132	201	171	189	172	165	142
15	128	140	e130	e130	e120	131	199	164	180	159	155	159
16	125	140	e130	e130	e120	130	197	161	184	145	153	163
17	123	142	e130	e130	e120	132	194	246	178	135	151	155
18	122	145	e130	e120	e120	132	228	258	168	131	146	150
19	122	146	e130	e120	e130	131	328	241	159	129	139	144
20	120	144	e130	e120	e130	130	316	232	153	128	133	140
21	119	140	e130	e120	128	131	319	210	148	126	129	140
22	120	137	131	e120	126	131	305	208	143	123	136	144
23	119	141	131	e120	128	131	278	227	147	120	131	144
24	122	e140	e130	e120	127	133	255	231	153	118	129	152
25	123	e140	e130	e120	126	141	252	222	147	118	128	148
26	123	142	e130	e120	126	161	244	210	142	116	134	143
27	122	142	e130	e120	126	170	232	207	138	115	131	140
28	129	143	e130	e120	127	215	222	200	135	123	129	137
29	136	142	e130	e120	128	243	212	190	131	167	127	135
30	140	141	e130	e120	---	243	206	192	129	162	128	133
31	147	---	e130	e120	---	256	---	308	---	182	127	---
TOTAL	3,880	4,179	4,094	3,880	3,562	4,534	7,514	6,075	5,631	4,272	4,389	4,440
MEAN	125	139	132	125	123	146	250	196	188	138	142	148
MAX	147	148	140	130	130	256	328	308	314	188	184	200
MIN	119	129	130	120	120	120	194	152	129	115	119	122
CFSM	1.06	1.18	1.12	1.06	1.04	1.24	2.12	1.66	1.59	1.17	1.20	1.25
IN.	1.22	1.32	1.29	1.22	1.12	1.43	2.37	1.92	1.78	1.35	1.38	1.40

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2004, BY WATER YEAR (WY)

MEAN	158	161	143	133	133	155	282	233	193	168	149	156
MAX	259	295	205	164	187	265	611	495	416	345	289	297
(WY)	(1978)	(1972)	(1972)	(1984)	(1966)	(1945)	(2001)	(1950)	(1944)	(1952)	(1999)	(1951)
MIN	110	119	113	104	104	105	157	140	122	108	114	108
(WY)	(1949)	(1949)	(1948)	(1948)	(1948)	(1943)	(1959)	(1958)	(1948)	(1964)	(1948)	(1948)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1943 - 2004	
ANNUAL TOTAL	57,501		56,450			
ANNUAL MEAN	158		154		172	
HIGHEST ANNUAL MEAN					223	1972
LOWEST ANNUAL MEAN					133	1948
HIGHEST DAILY MEAN	462	May 12	328	Apr 19	1,700	Apr 23, 2001
LOWEST DAILY MEAN	107	(a)Sep 3	115	Jul 27	74	Mar 23, 1943
ANNUAL SEVEN-DAY MINIMUM	107	Sep 2	119	Jul 22	89	Mar 23, 1943
MAXIMUM PEAK FLOW			(b)342	Apr 19	1,860	Apr 23, 2001
MAXIMUM PEAK STAGE			(c)3.74	Jan 18	7.24	Apr 23, 2001
INSTANTANEOUS LOW FLOW			113	(d)Mar 16	67	Mar 13, 1943
ANNUAL RUNOFF (CFSM)	1.34		1.31		1.45	
ANNUAL RUNOFF (INCHES)	18.13		17.80		19.76	
10 PERCENT EXCEEDS	225		227		253	
50 PERCENT EXCEEDS	134		134		146	
90 PERCENT EXCEEDS	118		120		120	

(a) Also occurred additional days
(b) Gage height, 2.60 ft
(c) Ice affected
(d) Also occurred July 28
(e) Estimated due to ice effect or missing record

040263205 WHITTLESEY CREEK NEAR ASHLAND, WI

LOCATION.--Lat 46°35'40", long 90°57'47", in SE ¼ NW ¼ sec.35, T.48 N., R.5 W., Bayfield County, Hydrologic Unit 04010301, at Cherryville road, 3.7 mi west of courthouse in Ashland.

DRAINAGE AREA.--37.6 mi^2, of which 30.2 mi^2 is noncontributing.

PERIOD OF RECORD.--April 1999 to current year.

REVISED RECORDS.--WDR WI-02-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 615 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	18	18	18	18	18	32	18	27	18	18	18
2	18	18	18	18	18	18	33	18	22	18	18	18
3	18	18	18	18	18	18	38	18	20	18	17	18
4	18	20	18	18	18	18	32	18	19	18	18	18
5	18	20	18	18	18	18	27	18	19	18	18	19
6	18	19	18	18	18	18	32	18	20	18	18	19
7	18	18	18	18	18	18	31	18	19	18	18	18
8	18	18	18	18	18	18	29	18	19	18	18	18
9	18	18	18	18	18	18	24	18	18	17	20	18
10	18	19	18	18	18	18	22	18	18	17	19	18
11	19	19	18	18	18	18	21	18	18	18	19	18
12	18	20	18	18	18	18	20	18	18	18	18	18
13	18	19	18	18	18	18	20	19	18	18	18	18
14	18	19	18	18	18	18	20	19	18	17	17	19
15	18	19	18	18	18	18	20	18	18	17	17	21
16	18	19	18	18	18	18	20	18	18	18	18	20
17	18	19	18	18	18	18	19	46	18	17	17	19
18	18	20	18	18	18	18	37	26	18	18	18	19
19	18	19	18	18	18	18	106	21	17	17	18	18
20	18	19	18	18	18	18	30	24	17	17	18	18
21	18	18	18	18	18	17	39	20	17	17	18	19
22	18	19	18	18	18	18	28	20	17	17	19	19
23	18	19	18	18	18	18	23	34	18	17	18	19
24	18	19	18	18	18	18	21	46	18	17	18	19
25	18	19	18	18	18	19	27	26	17	17	18	19
26	18	18	18	17	18	31	24	22	17	17	21	18
27	18	18	18	18	18	42	21	21	17	17	18	19
28	19	18	18	18	18	110	20	20	17	18	18	19
29	19	19	18	18	18	79	20	19	17	19	18	19
30	19	18	18	18	---	43	19	35	18	18	19	19
31	19	---	18	18	---	34	---	62	---	18	18	---
TOTAL	563	563	558	557	522	789	855	732	552	545	563	559
MEAN	18.2	18.8	18.0	18.0	18.0	25.5	28.5	23.6	18.4	17.6	18.2	18.6
MAX	19	20	18	18	18	110	106	62	27	19	21	21
MIN	18	18	18	17	18	17	19	18	17	17	17	18
CFSM	2.45	2.54	2.43	2.43	2.43	3.44	3.85	3.19	2.49	2.38	2.45	2.52
IN.	2.83	2.83	2.81	2.80	2.62	3.97	4.30	3.68	2.77	2.74	2.83	2.81

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)

MEAN	20.4	20.2	18.7	18.0	18.7	22.4	39.7	24.0	19.6	21.7	19.4	19.7
MAX	25.5	25.1	19.8	18.4	21.4	25.5	76.5	31.5	22.6	36.6	22.8	22.4
(WY)	(2003)	(2001)	(2002)	(2003)	(2000)	(2004)	(2001)	(2003)	(1999)	(1999)	(1999)	(2002)
MIN	18.2	18.5	18.0	17.5	17.7	18.2	19.2	19.4	18.4	17.6	17.1	17.6
(WY)	(2004)	(2002)	(2000)	(2001)	(2001)	(2002)	(2000)	(1999)	(2004)	(2004)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1999 - 2004	
ANNUAL TOTAL	7,744		7,358			
ANNUAL MEAN	21.2		20.1		21.8	
HIGHEST ANNUAL MEAN					24.3	2001
LOWEST ANNUAL MEAN					19.8	2000
HIGHEST DAILY MEAN	192	May 11	110	Mar 28	370	Apr 23, 2001
LOWEST DAILY MEAN	16	Jul 28, 29	17	(a)Jan 26	16	(b)Jul 26, 2001
ANNUAL SEVEN-DAY MINIMUM	17	(a)Jul 23	17	Jul 19	17	(a)Jul 23, 2003
MAXIMUM PEAK FLOW			319	Apr 19	777	Apr 23, 2001
MAXIMUM PEAK STAGE			4.20	Apr 19	(c)6.44	Apr 23, 2001
INSTANTANEOUS LOW FLOW			16	(a)Jul 22	16	(a)Jul 25, 2001
ANNUAL RUNOFF (CFSM)	2.87		2.72		2.95	
ANNUAL RUNOFF (INCHES)	38.93		36.99		40.07	
10 PERCENT EXCEEDS	23		21		24	
50 PERCENT EXCEEDS	18		18		19	
90 PERCENT EXCEEDS	17		18		18	

(a) Also occurred additional days
(b) Also occurred July 28, 29, 2003, and Feb. 17, 2000, estimated
(c) 7.18 ft, July 5, 1999, from crest-stage gage

040263491 NORTH FISH CREEK NEAR MOQUAH, WI

LOCATION.--Lat 46°32'56", long 91°03'43", in SW ¼ SE ¼ sec.13, T.47 N., R.6 W., Bayfield County, Hydrologic Unit 04010301, on left bank just downstream from bridge on old U.S. Highway 2, and 1.3 mi southeast of Moquah.

DRAINAGE AREA.--65.4 mi^2, of which 27.1 mi^2 is noncontributing (revised).

PERIOD OF RECORD.--October 1989 to September 1991, October 1994 to September 1997, July 2000 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 660 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good (see page 13). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	51	50	51	51	52	153	62	140	52	51	54
2	51	51	50	51	51	52	155	60	94	52	50	53
3	51	51	50	50	49	52	168	59	76	52	50	52
4	50	54	50	49	50	51	140	58	67	54	49	51
5	50	52	50	46	49	53	117	58	83	52	49	57
6	50	51	50	51	50	52	122	57	156	51	49	57
7	50	50	51	52	50	52	109	57	91	52	50	55
8	50	50	52	51	49	51	109	57	81	51	51	53
9	50	50	51	50	50	52	93	57	76	50	53	52
10	50	51	52	50	50	54	84	55	68	50	52	52
11	52	52	51	50	50	55	81	55	63	53	53	51
12	52	56	50	49	50	54	76	59	64	51	51	52
13	51	54	51	49	50	54	73	63	61	51	50	51
14	51	53	51	51	49	53	72	66	60	50	49	54
15	50	52	51	50	53	53	71	62	59	50	49	65
16	50	52	51	50	51	53	70	62	73	50	52	69
17	50	52	50	50	50	53	68	240	65	50	51	61
18	50	53	50	49	50	53	181	137	59	50	51	55
19	50	53	50	49	50	53	515	93	56	50	50	54
20	50	52	50	50	51	54	172	83	55	50	50	53
21	50	51	51	50	50	53	170	73	55	50	50	54
22	50	52	50	50	51	54	128	69	54	49	53	53
23	50	55	50	53	50	54	93	112	56	49	51	52
24	51	53	50	50	50	57	79	167	55	49	51	52
25	50	52	50	49	50	67	112	101	54	49	51	51
26	50	52	50	49	50	157	100	82	53	49	82	52
27	50	51	51	50	50	208	81	79	53	49	77	51
28	53	51	52	46	51	671	76	72	53	53	62	51
29	51	51	52	52	51	429	69	66	52	57	57	51
30	53	51	51	54	---	222	65	199	53	53	57	51
31	52	---	51	54	---	164	---	329	---	53	55	---
TOTAL	1,568	1,559	1,569	1,555	1,456	3,192	3,602	2,849	2,085	1,581	1,656	1,619
MEAN	50.6	52.0	50.6	50.2	50.2	103	120	91.9	69.5	51.0	53.4	54.0
MAX	53	56	52	54	53	671	515	329	156	57	82	69
MIN	50	50	50	46	49	51	65	55	52	49	49	51
CFSM	1.32	1.36	1.32	1.31	1.31	2.69	3.13	2.40	1.81	1.33	1.39	1.41
IN.	1.52	1.51	1.52	1.51	1.41	3.10	3.50	2.77	2.03	1.54	1.61	1.57

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2004, BY WATER YEAR (WY)

MEAN	70.0	65.0	55.2	53.8	54.6	91.6	180	87.6	68.0	72.3	56.7	69.1
MAX	110	102	68.6	63.7	64.1	141	374	114	97.6	155	74.4	135
(WY)	(1991)	(1997)	(2002)	(1997)	(1997)	(1990)	(2001)	(2003)	(1991)	(1996)	(1990)	(1990)
MIN	50.6	52.0	49.0	49.4	49.5	59.3	87.8	59.6	54.6	51.0	49.6	50.4
(WY)	(2004)	(2004)	(2001)	(2001)	(2003)	(2001)	(1990)	(1990)	(2003)	(2004)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1990 - 2004	
ANNUAL TOTAL	23,156		24,291			
ANNUAL MEAN	63.4		66.4		77.3	
HIGHEST ANNUAL MEAN					87.9	1996
LOWEST ANNUAL MEAN					66.4	2004
HIGHEST DAILY MEAN	661	May 11	671	Mar 28	1,960	Apr 23, 2001
LOWEST DAILY MEAN	48	(a)Jan 13	46	Jan 5, 28	45	(b)Dec 10, 2000
ANNUAL SEVEN-DAY MINIMUM	48	Mar 7	49	Jul 21	48	(c)Dec 4, 2000
MAXIMUM PEAK FLOW			1,120	Apr 19	3,420	Apr 23, 2001
MAXIMUM PEAK STAGE			10.75	Apr 19	16.79	Apr 23, 2001
INSTANTANEOUS LOW FLOW			(d)36	Feb 4	(d)35	(f)Dec 19, 1989
ANNUAL RUNOFF (CFSM)	1.66		1.73		2.02	
ANNUAL RUNOFF (INCHES)	22.49		23.59		27.41	
10 PERCENT EXCEEDS	70		83		99	
50 PERCENT EXCEEDS	51		52		56	
90 PERCENT EXCEEDS	49		50		50	

(a) Also occurred additional days
(b) Also occurred Jan. 2, 1995, estimated
(c) Also occurred Mar. 7, 2003, and Dec. 29, 1994, estimated
(d) Result of freezeup
(f) Also occurred Feb. 21, 2001

04027000 BAD RIVER NEAR ODANAH, WI

LOCATION.--Lat 46°29'12", long 90°41'46", in NE ¼ NE ¼ sec.11 (revised), T.46 N., R.3 W., Ashland County, Hydrologic Unit 04010302, Bad River Indian Reservation, on left bank just downstream from Elm Hoist bridge, 5.0 mi downstream from Potato River, 8.5 mi south of Odanah, and 23 mi from mouth.

DRAINAGE AREA.--597 mi^2.

PERIOD OF RECORD.--July 1914 to December 1922 (monthly discharge for some periods published in WSP 1307) May 1948 to current year.

REVISED RECORDS.--WSP 1337: 1922. WDR WI-82-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 668.3 ft above NGVD of 1929. May 17, 1948, to Nov. 6, 1959, and Oct. 19, 1960, to Nov. 23, 1961, water-stage recorder. Nov. 7, 1959, to Oct. 18, 1960, and Nov. 24, 1961, to July 12, 1962, nonrecording gage. Prior to Nov. 11, 1922, water-stage recorder at site 2 mi downstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

EXTREMES OUTSIDE THE PERIOD OF RECORD.--Flood of June 24, 1946, reached a stage of at least 22.2 ft, top of former downstream bridge submerged, information from Indian Service.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	213	446	e210	e230	e120	e150	2,810	761	1,710	184	256	334
2	194	397	e190	e240	e130	e160	2,380	657	1,450	175	217	296
3	181	344	e180	e250	e140	e180	2,270	573	1,120	164	183	257
4	177	317	e190	e220	e130	e250	2,080	519	839	407	162	226
5	170	320	e200	e200	e130	e330	1,840	471	681	645	145	223
6	165	305	e210	e180	e130	e320	1,790	435	1,540	494	134	777
7	161	e220	e210	e160	e130	e330	1,920	398	1,420	420	126	911
8	158	e200	e210	e150	e130	e310	1,960	363	1,010	377	126	661
9	149	e200	e220	e140	e130	e300	1,900	340	872	321	165	491
10	142	e260	e220	e140	e130	e300	1,620	326	876	275	269	383
11	141	262	e210	e150	e130	e330	1,370	310	708	242	423	319
12	170	261	e200	e150	e130	e320	1,130	291	630	254	859	278
13	213	241	e200	e140	e130	e340	947	323	602	225	659	243
14	215	280	e210	e130	e140	e360	837	1,030	569	207	467	217
15	201	284	e220	e130	e130	e370	771	1,170	540	187	348	256
16	186	285	e230	e130	e120	e360	735	928	480	171	282	674
17	176	310	e230	e130	e120	e350	719	1,440	463	159	251	564
18	171	359	e220	e140	e120	e340	1,290	1,840	404	149	230	441
19	167	420	e220	e130	e120	e330	6,300	1,320	347	143	215	354
20	163	413	e210	e120	e120	e330	6,830	1,040	302	241	198	297
21	161	373	e210	e120	e120	e320	4,790	901	269	239	176	261
22	161	334	e220	e120	e120	e300	3,400	750	249	186	168	240
23	163	303	e210	e120	e120	e330	2,350	758	240	160	159	223
24	162	e230	e200	e120	e130	e330	1,700	2,600	269	143	150	211
25	167	e230	e180	e120	e140	e420	1,570	2,220	279	131	150	207
26	176	e280	e190	e120	e130	e1,700	1,750	1,620	258	123	1,540	198
27	182	e280	e200	e120	e130	e3,000	1,500	1,370	234	116	1,200	192
28	192	e270	e250	e120	e140	e5,600	1,260	1,330	216	113	707	185
29	233	e250	e300	e120	e150	7,650	1,060	1,060	199	155	493	178
30	301	e230	e330	e110	---	5,580	890	896	184	286	397	170
31	418	---	e300	e120	---	3,540	---	1,520	---	263	383	---
TOTAL	5,829	8,904	6,780	4,570	3,740	34,830	61,769	29,560	18,960	7,355	11,238	10,267
MEAN	188	297	219	147	129	1,124	2,059	954	632	237	363	342
MAX	418	446	330	250	150	7,650	6,830	2,600	1,710	645	1,540	911
MIN	141	200	180	110	120	150	719	291	184	113	126	170
CFSM	0.31	0.50	0.37	0.25	0.22	1.88	3.45	1.60	1.06	0.40	0.61	0.57
IN.	0.36	0.55	0.42	0.28	0.23	2.17	3.85	1.84	1.18	0.46	0.70	0.64

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2004, BY WATER YEAR (WY)

MEAN	468	512	293	189	198	678	2,223	1,064	637	478	301	346
MAX	1,861	2,151	638	410	713	2,494	4,320	2,752	2,054	2,311	1,565	1,775
(WY)	(1986)	(1992)	(1992)	(1992)	(1984)	(1973)	(2001)	(1950)	(1951)	(1949)	(1972)	(1977)
MIN	67.1	95.2	107	95.0	69.3	113	513	202	121	77.9	68.2	74.3
(WY)	(1949)	(1949)	(1977)	(1917)	(1964)	(1917)	(1987)	(1998)	(1948)	(1964)	(1948)	(1976)

04027000 BAD RIVER NEAR ODANAH, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1914 - 2004	
ANNUAL TOTAL	204,763		203,802			
ANNUAL MEAN	561		557		618	
HIGHEST ANNUAL MEAN					942	1983
LOWEST ANNUAL MEAN					346	1990
HIGHEST DAILY MEAN	18,800	May 12	7,650	Mar 29	22,000	Apr 24, 1960
LOWEST DAILY MEAN	93	Sep 11	(a)110	Jan 30	52	(b)Oct 1, 1948
ANNUAL SEVEN-DAY MINIMUM	98	Sep 6	(a)119	Jan 24	54	Feb 19, 1964
MAXIMUM PEAK FLOW			8,020	Mar 29	(c)27,700	Apr 24, 1960
MAXIMUM PEAK STAGE			11.30	Mar 29	(d)21.70	Apr 24, 1960
INSTANTANEOUS LOW FLOW			108	Jul 28	(f)34	Nov 8, 1976
ANNUAL RUNOFF (CFSM)	0.940		0.933		1.03	
ANNUAL RUNOFF (INCHES)	12.76		12.70		14.06	
10 PERCENT EXCEEDS	1,040		1,380		1,420	
50 PERCENT EXCEEDS	202		250		275	
90 PERCENT EXCEEDS	120		130		120	

(a) Ice affected
(b) Also occurred Aug. 6, 7, 1964
(c) From rating curve extended above 12,000 ft^3/s and a comparison with contracted-opening measurement of peak flow 45,600 ft^3/s at Odanah, drainage area, 990 mi^2
(d) From floodmarks
(e) Estimated due to ice effect or missing record
(f) Result of freezeup

04027500 WHITE RIVER NEAR ASHLAND, WI

LOCATION.--Lat 46°29'54", long 90°54'11"(revised), in NE ¼ NE ¼ sec.6, T.46 N., R.4 W., Ashland County, Hydrologic Unit 04010302, at downstream end of powerplant of Lake Superior District Power Co., 0.3 mi downstream from bridge on State Highway 112 over dam, and 4.5 mi south of Ashland city limits.

DRAINAGE AREA.--301 mi^2.

PERIOD OF RECORD.--May 1948 to current year.

REVISED RECORDS.--WDR WI-82-1: Drainage area. WDR WI-92-1: 1952-53(M), 1960(M), 1967(M), 1972(M), and 1978(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 660.15 ft above NGVD of 1929 (Lake Superior District Power Co. bench mark). Prior to May 20, 1976, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Diurnal fluctuation caused by hydroelectric plant at gage. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	171	199	186	154	e170	203	864	224	523	161	e160	189
2	167	191	148	161	e180	220	660	227	603	180	e170	158
3	173	186	136	202	e180	209	626	200	542	170	e170	198
4	166	186	179	171	e180	215	585	194	411	171	e160	182
5	173	189	200	100	e170	206	531	190	323	174	e160	179
6	169	189	204	139	e170	202	517	186	499	235	e160	194
7	166	182	192	152	e180	193	474	159	448	181	e160	224
8	169	143	187	190	e170	196	482	171	551	189	e160	217
9	167	147	188	186	e170	197	453	172	490	166	e180	199
10	166	192	213	180	e170	211	392	172	393	166	e180	184
11	168	198	150	179	e170	205	358	175	335	166	e200	179
12	178	193	115	182	e170	200	321	166	299	164	e210	175
13	178	194	130	183	e180	201	290	163	265	190	e210	171
14	179	192	187	181	e180	200	256	187	245	159	e210	e180
15	180	187	222	174	e170	198	262	203	229	156	e210	e180
16	179	186	206	182	e150	197	248	191	231	155	e180	238
17	165	187	186	181	e160	198	227	360	202	149	e180	267
18	178	191	186	181	e170	197	407	421	209	145	e180	254
19	178	199	196	e130	e170	197	1,920	433	201	151	e180	217
20	169	195	172	e150	e180	197	861	421	189	140	e170	194
21	168	189	163	e160	194	180	1,020	350	175	139	e170	183
22	176	186	184	e160	189	195	857	283	165	139	e170	167
23	172	188	200	e160	185	179	645	331	184	139	e170	174
24	179	160	175	e160	190	195	474	675	184	e150	e170	178
25	169	136	130	e160	190	199	426	465	186	e150	e170	180
26	179	182	148	e170	191	596	423	492	184	e150	e180	178
27	170	233	200	e180	205	738	386	430	181	e150	e240	173
28	179	217	229	e180	189	1,870	338	383	157	e160	e240	161
29	161	198	243	e170	202	1,490	304	350	175	e170	e240	168
30	182	192	214	e160	---	1,250	271	334	161	e160	e260	163
31	192	---	210	e160	---	980	---	677	---	e160	e260	---
TOTAL	5,366	5,607	5,679	5,178	5,175	11,914	15,878	9,385	8,940	5,035	5,860	5,704
MEAN	173	187	183	167	178	384	529	303	298	162	189	190
MAX	192	233	243	202	205	1,870	1,920	677	603	235	260	267
MIN	161	136	115	100	150	179	227	159	157	139	160	158
CFSM	0.58	0.62	0.61	0.55	0.59	1.28	1.76	1.01	0.99	0.54	0.63	0.63
IN.	0.66	0.69	0.70	0.64	0.64	1.47	1.96	1.16	1.10	0.62	0.72	0.70

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2004, BY WATER YEAR (WY)

MEAN	235	246	203	186	194	307	593	360	283	264	226	234
MAX	445	509	311	248	318	666	1,330	867	707	697	744	635
(WY)	(1983)	(1992)	(2002)	(1952)	(1984)	(1973)	(2001)	(1950)	(1952)	(1953)	(1972)	(1960)
MIN	152	160	150	146	136	178	231	175	140	142	147	146
(WY)	(1949)	(1977)	(1964)	(1991)	(1968)	(1965)	(2000)	(1998)	(1948)	(1988)	(1948)	(1948)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1948 - 2004	
ANNUAL TOTAL	90,114		89,721			
ANNUAL MEAN	247		245		278	
HIGHEST ANNUAL MEAN					426	1953
LOWEST ANNUAL MEAN					210	2000
HIGHEST DAILY MEAN	2,070	May 11	1,920	Apr 19	4,100	Aug 20, 1972
LOWEST DAILY MEAN	95	Jan 12	100	Jan 5	61	Sep 7, 8, 1979
ANNUAL SEVEN-DAY MINIMUM	(a)147	Jan 11	143	Jul 17	68	Sep 4, 1979
MAXIMUM PEAK FLOW			2,930	Apr 19	(b)8,100	Jul 1, 1953
MAXIMUM PEAK STAGE			4.74	Apr 19	7.90	Jul 1, 1953
ANNUAL RUNOFF (CFSM)	0.820		0.814		0.924	
ANNUAL RUNOFF (INCHES)	11.14		11.09		12.56	
10 PERCENT EXCEEDS	372		422		463	
50 PERCENT EXCEEDS	187		186		208	
90 PERCENT EXCEEDS	160		160		160	

(a) Ice affected
(b) From rating curve extended above 3,000 ft^3/s
(e) Estimated due to ice effect or missing record

04029990 MONTREAL RIVER AT SAXON FALLS NEAR SAXON, WI

LOCATION.--Lat 46°32'13", long 90°22'47", in SW ¼ NW ¼ sec.21, T.47 N., R.1 E., Iron County, Hydrologic Unit 04010302, at Saxon Falls powerhouse, 3.4 mi northeast of Saxon, and 3.8 mi upstream from mouth.

DRAINAGE AREA.--262 mi^2.

PERIOD OF RECORD.--September 1938 to September 1970, October 1986 to current year. Published as "Montreal River near Saxon" (04030000), September 1938 to September 1970.

REVISED RECORDS.--WSP 894: 1938-39. WSP 924: 1939-40. WSP 1307: 1948(M). WSP 1627: 1958.

GAGE.--Headwater and tailwater gages read by Northern States Power Company. September 1938 to September 1970, water-stage recorder at site 1.8 mi downstream at elevation of 760 ft above NGVD of 1929 (from Power Company data).

REMARKS.--Diurnal fluctuation caused by Saxon Falls powerplant. Flow regulated by Gile Reservoir on West Branch Montreal River (capacity 1,290,000,000 ft^3/s) since April 1941.

COOPERATION.--Records were provided by Northern States Power Company and reviewed by the Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	188	83	173	83	101	1,220	470	1,130	195	142	121
2	71	188	109	110	89	129	1,110	470	950	190	129	106
3	65	124	48	131	95	165	1,120	371	745	190	122	100
4	65	112	89	131	95	169	1,120	325	678	190	120	100
5	65	112	102	149	89	174	862	220	526	190	120	100
6	65	112	95	149	95	165	869	205	526	210	119	100
7	65	106	95	131	95	165	1,120	200	795	205	119	141
8	59	71	71	109	95	161	1,180	205	585	205	119	123
9	59	71	89	101	95	149	1,180	205	475	185	107	88
10	53	96	93	101	102	149	995	205	530	190	184	106
11	47	95	95	101	102	171	995	188	375	190	189	106
12	47	89	83	101	102	155	617	183	375	195	359	106
13	47	105	83	95	102	183	530	220	375	203	249	59
14	59	95	83	101	89	155	470	649	235	205	249	59
15	59	105	101	95	89	177	470	498	235	190	249	71
16	59	105	101	95	102	173	455	498	205	190	106	107
17	53	129	101	95	83	167	505	435	220	190	112	82
18	96	125	95	95	95	167	505	585	205	190	160	82
19	53	189	89	101	101	155	2,800	470	205	188	136	82
20	58	205	77	95	102	155	3,140	395	205	200	107	76
21	53	188	77	95	95	155	2,510	345	190	183	107	65
22	53	167	77	102	95	125	1,920	345	190	183	107	53
23	47	167	83	77	101	143	1,500	345	198	178	103	55
24	53	95	83	89	95	155	1,140	905	205	178	107	53
25	56	89	83	89	101	167	1,140	950	198	178	101	53
26	56	131	60	95	95	486	1,120	720	198	193	507	53
27	64	131	83	95	95	870	955	615	198	178	383	59
28	70	131	83	71	95	870	795	605	195	190	383	53
29	107	89	230	83	95	3,130	720	530	195	148	383	41
30	132	89	167	83	---	2,500	545	530	195	142	183	52
31	168	---	173	83	---	1,500	---	530	---	142	130	---
TOTAL	2,080	3,699	2,981	3,221	2,767	13,286	33,608	13,417	11,537	5,784	5,691	2,452
MEAN	67.1	123	96.2	104	95.4	429	1,120	433	385	187	184	81.7
MAX	168	205	230	173	102	3,130	3,140	950	1,130	210	507	141
MIN	47	71	48	71	83	101	455	183	190	142	101	41
CFSM	0.26	0.47	0.37	0.40	0.36	1.64	4.28	1.65	1.47	0.71	0.70	0.31
IN.	0.30	0.53	0.42	0.46	0.39	1.89	4.77	1.91	1.64	0.82	0.81	0.35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2004, BY WATER YEAR (WY)

MEAN	200	242	176	160	157	318	1,016	530	359	283	193	187
MAX	566	800	391	295	321	888	2,388	1,180	1,172	1,068	432	894
(WY)	(2003)	(1992)	(1952)	(1969)	(1969)	(1945)	(2002)	(1954)	(1939)	(1992)	(1953)	(1941)
MIN	38.2	34.2	38.1	27.8	21.0	55.4	213	127	101	74.1	36.1	33.6
(WY)	(1949)	(1949)	(1949)	(1949)	(1949)	(1940)	(1987)	(1941)	(1987)	(1987)	(1987)	(1939)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1938 - 2004	
ANNUAL TOTAL	118,380		100,523			
ANNUAL MEAN	324		275		318	
HIGHEST ANNUAL MEAN					487	1952
LOWEST ANNUAL MEAN					85.7	1971
HIGHEST DAILY MEAN	8,520	May 12	3,140	Apr 20	9,880	Jul 3, 1992
LOWEST DAILY MEAN	20	Sep 4	41	Sep 29	7.2	Oct 24, 1948
ANNUAL SEVEN-DAY MINIMUM	49	Sep 4	52	Sep 24	7.7	Oct 29, 1948
ANNUAL RUNOFF (CFSM)	1.24		1.05		1.21	
ANNUAL RUNOFF (INCHES)	16.81		14.27		16.51	
10 PERCENT EXCEEDS	480		627		643	
50 PERCENT EXCEEDS	119		131		191	
90 PERCENT EXCEEDS	59		65		85	

04037500 CISCO BRANCH ONTONAGON RIVER AT CISCO LAKE OUTLET, MI

LOCATION.--Lat 46°15'12", long 89°27'05", in NE $^1/_4$ sec.32, T.45 N., R.41 W., Gogebic County, Hydrologic Unit 04020102, on left bank 80 ft downstream from Cisco Lake Dam, 2.5 mi upstream from Langford Creek, 5.0 mi upstream from U.S. Highway 2, and 13 mi west of Watersmeet.

DRAINAGE AREA.--50.7 mi^2.

PERIOD OF RECORD.--October 1944 to current year.

REVISED RECORDS.--WSP 1911: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,672.69 ft above sea level. Prior to Oct. 1, 1968, nonrecording gage at same site and at datum 4.00 ft higher.

REMARKS.--Records good except for discharges below 3.0 ft^3/s, which are poor (see page 11). Flow regulated by Cisco Lake (station 04037400). Several measurements of water temperature were made during the year. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

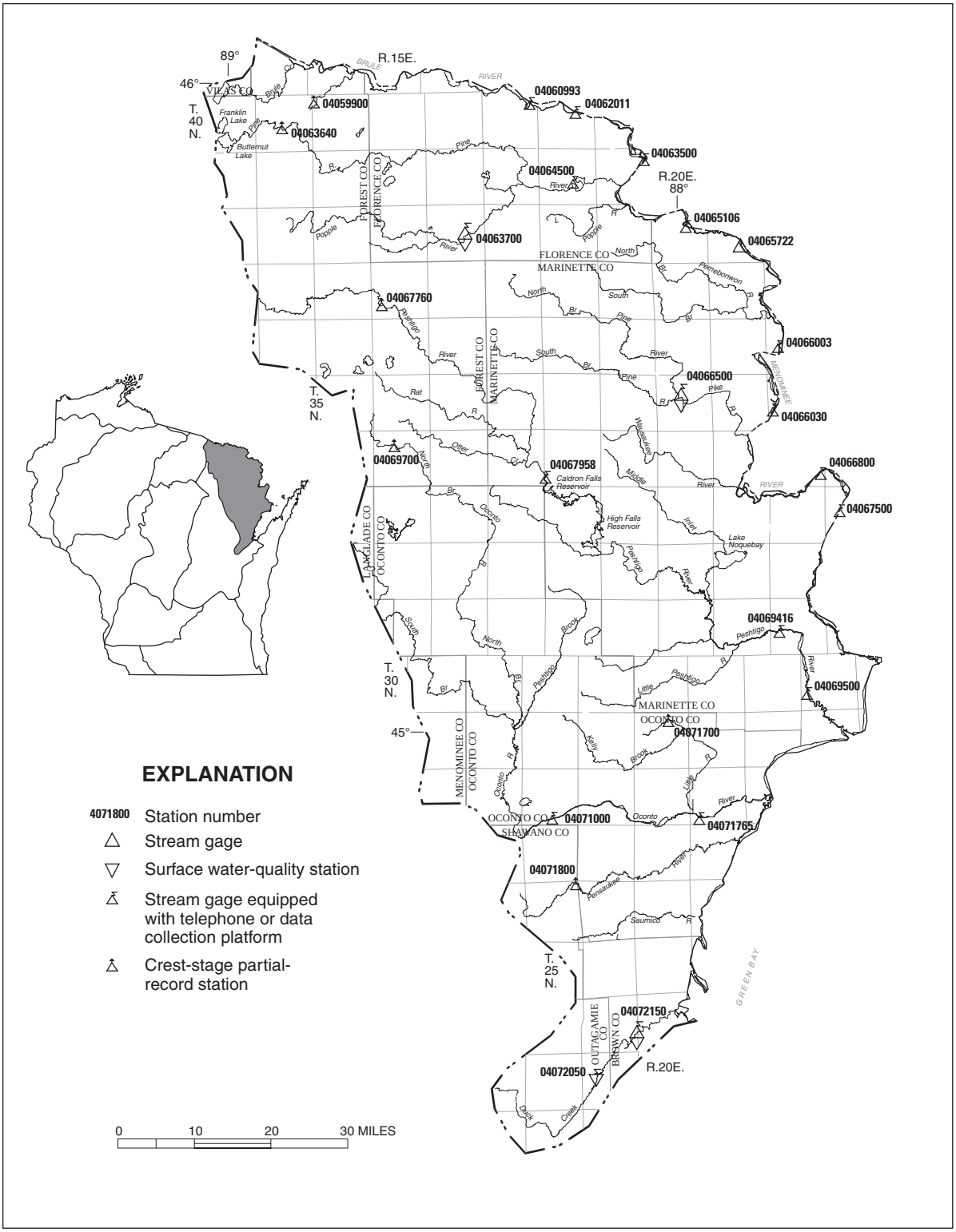
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	93	17	2.2	12	12	41	178	91	e6.0	0.68	e0.07
2	54	61	17	2.2	27	16	19	172	53	21	0.69	e0.07
3	38	45	17	2.1	53	21	20	167	15	21	0.57	e0.07
4	13	37	17	2.1	63	43	21	119	15	20	0.50	e0.07
5	13	42	17	15	61	89	47	68	43	21	0.43	e0.07
6	14	42	17	37	40	114	88	47	92	21	0.40	28
7	14	40	17	42	19	112	124	23	125	20	0.37	62
8	18	41	17	41	19	78	147	23	124	20	0.37	61
9	31	40	29	41	19	24	157	24	44	21	0.37	59
10	36	27	86	41	20	11	153	22	5.5	21	0.40	59
11	32	11	115	40	20	12	152	56	4.3	21	5.5	40
12	32	11	80	40	20	29	95	90	3.6	21	15	16
13	32	11	43	40	20	44	58	105	2.7	33	20	17
14	30	11	42	41	20	45	31	116	2.2	29	19	16
15	23	12	33	41	21	67	13	116	8.0	8.0	19	58
16	6.2	12	21	40	34	87	17	115	17	3.6	18	79
17	1.9	38	21	40	41	85	22	83	20	3.5	19	18
18	1.5	110	21	40	30	59	e70	44	19	3.2	31	17
19	0.44	153	23	40	15	24	204	21	18	2.7	25	19
20	0.41	162	25	35	28	11	217	22	18	1.8	4.2	18
21	0.32	92	25	29	42	11	219	22	11	1.2	0.63	13
22	0.33	42	25	29	42	11	213	22	1.7	0.95	0.22	8.1
23	0.33	43	25	29	67	11	212	24	1.3	0.73	0.19	4.7
24	0.32	44	25	29	76	11	207	55	1.3	0.73	e0.07	e0.07
25	0.34	44	25	29	54	16	207	100	1.1	0.70	e0.07	e0.07
26	0.32	43	47	29	34	57	201	116	0.99	0.64	e0.07	e0.07
27	9.1	43	63	29	18	103	198	116	0.91	0.58	e0.07	e0.07
28	37	43	62	19	11	139	196	86	0.82	0.61	e0.07	e0.07
29	73	43	41	11	11	158	188	65	0.76	0.61	e0.07	e0.07
30	112	33	15	11	---	155	186	78	0.70	0.63	e0.07	e0.07
31	137	---	8.4	11	---	103	---	91	---	0.70	e0.07	---
TOTAL	801.51	1,469	1,036.4	877.6	937	1,758	3,723	2,386	740.88	326.88	182.08	593.64
MEAN	25.9	49.0	33.4	28.3	32.3	56.7	124	77.0	24.7	10.5	5.87	19.8
MAX	137	162	115	42	76	158	219	178	125	33	31	79
MIN	0.32	11	8.4	2.1	11	11	13	21	0.70	0.58	0.07	0.07
CFSM	0.51	0.97	0.66	0.56	0.64	1.12	2.45	1.52	0.49	0.21	0.12	0.39
IN.	0.59	1.08	0.76	0.64	0.69	1.29	2.73	1.75	0.54	0.24	0.13	0.44

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2004, BY WATER YEAR (WY)

MEAN	66.2	65.1	46.8	38.5	34.9	44.2	64.6	49.6	44.2	31.7	24.8	35.8
MAX	151	116	84.1	62.6	81.0	92.1	156	160	123	113	99.7	104
(WY)	(1986)	(1968)	(1961)	(1983)	(1945)	(1973)	(2002)	(1996)	(1953)	(1953)	(1978)	(1977)
MIN	13.1	14.5	23.5	23.1	20.6	24.1	2.02	0.17	0.11	0.25	0.15	0.23
(WY)	(1958)	(1945)	(1990)	(1959)	(1950)	(1956)	(1948)	(1977)	(1977)	(1977)	(1970)	(1976)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1945 - 2004	
ANNUAL TOTAL	15,025.76		14,831.99			
ANNUAL MEAN	41.2		40.5		45.5	
HIGHEST ANNUAL MEAN					65.9	1973
LOWEST ANNUAL MEAN					25.2	1949
HIGHEST DAILY MEAN	239	May 13	219	Apr 21	288	May 1, 1951
LOWEST DAILY MEAN	0.24	Sep 4	0.07	(a)	0.07	(a)
ANNUAL SEVEN-DAY MINIMUM	0.24	Sep 3	0.07	Aug 24	0.07	Aug 24, 2004
MAXIMUM PEAK FLOW			223	Apr 20	288	May 1, 1951
MAXIMUM PEAK STAGE			5.78	Apr 20	(b)6.10	May 1, 1951
ANNUAL RUNOFF (CFSM)	0.812		0.799		0.898	
ANNUAL RUNOFF (INCHES)	11.02		10.88		12.20	
10 PERCENT EXCEEDS	111		113		103	
50 PERCENT EXCEEDS	23		22		36	
90 PERCENT EXCEEDS	0.41		0.48		0.90	

(a) Aug. 24 to Sept. 5, Sept. 24-30, 2004.
(b) Present datum.
(e) Estimated.



Base from U.S. Geological Survey 1:100,000 digital data; modified by Wisconsin Department of Natural Resources. Wisconsin Transverse Mercator projection.

MENOMINEE-OCONTO-PESHTIGO BASIN

04060993 BRULE RIVER NEAR FLORENCE, WI

LOCATION.--Lat 45°57'39", long 88°18'57", in NW ¼ SE ¼ sec.9, T.41 N., R.32 W., Michigan Meridian, Iron County, Hydrologic Unit 04030106, on left bank 30 ft upstream from bridge on U.S. Highway 2, 4.0 mi upstream from Paint River, 4.0 mi northwest of Florence, and 8.0 mi upstream from confluence with Michigamme River.

DRAINAGE AREA.--366 mi^2, approximately.

PERIOD OF RECORD.--January 1914 to February 1916, June 1944 to current year.

REVISED RECORDS.--WSP 1387: 1914-16. WDR MI-92-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,240 ft above sea level, from topographic map. Prior to Aug. 29, 1944, nonrecording gage, and Aug. 29, 1944 to Apr. 4, 1994, water-stage recorder at site 3.0 mi downstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Discharge includes some mine pumpage prior to August 1977. Several measurements of water temperature were made during the year. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	244	274	253	e180	e170	e240	612	585	896	268	250	207
2	238	257	226	e180	e170	e250	608	526	792	263	231	229
3	237	249	213	e170	e170	e260	650	484	637	247	218	217
4	240	270	306	e170	e165	e260	628	455	531	314	217	205
5	234	291	340	e170	e165	e250	583	432	471	334	221	198
6	227	278	353	e170	e165	e250	669	412	453	322	206	209
7	223	256	335	e170	e165	e250	845	393	425	388	197	216
8	222	237	313	e170	e165	e250	986	377	385	353	203	214
9	228	219	283	e170	e165	e250	1,110	368	375	317	209	200
10	223	257	274	e170	e165	e250	998	374	364	294	224	195
11	221	254	220	e170	e165	e250	823	366	339	279	228	191
12	263	260	e210	e170	e165	e250	704	356	333	271	246	190
13	259	266	e200	e170	e165	e250	618	445	382	267	230	190
14	240	243	e190	e170	e165	e250	594	529	552	280	213	191
15	230	256	e190	e170	e165	e250	591	566	495	263	205	279
16	224	261	e190	e170	e165	e250	636	500	410	255	202	406
17	222	270	e190	e170	e165	e250	707	449	377	256	218	336
18	227	344	e190	e170	e165	e250	792	411	347	245	231	280
19	223	435	e190	e170	e170	e250	1,210	374	314	235	253	249
20	224	382	e180	e170	e170	e250	1,840	360	295	232	225	236
21	219	330	e180	e170	e170	e250	2,090	352	290	237	208	223
22	218	299	e180	e170	e170	e250	1,570	349	312	228	205	217
23	225	296	e180	e170	e180	e250	1,170	444	303	222	200	209
24	227	310	e180	e170	e190	e250	906	692	319	215	198	211
25	226	283	e180	e170	e200	e250	803	650	307	210	199	204
26	223	270	e180	e170	e200	e270	778	558	294	206	202	202
27	220	290	e180	e170	e210	e350	722	485	276	203	240	201
28	233	270	e180	e170	e220	502	652	458	271	201	210	199
29	256	256	e180	e170	e230	841	603	416	261	199	199	196
30	258	249	e180	e170	---	812	623	385	254	200	196	197
31	282	---	e180	e170	---	667	---	604	---	267	195	---
TOTAL	7,236	8,412	6,826	5,290	5,095	9,702	26,121	14,155	12,060	8,071	6,679	6,697
MEAN	233	280	220	171	176	313	871	457	402	260	215	223
MAX	282	435	353	180	230	841	2,090	692	896	388	253	406
MIN	218	219	180	170	165	240	583	349	254	199	195	190
CFSM	0.64	0.77	0.60	0.47	0.48	0.86	2.38	1.25	1.10	0.71	0.59	0.61
IN.	0.74	0.85	0.69	0.54	0.52	0.99	2.65	1.44	1.23	0.82	0.68	0.68

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2004, BY WATER YEAR (WY)

MEAN	322	330	273	248	242	318	658	497	390	334	286	305
MAX	612	600	424	369	406	833	1,235	1,104	712	983	604	582
(WY)	(1986)	(1916)	(1986)	(1986)	(1984)	(1973)	(1967)	(1965)	(1981)	(1953)	(1972)	(1959)
MIN	179	202	175	156	163	178	235	242	194	185	186	182
(WY)	(1949)	(1990)	(1990)	(1995)	(1995)	(1965)	(1990)	(1998)	(1988)	(1989)	(1948)	(1948)

04060993 BRULE RIVER NEAR FLORENCE, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1914 - 2004	
ANNUAL TOTAL	113,755		116,344			
ANNUAL MEAN	312		318		349	
HIGHEST ANNUAL MEAN					512	1973
LOWEST ANNUAL MEAN					221	1990
HIGHEST DAILY MEAN	1,600	May 13	2,090	Apr 21	4,420	Jul 2, 1953
LOWEST DAILY MEAN	180	Sep 7	165	Feb 4	130	Dec 2, 1963
ANNUAL SEVEN-DAY MINIMUM	180	Dec 20	165	Feb 4	140	Jan 2, 1995
MAXIMUM PEAK FLOW			2,210	Apr 21	4,700	Jul 2, 1953
MAXIMUM PEAK STAGE			6.46	Apr 21	(a)8.41	Jul 15, 1999
INSTANTANEOUS LOW FLOW			160	Nov 8	(b)95	Dec 17, 1999
ANNUAL RUNOFF (CFSM)	0.852		0.869		0.954	
ANNUAL RUNOFF (INCHES)	11.56		11.83		12.96	
10 PERCENT EXCEEDS	478		597		548	
50 PERCENT EXCEEDS	240		249		285	
90 PERCENT EXCEEDS	198		170		203	

(a) Present site and datum; peak stage at previous site and datum, 8.60 ft, Dec. 20, 1983, backwater from ice.
(b) Result of freezeup.
(e) Estimated.

04062011 BRULE RIVER NEAR COMMONWEALTH, WI

LOCATION.--Lat 45°56'51" long 88°12'55", in NW $^1/_4$ sec.14, T.40 N., R.18 E., Wisconsin Meridian, Florence County, Hydrologic Unit 04030106, on right bank 900 ft downstream from Brule Island Dam, 1.5 mi upstream from confluence with Michigamme River, and 2.8 mi north of Commonwealth, WI.

DRAINAGE AREA.--1,020 mi^2.

PERIOD OF RECORD.--October 1989 to current year.

REVISED RECORD.--WDR MI-91-1: 1990(M).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,130 ft above sea level, from topographic map.

REMARKS.--Records excellent (see page 11). Flow regulated by powerplant 900 ft upstream and by Lower Paint Dam 8.2 mi upstream. Records not adjusted for diversion to Michigamme River by Paint River Diversion Canal. Several measurements of water temperature were made during the year. Gage-height telemeter at station.

COOPERATION.--Gage-height record was provided by We Energies, under general supervision of the Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	517	566	506	434	427	514	1,060	994	1,800	555	498	505
2	517	501	401	420	439	507	1,000	911	2,300	521	493	502
3	516	561	331	509	439	577	1,140	881	1,880	495	479	501
4	517	563	357	373	382	521	996	874	1,570	580	481	500
5	517	561	493	414	378	480	1,040	824	1,300	658	484	470
6	517	556	461	349	437	485	1,030	761	904	589	490	467
7	516	485	411	358	450	481	1,300	783	757	723	508	495
8	517	426	405	388	450	473	1,470	804	745	627	478	515
9	502	417	496	395	441	429	2,030	743	741	597	444	466
10	490	564	495	391	414	438	2,110	718	723	594	548	518
11	515	565	346	403	408	507	1,870	767	637	518	476	487
12	551	505	362	434	420	465	1,740	782	667	522	459	469
13	566	573	367	439	431	450	1,310	833	715	579	540	460
14	529	504	416	436	433	422	977	914	945	578	481	455
15	514	509	493	437	435	436	975	990	856	561	490	631
16	512	509	460	438	433	506	1,040	936	768	483	500	667
17	466	509	490	434	429	489	1,120	843	613	509	499	639
18	463	629	448	440	424	452	1,260	734	680	570	521	534
19	497	757	446	439	427	446	2,810	733	572	529	527	525
20	510	689	399	440	426	448	5,540	690	612	445	526	509
21	512	584	394	389	410	442	6,050	671	604	518	512	510
22	504	565	428	441	411	477	5,310	681	526	487	480	539
23	474	558	474	446	452	461	4,580	813	640	498	472	488
24	474	597	478	445	473	459	3,730	1,100	601	501	470	489
25	472	470	426	418	399	455	3,410	1,010	610	483	461	479
26	527	502	428	391	416	507	2,740	913	639	465	484	481
27	493	571	422	415	486	603	2,370	888	563	467	525	478
28	490	577	465	443	451	792	2,160	820	559	504	529	481
29	560	515	497	445	459	1,180	1,680	748	557	467	477	471
30	571	519	506	439	---	1,010	1,230	682	552	443	470	465
31	513	---	449	366	---	1,000	---	977	---	628	504	---
TOTAL	15,839	16,407	13,550	13,009	12,480	16,912	65,078	25,818	25,636	16,694	15,306	15,196
MEAN	511	547	437	420	430	546	2,169	833	855	539	494	507
MAX	571	757	506	509	486	1,180	6,050	1,100	2,300	723	548	667
MIN	463	417	331	349	378	422	975	671	526	443	444	455

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2004, BY WATER YEAR (WY)

MEAN	447	416	372	352	360	451	1,232	885	534	473	400	394
MAX	923	603	545	476	497	634	3,128	2,757	855	887	680	569
(WY)	(2003)	(2003)	(2002)	(2003)	(2003)	(1998)	(2002)	(1996)	(2004)	(1999)	(2002)	(2002)
MIN	276	307	270	259	270	327	322	355	334	272	296	285
(WY)	(1990)	(1990)	(1990)	(1991)	(1991)	(2001)	(1990)	(1998)	(1992)	(1990)	(1990)	(1998)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1990 - 2004	
ANNUAL TOTAL	240,812		251,925			
ANNUAL MEAN	660		688		526	
HIGHEST ANNUAL MEAN					810	1996
LOWEST ANNUAL MEAN					325	1990
HIGHEST DAILY MEAN	4,580	May 13	6,050	Apr 21	10,500	Apr 17, 2002
LOWEST DAILY MEAN	331	Dec 3	331	Dec 3	182	Feb 11, 1994
ANNUAL SEVEN-DAY MINIMUM	408	Dec 2	381	Jan 4	202	Mar 26, 1990
MAXIMUM PEAK FLOW			6,220	Apr 21	11,200	Apr 17, 2002
MAXIMUM PEAK STAGE			12.26	Apr 21	15.67	Apr 17, 2002
10 PERCENT EXCEEDS	913		1,000		762	
50 PERCENT EXCEEDS	509		506		394	
90 PERCENT EXCEEDS	452		422		288	

STREAMS TRIBUTARY TO LAKE MICHIGAN

04063000 MENOMINEE RIVER NEAR FLORENCE, WI

LOCATION.--Lat 45°57'05", long 88°11'21", in SE1/4 sec.12, T.41 N., R.18 E., Wisconsin Meridian, Florence County, Hydrologic Unit 04030108, on right bank 0.4 mi downstream from confluence of Brule and Michigamme Rivers, 3.5 mi northeast of Florence, WI, and at mile 117.

DRAINAGE AREA.--1,760 mi^2.

PERIOD OF RECORD.--January 1914 to current year. Published as "at Twin Falls near Iron Mountain, MI", January 1914 to June 1950, October 1996 to September 1998. Records published for both sites July 1950 to September 1957, October 1989 to September 1996, October 1998 to current year.

REVISED RECORDS.--WSP 1707: 1953(M). WDR MI-92-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,119.23 ft above sea level (levels by Owen Ayres Associates). Prior to July 5, 1950, headwater and tailwater gages and generation data entered hourly in daily log sheets by company employees at the We Energies Twin Falls Powerplant, 10.4 mi downstream. July 5, 1950 to Oct. 19, 2000, water-stage recorder at site 500 ft downstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Prior to July 1950, discharge determined from powerplant records computed on basis of load-discharge rating of hydroelectric units and rating for tailwater gage during periods of spill; ratings developed by U.S. Geological Survey. Flow regulated by powerplants, by Michigamme Reservoir, capacity, 119,950 acre-ft, by Peavy Pond, capacity, 33,860 acre-ft, on Michigamme River, and by many smaller reservoirs upstream from station. Several measurements of water temperature were made during the year. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	852	858	1040	1210	e1500	1520	1940	3220	4300	1310	1130	898
2	985	940	967	1150	e1400	1430	2060	3200	4800	1330	1250	990
3	901	969	894	1260	e1600	1860	1960	3180	4400	1180	1060	826
4	861	991	881	1170	e1600	1650	2260	3160	4080	1330	1060	975
5	769	1160	1480	e1600	e1600	1990	2320	3160	3700	1360	1140	920
6	950	905	1020	e1350	e1600	1760	2390	3020	3150	1320	1110	859
7	892	1290	909	e1300	1600	1780	2230	2530	3030	1650	998	939
8	870	1000	1030	e1400	e1600	1740	2340	2110	2860	1510	972	875
9	841	928	1270	e1400	e1700	2070	2890	2030	2860	1520	1040	847
10	899	1020	1040	e1300	e1420	1970	2920	1970	2830	1420	1100	1010
11	938	902	817	e1530	1490	1930	3300	2010	2490	1390	938	810
12	827	953	925	1510	1640	1850	3320	1870	2300	1370	940	807
13	1040	984	1010	e1600	1530	e1800	3230	1870	2270	1450	1050	728
14	1010	1050	949	e1530	1550	1550	2850	2240	2460	1350	893	759
15	934	1150	850	e1700	1530	e1800	2510	2710	2220	1180	981	966
16	930	923	933	e1700	1670	e1800	2980	2780	2180	1100	1060	1030
17	884	1100	1300	e1790	1590	1620	3320	2690	1860	1350	1070	991
18	949	1090	1070	e1550	e1500	1570	e3500	2650	1420	1200	1130	873
19	1010	1570	e1140	e1440	1480	1600	e5200	2420	1390	1430	1030	1040
20	956	1420	e1000	1750	e1600	1580	8760	2460	1520	1260	1040	1050
21	880	1440	926	e1500	e1600	1480	9470	2450	1340	1500	1030	920
22	912	1590	1120	e1600	1540	1580	8560	2300	1240	1230	1000	959
23	935	1580	1120	e1600	1630	1550	7260	2360	1230	1100	970	892
24	806	1600	e1160	e1550	1510	1580	6210	3140	1150	1090	1020	892
25	802	1410	985	e1600	e1500	1410	5910	3270	1330	921	914	815
26	888	1100	1060	e1600	e1500	1590	5200	3160	1220	889	931	808
27	907	1130	1020	e1600	1530	1940	4830	2700	1340	1020	945	811
28	884	1220	1060	e1550	1480	1720	4570	2500	1200	1110	955	786
29	834	1080	1290	e1500	1400	1860	3900	2750	1300	1130	880	752
30	863	1170	1190	e1600	---	1960	3250	2900	1250	1030	845	663
31	836	---	1160	e1700	---	1870	---	3050	---	1190	1050	---
TOTAL	27845	34523	32616	46640	44890	53410	121440	81860	68720	39220	31532	26491
MEAN	898	1151	1052	1505	1548	1723	4048	2641	2291	1265	1017	883
MAX	1040	1600	1480	1790	1700	2070	9470	3270	4800	1650	1250	1050
MIN	769	858	817	1150	1400	1410	1940	1870	1150	889	845	663

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2004, BY WATER YEAR (WY)

MEAN	1458	1569	1440	1398	1387	1597	3168	3021	2108	1580	1291	1375
MAX	3537	3465	2640	2253	2514	3544	8159	6319	5035	4253	2359	3149
(WY)	1986	1986	1984	1983	1984	1973	1916	1960	1916	1953	1972	1968
MIN	726	725	765	691	647	692	735	595	799	721	545	718
(WY)	1949	1964	1925	1924	1926	1914	1990	1987	1988	1925	1925	1925

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1914 - 2004	
ANNUAL TOTAL	548416		609187			
ANNUAL MEAN	1503		1664		1782	
HIGHEST ANNUAL MEAN					3069	1916
LOWEST ANNUAL MEAN					922	1925
HIGHEST DAILY MEAN	7550	May 13	9470	Apr 21	18800	Jul 2 1953
LOWEST DAILY MEAN	629	Sep 11	663	Sep 30	57	Sep 26 1975
ANNUAL SEVEN-DAY MINIMUM	728	Sep 8	790	Sep 24	277	Oct 18 1975
MAXIMUM PEAK FLOW			10000	Apr 21	19500	Apr 26 1960
MAXIMUM PEAK STAGE			9.84	Apr 21	14.15	Apr 26 1960
INSTANTANEOUS LOW FLOW					38	(a)
10 PERCENT EXCEEDS	2370		2910		3000	
50 PERCENT EXCEEDS	1270		1360		1460	
90 PERCENT EXCEEDS	846		889		848	

(a) Aug. 21, 1962, Sept. 26, 1975
(e) Estimated

04063500 MENOMINEE RIVER AT TWIN FALLS NEAR IRON MOUNTAIN, MI

LOCATION.--Lat 45°52'17", long 88°04'12" in NE ¼ SE ¼ sec.12, T.40 N., R.31 W., Michigan Meridian, Dickinson County, Hydrologic Unit 04030108, on left bank 150 ft downstream from We Energies powerhouse at Twin Falls Dam, 3.6 mi north of Iron Mountain, and at mile 106.6.

DRAINAGE AREA.--1,800 mi^2.

PERIOD OF RECORD.--January 1914 to current year. Published as "near Florence, WI" October 1957 to September 1989. Records published for both sites July 1950 to September 1957, October 1989 to September 1996, and October 1998 to current year.

REVISED RECORDS.--WDR MI-91-1: 1990(M). WDR MI-92-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,062 ft above sea level (levels by We Energies). Prior to September 1957, headwater and tailwater gages and generation data entered hourly in daily log sheets by company employees. October 1957 to September 1989, water-stage recorder at site 10.4 mi upstream at different datum. November 1989 to July 1993, water-stage recorder at site 150 ft upstream at same datum.

REMARKS.--Records good (see page 11). Prior to September 1957, discharge determined from powerplant records computed on basis of load-discharge rating of hydroelectric units and rating for tailwater gage during periods of spill; ratings developed by U.S. Geological Survey. Flow regulated by powerplants, by Michigamme Reservoir, capacity, 119,950 acre-ft, by Peavy Pond, capacity, 33,860 acre-ft, on Michigamme River, and by many smaller reservoirs upstream from station. Several measurements of water temperature were made during the year. Gage-height telemeter at station.

COOPERATION.--Gage-height record was provided by We Energies, under general supervision of the Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	968	981	1,110	1,220	1,570	1,490	2,150	3,470	4,420	1,420	1,200	1,040
2	1,030	1,010	955	1,240	1,450	1,560	2,240	3,410	5,030	1,470	1,360	1,080
3	1,020	1,080	998	1,260	1,680	1,820	2,250	3,380	4,590	1,300	1,140	934
4	987	1,090	834	1,280	1,640	1,710	2,520	3,360	4,300	1,420	1,160	1,030
5	949	1,280	1,530	1,580	1,630	2,020	2,640	3,420	3,950	1,460	1,200	964
6	914	1,100	985	1,350	1,580	1,900	2,640	3,190	3,430	1,520	1,220	1,010
7	1,100	1,280	973	1,290	1,680	1,830	2,470	2,820	3,130	1,820	1,090	994
8	923	1,160	1,120	1,400	1,650	1,930	2,600	2,230	3,070	1,720	1,110	912
9	992	1,040	1,290	1,430	1,670	1,980	3,190	2,240	3,230	1,650	1,140	993
10	1,010	939	1,060	1,170	1,420	2,090	3,390	2,110	2,950	1,590	1,130	1,050
11	983	1,030	1,030	1,460	1,540	2,030	3,590	2,160	2,690	1,470	1,090	903
12	1,010	1,090	807	1,540	1,560	1,780	3,590	2,060	2,480	1,550	1,080	911
13	1,070	1,030	979	1,590	1,600	1,790	3,540	2,060	2,480	1,540	1,080	826
14	1,170	1,050	937	1,500	1,520	1,680	3,190	2,340	2,740	1,480	1,050	922
15	1,040	1,190	867	1,660	1,620	1,740	2,870	2,930	2,460	1,360	1,170	966
16	1,000	1,060	1,100	1,610	1,580	1,760	3,230	3,010	2,360	1,330	1,130	1,090
17	1,020	1,150	1,250	1,740	1,610	1,740	3,580	2,940	2,050	1,450	1,200	1,060
18	1,070	1,120	1,160	1,710	1,530	1,690	3,700	2,900	1,640	1,280	1,220	996
19	1,060	1,680	1,170	1,480	1,570	1,730	5,350	2,700	1,600	1,570	1,100	1,110
20	1,030	1,600	1,010	1,750	1,590	1,600	8,850	2,680	1,680	1,340	1,150	1,070
21	979	1,530	1,010	1,540	1,570	1,630	9,980	2,580	1,410	1,550	1,160	999
22	982	1,710	1,010	1,610	1,570	1,560	9,050	2,450	1,490	1,360	1,170	1,090
23	1,040	1,710	1,090	1,610	1,650	1,630	7,920	2,570	1,270	1,220	1,100	973
24	885	1,710	1,170	1,560	1,510	1,650	6,450	3,380	1,320	1,180	1,070	929
25	908	1,570	985	1,590	1,570	1,540	6,180	3,530	1,450	1,050	1,130	906
26	880	1,180	1,010	1,620	1,480	1,670	5,440	3,370	1,300	1,040	1,010	871
27	1,020	1,190	992	1,590	1,590	1,970	5,040	2,990	1,430	1,130	1,100	792
28	979	1,280	1,110	1,560	1,450	2,020	4,930	2,830	1,400	1,120	1,040	925
29	918	1,110	1,330	1,470	1,550	2,160	4,050	2,880	1,420	1,180	1,040	813
30	891	1,240	1,290	1,680	---	2,070	3,490	3,040	1,370	1,200	1,050	773
31	891	---	1,200	1,710	---	2,050	---	3,330	---	1,170	1,020	---
TOTAL	30,719	37,190	33,362	46,800	45,630	55,820	130,110	88,360	74,140	42,940	34,910	28,932
MEAN	991	1,240	1,076	1,510	1,573	1,801	4,337	2,850	2,471	1,385	1,126	964
MAX	1,170	1,710	1,530	1,750	1,680	2,160	9,980	3,530	5,030	1,820	1,360	1,110
MIN	880	939	807	1,170	1,420	1,490	2,150	2,060	1,270	1,040	1,010	773

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2004, BY WATER YEAR (WY)

MEAN	1,469	1,583	1,449	1,407	1,395	1,611	3,191	3,039	2,127	1,595	1,305	1,389
MAX	3,537	3,465	2,640	2,253	2,514	3,544	8,159	6,319	5,035	4,309	2,359	3,149
(WY)	(1986)	(1986)	(1984)	(1983)	(1984)	(1973)	(1916)	(1960)	(1916)	(1953)	(1972)	(1968)
MIN	726	725	765	691	647	692	707	595	799	721	545	718
(WY)	(1949)	(1964)	(1925)	(1924)	(1926)	(1914)	(1990)	(1987)	(1988)	(1925)	(1925)	(1925)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1914 - 2004	
ANNUAL TOTAL	577,358		648,913			
ANNUAL MEAN	1,582		1,773		1,797	
HIGHEST ANNUAL MEAN					3,069	1916
LOWEST ANNUAL MEAN					922	1925
HIGHEST DAILY MEAN	7,990	May 14	9,980	Apr 21	18,100	Apr 26, 1960
LOWEST DAILY MEAN	649	Sep 11	773	Sep 30	57	Sep 26, 1975
ANNUAL SEVEN-DAY MINIMUM	810	Sep 8	858	Sep 24	277	Oct 18, 1975
MAXIMUM PEAK FLOW			10,600	Apr 21	(a)19,500	Apr 26, 1960
MAXIMUM PEAK STAGE			11.99	Apr 21	(b)13.88	Apr 17, 2002
10 PERCENT EXCEEDS	2,590		3,190		3,020	
50 PERCENT EXCEEDS	1,310		1,450		1,470	
90 PERCENT EXCEEDS	885		980		859	

(a) Gage height 14.15 ft, site and datum then in use.
(b) Present site and datum.

04063700 POPPLE RIVER NEAR FENCE, WI
(HYDROLOGIC BENCHMARK STATION)

LOCATION.--Lat 45°45'49", long 88°27'47", in NW ¼ NW ¼ sec.23, T.38 N., R.16 E., Florence County, Hydrologic Unit 04030108, on left bank 20 ft upstream from bridge on U. S. Forest Service Road 2159, 1.8 mi downstream from Mud Creek, 2.6 mi northwest of Fence, and 11.5 mi upstream from mouth.

DRAINAGE AREA.--139 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1963 to current year.

REVISED RECORDS.--WDR WI-76-1: 1972(M). WDR WI-80-1: Drainage area. WDR WI-81-1: 1965 (M).

GAGE.--Water-stage recorder. Datum of gage is 1,406.16 ft above NGVD of 1929. Prior to June 18, 1964, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	54	55	e42	e32	e40	e330	202	303	54	49	42
2	52	52	52	e39	e32	e42	e320	183	317	52	46	42
3	52	50	49	e35	e32	e44	e310	164	292	53	51	41
4	51	56	45	e31	e32	e48	e300	149	260	61	49	39
5	50	70	43	e28	e32	e44	276	136	215	71	44	39
6	47	68	43	e26	e31	e41	280	128	184	74	40	40
7	46	68	42	e25	e31	e41	323	119	161	109	39	41
8	44	55	42	e26	e31	e40	353	114	141	115	38	41
9	42	48	44	e26	e31	e42	390	110	133	108	42	39
10	40	48	43	e27	e31	e43	408	117	134	96	49	38
11	39	51	42	e27	e31	e43	404	122	126	85	49	36
12	48	56	e41	e27	e31	e44	379	118	119	77	50	36
13	50	54	e40	e28	e31	e43	346	136	125	73	49	36
14	48	57	e41	e29	e31	e43	311	179	172	73	44	35
15	46	57	e41	e29	e32	e43	285	208	185	63	42	43
16	45	59	e41	e29	e34	e43	283	205	182	56	42	56
17	43	64	e41	e29	e36	e43	309	177	170	55	43	50
18	42	86	e41	e30	e37	e42	336	161	158	52	48	46
19	41	117	e41	e31	e38	e42	386	139	138	49	55	43
20	40	117	e41	e33	e38	e41	416	128	116	59	50	41
21	42	108	e41	e36	e39	e41	434	122	102	76	46	39
22	41	98	e40	e35	e39	e42	433	115	94	64	44	38
23	41	93	e40	e35	e39	e43	410	157	88	54	43	38
24	41	90	e39	e34	e38	e44	372	289	84	48	42	36
25	41	87	e39	e33	e36	e48	348	324	79	45	41	34
26	41	90	e38	e32	e36	e68	328	314	74	44	41	35
27	40	78	e39	e32	e36	e87	293	289	68	41	46	34
28	43	73	e43	e31	e36	e130	261	251	64	39	44	37
29	55	67	e51	e31	e38	e210	234	203	60	39	44	34
30	56	59	e50	e31	---	e270	219	181	56	38	43	35
31	55	---	e46	e31	---	e300	---	228	---	46	41	---
TOTAL	1,412	2,130	1,334	958	991	2,135	10,077	5,468	4,400	1,969	1,394	1,184
MEAN	45.5	71.0	43.0	30.9	34.2	68.9	336	176	147	63.5	45.0	39.5
MAX	56	117	55	42	39	300	434	324	317	115	55	56
MIN	39	48	38	25	31	40	219	110	56	38	38	34
CFSM	0.33	0.51	0.31	0.22	0.25	0.50	2.42	1.27	1.06	0.46	0.32	0.28
IN.	0.38	0.57	0.36	0.26	0.27	0.57	2.70	1.46	1.18	0.53	0.37	0.32

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2004, BY WATER YEAR (WY)

MEAN	113	109	64.5	47.0	46.2	85.5	310	216	142	80.4	64.8	102
MAX	265	220	116	86.6	107	356	613	617	345	260	147	356
(WY)	(1972)	(1986)	(1992)	(1969)	(1984)	(1973)	(1979)	(1965)	(1993)	(1999)	(1978)	(1980)
MIN	25.0	30.9	23.9	24.6	22.8	30.5	54.6	52.0	21.2	17.5	23.1	16.4
(WY)	(1990)	(1977)	(1990)	(1977)	(2003)	(1964)	(1990)	(1998)	(1988)	(1988)	(1989)	(1989)

04063700 POPPLE RIVER NEAR FENCE, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1964 - 2004	
ANNUAL TOTAL	32,508		33,452			
ANNUAL MEAN	89.1		91.4		115	
HIGHEST ANNUAL MEAN					175	1973
LOWEST ANNUAL MEAN					64.3	1988
HIGHEST DAILY MEAN	510	Apr 22	434	Apr 21	1,610	Apr 25, 1979
LOWEST DAILY MEAN	21	Feb 7	(a)25	Jan 7	10	Aug 12, 1989
ANNUAL SEVEN-DAY MINIMUM	22	(b)Feb 1	(a)26	Jan 6	12	(c)Jul 3, 1988
MAXIMUM PEAK FLOW			(d)438	Apr 21	(f)1,640	Apr 25, 1979
MAXIMUM PEAK STAGE			(a)2.70	Mar 31	4.81	Apr 19, 2002
INSTANTANEOUS LOW FLOW			(a)		(g)5.9	Oct 28, 1976
ANNUAL RUNOFF (CFSM)	0.641		0.658		0.827	
ANNUAL RUNOFF (INCHES)	8.70		8.95		11.23	
10 PERCENT EXCEEDS	236		264		251	
50 PERCENT EXCEEDS	45		46		69	
90 PERCENT EXCEEDS	27		32		33	

(a) Ice affected
(b) Also occurred Feb. 17, Ice affected
(c) Also occurred Sept. 20, 1989
(d) Gage height, 2.69 ft
(e) Estimated due to ice effect or missing record
(f) Gage height, 4.52 ft
(g) Result of temporary storage from beaver dam

04063700 POPPLE RIVER NEAR FENCE, WI—Continued
(HYDROLOGIC BENCHMARK STATION)

WATER-QUALITY RECORD

PERIOD OF RECORD.--June 1964 to September 1997, October 2000 to current year. National Water-Quality Assessment Program sampling April 1993 to October 1996, and April 2001 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: June 2002 to current year.
SPECIFIC CONDUCTANCE: June 2002 to current year.

INSTRUMENTATION.--Continuous water temperature recorder and specific conductance recorder since June 2002. Sensor located near midstream.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Records for water temperature were faulty Aug. 15-19. Records for specific conductance were faulty Jan. 11 to Feb. 26 and Aug. 15-19.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum, 27.0°C, July 5 and Aug. 19 (partial day), 2003; minimum, 0.0°C, many days.
SPECIFIC CONDUCTANCE: Maximum, 292 mS/cm, Jan. 11, 2003; minimum, 63 mS/cm, Apr. 11 and 12, 2004.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 25.5°C, July 1 and 20; minimum, 0.0°C, many days.
SPECIFIC CONDUCTANCE: Maximum, 279 mS/cm, Jan. 10; minimum, 63 mS/cm, Apr. 11 and 12.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	7.5	5.5	6.5	5.5	4.5	5.0	0.0	0.0	0.0	0.0	0.0	0.0
2	7.5	4.5	6.0	4.5	4.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0
3	8.0	5.5	7.0	4.0	1.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0
4	7.5	5.5	6.5	1.5	0.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0
5	8.0	4.0	6.0	2.0	1.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0
6	9.0	4.0	6.5	1.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
7	11.0	6.0	8.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	13.5	8.5	11.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	14.0	10.5	12.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	15.0	11.0	13.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	15.0	12.0	13.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	14.5	11.5	12.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	12.5	10.0	11.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	11.5	9.5	10.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	9.5	7.0	8.0	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
16	7.5	5.5	6.5	1.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
17	6.5	4.5	5.5	2.5	0.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
18	9.0	5.5	7.0	3.5	2.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0
19	8.5	6.0	7.5	3.0	1.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0
20	10.5	7.0	8.5	2.5	1.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
21	10.0	8.0	9.0	2.0	1.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
22	8.0	6.0	6.5	1.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
23	7.0	6.0	6.5	1.0	0.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0
24	6.0	5.0	5.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	7.0	4.5	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	6.5	4.5	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	5.0	3.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	4.5	3.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	5.0	4.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	5.0	4.5	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	6.0	5.0	5.5	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0
MONTH	15.0	3.0	7.6	5.5	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0

04063700 POPPLE RIVER NEAR FENCE, WI—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	11.5	8.0	9.5
2	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	9.5	7.5	8.5
3	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	10.5	5.5	8.0
4	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.5	12.0	8.5	10.0
5	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.5	2.0	12.5	8.5	10.5
6	0.0	0.0	0.0	0.0	0.0	0.0	6.0	2.5	4.0	13.0	10.5	11.5
7	0.0	0.0	0.0	0.0	0.0	0.0	4.5	2.5	3.5	13.0	9.5	11.5
8	0.0	0.0	0.0	0.0	0.0	0.0	3.5	2.5	3.0	11.5	10.0	10.5
9	0.0	0.0	0.0	0.0	0.0	0.0	3.5	1.5	2.5	10.5	9.5	10.0
10	0.0	0.0	0.0	0.0	0.0	0.0	3.0	1.5	2.5	15.5	10.0	12.5
11	0.0	0.0	0.0	0.0	0.0	0.0	2.5	1.0	2.0	16.0	11.5	14.0
12	0.0	0.0	0.0	0.0	0.0	0.0	2.5	1.0	2.0	19.5	14.0	16.5
13	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.5	3.0	17.5	14.0	16.0
14	0.0	0.0	0.0	0.0	0.0	0.0	6.0	4.0	5.0	14.0	10.0	11.5
15	0.0	0.0	0.0	0.0	0.0	0.0	7.5	4.0	6.0	12.5	8.0	10.5
16	0.0	0.0	0.0	0.0	0.0	0.0	9.5	6.5	8.0	15.0	11.0	13.0
17	0.0	0.0	0.0	0.0	0.0	0.0	11.0	7.5	9.5	15.0	13.5	14.0
18	0.0	0.0	0.0	0.0	0.0	0.0	10.0	8.0	9.0	17.5	12.5	15.0
19	0.0	0.0	0.0	0.0	0.0	0.0	9.0	8.0	8.5	18.0	14.0	16.0
20	0.0	0.0	0.0	0.0	0.0	0.0	8.0	5.5	6.5	19.0	16.0	17.5
21	0.0	0.0	0.0	0.0	0.0	0.0	6.0	5.0	5.5	17.5	13.0	15.0
22	0.0	0.0	0.0	0.0	0.0	0.0	8.5	4.5	6.5	13.0	12.0	12.5
23	0.0	0.0	0.0	0.0	0.0	0.0	8.5	6.0	7.0	12.0	9.0	10.5
24	0.0	0.0	0.0	0.0	0.0	0.0	8.0	6.0	7.0	9.5	8.0	9.0
25	0.0	0.0	0.0	0.0	0.0	0.0	7.5	5.5	6.5	10.5	8.5	9.5
26	0.0	0.0	0.0	0.0	0.0	0.0	6.0	4.5	5.5	14.5	9.5	12.0
27	0.0	0.0	0.0	0.0	0.0	0.0	7.0	4.0	5.5	14.0	12.5	13.5
28	0.0	0.0	0.0	0.0	0.0	0.0	11.0	6.0	8.5	15.5	10.5	13.0
29	0.0	0.0	0.0	0.0	0.0	0.0	13.0	11.0	12.0	14.5	12.5	13.5
30	---	---	---	0.0	0.0	0.0	11.5	9.5	10.0	13.5	12.5	13.0
31	---	---	---	0.0	0.0	0.0	---	---	---	12.5	10.5	11.5
MONTH	0.0	0.0	0.0	0.0	0.0	0.0	13.0	0.0	5.0	19.5	5.5	12.2
		JUNE			JULY			AUGUST			SEPTEMBER	
1	11.5	10.5	11.0	25.5	19.0	22.0	24.0	19.0	21.5	17.5	16.0	16.5
2	15.0	10.5	12.5	23.5	19.0	21.5	23.0	20.5	22.0	21.5	15.5	18.0
3	17.0	12.0	14.5	23.5	18.5	21.5	24.5	20.0	22.0	23.5	18.0	20.5
4	18.0	14.0	16.0	22.0	18.5	20.0	23.5	20.0	22.0	23.0	18.5	21.0
5	16.5	15.0	16.0	21.0	16.5	18.5	22.5	17.5	20.0	22.5	19.0	21.0
6	20.5	15.0	17.5	19.5	15.0	16.5	23.0	17.0	20.0	22.0	20.0	21.0
7	23.0	18.0	20.0	15.0	13.5	14.0	21.0	17.0	19.0	20.0	16.0	17.0
8	24.5	21.0	22.5	15.5	13.0	14.0	19.0	17.5	18.5	18.0	14.0	16.0
9	23.0	17.5	20.0	17.5	13.5	15.5	21.5	17.5	19.5	18.5	13.5	16.0
10	20.0	15.5	17.5	22.0	15.5	18.5	20.0	17.0	18.5	19.5	14.5	17.5
11	18.0	15.5	16.5	21.0	18.5	20.0	17.0	14.5	15.5	19.5	17.0	18.5
12	21.0	15.0	17.5	24.5	18.5	21.0	18.5	13.0	15.5	20.5	15.5	18.0
13	20.0	18.5	19.0	23.5	20.0	21.5	18.0	14.0	16.0	21.5	17.5	19.5
14	19.0	17.0	18.0	23.5	19.0	21.5	19.0	14.0	16.5	20.5	18.5	19.5
15	20.5	17.0	18.5	25.0	18.5	21.5	---	---	---	19.5	18.0	19.0
16	22.0	18.5	20.0	22.5	19.5	21.0	---	---	---	18.0	15.0	16.5
17	22.5	19.0	20.5	24.0	18.5	21.5	---	---	---	17.0	12.5	15.0
18	22.0	19.0	20.5	23.0	18.0	21.0	---	---	---	18.5	13.5	16.0
19	20.0	16.5	18.5	24.0	19.5	22.0	---	---	---	18.5	15.0	17.0
20	21.0	16.0	18.5	25.5	20.5	23.0	19.0	14.0	16.5	19.5	15.5	17.5
21	20.5	17.0	19.0	24.5	21.5	23.0	18.5	13.0	16.0	19.5	15.0	17.5
22	20.0	16.5	18.5	24.0	21.5	22.5	20.0	15.0	17.5	21.5	17.0	19.0
23	21.0	16.0	18.5	21.5	17.5	20.0	20.5	16.5	18.5	19.5	16.0	18.0
24	18.5	15.5	17.0	21.5	16.0	19.0	18.5	16.5	17.5	18.5	15.5	16.5
25	17.0	13.5	15.5	23.0	16.5	20.0	21.5	17.5	19.5	18.0	14.0	16.0
26	18.5	13.0	15.5	23.5	18.0	20.5	24.0	19.0	21.5	17.0	13.0	15.5
27	17.5	13.5	16.0	24.0	19.0	21.5	24.0	20.0	22.0	16.5	13.5	15.0
28	19.5	14.0	17.0	23.5	19.5	21.5	22.0	16.5	18.0	15.0	12.5	14.0
29	22.5	16.0	19.0	22.5	19.5	21.0	16.5	14.5	15.5	14.0	9.5	12.0
30	24.0	17.5	20.5	23.0	18.5	21.0	17.5	13.5	15.5	13.5	9.0	11.5
31	---	---	---	23.0	19.0	21.0	18.0	14.0	16.5	---	---	---
MONTH	24.5	10.5	17.7	25.5	13.0	20.2	24.5	13.0	18.5	23.5	9.0	17.2
YEAR	25.5	0.0	8.2									

04063700 POPPLE RIVER NEAR FENCE, WI—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	226	224	225	220	213	216	175	163	170	227	216	222
2	232	226	230	218	214	216	188	175	182	226	224	225
3	232	230	231	218	213	215	194	188	190	224	216	221
4	232	230	231	213	204	208	202	193	199	232	220	227
5	231	230	231	204	194	198	206	202	204	237	232	234
6	233	231	232	196	190	195	209	203	205	251	237	243
7	235	232	234	204	186	197	214	209	212	264	251	258
8	237	234	236	214	203	209	214	209	212	273	258	269
9	241	236	239	224	214	220	210	206	208	277	260	274
10	243	240	241	222	213	218	208	205	208	279	263	277
11	244	241	243	214	203	209	211	208	210	---	---	---
12	245	237	241	207	199	203	217	210	213	---	---	---
13	241	233	235	204	200	202	225	217	222	---	---	---
14	235	233	234	208	202	205	229	225	227	---	---	---
15	235	234	235	204	200	202	229	226	228	---	---	---
16	236	235	235	202	198	200	226	221	223	---	---	---
17	236	233	234	200	196	198	221	218	220	---	---	---
18	235	234	234	196	178	187	219	211	217	---	---	---
19	239	234	235	178	155	163	219	214	219	---	---	---
20	238	236	237	155	147	150	224	211	220	---	---	---
21	239	237	238	148	146	146	225	218	224	---	---	---
22	239	234	238	146	145	146	226	217	224	---	---	---
23	239	237	238	147	146	147	225	217	224	---	---	---
24	239	235	237	147	129	142	228	222	226	---	---	---
25	237	233	236	159	128	144	228	215	226	---	---	---
26	238	236	237	153	149	151	229	226	228	---	---	---
27	239	232	237	153	151	152	228	219	226	---	---	---
28	237	227	233	156	153	155	227	204	216	---	---	---
29	231	226	228	178	156	160	214	195	207	---	---	---
30	226	221	223	184	164	180	211	204	208	---	---	---
31	223	219	221	---	---	---	218	211	213	---	---	---
MONTH	245	219	234	224	128	184	229	163	213	279	216	245
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	236	229	233	79	65	77	89	86	87
2	---	---	---	230	222	227	78	74	76	107	89	95
3	---	---	---	225	216	220	75	72	74	105	92	93
4	---	---	---	221	216	218	74	72	73	102	95	98
5	---	---	---	230	216	221	80	74	77	120	99	105
6	---	---	---	231	225	227	80	78	79	125	104	107
7	---	---	---	231	226	228	78	73	74	129	109	112
8	---	---	---	243	227	237	74	67	70	132	114	116
9	---	---	---	237	225	228	67	65	66	137	118	121
10	---	---	---	229	227	228	65	64	64	129	120	122
11	---	---	---	227	218	224	64	63	64	138	118	121
12	---	---	---	227	220	223	65	63	64	124	120	122
13	---	---	---	228	219	224	68	64	66	138	117	122
14	---	---	---	231	227	229	71	68	69	117	107	113
15	---	---	---	229	219	226	75	71	73	119	99	107
16	---	---	---	235	216	225	78	75	76	112	95	98
17	---	---	---	230	218	227	78	76	77	109	96	98
18	---	---	---	234	212	228	78	76	77	104	99	101
19	---	---	---	230	207	223	76	72	74	110	104	107
20	---	---	---	229	217	223	72	69	70	116	110	113
21	---	---	---	231	217	225	69	66	68	120	116	117
22	---	---	---	233	225	229	66	65	66	123	120	121
23	---	---	---	231	226	229	66	65	65	124	104	117
24	---	---	---	231	224	226	66	65	66	104	87	92
25	---	---	---	238	212	233	68	66	67	87	79	82
26	---	---	---	224	187	207	70	68	69	79	78	79
27	243	240	241	187	161	173	72	70	71	81	79	80
28	244	239	240	161	122	146	75	72	74	85	81	82
29	241	234	238	122	89	104	90	75	79	91	84	88
30	---	---	---	89	74	82	93	81	84	100	91	96
31	---	---	---	83	77	80	---	---	---	102	92	99
MONTH	244	234	240	243	74	208	93	63	72	138	78	104

04063700 POPPLE RIVER NEAR FENCE, WI—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	92	85	88	195	189	193	225	220	222	242	237	240
2	85	82	83	200	195	198	232	220	224	244	240	242
3	84	82	83	207	200	206	224	219	222	244	240	243
4	88	84	86	208	205	206	221	216	219	247	242	245
5	96	88	92	206	199	204	227	216	224	248	242	246
6	105	96	101	204	192	198	228	222	225	248	241	244
7	112	105	109	192	174	183	228	222	225	246	241	243
8	121	112	116	174	162	167	232	223	227	245	241	243
9	126	121	123	162	153	156	226	218	222	247	244	245
10	131	126	128	159	153	154	222	216	219	249	244	246
11	132	131	131	165	158	161	221	212	217	250	246	248
12	135	131	133	172	165	168	217	213	215	251	247	249
13	137	133	135	177	172	175	218	215	217	252	247	250
14	133	123	128	181	177	180	224	218	221	254	248	252
15	123	110	116	187	181	184	---	---	---	250	237	244
16	110	105	108	192	187	191	---	---	---	238	234	235
17	115	107	112	197	192	195	---	---	---	240	234	237
18	117	113	115	202	197	200	---	---	---	244	239	242
19	123	116	119	207	199	204	---	---	---	245	236	242
20	132	123	127	212	205	210	228	222	226	238	234	237
21	141	132	136	205	192	197	230	227	229	241	237	239
22	149	141	144	196	193	194	232	227	230	244	240	242
23	156	149	152	197	192	194	238	231	234	245	240	243
24	161	156	159	202	197	201	238	235	237	247	243	245
25	165	161	163	208	202	206	240	230	239	245	242	244
26	171	165	168	229	208	212	244	236	241	245	242	244
27	175	171	173	230	216	221	236	228	231	246	243	245
28	180	175	178	222	217	220	236	230	233	258	243	249
29	185	180	183	226	222	224	236	231	234	246	242	244
30	190	179	188	229	223	226	240	236	238	245	242	244
31	---	---	---	226	221	224	241	237	240	---	---	---
MONTH	190	82	129	230	153	195	244	212	227	258	234	244
YEAR	279	63	183									

04063700 POPPLE RIVER NEAR FENCE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Discharge, cfs (00060)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
OCT													
02...	0940	--	53	10	731	10.5	84	7.9	219	4.3	--	--	--
NOV													
05...	0945	--	70	10	723	12.3	92	7.4	201	1.4	--	--	--
10...	1200	--	48	70	--	--	--	--	--	.1	24.2	13.5	.91
10...	1201	--	48	10	--	--	--	--	--	.1	24.7	13.6	.91
DEC													
03...	1030	--	49	10	735	13.2	93	7.2	194	-.1	--	--	--
31...	1215	46	--	70	--	--	--	--	--	.1	24.9	13.2	.88
31...	1216	46	--	50	--	--	--	--	--	.1	25.2	13.2	.88
31...	1217	46	--	10	--	--	--	--	--	.1	25.6	13.2	.88
JAN													
07...	1040	--	24	40	727	9.8	70	7.2	254	-.2	--	--	--
FEB													
03...	1030	--	32	40	719	10.4	75	7.0	235	-.2	--	--	--
MAR													
11...	1245	43	--	50	--	--	--	--	--	-.1	25.2	13.1	.99
11...	1246	43	--	70	--	--	--	--	--	-.1	26.2	13.2	.99
28...	0720	130	--	50	--	--	--	--	--	-.1	17.9	9.27	--
31...	1730	300	--	50	--	--	--	--	--	.2	8.87	4.59	--
APR													
13...	1000	--	358	10	727	12.7	95	6.8	70	1.5	--	--	--
13...	1045	--	358	10	--	--	--	--	--	1.5	7.40	3.88	--
13...	1047	--	358	50	--	--	--	--	--	1.5	7.79	4.02	--
13...	1049	--	358	70	--	--	--	--	--	1.5	7.76	4.01	--
MAY													
23...	1231	--	136	50	--	--	--	--	--	9.9	13.4	6.57	--
24...	0715	--	283	50	--	--	--	--	--	8.2	11.9	5.80	--
26...	0830	--	317	50	--	--	--	--	--	10.0	10.5	4.99	--
31...	1302	--	222	50	--	--	--	--	--	11.2	11.9	5.99	--
JUN													
02...	0940	--	321	10	724	9.4	90	6.9	86	11.0	--	--	--
02...	1917	--	313	50	--	--	--	--	--	14.8	10.8	5.27	--
10...	1335	--	134	70	--	--	--	--	--	18.0	15.3	7.70	--
10...	1345	--	134	70	--	--	--	--	--	18.0	16.3	7.48	--
14...	0210	--	156	50	--	--	--	--	--	17.4	17.9	8.12	--
16...	0137	--	182	50	--	--	--	--	--	18.8	15.1	7.02	--
JUL													
07...	0526	--	102	50	--	--	--	--	--	14.0	23.1	11.2	--
09...	0421	--	112	50	--	--	--	--	--	13.7	20.3	9.93	--
19...	1526	--	49	70	--	--	--	--	--	23.5	24.1	11.7	--
19...	1527	--	49	50	--	--	--	--	--	23.5	25.4	11.9	--
19...	1545	--	49	10	--	--	--	--	--	23.5	24.5	11.9	--
AUG													
13...	0940	--	50	10	728	8.7	88	7.9	226	14.0	--	--	--
SEP													
09...	0945	--	40	70	729	8.0	80	7.9	249	13.5	28.9	15.7	.95
22...	1315	--	38	50	--	--	--	--	--	19.8	28.6	14.7	--
22...	1330	--	38	70	--	--	--	--	--	20.0	28.7	14.7	--

04063700 POPPLE RIVER NEAR FENCE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Sodium, water, fltrd, mg/L (00930)	ANC, water, unfltrd Gran titr., ueq/L (00409)	Alka-linity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicar-bonate, wat flt incrm. titr., field, mg/L (00453)	Chlor-ide, water, fltrd, mg/L (00940)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia water, unfltrd mg/L as N (00610)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water fltrd, mg/L as N (00631)
OCT													
02...	--	--	--	105	128	2.16	--	6.2	--	<.04	--	--	<.06
NOV													
05...	--	--	--	83	101	2.34	--	7.6	--	<.04	--	--	.67
10...	2.01	2,040	--	--	--	2.0	5.53	8.7	--	--	<.028	.05	--
10...	2.01	2,020	--	--	--	2.1	5.61	8.7	--	--	<.028	.05	--
DEC													
03...	--	--	--	81	99	2.29	--	10.2	--	<.04	--	--	.17
31...	1.92	1,980	--	--	--	2.0	6.37	9.1	--	--	.058	.20	--
31...	1.93	1,960	--	--	--	2.0	6.47	9.5	--	--	.053	.20	--
31...	1.94	1,980	--	--	--	2.1	6.54	9.3	--	--	.051	.21	--
JAN													
07...	--	--	--	124	151	2.62	--	9.3	--	.05	--	--	.20
FEB													
03...	--	--	--	123	150	2.45	--	8.4	--	.07	--	--	.21
MAR													
11...	1.92	2,150	--	--	--	1.6	6.42	7.7	--	--	.097	.19	--
11...	1.92	2,200	--	--	--	1.6	6.55	8.7	--	--	.125	.33	--
28...	--	1,450	--	--	--	1.5	4.94	7.2	--	--	.209	.41	--
31...	--	620	--	--	--	1.1	3.22	6.0	--	--	.154	.41	--
APR													
13...	--	--	--	22	27	1.87	--	5.3	--	<.04	--	--	.07
13...	--	453	--	--	--	1.8	3.39	6.0	--	--	.060	.05	--
13...	--	466	--	--	--	1.7	3.43	6.1	--	--	.034	.06	--
13...	--	463	--	--	--	1.8	3.45	6.1	--	--	.046	.06	--
MAY													
23...	--	1,030	--	--	--	1.1	3.40	5.3	--	--	.038	.07	--
24...	--	861	--	--	--	1.0	3.40	4.4	--	--	.055	.11	--
26...	--	715	--	--	--	1.1	3.35	3.6	--	--	.053	.04	--
31...	--	892	--	--	--	.8	3.16	3.9	--	--	.042	.05	--
JUN													
02...	--	--	--	34	42	.80	--	3.0	--	<.04	--	--	<.06
02...	--	753	--	--	--	.7	3.10	3.2	--	--	.045	<.03	--
10...	--	1,210	--	--	--	3.6	3.48	3.6	--	--	<.028	.07	--
10...	--	1,200	--	--	--	1.0	3.65	3.6	--	--	.057	.06	--
14...	--	1,300	--	--	--	1.0	3.98	3.6	--	--	.048	.06	--
16...	--	1,080	--	--	--	.9	3.80	2.8	--	--	.042	.04	--
JUL													
07...	--	1,820	--	--	--	1.4	4.08	4.6	--	--	<.028	<.03	--
09...	--	1,600	--	--	--	1.7	4.16	4.0	--	--	<.028	<.03	--
19...	--	1,980	--	--	--	1.4	3.40	4.7	--	--	<.028	<.03	--
19...	--	2,030	--	--	--	1.4	3.40	4.9	--	--	<.028	<.03	--
19...	--	1,980	--	--	--	1.3	3.33	4.8	--	--	.041	<.03	--
AUG													
13...	--	--	--	101	122	1.54	--	5.6	--	<.04	--	--	<.06
SEP													
09...	1.94	--	127	--	--	1.86	--	5.1	.23	<.04	--	--	<.06
22...	--	2,400	--	--	--	1.8	4.11	5.9	--	--	<.028	<.03	--
22...	--	2,450	--	--	--	1.8	4.09	6.3	--	--	<.028	<.03	--

04063700 POPPLE RIVER NEAR FENCE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, wat unf by analysis, mg/L (62855)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Aluminum, water, fltrd, ug/L (01106)	Iron, water, fltrd, ug/L (01046)	Mercury water fltrd, ng/L (50287)
OCT													
02...	<.008	<.02	<.006	--	.011	.29	.2	<.1	.1	7.4	--	--	--
NOV													
05...	E.004	.02	<.006	--	.010	.29	.2	<.1	.2	6.5	--	--	--
10...	--	--	--	--	--	--	--	--	--	6.7	<27	--	--
10...	--	--	--	--	--	--	--	--	--	6.6	<27	--	--
DEC													
03...	<.008	<.02	<.006	--	.011	.70	.2	<.1	.2	17.1	--	--	--
31...	--	--	--	--	--	--	--	--	--	6.9	<27	--	--
31...	--	--	--	--	--	--	--	--	--	6.9	<27	--	--
31...	--	--	--	--	--	--	--	--	--	7.0	<27	--	--
JAN													
07...	<.008	<.02	E.005	--	.015	.45	.2	<.1	.2	6.7	--	--	--
FEB													
03...	<.008	<.02	E.003	--	.012	.46	.2	<.1	.2	3.5	--	--	--
MAR													
11...	--	--	--	--	--	--	--	--	--	5.7	<27	--	--
11...	--	--	--	--	--	--	--	--	--	3.8	<27	--	--
28...	--	--	--	--	--	--	--	--	--	8.1	46	--	--
31...	--	--	--	--	--	--	--	--	--	12.9	79	--	--
APR													
13...	E.005	.05	<.006	--	.024	.85	.4	<.1	.4	21.2	--	--	--
13...	--	--	--	--	--	--	--	--	--	21.3	86	--	--
13...	--	--	--	--	--	--	--	--	--	20.8	100	--	--
13...	--	--	--	--	--	--	--	--	--	21.0	149	--	--
MAY													
23...	--	--	--	--	--	--	--	--	--	21.8	106	--	--
24...	--	--	--	--	--	--	--	--	--	21.5	54	--	--
26...	--	--	--	--	--	--	--	--	--	24.8	102	--	--
31...	--	--	--	--	--	--	--	--	--	22.9	94	--	--
JUN													
02...	E.005	.05	<.006	--	.027	.84	.6	<.1	.6	25.6	--	--	--
02...	--	--	--	--	--	--	--	--	--	24.3	80	--	--
10...	--	--	--	--	--	--	--	--	--	23.2	88	--	--
10...	--	--	--	--	--	--	--	--	--	21.2	74	--	--
14...	--	--	--	--	--	--	--	--	--	22.5	40	--	--
16...	--	--	--	--	--	--	--	--	--	25.1	59	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	18.0	80	--	--
09...	--	--	--	--	--	--	--	--	--	18.6	47	--	--
19...	--	--	--	--	--	--	--	--	--	15.9	29	--	--
19...	--	--	--	--	--	--	--	--	--	13.5	75	--	--
19...	--	--	--	--	--	--	--	--	--	12.6	91	--	--
AUG													
13...	<.008	.06	<.006	--	.014	.34	.4	<.1	.4	7.0	--	--	--
SEP													
09...	--	--	<.02	<.04	--	--	--	--	--	--	--	147	.93
22...	--	--	--	--	--	--	--	--	--	14.7	<27	--	--
22...	--	--	--	--	--	--	--	--	--	5.6	<27	--	--

04063700 POPPLE RIVER NEAR FENCE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Organic monomeric aluminum, wat unf ug/L (49288)	Methylmercury water fltrd, ng/L (50285)	Methylmercury suspnd sedimnt total, ng/L (62977)	Suspended sediment concentration mg/L (80154)
OCT				
02...	--	--	--	16
NOV				
05...	--	--	--	21
10...	<40	--	--	--
10...	<40	--	--	--
DEC				
03...	--	--	--	32
31...	<40	--	--	--
31...	<40	--	--	--
31...	<40	--	--	--
JAN				
07...	--	--	--	--
FEB				
03...	--	--	--	23
MAR				
11...	<40	--	--	--
11...	<40	--	--	--
28...	<40	--	--	--
31...	<40	--	--	--
APR				
13...	--	--	--	12
13...	<40	--	--	--
13...	<40	--	--	--
13...	<40	--	--	--
MAY				
23...	--	--	--	--
24...	--	--	--	--
26...	--	--	--	--
31...	--	--	--	--
JUN				
02...	--	--	--	22
02...	--	--	--	--
10...	--	--	--	--
10...	<40	--	--	--
14...	--	--	--	--
16...	--	--	--	--
JUL				
07...	--	--	--	--
09...	--	--	--	--
19...	<40	--	--	--
19...	<40	--	--	--
19...	--	--	--	--
AUG				
13...	--	--	--	26
SEP				
09...	--	.08	<.010	25
22...	--	--	--	--
22...	--	--	--	--

04064500 PINE RIVER BELOW PINE RIVER POWERPLANT NEAR FLORENCE, WI

LOCATION.--Lat 45°50'16", long 88°13'31", in SW ¼ SE ¼ sec.22, T.39 N., R.18 E., Florence County, Hydrologic Unit 04030108, on left bank 60 ft upstream from bridge on County Trunk Highway N, 1.9 mi downstream from powerplant of Wisconsin-Michigan Power Co., 6.0 mi south of Florence, and 7.0 mi downstream from Popple River.

DRAINAGE AREA.--533 mi^2.

PERIOD OF RECORD.--October 1923 to December 1975, October 1996 to current year.

REVISED RECORDS.--WDR WI-97-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,098.84 ft above mean NGVD of 1929. Prior to October 1968, record obtained from Pine River Powerplant 1.9 mi upstream with a drainage area of 528 mi^2.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Flow regulated by Pine River Powerplant 1.9 mi upstream; since storage capacity is small, monthly flows are not affected appreciably. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	247	279	301	e250	e180	e220	1,110	751	1,260	256	226	187
2	214	239	247	e250	e180	e240	1,160	672	1,130	224	238	193
3	252	247	267	e230	e140	e240	1,200	599	972	210	236	182
4	215	281	255	e230	e170	e240	1,070	607	797	338	249	183
5	222	320	247	e220	e180	e260	964	520	698	367	242	170
6	218	336	242	e160	e190	e230	1,010	501	598	408	177	159
7	203	242	213	e150	e160	e240	1,150	473	570	510	187	203
8	205	169	247	e150	e170	e230	1,360	435	491	491	177	177
9	203	224	238	e140	e170	e230	1,450	431	475	455	195	161
10	188	263	246	e140	e170	e240	1,380	444	465	374	217	189
11	177	285	e190	e130	e170	e250	1,260	471	432	350	234	182
12	214	261	e200	e170	e190	e240	1,130	456	429	308	213	154
13	214	286	e200	e150	e180	e240	992	501	439	289	239	136
14	218	213	e200	e180	e180	e230	948	636	625	306	219	154
15	224	290	e200	e180	e180	e250	936	760	664	264	194	203
16	207	290	e190	e180	e190	e250	975	751	644	282	178	319
17	181	290	e190	e170	e220	e260	1,100	673	612	253	193	329
18	197	344	e190	e180	e180	e240	1,190	575	535	245	261	261
19	187	497	e200	e190	e190	e240	1,430	531	438	208	216	239
20	200	541	e210	e190	e180	e240	1,490	493	376	229	209	203
21	168	481	e220	e190	e190	e240	1,580	442	365	233	203	179
22	193	426	e220	e180	e180	e230	1,510	447	411	275	167	176
23	185	403	e210	e180	e190	e250	1,380	599	390	244	177	162
24	211	423	e200	e170	e190	e220	1,180	1,060	357	246	166	182
25	187	296	e200	e190	e190	e230	1,100	1,070	350	207	166	180
26	175	372	e210	e150	e190	318	1,050	982	327	213	180	163
27	198	372	e220	e160	e180	372	959	840	292	196	183	159
28	191	363	e230	e190	e200	513	877	733	291	204	214	140
29	245	319	e240	e170	e210	911	811	652	263	184	171	177
30	267	267	e230	e190	---	1,090	784	592	234	159	180	136
31	243	---	e220	e180	---	1,080	---	801	---	227	170	---
TOTAL	6,449	9,619	6,873	5,590	5,290	10,264	34,536	19,498	15,930	8,755	6,277	5,638
MEAN	208	321	222	180	182	331	1,151	629	531	282	202	188
MAX	267	541	301	250	220	1,090	1,580	1,070	1,260	510	261	329
MIN	168	169	190	130	140	220	784	431	234	159	166	136
CFSM	0.39	0.60	0.42	0.34	0.34	0.62	2.16	1.18	1.00	0.53	0.38	0.35
IN.	0.45	0.67	0.48	0.39	0.37	0.72	2.41	1.36	1.11	0.61	0.44	0.39

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 2004, BY WATER YEAR (WY)

MEAN	373	384	258	215	197	315	957	796	543	379	299	357
MAX	1,017	694	433	473	351	1,188	1,882	2,127	1,424	1,000	760	1,115
(WY)	(1929)	(1946)	(2002)	(1939)	(1969)	(1973)	(1967)	(1965)	(1939)	(1999)	(1938)	(1928)
MIN	100	185	139	120	80.7	74.5	325	209	190	117	80.3	108
(WY)	(1949)	(1964)	(1964)	(1964)	(1964)	(1964)	(1931)	(1998)	(1948)	(1934)	(1933)	(1998)

04064500 PINE RIVER BELOW PINE RIVER POWERPLANT NEAR FLORENCE, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1924 - 2004	
ANNUAL TOTAL	126,826		134,719			
ANNUAL MEAN	347		368		423	
HIGHEST ANNUAL MEAN					658	1960
LOWEST ANNUAL MEAN					210	1931
HIGHEST DAILY MEAN	1,730	Apr 21	1,580	Apr 21	4,440	Apr 19, 2002
LOWEST DAILY MEAN	(a)92	Jan 23, 26	130	Jan 11	0.00	(b)Jan 20, 1924
ANNUAL SEVEN-DAY MINIMUM	(a)104	Jan 22	(a)147	Jan 7	41	Aug 4, 1936
MAXIMUM PEAK FLOW			1,680	Apr 21	(c)4,850	Apr 19, 2002
MAXIMUM PEAK STAGE			5.52	Apr 21	9.37	Apr 19, 2002
ANNUAL RUNOFF (CFSM)	0.652		0.691		0.794	
ANNUAL RUNOFF (INCHES)	8.85		9.40		10.79	
10 PERCENT EXCEEDS	714		887		878	
50 PERCENT EXCEEDS	224		238		295	
90 PERCENT EXCEEDS	150		170		152	

(a) Ice affected
(b) No flow at times during 1924, 1926-27, 1930-31, 1933, 1940
(c) From rating curve extended above 3,600 ft^3/s
(e) Estimated due to ice effect or missing record

04065106 MENOMINEE RIVER AT NIAGARA, WI

LOCATION.--Lat 45°46'04", long 87°58'50", in NE $^1/_4$ NE $^1/_4$ sec.15, T.38 N., R.20 E., Marinette County, Hydrologic Unit 04030108, on right bank 0.7 mi downstream from Little Quinnesec Falls Dam, at Niagara.

DRAINAGE AREA.--2,470 mi^2.

PERIOD OF RECORD.--October 1992 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 880 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Flow regulated by powerplants, by Michigamme Reservoir, capacity, 119,950 acre-ft, by Peavy Pond, capacity, 33,860 acre-ft, on Michigamme River, and by smaller reservoirs upstream of gage. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,230	1,340	1,430	1,550	e1,800	e1,700	3,460	4,070	6,050	1,670	1,460	1,300
2	1,210	1,330	1,260	1,520	e1,800	e1,800	3,540	4,150	6,840	1,750	1,650	1,310
3	1,380	1,380	1,200	1,600	e1,700	e1,900	3,820	4,010	6,050	1,690	1,560	1,310
4	1,250	1,530	1,250	1,580	e1,700	e2,000	3,780	3,880	5,420	1,700	1,510	1,180
5	1,260	1,630	1,650	1,780	e1,700	2,380	3,780	4,010	4,950	1,930	1,490	1,290
6	1,270	1,610	1,430	1,810	e1,700	2,300	3,790	3,570	4,070	1,940	1,490	1,340
7	1,270	1,590	1,250	1,580	e1,700	2,210	3,810	3,480	3,710	2,420	1,370	1,340
8	1,270	1,460	1,460	e1,500	e1,800	2,130	4,060	2,660	3,610	2,310	1,320	1,290
9	1,190	1,290	1,660	e1,600	e1,700	2,220	4,860	2,580	3,910	2,200	1,440	1,160
10	1,250	1,310	1,330	e1,400	e1,600	2,330	4,920	2,560	3,360	2,070	1,440	1,140
11	1,230	1,380	1,340	e1,500	e1,600	e2,300	4,950	2,530	3,380	2,000	1,360	1,190
12	1,300	1,430	1,230	e1,700	e1,600	2,230	4,990	2,590	2,730	1,970	1,370	1,170
13	1,350	1,420	1,200	e1,700	e1,700	2,030	4,600	2,540	2,950	1,790	1,380	1,040
14	1,430	1,460	1,200	e1,700	e1,600	2,060	4,250	2,860	3,270	1,840	1,440	1,070
15	1,310	1,410	1,250	e1,800	e1,700	1,960	3,760	3,670	3,330	1,760	1,400	1,320
16	1,340	1,480	1,510	e1,800	e1,600	2,070	4,150	3,750	2,940	1,710	1,410	1,450
17	1,240	1,520	1,490	e1,900	e1,700	1,990	4,750	3,720	3,010	1,670	1,460	1,540
18	1,280	1,590	1,470	e1,900	e1,600	1,950	5,030	3,330	2,350	1,660	1,530	1,430
19	1,330	1,980	1,530	e1,800	e1,600	2,090	6,490	3,200	2,230	1,790	1,420	1,280
20	1,370	2,240	1,260	e1,800	e1,700	1,890	10,100	3,160	2,000	1,720	1,320	1,450
21	1,210	2,160	1,400	e1,800	e1,600	1,910	12,100	3,080	1,970	1,860	1,410	1,340
22	1,210	2,150	1,260	e1,800	e1,600	1,870	11,400	2,780	1,860	1,750	1,310	1,280
23	1,230	2,160	1,490	e1,800	e1,800	1,880	10,200	3,310	1,750	1,540	1,450	1,260
24	1,230	2,200	1,450	e1,800	e1,700	1,860	8,130	4,750	1,810	1,500	1,320	1,160
25	1,250	1,960	1,350	e1,800	e1,700	1,900	7,770	5,030	1,830	1,420	1,380	1,190
26	1,160	1,630	1,240	e1,800	e1,700	2,010	7,190	4,730	1,720	1,360	1,260	1,160
27	1,240	1,680	1,300	e1,800	e1,700	2,310	6,160	4,000	1,700	1,430	1,410	1,040
28	1,180	1,690	1,500	e1,700	e1,700	2,580	6,130	3,580	1,720	1,440	1,300	1,150
29	1,230	1,580	1,650	e1,600	e1,700	3,360	5,160	3,590	1,730	1,460	1,340	1,160
30	1,230	1,550	1,720	e1,800	---	3,420	4,410	3,610	1,770	1,490	1,290	1,100
31	1,230	---	1,630	e1,900	---	3,370	---	4,050	---	1,520	1,250	---
TOTAL	39,160	49,140	43,390	53,120	48,800	68,010	171,540	108,830	94,020	54,360	43,540	37,440
MEAN	1,263	1,638	1,400	1,714	1,683	2,194	5,718	3,511	3,134	1,754	1,405	1,248
MAX	1,430	2,240	1,720	1,900	1,800	3,420	12,100	5,030	6,840	2,420	1,650	1,540
MIN	1,160	1,290	1,200	1,400	1,600	1,700	3,460	2,530	1,700	1,360	1,250	1,040

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2004, BY WATER YEAR (WY)

MEAN	1,777	1,724	1,690	1,711	1,841	2,082	4,033	3,675	2,564	2,022	1,640	1,573
MAX	3,689	2,531	2,458	2,258	2,286	2,800	7,476	7,555	4,184	3,547	2,290	2,225
(WY)	(2003)	(1993)	(1993)	(1993)	(1997)	(2000)	(2002)	(1996)	(1993)	(1999)	(1996)	(1994)
MIN	1,151	1,245	1,161	1,369	1,391	1,553	1,953	1,175	1,587	1,176	1,080	1,180
(WY)	(2001)	(2001)	(2001)	(1995)	(1995)	(2001)	(1994)	(1998)	(1998)	(2003)	(1998)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1993 - 2004	
ANNUAL TOTAL	722,541		811,350			
ANNUAL MEAN	1,980		2,217		2,194	
HIGHEST ANNUAL MEAN					3,135	1996
LOWEST ANNUAL MEAN					1,707	1998
HIGHEST DAILY MEAN	9,730	May 14	12,100	Apr 21	18,400	Apr 19, 2002
LOWEST DAILY MEAN	826	Sep 11	1,040	Sep 13, 17	826	Sep 11, 2003
ANNUAL SEVEN-DAY MINIMUM	997	Sep 6	1,140	Sep 24	951	May 24, 1998
MAXIMUM PEAK FLOW			12,400	Apr 21	18,900	Apr 18, 2002
MAXIMUM PEAK STAGE			13.21	Apr 21	16.22	Apr 18, 2002
10 PERCENT EXCEEDS	3,340		4,000		3,540	
50 PERCENT EXCEEDS	1,500		1,700		1,790	
90 PERCENT EXCEEDS	1,150		1,250		1,200	

(e) Estimated due to ice effect or missing record

04065722 MENOMINEE RIVER NEAR VULCAN, MI

LOCATION.--Lat 45°44'12", long 87°51'48", sec.34, T.39 N., R.29 W., Michigan Meridian, Dickinson County, Hydrologic Unit 04030108, on left bank 0.35 mi downstream from Sturgeon Falls Dam, 3.0 mi south of Vulcan, and at mile 78.7.

DRAINAGE AREA.--2,900 mi^2.

PERIOD OF RECORD.--December 1987 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 820 ft above sea level, from topographic map.

REMARKS.--Records good (see page 11). Flow regulated by powerplants, by Michigamme Reservoir, capacity, 119,950 acre-ft, by Peavy Pond, capacity, 33,860 acre-ft, on Michigamme River, and by smaller reservoirs upstream from station. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,310	1,360	1,550	1,620	1,900	1,840	5,410	5,030	7,380	1,850	1,530	1,390
2	1,260	1,350	1,270	1,650	1,860	1,930	5,510	4,970	8,560	1,920	1,710	1,440
3	1,330	1,400	1,230	1,740	1,820	2,040	6,070	4,840	7,960	1,880	1,750	1,430
4	1,330	1,570	1,380	1,680	1,840	2,150	6,000	4,520	6,960	1,910	1,570	1,390
5	1,220	1,670	1,630	1,790	1,830	2,450	5,800	4,830	6,320	2,200	1,530	1,380
6	1,340	1,870	1,590	1,900	1,830	2,410	5,500	4,110	5,070	2,290	1,530	1,390
7	1,260	1,730	1,270	1,640	1,760	2,270	5,750	4,230	4,750	2,710	1,430	1,460
8	1,310	1,570	1,540	1,610	1,890	2,220	5,980	3,280	4,390	2,830	1,380	1,530
9	1,170	1,280	1,700	1,730	1,830	2,380	6,970	3,240	4,480	2,560	1,480	1,250
10	1,230	1,460	1,420	1,450	1,740	2,460	7,220	2,980	4,100	2,450	1,570	1,250
11	1,230	1,420	1,320	1,570	1,700	2,430	7,010	3,070	4,240	2,280	1,380	1,260
12	1,360	1,440	1,240	1,810	1,730	2,380	6,790	3,070	3,190	2,270	1,490	1,290
13	1,340	1,650	1,230	1,850	1,780	2,130	6,180	3,060	3,400	2,020	1,450	1,150
14	1,470	1,560	1,230	1,780	1,690	2,160	5,660	3,320	4,100	2,180	1,480	1,080
15	1,280	1,470	1,260	1,860	1,810	2,080	5,040	4,340	3,980	2,010	1,550	1,270
16	1,380	1,640	1,550	1,920	1,750	2,170	5,280	4,450	3,600	1,990	1,490	1,650
17	1,220	1,590	1,500	1,970	1,850	2,090	6,160	4,450	3,700	1,870	1,520	1,650
18	1,240	1,710	1,540	2,010	1,700	2,090	6,390	3,910	2,810	1,910	1,590	1,600
19	1,360	2,120	1,590	1,910	1,760	2,180	7,480	3,810	2,690	2,010	1,520	1,460
20	1,400	2,580	1,350	1,900	1,860	1,990	10,900	3,680	2,370	1,750	1,490	1,450
21	1,200	2,480	1,410	1,870	1,720	2,010	13,300	3,730	2,490	2,160	1,390	1,610
22	1,170	2,400	1,300	1,900	1,750	1,970	13,500	3,220	2,150	1,990	1,360	1,410
23	1,280	2,470	1,470	2,020	1,860	2,030	11,900	3,920	2,080	1,660	1,390	1,240
24	1,130	2,560	1,500	1,890	1,810	1,960	10,100	6,060	2,070	1,630	1,450	1,310
25	1,260	2,390	1,350	1,880	1,760	1,990	8,990	6,900	2,130	1,540	1,370	1,130
26	1,180	1,840	1,250	1,850	1,830	2,210	8,570	6,650	1,990	1,420	1,390	1,280
27	1,220	1,860	1,300	1,860	1,780	2,620	7,230	5,600	1,950	1,510	1,580	1,250
28	1,220	1,910	1,560	1,790	1,770	2,960	7,460	4,980	1,940	1,490	1,670	1,090
29	1,190	1,760	1,750	1,740	1,750	4,360	6,280	4,850	1,950	1,560	1,500	1,140
30	1,330	1,740	1,900	1,930	---	4,820	5,420	4,650	2,000	1,560	1,470	1,190
31	1,280	---	1,850	2,000	---	4,910	---	4,890	---	1,620	1,370	---
TOTAL	39,500	53,850	45,030	56,120	51,960	75,690	219,850	134,640	114,800	61,030	46,380	40,420
MEAN	1,274	1,795	1,453	1,810	1,792	2,442	7,328	4,343	3,827	1,969	1,496	1,347
MAX	1,470	2,580	1,900	2,020	1,900	4,910	13,500	6,900	8,560	2,830	1,750	1,650
MIN	1,130	1,280	1,230	1,450	1,690	1,840	5,040	2,980	1,940	1,420	1,360	1,080

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2004, BY WATER YEAR (WY)

MEAN	2,001	2,158	2,053	1,967	2,021	2,505	4,783	3,973	2,915	2,149	1,701	1,772
MAX	4,574	4,412	3,008	2,533	2,548	3,701	9,292	8,850	4,832	4,196	2,598	2,456
(WY)	(2003)	(1989)	(1989)	(1993)	(1997)	(2000)	(2002)	(1996)	(1993)	(1999)	(1996)	(1994)
MIN	1,081	1,382	1,376	1,489	1,442	1,855	1,356	1,344	1,062	1,100	1,184	1,223
(WY)	(1990)	(1990)	(2001)	(1995)	(1995)	(2001)	(1990)	(1998)	(1988)	(1988)	(1998)	(1989)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1988 - 2004	
ANNUAL TOTAL	849,905		939,270			
ANNUAL MEAN	2,329		2,566		2,534	
HIGHEST ANNUAL MEAN					3,781	1996
LOWEST ANNUAL MEAN					1,864	1990
HIGHEST DAILY MEAN	11,100	May 14	13,500	Apr 22	22,800	Apr 19, 2002
LOWEST DAILY MEAN	884	Sep 12	1,080	Sep 14	846	Aug 3, 1988
ANNUAL SEVEN-DAY MINIMUM	1,030	Aug 31	1,200	Sep 24	932	Oct 1, 1989
MAXIMUM PEAK FLOW			14,100	Apr 21	23,000	Apr 19, 2002
MAXIMUM PEAK STAGE			14.20	Apr 21	17.72	Apr 19, 2002
INSTANTANEOUS LOW FLOW			414	Nov 13	414	Nov 13, 2003
10 PERCENT EXCEEDS	4,230		5,410		4,240	
50 PERCENT EXCEEDS	1,760		1,830		2,030	
90 PERCENT EXCEEDS	1,190		1,280		1,310	

04066003 MENOMINEE RIVER BELOW PEMENE CREEK NEAR PEMBINE, WI

LOCATION.--Lat 45°34'46", long 87°47'13", in NE $^1/_4$, sec.29, T. 37 N., R.28 W., Michigan Meridian, Menominee County, MI, Hydrologic Unit 04030108, on left bank 40 ft downstream from County Trunk Z bridge, 0.9 mi downstream from Pemene Creek, 3.9 mi west of Nathan, MI, 10.6 mi southeast of Pembine, and at mile 64.3.

DRAINAGE AREA.--3,140 mi^2.

PERIOD OF RECORD.--October 1949 to current year. Published as "near Pembine" (04066000) prior to August 1982. Monthly discharges for some periods published in WSP 1307.

GAGE.--Water-stage recorder. Elevation of gage is 740 ft above NGVD of 1929, from topographic map. October 1949 to Oct. 27, 1972, water-stage recorder at site 1.0 mi upstream at elevation 745, from river-profile map, and Oct. 28, 1972, to August 1982, water-stage recorder at site 1.5 mi upstream at elevation 770, from river-profile map.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Flow regulated by powerplants and by Michigamme Reservoir, capacity, 119,950 acre-ft, and Peavy Pond, capacity, 33,860 acre-ft, on the Michigamme River, and by many smaller reservoirs above station. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,530	1,570	1,820	e1,600	e1,700	e1,900	5,980	5,330	7,650	2,010	1,560	1,460
2	1,430	1,520	1,800	e1,900	e1,700	e2,000	6,280	5,130	9,320	2,030	1,730	1,510
3	1,410	1,540	1,750	e1,700	e1,700	e2,200	6,960	5,010	8,980	2,010	2,020	1,570
4	1,610	1,700	2,700	e1,500	e1,700	e2,300	6,890	4,720	7,630	2,140	1,730	1,490
5	1,310	1,880	2,160	e1,700	e1,700	e2,600	6,630	4,890	6,830	2,490	1,530	1,480
6	1,440	2,070	e1,900	e1,500	e1,700	e2,600	6,380	4,400	5,690	2,540	1,570	1,510
7	1,360	2,090	e1,600	e1,400	e1,700	e2,500	6,490	4,380	4,980	2,940	1,540	1,520
8	1,370	1,780	e1,500	e1,600	e1,700	e2,400	6,720	3,710	4,520	3,100	1,510	1,730
9	1,370	1,630	e1,700	e1,700	e1,700	e2,600	7,810	3,280	4,560	2,790	1,510	1,280
10	1,240	1,630	e1,600	e1,700	e1,700	e2,700	8,150	3,230	4,520	2,730	1,700	1,360
11	1,310	1,650	e1,600	e1,600	e1,600	e2,700	7,770	3,260	4,310	2,420	1,520	1,350
12	1,500	1,660	e1,500	e1,900	e1,600	e2,600	7,410	3,210	3,610	2,420	1,460	1,360
13	1,410	1,830	e1,600	e2,000	e1,700	e2,400	6,710	3,260	3,540	2,190	1,540	1,310
14	1,470	1,690	e1,600	e1,900	e1,700	e2,400	6,140	3,430	4,200	2,400	1,560	1,200
15	1,610	1,700	e1,600	e2,000	e1,700	e2,300	5,420	4,260	4,430	2,160	1,600	1,220
16	1,340	1,810	e1,600	e2,000	e1,700	2,370	5,600	4,600	3,890	2,190	1,550	1,740
17	1,470	1,790	e1,700	e2,000	e1,700	2,290	6,550	4,580	4,160	1,960	1,630	1,750
18	1,350	1,870	e1,600	e2,000	e1,700	2,280	6,700	4,170	3,680	2,040	1,630	1,720
19	1,370	2,260	e1,600	e1,900	e1,700	2,270	7,680	3,980	2,870	2,060	1,680	1,600
20	1,440	2,800	e1,500	e2,000	e1,800	2,150	11,000	3,810	2,790	1,960	1,640	1,450
21	1,480	2,700	e1,500	e1,900	e1,700	2,170	13,500	3,910	2,610	2,040	1,490	1,590
22	1,340	2,630	e1,700	e1,800	e1,800	2,140	14,200	3,530	2,320	2,150	1,440	1,600
23	1,350	2,730	e1,500	e1,800	e1,900	2,170	12,800	3,760	2,340	1,760	1,400	1,310
24	1,340	2,810	e1,600	e1,800	e1,800	2,110	11,000	6,470	2,230	1,710	1,560	1,420
25	1,410	2,740	e1,400	e1,800	e1,800	2,110	9,480	7,730	2,350	1,690	1,470	1,260
26	1,410	2,110	e1,500	e1,800	e1,800	2,350	9,210	7,530	2,160	1,570	1,540	1,280
27	1,350	2,060	e1,500	e1,800	e1,800	2,760	7,780	6,600	2,090	1,510	1,610	1,420
28	1,460	2,170	e1,700	e1,800	e1,700	3,090	7,680	5,540	2,090	1,540	1,860	1,230
29	1,370	2,050	e1,600	e1,700	e1,800	4,640	6,750	5,250	2,070	1,590	1,680	1,170
30	1,450	1,970	e1,900	e1,700	---	5,420	5,770	4,970	2,110	1,550	1,660	1,210
31	1,450	---	e1,700	e1,800	---	5,530	---	5,190	---	1,640	1,520	---
TOTAL	43,750	60,440	52,030	55,300	50,000	82,050	237,440	143,120	124,530	65,330	49,440	43,100
MEAN	1,411	2,015	1,678	1,784	1,724	2,647	7,915	4,617	4,151	2,107	1,595	1,437
MAX	1,610	2,810	2,700	2,000	1,900	5,530	14,200	7,730	9,320	3,100	2,020	1,750
MIN	1,240	1,520	1,400	1,400	1,600	1,900	5,420	3,210	2,070	1,510	1,400	1,170

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2004, BY WATER YEAR (WY)

MEAN	2,452	2,563	2,261	2,105	2,097	2,629	5,642	4,785	3,366	2,506	2,066	2,250
MAX	5,660	5,766	3,939	3,035	3,810	7,461	10,000	12,100	6,118	6,523	3,505	5,335
(WY)	(1986)	(1986)	(1986)	(1986)	(1984)	(1973)	(1967)	(1960)	(1953)	(1953)	(1952)	(1968)
MIN	1,028	1,043	1,167	1,080	1,201	1,461	1,432	1,341	1,152	1,201	1,003	1,009
(WY)	(1977)	(1977)	(1977)	(1977)	(1964)	(1964)	(1990)	(1987)	(1988)	(1988)	(1977)	(1976)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1950 - 2004	
ANNUAL TOTAL	933,970		1,006,530			
ANNUAL MEAN	2,559		2,750		2,893	
HIGHEST ANNUAL MEAN					4,318	1960
LOWEST ANNUAL MEAN					1,778	1977
HIGHEST DAILY MEAN	11,900	May 14	14,200	Apr 22	26,700	May 8, 1960
LOWEST DAILY MEAN	1,040	Sep 4	1,170	Sep 29	840	Aug 14, 1977
ANNUAL SEVEN-DAY MINIMUM	1,170	Sep 7	1,280	Sep 24	914	Aug 8, 1977
MAXIMUM PEAK FLOW			14,500	Apr 22	(a)26,900	May 8, 1960
MAXIMUM PEAK STAGE			13.53	Apr 22	(b)18.94	Dec 17, 1985
10 PERCENT EXCEEDS	4,630		5,830		4,920	
50 PERCENT EXCEEDS	1,900		1,800		2,300	
90 PERCENT EXCEEDS	1,310		1,430		1,430	

(a) Gage height, 13.90 ft, site and datum then in use
(b) Ice affected
(e) Estimated due to ice effect or missing record

04066030 MENOMINEE RIVER AT WHITE RAPIDS DAM NEAR BANAT, MI

LOCATION.--Lat 45°28'55", long 87°48'08", in SE ¼ SE ¼, sec.30, T. 36 N., R.28 W., Michigan Meridian, Menominee County, Hydrologic Unit 04030108, on left bank at powerplant at White Rapids Dam, 5.7 mi southwest of Banat, MI.

DRAINAGE AREA.--3,190 mi^2.

PERIOD OF RECORD.--October 1998 to current year.

GAGE.--Water-stage recorder. Datum of gage is 680.00 ft above NGVD of 1929 (levels by Wisconsin Electric Power Company).

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Flow regulated by powerplants, by Michigamme Reservoir, capacity, 119,950 acre-ft, by Peavy Pond, capacity, 33,860 acre-ft, on the Michigamme River, and by many smaller reservoirs above station. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,700	1,730	2,030	1,770	e2,000	e2,000	6,010	5,450	7,630	2,190	1,630	1,600
2	1,600	1,650	1,580	2,230	e2,000	e2,000	6,590	5,220	9,200	2,070	1,790	1,460
3	1,410	1,510	1,250	2,010	e1,900	e2,200	7,310	5,130	9,060	2,110	2,030	1,640
4	1,490	2,020	1,420	1,650	e1,800	2,620	7,020	5,040	7,690	2,310	1,780	1,510
5	1,550	1,940	1,770	2,100	e1,900	2,730	6,910	4,740	6,780	2,660	1,650	1,500
6	1,470	1,980	2,040	1,780	e2,000	2,730	6,440	4,710	5,940	2,610	1,840	1,530
7	1,590	2,250	1,620	e1,500	e2,000	2,730	6,860	4,310	4,930	2,910	1,570	1,690
8	1,580	1,970	1,640	e1,500	e2,000	2,670	6,700	3,970	4,890	3,390	1,270	1,650
9	1,490	1,640	1,890	e1,800	e1,900	2,630	8,110	3,370	4,470	2,900	1,460	1,390
10	1,400	1,590	2,050	e1,800	e1,900	2,560	8,280	3,490	4,930	2,640	1,750	1,390
11	1,320	1,710	1,680	e1,600	e1,900	2,710	7,730	3,240	4,240	2,820	1,620	1,370
12	1,820	1,710	1,190	1,870	e1,900	2,760	7,660	3,300	3,880	2,220	1,620	1,390
13	1,560	1,760	1,290	2,180	e1,900	2,410	6,870	3,400	3,440	2,520	1,460	1,470
14	1,440	1,910	1,500	2,130	e1,800	2,330	6,440	3,440	4,320	2,320	1,660	1,220
15	1,670	1,900	1,680	1,990	e1,800	2,640	5,660	4,340	4,960	2,480	1,630	1,140
16	1,500	1,870	1,650	2,020	e1,800	2,350	5,810	4,630	3,820	2,070	1,600	1,640
17	1,520	1,890	2,080	2,150	e2,100	2,340	6,620	4,650	4,510	2,310	1,440	1,770
18	1,550	1,920	1,670	2,320	e2,000	2,480	6,810	4,390	4,350	2,120	1,900	1,510
19	1,520	2,420	1,870	2,220	e2,000	2,400	7,750	3,990	2,780	2,170	1,520	1,710
20	1,410	2,760	1,580	e2,100	e2,000	2,260	10,500	3,880	3,090	2,240	1,630	1,560
21	1,410	2,760	1,600	e1,800	e2,000	2,150	12,800	3,800	2,480	1,770	1,620	1,500
22	1,540	2,770	1,780	e1,900	e2,000	2,240	13,800	3,930	2,820	2,440	1,430	1,520
23	1,270	2,960	1,770	e1,700	e1,900	2,260	12,500	3,670	2,410	1,780	1,400	1,310
24	1,450	2,780	1,650	e2,000	e1,900	2,240	10,900	6,530	2,290	1,800	1,610	1,240
25	1,390	2,880	1,650	e2,000	e2,200	2,190	9,470	7,840	2,440	1,680	1,530	1,260
26	1,390	2,240	1,440	e1,900	e2,000	2,570	9,080	7,720	2,350	1,690	1,490	1,240
27	1,420	2,290	1,480	e2,000	e1,900	2,790	7,900	6,760	2,190	1,630	1,800	1,380
28	1,440	2,130	1,940	e2,000	e2,000	3,280	7,570	5,630	2,350	1,490	1,860	1,280
29	1,710	2,100	2,160	e1,900	e2,000	4,820	6,760	5,450	1,970	1,750	1,800	1,240
30	1,460	2,100	2,020	e1,800	---	5,770	5,880	4,980	2,130	1,680	1,500	1,170
31	1,480	---	2,400	e1,900	---	5,900	---	5,260	---	1,610	1,660	---
TOTAL	46,550	63,140	53,370	59,620	56,500	85,760	238,740	146,260	128,340	68,380	50,550	43,280
MEAN	1,502	2,105	1,722	1,923	1,948	2,766	7,958	4,718	4,278	2,206	1,631	1,443
MAX	1,820	2,960	2,400	2,320	2,200	5,900	13,800	7,840	9,200	3,390	2,030	1,770
MIN	1,270	1,510	1,190	1,500	1,800	2,000	5,660	3,240	1,970	1,490	1,270	1,140

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)

MEAN	2,081	1,974	1,845	1,914	2,153	2,865	5,880	4,512	3,208	2,472	1,957	1,716
MAX	4,909	2,882	2,619	2,068	2,345	4,118	9,373	6,120	4,278	4,584	2,674	2,237
(WY)	(2003)	(2003)	(2002)	(2002)	(1999)	(2000)	(2002)	(2002)	(2004)	(1999)	(2002)	(2000)
MIN	1,417	1,659	1,493	1,774	1,948	2,065	3,147	2,156	2,087	1,395	1,436	1,410
(WY)	(2001)	(1999)	(2001)	(1999)	(2004)	(2001)	(2000)	(2000)	(2000)	(2003)	(2001)	(2001)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1999 - 2004	
ANNUAL TOTAL	941,764		1,040,490			
ANNUAL MEAN	2,580		2,843		2,714	
HIGHEST ANNUAL MEAN					3,244	2002
LOWEST ANNUAL MEAN					2,253	2001
HIGHEST DAILY MEAN	11,500	May 14	13,800	Apr 22	20,800	Apr 19, 2002
LOWEST DAILY MEAN	954	Sep 6	1,140	Sep 15	954	Sep 6, 2003
ANNUAL SEVEN-DAY MINIMUM	1,150	Sep 5	1,260	Sep 24	1,110	Sep 2, 2001
MAXIMUM PEAK FLOW			14,400	Apr 22	22,200	Apr 18, 2002
MAXIMUM PEAK STAGE			12.68	Apr 22	14.98	Apr 18, 2002
10 PERCENT EXCEEDS	4,610		5,960		4,670	
50 PERCENT EXCEEDS	1,940		2,000		2,090	
90 PERCENT EXCEEDS	1,330		1,460		1,390	

(e) Estimated due to ice effect or missing record

04066500 PIKE RIVER AT AMBERG, MI

LOCATION.--Lat 45°30'00", long 88°00'00", in SE ¼ SE ¼ , sec.16, T. 35 N., R.20 E., Marinette County, WI, Hydrologic Unit 04030108, on right bank 35 ft upstream from bridge on County Trunk Highway V, 0.4 mi southwest of Amberg.

DRAINAGE AREA.--255 mi^2.

PERIOD OF RECORD.--February 1914 to September 1970, June 2000 to current year.

REVISED RECORDS.--WSP 699: 1927. WSP 1207: Drainage area. WSP 1337: 1914(M), 1916-19(M), 1921-24(M), 1926(M), 1928(M), 1929, 1930(M), 1931, 1932-33(M), 1935, 1936-37(M), 1938, 1939-36(M).

GAGE.--Water-stage recorder. Elevation of gage is 855 ft above NGVD of 1929, from topographic map. Oct. 7, 1946 to Sept. 30, 1970, water-stage recorder at site 0.5 mi downstream at elevation 865 ft above mean NGVD of 1929 (from survey level line along railroad). See WSP 1727 for history of changes prior to Oct. 7, 1946.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	202	146	e140	e160	e110	e150	788	347	669	175	140	138
2	187	141	e180	e180	e110	e150	828	323	812	166	157	134
3	170	139	e240	e170	e110	e150	788	300	701	159	220	130
4	164	158	e200	e140	e110	e150	747	283	523	242	212	124
5	158	194	e170	e130	e110	e160	669	267	409	311	172	120
6	151	209	e150	e120	e110	e170	643	256	345	290	145	122
7	146	189	e140	e120	e110	e170	714	247	306	318	133	122
8	144	162	e140	e120	e110	e170	815	246	275	301	128	121
9	142	e170	e140	e120	e110	e170	864	249	277	257	129	118
10	137	e170	e140	e120	e110	e180	820	276	306	225	135	114
11	143	163	e130	e120	e110	e180	686	291	286	202	131	112
12	153	158	e120	e120	e110	e170	564	276	267	190	130	111
13	158	163	e140	e120	e110	e170	474	274	280	185	126	110
14	150	158	e160	e120	e110	e180	435	301	349	192	121	108
15	146	152	e160	e120	e110	e180	429	327	356	179	121	140
16	143	158	e150	e120	e110	e180	444	310	319	170	115	158
17	139	167	e150	e120	e120	e180	484	282	439	178	115	152
18	142	180	e140	e110	e130	e180	520	257	428	169	119	140
19	139	205	e140	e110	e130	e180	559	235	358	161	123	130
20	137	203	e140	e110	e130	e190	558	226	304	178	120	122
21	137	188	e140	e110	e140	e190	557	230	264	183	113	117
22	133	175	e140	e110	e140	e190	586	233	243	181	110	114
23	131	e170	e140	e110	e140	e190	542	349	227	163	108	111
24	131	e170	e140	e110	e140	e200	470	718	219	147	108	109
25	129	e160	e150	e110	e150	e200	440	956	212	139	148	109
26	128	e170	e150	e110	e150	e220	441	880	202	134	176	107
27	126	e160	e160	e110	e150	e250	411	634	191	130	193	107
28	131	e160	e170	e100	e150	296	379	492	183	126	204	110
29	146	e150	e190	e100	e150	503	357	397	179	123	173	107
30	155	e150	e190	e100	---	661	346	339	180	123	155	106
31	150	---	e170	e110	---	714	---	434	---	135	146	---
TOTAL	4,548	5,038	4,810	3,730	3,580	7,024	17,358	11,235	10,109	5,832	4,426	3,623
MEAN	147	168	155	120	123	227	579	362	337	188	143	121
MAX	202	209	240	180	150	714	864	956	812	318	220	158
MIN	126	139	120	100	110	150	346	226	179	123	108	106
CFSM	0.58	0.66	0.61	0.47	0.48	0.89	2.27	1.42	1.32	0.74	0.56	0.47
IN.	0.66	0.73	0.70	0.54	0.52	1.02	2.53	1.64	1.47	0.85	0.65	0.53

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2004, BY WATER YEAR (WY)

MEAN	179	205	158	132	123	212	464	340	269	180	155	170
MAX	454	422	296	215	194	503	1,016	820	699	525	365	452
(WY)	(1942)	(1920)	(1929)	(1939)	(1942)	(1921)	(1922)	(1960)	(1916)	(1914)	(1914)	(1941)
MIN	83.2	119	93.5	82.7	78.1	98.8	188	181	111	90.2	80.3	89.1
(WY)	(1949)	(1954)	(1918)	(1964)	(1948)	(1964)	(1931)	(1925)	(1948)	(1948)	(1934)	(1948)

04066500 PIKE RIVER AT AMBERG, MI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1914 - 2004	
ANNUAL TOTAL	70,300		81,313			
ANNUAL MEAN	193		222		215	
HIGHEST ANNUAL MEAN					344	1916
LOWEST ANNUAL MEAN					133	1931
HIGHEST DAILY MEAN	875	Apr 18	956	May 25	2,620	Apr 11, 1922
LOWEST DAILY MEAN	(a)76	Jan 26	(a)100	Jan 28	26	Dec 27, 1925
ANNUAL SEVEN-DAY MINIMUM	(a)78	Jan 21	(a)106	Jan 24	(a)53	Mar 5, 1928
MAXIMUM PEAK FLOW			1,020	May 25	(b)2,800	Apr 10, 1922
MAXIMUM PEAK STAGE			6.01	May 25	(c)(d)7.80	Apr 10, 1922
INSTANTANEOUS LOW FLOW			(a)		26	Dec 27, 1925
ANNUAL RUNOFF (CFSM)	0.755		0.871		0.843	
ANNUAL RUNOFF (INCHES)	10.26		11.86		11.45	
10 PERCENT EXCEEDS	362		439		396	
50 PERCENT EXCEEDS	146		160		160	
90 PERCENT EXCEEDS	88		110		100	

(a) Ice affected
(b) From rating curve extended above 1,100 ft^3/s
(c) Site and datum then in use
(d) From graph based on gage readings
(e) Estimated due to ice effect or missing record

04066500 PIKE RIVER AT AMBERG, WI—Continued
(NATIONAL WATER-QUALITY ASSESSMENT STATION)

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--November 2002 to current year.

REMARKS.--Chemical analysis of some constituents done by the National Water-Quality Laboratory, and Wisconsin District Mercury Lab.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)
OCT													
01...	0940	199	70	743	11.1	93	8.2	218	6.5	26.1	12.7	1.12	2.26
NOV													
06...	1000	211	70	745	12.7	95	7.6	213	2.5	24.4	11.5	1.30	2.48
10...	1115	175	70	742	13.6	96	7.8	234	.0	29.3	13.7	1.27	2.58
DEC													
02...	0900	180	70	756	13.9	95	7.3	248	-.2	28.3	13.5	1.15	2.25
JAN													
06...	0945	120	70	740	11.7	82	7.9	248	-.3	33.0	14.7	1.34	3.70
FEB													
05...	0900	110	70	744	12.2	85	7.3	256	-.2	31.6	14.4	1.37	2.57
MAR													
04...	0940	150	70	742	16.6	116	7.7	224	-.3	25.9	12.2	1.36	2.42
30...	1100	651	40	742	13.7	98	7.2	115	.6	12.2	5.64	1.60	1.95
APR													
14...	1100	434	40	741	12.0	94	7.2	143	4.0	16.4	7.63	1.09	1.87
21...	1045	550	40	725	11.3	95	6.9	137	6.0	16.8	7.47	.90	1.99
MAY													
03...	0930	300	70	744	11.6	95	7.6	178	6.0	21.9	9.44	.92	2.18
24...	1100	718	40	736	10.5	95	7.1	131	9.2	15.1	6.06	.74	1.52
JUN													
03...	1020	715	40	748	--	--	7.2	113	12.5	15.6	6.24	.54	1.76
JUL													
13...	0830	181	70	735	8.7	95	7.6	228	18.0	27.7	12.1	.97	2.25
AUG													
12...	0930	131	70	739	10.7	105	8.2	254	13.3	30.2	14.7	1.08	2.27
SEP													
08...	0900	122	70	747	9.7	95	7.8	259	13.5	30.4	14.7	1.31	2.36
16...	1100	159	70	738	9.3	97	7.9	240	15.9	31.2	13.6	1.54	2.31

04066500 PIKE RIVER AT AMBERG, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Iron, water, fltrd, ug/L (01046)	Mercury water fltrd, ng/L (50287)	Mercury suspnd sedimnt total, ng/L (62976)	Methylmercury water fltrd, ng/L (50285)	Methylmercury suspnd sedimnt total, ng/L (62977)
OCT													
01...	105	3.14	8.3	.34	<.04	E.03	<.02	<.04	153	1.49	.295	.12	--
NOV													
06...	103	4.12	8.7	.24	<.04	.12	<.18	<.04	110	1.03	.357	.07	--
10...	119	3.63	9.8	.92	<.04	.12	<.02	<.04	99	1.01	.400	.07	--
DEC													
02...	117	3.53	9.6	.24	<.04	.14	<.02	<.04	171	.84	.247	.05	--
JAN													
06...	129	3.91	10.4	.21	<.04	.17	<.02	E.02	129	.52	--	<.04	<.010
FEB													
05...	129	3.46	9.3	E.09	<.04	.17	<.02	<.04	66	.32	--	E.06	.016
MAR													
04...	110	3.77	8.7	.17	E.02	.24	<.02	<.04	81	.87	1.11	--	.045
30...	45	2.79	6.0	.50	E.03	.29	<.02	<.04	184	1.40	5.88	--	.167
APR													
14...	64	2.31	6.1	.40	<.04	.09	<.02	<.04	158	--	--	--	--
21...	61	2.27	6.4	.49	<.04	.08	<.02	<.04	176	--	--	--	--
MAY													
03...	83	2.75	7.0	.36	<.04	E.05	<.02	<.04	171	2.44	--	--	--
24...	56	1.46	4.0	.58	E.02	.08	E.01	<.04	215	4.70	--	--	--
JUN													
03...	55	1.97	4.3	.54	<.04	<.06	<.02	<.04	201	--	--	--	--
JUL													
13...	113	2.92	7.1	.30	<.04	.06	<.02	<.04	196	--	--	--	--
AUG													
12...	125	3.22	8.2	.20	<.04	E.06	<.02	<.04	116	--	--	--	--
SEP													
08...	127	2.87	6.9	.19	<.04	E.04	<.02	<.04	140	--	--	--	--
16...	121	2.67	7.0	.19	<.04	<.06	<.02	<.04	111	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Suspended sediment concentration mg/L (80154)
OCT	
01...	19
NOV	
06...	23
10...	27
DEC	
02...	25
JAN	
06...	26
FEB	
05...	25
MAR	
04...	26
30...	39
APR	
14...	16
21...	23
MAY	
03...	24
24...	43
JUN	
03...	23
JUL	
13...	29
AUG	
12...	27
SEP	
08...	25
16...	25

04066800 MENOMINEE RIVER AT KOSS, MI

LOCATION.--Lat 45°23'14", long 87°42'07", in NE $^1/_4$, sec.36, T. 35 N., R.28 W., Michigan Meridian, Menominee County, MI, Hydrologic Unit 04030108, on left upstream bank 30 ft from river and 18 ft west of County Trunk JJ (Koss) bridge, 0.3 mi southeast of Koss and 3.4 mi upstream of Grand Rapids Dam.

DRAINAGE AREA.--3,700 mi^2.

PERIOD OF RECORD.--July 1907 to March 1909 monthly discharge only (published as "at Koss"), July 1913 to September 1981 (published as 04067000 Menominee River below Koss, MI), June 1998 to current year. Records prior to October 1913 published in WSP 244, 264, and 384.

REVISED RECORDS.--WDR WI-80-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 665 ft above NGVD of 1929, from topographic map. June 1913 to September 1981, headwater and tailwater gages and generation data entered hourly in daily log sheet by Wisconsin Public Service Corp. employees at powerplant 4 mi downstream. Records of daily discharge furnished by Wisconsin Public Service Corp. Prior to June 1913, chain gage on railroad bridge at Koss.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Flow regulated by powerplants and by Michigamme Reservoir, capacity, 119,950 acre-ft, and Peavy Pond, capacity, 33,860 acre-ft, on the Michigamme River, and by many smaller reservoirs above station. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,710	1,850	2,270	e2,300	e2,200	e2,200	8,370	6,690	7,690	2,530	1,920	1,730
2	1,690	2,010	e2,200	e2,300	e2,300	e2,200	8,710	6,360	10,100	2,450	1,940	1,570
3	1,660	1,790	e1,700	e2,400	e2,300	e2,400	9,230	5,980	11,100	2,450	1,900	1,590
4	1,500	2,000	e1,500	e2,100	e2,000	e2,500	9,690	5,850	10,700	2,620	1,990	1,640
5	1,670	2,330	e1,900	e2,000	e2,000	e2,700	9,310	5,590	8,930	3,070	1,840	1,550
6	1,620	2,250	e2,200	e1,900	e2,100	e2,800	8,820	5,560	7,790	3,390	1,800	1,600
7	1,720	2,540	e2,100	e1,900	e2,100	e2,800	8,720	4,890	6,250	3,350	2,100	1,620
8	1,810	2,470	e1,800	e1,800	e2,200	e2,900	9,120	4,940	5,930	3,730	1,650	1,660
9	1,880	1,950	e2,000	e1,900	e2,200	e2,800	9,620	4,120	5,330	3,890	1,520	1,600
10	1,820	1,740	e2,100	e2,200	e2,200	e2,800	10,500	4,150	5,320	3,150	1,860	1,460
11	1,630	1,750	e1,700	e2,000	e2,200	e2,700	10,400	3,890	5,150	3,160	1,920	1,490
12	1,470	1,820	e1,500	e1,900	e2,200	e3,000	9,730	4,040	5,050	2,860	1,850	1,430
13	1,940	1,800	e1,400	e2,100	e2,100	e2,700	9,250	3,970	3,970	2,760	1,800	1,460
14	1,560	1,940	e1,500	e2,300	e2,100	e2,500	8,060	4,060	4,580	2,860	1,580	1,590
15	1,740	2,040	e1,800	e2,200	e2,000	e2,500	7,380	4,630	5,670	2,770	1,950	1,550
16	1,880	1,990	e1,900	e2,100	e2,000	e2,800	6,840	5,470	5,160	2,590	1,820	1,530
17	1,500	2,010	e1,900	e2,100	e2,000	e2,500	7,430	5,380	5,030	2,510	1,690	1,880
18	1,820	2,040	e2,300	e2,200	e2,200	e2,400	8,270	5,330	5,500	2,570	1,860	1,880
19	1,790	2,160	e1,800	e2,200	e2,100	e2,700	8,560	4,670	4,150	2,280	1,950	1,730
20	1,750	2,830	e1,700	e2,100	e2,200	e2,600	10,000	4,570	3,890	2,630	1,800	1,740
21	1,620	2,980	e1,600	e2,000	e2,200	e2,500	12,700	4,430	3,230	2,200	1,860	1,620
22	1,890	2,840	e1,600	e2,000	e2,200	e2,400	15,000	4,300	3,350	2,430	1,900	1,640
23	1,830	3,070	e1,800	e2,000	e2,200	e2,500	15,700	4,350	2,950	2,420	1,780	1,580
24	1,790	3,170	e1,700	e2,000	e2,100	e2,500	14,600	6,260	2,780	2,200	1,790	1,430
25	1,760	3,040	e1,700	e2,000	e2,000	e2,400	12,700	8,900	2,830	2,020	1,970	1,480
26	1,730	3,000	e1,600	e2,100	e2,200	e2,500	11,300	10,000	2,830	2,070	1,620	1,450
27	1,750	2,380	e1,600	e2,100	e2,100	e3,100	10,400	9,410	2,650	2,010	1,750	1,470
28	1,820	2,420	e1,800	e2,100	e2,100	e4,500	9,020	7,910	2,580	1,930	2,070	1,480
29	1,870	2,350	e2,200	e2,100	e2,200	e7,500	8,920	6,710	2,450	1,860	2,120	1,450
30	1,800	2,340	e2,400	e2,100	---	12,200	7,660	6,330	2,500	2,070	1,730	1,370
31	1,690	---	e2,600	e2,100	---	12,200	---	6,110	---	1,870	1,740	---
TOTAL	53,710	68,900	57,870	64,600	62,000	106,800	296,010	174,850	155,440	80,700	57,070	47,270
MEAN	1,733	2,297	1,867	2,084	2,138	3,445	9,867	5,640	5,181	2,603	1,841	1,576
MAX	1,940	3,170	2,600	2,400	2,300	12,200	15,700	10,000	11,100	3,890	2,120	1,880
MIN	1,470	1,740	1,400	1,800	2,000	2,200	6,840	3,890	2,450	1,860	1,520	1,370

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 2004, BY WATER YEAR (WY)

MEAN	2,556	2,795	2,193	1,986	1,895	2,734	6,682	5,711	3,880	2,741	2,149	2,394
MAX	6,178	5,597	3,588	3,174	3,176	7,973	13,650	13,180	10,780	6,159	3,800	5,538
(WY)	(1929)	(1917)	(1919)	(1969)	(1969)	(1973)	(1916)	(1960)	(1916)	(1953)	(1972)	(1928)
MIN	1,131	1,170	1,166	989	864	1,199	2,479	2,220	1,708	1,111	731	1,013
(WY)	(1977)	(1977)	(1931)	(1926)	(1926)	(1934)	(1964)	(1977)	(1977)	(1934)	(1934)	(1933)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1913 - 2004	
ANNUAL TOTAL	1,062,540		1,225,220			
ANNUAL MEAN	2,911		3,348		3,148	
HIGHEST ANNUAL MEAN					5,262	1916
LOWEST ANNUAL MEAN					1,642	1931
HIGHEST DAILY MEAN	12,900	Apr 23	15,700	Apr 23	33,000	May 10, 1960
LOWEST DAILY MEAN	1,070	Sep 6	1,370	Sep 30	162	Sep 15, 1931
ANNUAL SEVEN-DAY MINIMUM	1,290	Sep 1	1,450	Sep 24	402	Sep 9, 1931
MAXIMUM PEAK FLOW			16,000	Apr 23		
MAXIMUM PEAK STAGE			15.26	Apr 23		
10 PERCENT EXCEEDS	5,670		7,830		5,940	
50 PERCENT EXCEEDS	2,000		2,200		2,330	
90 PERCENT EXCEEDS	1,500		1,620		1,400	

(e) Estimated due to ice effect or missing record

04067500 MENOMINEE RIVER NEAR MC ALLISTER, WI

LOCATION.--Lat 45°19'33", long 87°39'48", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.17, T.33 N., R.23 E., Marinette County, Hydrologic Unit 04030108, on right bank 85 ft downstream from bridge on County Highway JJ, 2.9 mi downstream from Grand Rapids Dam, 2.6 mi east of McAllister, 1.9 mi downstream from Little Cedar River, and at mile 22.6.

DRAINAGE AREA.--3,930 mi^2.

PERIOD OF RECORD.--March 1945 to September 1961; October 1961 to September 1979, miscellaneous measurements and peaks only; October 1979 to September 1986; October 1986 to March 1987, crest-stage partial-record station; April 1988 to September 1990; April 1993 to September 1995; October 1997 to current year.

REVISED RECORDS.--WDR WI-80-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 622.20 ft above NGVD of 1929 (Michigan Department of Transportation reference mark). Prior to May 15, 1945, nonrecording gage 1,400 ft downstream at same datum; May 16, 1945 to September 1961, water-stage recorder 1,000 ft downstream at same datum; October 1961 to September 1979, crest- stage gage 1,100 ft downstream at same datum; October 1979 to September 1986, water-stage recorder at same site and datum; October 1986 to March 1987, crest-stage gage at same site and datum. April 1988 to September 1990, and April 1993 to September 1995, water-stage recorder at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Flow regulated by powerplants, by Michigamme Reservoir, capacity, 119,950 acre-ft, and Peavy Pond, capacity, 33,860 acre-ft on the Michigamme River, and by many smaller reservoirs above station. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,000	1,650	e2,300	e2,300	e2,200	e2,300	9,510	6,930	8,030	2,540	1,910	1,890
2	1,930	1,950	e2,000	e2,400	e2,300	e2,300	9,620	6,640	10,300	2,510	2,070	1,780
3	1,810	1,720	e1,600	e2,500	e2,300	e2,400	10,100	6,220	11,300	2,460	2,300	1,710
4	1,630	1,860	1,490	e2,100	e2,100	e2,600	10,500	6,130	10,900	2,770	2,370	1,800
5	1,820	2,400	1,860	e2,000	e2,100	e2,800	10,000	5,930	9,140	3,300	2,160	1,650
6	1,700	2,270	2,260	e2,000	e2,200	e2,800	9,490	5,820	7,980	3,740	2,010	1,690
7	1,710	2,310	2,170	e1,900	e2,200	e2,800	9,380	5,200	6,590	3,670	2,100	1,710
8	1,740	2,510	1,880	e1,800	e2,200	e3,000	9,710	5,190	6,080	4,040	1,760	1,860
9	1,700	2,040	2,000	e1,900	e2,300	e2,900	10,200	4,500	5,570	4,160	1,620	1,770
10	1,610	1,820	2,160	e2,200	e2,200	e2,900	11,100	4,400	5,360	3,370	1,790	1,580
11	1,590	1,860	1,700	e2,100	e2,200	e2,800	11,000	4,200	5,330	3,320	1,960	1,570
12	1,560	1,970	e1,500	e1,900	e2,100	e3,100	10,100	4,380	5,170	3,080	1,880	1,570
13	2,000	1,950	e1,500	e2,100	e2,100	e2,900	9,450	4,240	4,240	2,940	1,840	1,560
14	1,660	2,010	1,550	e2,300	e2,100	e2,700	8,320	4,330	4,620	3,180	1,640	1,600
15	1,690	2,130	1,810	e2,200	e2,100	e2,700	7,630	4,740	5,690	2,980	1,930	1,450
16	1,830	2,080	1,970	e2,200	e2,000	e2,900	7,150	5,630	5,450	e2,900	1,830	1,480
17	1,700	2,100	1,990	e2,200	e2,000	e2,700	7,620	5,540	5,140	e2,700	1,770	2,040
18	1,670	2,170	2,380	e2,300	e2,300	e2,600	8,450	5,490	5,570	e2,800	1,780	2,110
19	1,660	2,300	1,920	e2,300	e2,200	e2,900	8,740	4,830	4,580	e2,500	2,020	1,790
20	1,700	2,850	e1,800	e2,300	e2,200	e2,800	9,840	4,710	4,080	2,740	1,800	1,940
21	1,540	3,100	e1,700	e2,100	e2,200	e2,700	12,300	4,580	3,590	2,400	1,790	1,760
22	1,760	e2,800	e1,800	e2,200	e2,200	e2,600	14,600	4,510	3,620	2,480	1,770	1,750
23	1,720	e3,100	e1,900	e2,100	e2,200	e2,600	15,500	4,700	3,290	2,560	1,560	1,710
24	1,620	e3,200	e1,900	e2,000	e2,100	e2,600	14,400	6,560	3,080	2,180	1,540	1,480
25	1,680	e3,100	e1,900	e2,100	e2,100	e2,700	12,600	9,310	3,060	1,990	1,890	1,480
26	1,580	e3,100	e1,800	e2,100	e2,400	e3,000	11,200	10,300	3,060	2,050	1,710	1,460
27	1,600	e2,500	e1,700	e2,100	e2,200	e3,700	10,400	9,830	2,800	2,100	1,780	1,490
28	1,620	e2,400	e2,000	e2,100	e2,200	e4,800	9,110	8,440	2,670	1,930	2,100	1,580
29	1,680	e2,300	e2,300	e2,100	e2,300	7,390	8,960	7,170	2,600	1,810	2,220	1,510
30	1,870	e2,400	e2,500	e2,100	---	10,900	7,820	6,770	2,580	2,140	1,920	1,440
31	1,640	---	e2,600	e2,000	---	12,500	---	6,520	---	1,920	1,920	---
TOTAL	53,020	69,950	59,940	66,000	63,300	110,390	304,800	183,740	161,470	85,260	58,740	50,210
MEAN	1,710	2,332	1,934	2,129	2,183	3,561	10,160	5,927	5,382	2,750	1,895	1,674
MAX	2,000	3,200	2,600	2,500	2,400	12,500	15,500	10,300	11,300	4,160	2,370	2,110
MIN	1,540	1,650	1,490	1,800	2,000	2,300	7,150	4,200	2,580	1,810	1,540	1,440

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2004, BY WATER YEAR (WY)

MEAN	2,887	3,115	2,536	2,357	2,390	3,111	6,691	5,325	3,932	3,098	2,340	2,565
MAX	6,755	7,332	4,561	3,777	4,710	5,687	12,800	15,930	6,958	7,127	4,056	5,952
(WY)	(1986)	(1986)	(1986)	(1983)	(1984)	(1983)	(1951)	(1960)	(1993)	(1951)	(1952)	(1959)
MIN	1,195	1,753	1,532	1,621	1,245	1,897	1,869	1,636	1,296	1,374	1,312	1,390
(WY)	(1949)	(1990)	(1990)	(1949)	(1948)	(1956)	(1990)	(1998)	(1988)	(1988)	(1998)	(1989)

04067500 MENOMINEE RIVER NEAR MC ALLISTER, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1945 - 2004	
ANNUAL TOTAL	1,096,560		1,266,820			
ANNUAL MEAN	3,004		3,461		3,372	
HIGHEST ANNUAL MEAN					5,496	1960
LOWEST ANNUAL MEAN					2,118	1948
HIGHEST DAILY MEAN	12,900	Apr 23	15,500	Apr 23	31,800	May 9, 1960
LOWEST DAILY MEAN	1,040	Sep 7	1,440	Sep 30	810	Oct 26, 1948
ANNUAL SEVEN-DAY MINIMUM	1,260	Sep 6	1,490	Sep 24	952	Oct 24, 1948
MAXIMUM PEAK FLOW			15,800	Apr 23	32,500	May 9, 1960
MAXIMUM PEAK STAGE			15.95	Apr 23	(a)20.00	May 9, 1960
INSTANTANEOUS LOW FLOW					(b)538	Oct 6, 1946
10 PERCENT EXCEEDS	5,880		8,120		5,960	
50 PERCENT EXCEEDS	2,100		2,210		2,560	
90 PERCENT EXCEEDS	1,520		1,660		1,640	

(a) From graph based on gage readings
(b) Observed
(e) Estimated due to ice effect or missing record

04067958 PESHTIGO RIVER NEAR WABENO, WI

LOCATION.--Lat 45°23'16", long 88°18'18", in NW ¼ NW ¼ sec.31, T.34 N., R.18 E., Marinette County, Hydrologic Unit 04030105, on left upstream bank 50 ft from river's edge and 12 ft north of County Trunk C, 12.2 mi west of Athelstane and 17.7 mi east of Wabeno.

DRAINAGE AREA.--447 mi^2.

PERIOD OF RECORD.--June 1998 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 980 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	302	269	e260	e280	e170	e260	1,190	659	925	305	239	216
2	283	266	e250	e270	e180	e270	1,370	617	990	290	256	214
3	274	262	e240	e260	e180	e270	1,440	573	975	280	283	211
4	267	281	e240	e240	e180	e270	1,390	531	889	303	268	207
5	258	311	e240	e220	e180	e270	1,220	485	769	333	250	202
6	253	328	e240	e210	e180	e290	1,120	455	676	346	233	201
7	248	318	e240	e210	e180	e310	1,140	432	603	383	219	213
8	241	301	e240	e220	e190	e310	1,220	430	563	411	214	217
9	240	321	e230	e230	e190	e300	1,300	429	542	422	218	214
10	230	299	e230	e240	e180	e300	1,310	454	569	390	223	204
11	224	287	e230	e240	e180	e300	1,250	464	575	352	227	197
12	235	284	e220	e230	e180	e280	1,120	456	553	330	231	194
13	246	277	e230	e220	e170	e280	984	475	548	316	227	190
14	254	e280	e240	e210	e160	e300	881	513	659	328	228	188
15	254	e280	e240	e210	e150	e300	809	621	718	304	219	214
16	241	e280	e240	e210	e160	e300	780	665	709	291	211	257
17	233	289	e230	e200	e170	e300	815	626	741	282	208	268
18	230	312	e220	e190	e170	e300	888	560	704	271	215	258
19	230	370	e220	e180	e180	e300	993	494	621	266	232	240
20	229	449	e220	e180	e190	e300	1,080	453	546	303	225	223
21	235	453	e230	e170	e200	e300	1,120	439	486	302	217	212
22	226	415	e230	e170	e210	e300	1,130	436	444	284	207	202
23	225	e390	e220	e170	e230	e330	1,060	548	410	265	201	196
24	224	e350	e220	e170	e240	e310	967	1,020	390	252	199	191
25	225	e300	e220	e170	e250	e320	894	1,130	381	240	212	188
26	226	e340	e230	e170	e250	e320	830	1,130	390	232	213	184
27	224	e340	e240	e170	e250	e350	775	1,020	356	224	259	188
28	235	e330	e280	e160	e250	e460	717	889	339	219	255	189
29	253	e290	e320	e160	e250	e700	676	761	326	215	241	185
30	263	e260	e320	e160	---	e980	670	677	316	214	233	182
31	273	---	e300	e160	---	1,070	---	735	---	222	222	---
TOTAL	7,581	9,532	7,510	6,280	5,650	11,250	31,139	19,177	17,713	9,175	7,085	6,245
MEAN	245	318	242	203	195	363	1,038	619	590	296	229	208
MAX	302	453	320	280	250	1,070	1,440	1,130	990	422	283	268
MIN	224	260	220	160	150	260	670	429	316	214	199	182
CFSM	0.55	0.71	0.54	0.45	0.44	0.81	2.32	1.38	1.32	0.66	0.51	0.47
IN.	0.63	0.79	0.62	0.52	0.47	0.94	2.59	1.60	1.47	0.76	0.59	0.52

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2004, BY WATER YEAR (WY)

MEAN	289	288	235	181	189	332	823	594	441	316	234	249
MAX	624	367	356	203	209	542	1,201	978	694	481	308	422
(WY)	(2003)	(2003)	(2002)	(2004)	(1999)	(2000)	(2002)	(2002)	(2002)	(1999)	(2002)	(2000)
MIN	210	221	184	154	172	211	400	288	267	183	176	160
(WY)	(2001)	(2000)	(2001)	(1999)	(2002)	(2002)	(2000)	(2000)	(1998)	(1998)	(1998)	(1998)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1998 - 2004	
ANNUAL TOTAL	129,111		138,337			
ANNUAL MEAN	354		378		354	
HIGHEST ANNUAL MEAN					441	2002
LOWEST ANNUAL MEAN					299	1999
HIGHEST DAILY MEAN	1,560	Apr 21	1,440	Apr 3	2,340	Apr 17, 18, 2002
LOWEST DAILY MEAN	(a)130	Jan 21-28	(a)150	Feb 15	(a)130	(b)Jan 5, 1999
ANNUAL SEVEN-DAY MINIMUM	(a)130	Jan 21	(a)164	Jan 25	(a)130	Jan 21, 2003
MAXIMUM PEAK FLOW			1,490	Apr 2	2,370	Apr 17, 2002
MAXIMUM PEAK STAGE			6.17	Apr 2	7.17	Apr 17, 2002
INSTANTANEOUS LOW FLOW			(a)		(c)124	Dec 9, 1998
ANNUAL RUNOFF (CFSM)	0.791		0.846		0.792	
ANNUAL RUNOFF (INCHES)	10.74		11.51		10.76	
10 PERCENT EXCEEDS	688		789		670	
50 PERCENT EXCEEDS	250		266		250	
90 PERCENT EXCEEDS	170		189		170	

(a) Ice affected
(b) Also occurred Jan. 21-28, 2003
(c) Result of freezeup
(e) Estimated due to ice effect or missing record

04069416 PESHTIGO RIVER AT PORTERFIELD, WI

LOCATION.--Lat 45°08'36", long 87°48'02", in SE $^1/_4$ NE $^1/_4$ sec.19, T.31 N., R.22 E., Marinette County, Hydrologic Unit 04030105, on right bank 15 ft upstream from County Trunk E bridge, 0.8 mi south of Porterfield.

DRAINAGE AREA.--1,020 mi^2.

PERIOD OF RECORD.--June 1998 to current year. Prior to October 2000, published as "near Porterfield".

GAGE.--Water-stage recorder. Elevation of gage is 625 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Diurnal fluctuation caused by powerplant upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	663	566	e600	e670	e300	e560	4,490	1,540	2,680	969	506	473
2	569	576	e430	e580	e340	e600	4,210	1,410	2,910	896	485	468
3	603	527	e400	e590	e380	e620	4,080	1,380	2,740	773	517	429
4	561	660	e410	e560	e400	e640	3,800	1,140	2,600	756	555	383
5	522	838	e480	e500	e430	e680	3,420	1,060	2,010	1,070	516	451
6	406	836	e510	e360	e450	e720	3,340	1,180	1,700	1,190	506	468
7	388	757	e500	e400	e450	e760	3,220	947	1,450	1,300	433	410
8	388	641	e580	e440	e500	e760	3,110	926	1,240	1,300	401	437
9	376	552	e550	e390	e500	e760	3,160	1,170	1,120	1,230	415	435
10	357	476	e500	e400	e500	e740	2,950	1,320	1,220	1,110	436	426
11	431	514	e450	e420	e500	e680	2,920	1,310	1,040	1,010	504	417
12	417	593	e440	e380	e500	e730	2,780	1,160	1,210	975	477	432
13	411	612	e460	e460	e490	e740	2,370	1,140	1,290	860	460	441
14	407	584	e390	e480	e460	e700	2,120	1,300	1,620	698	458	457
15	460	549	e380	e420	e440	e700	2,070	1,570	1,750	723	454	529
16	493	632	e430	e430	e460	e720	2,140	1,570	1,960	745	449	515
17	509	643	e490	e440	e530	e880	1,770	1,450	2,020	797	454	510
18	504	666	e550	e450	e520	e900	1,760	1,430	2,470	760	473	484
19	455	745	e530	e420	e500	e790	2,070	1,310	2,780	706	441	481
20	484	806	e400	e420	e560	e650	2,340	1,000	2,310	711	451	579
21	483	768	e410	e440	e600	e750	2,350	926	1,830	654	478	507
22	486	761	e460	e450	e630	e880	2,470	935	1,520	744	465	438
23	496	1,010	e460	e400	e620	e850	2,640	1,010	1,220	763	442	413
24	527	1,230	e460	e400	e600	e900	2,290	2,100	1,100	695	436	419
25	506	1,120	e450	e390	e630	e1,100	2,130	2,900	1,140	611	449	416
26	519	1,040	e420	e360	e600	e1,600	2,210	3,070	710	494	470	411
27	547	793	e430	e330	e540	2,470	2,100	2,830	803	494	616	366
28	527	824	e480	e350	e510	3,610	1,960	2,510	878	508	736	379
29	516	848	e830	e360	e530	5,880	1,570	2,010	829	519	719	361
30	525	786	e830	e370	---	6,280	1,680	1,660	925	516	573	338
31	532	---	e840	e320	---	5,230	---	1,670	---	509	472	---
TOTAL	15,068	21,953	15,550	13,380	14,470	43,880	79,520	46,934	49,075	25,086	15,247	13,273
MEAN	486	732	502	432	499	1,415	2,651	1,514	1,636	809	492	442
MAX	663	1,230	840	670	630	6,280	4,490	3,070	2,910	1,300	736	579
MIN	357	476	380	320	300	560	1,570	926	710	494	401	338
CFSM	0.48	0.72	0.49	0.42	0.49	1.39	2.60	1.48	1.60	0.79	0.48	0.43
IN.	0.55	0.80	0.57	0.49	0.53	1.60	2.90	1.71	1.79	0.91	0.56	0.48

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2004, BY WATER YEAR (WY)

MEAN	630	620	477	382	435	903	1,766	1,201	999	597	482	501
MAX	1,379	837	675	434	526	1,415	2,651	1,754	1,791	844	660	762
(WY)	(2003)	(2003)	(2002)	(1999)	(1999)	(2004)	(2004)	(2002)	(2002)	(1999)	(2002)	(2000)
MIN	432	429	347	334	368	589	774	587	518	330	353	316
(WY)	(2000)	(2000)	(2000)	(2003)	(2001)	(2002)	(2000)	(2000)	(2000)	(2001)	(1998)	(1999)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1998 - 2004	
ANNUAL TOTAL	289,995		353,436			
ANNUAL MEAN	795		966		762	
HIGHEST ANNUAL MEAN					966	2004
LOWEST ANNUAL MEAN					568	2000
HIGHEST DAILY MEAN	3,800	Apr 22	6,280	Mar 30	6,280	Mar 30, 2004
LOWEST DAILY MEAN	(a)190	Jan 19	(a)300	Feb 1	164	Sep 25, 1998
ANNUAL SEVEN-DAY MINIMUM	(a)223	Jan 17	(a)339	Jan 27	218	Jul 28, 1998
MAXIMUM PEAK FLOW			6,630	Mar 30	6,630	Mar 30, 2004
MAXIMUM PEAK STAGE			13.87	Mar 30	13.87	Mar 30, 2004
ANNUAL RUNOFF (CFSM)	0.779		0.947		0.747	
ANNUAL RUNOFF (INCHES)	10.58		12.89		10.15	
10 PERCENT EXCEEDS	1,790		2,130		1,400	
50 PERCENT EXCEEDS	513		596		522	
90 PERCENT EXCEEDS	330		410		343	

(a) Ice affected
(e) Estimated due to ice effect or missing record

04069500 PESHTIGO RIVER AT PESHTIGO, WI

LOCATION.--Lat 45°02'51", long 87°44'40", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.30, T.30 N., R.23 E., Marinette County, Hydrologic Unit 04030105, on left bank 75 ft downstream from Chicago and Northwestern Railway bridge, 0.5 mi downstream from Wisconsin Public Service Corp. Powerplant at Peshtigo, and 11.5 mi upstream from mouth.

DRAINAGE AREA.--1,080 mi^2.

PERIOD OF RECORD.--June 1953 to current year.

REVISED RECORDS.--WDR WI-80-1: Drainage area. WDR WI-84-1: 1983 average discharge.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 584.64 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Diurnal fluctuation caused by two powerplants upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	757	614	761	726	e300	e520	5,220	1,570	2,760	934	418	477
2	671	639	495	669	e360	e600	4,740	1,430	3,080	833	364	464
3	687	612	419	705	e370	e660	4,510	1,390	2,790	739	438	460
4	655	735	462	673	e390	e710	4,190	1,240	2,650	785	530	372
5	608	923	537	e600	e400	e720	3,680	1,080	2,120	1,020	507	447
6	477	902	587	e390	e400	e700	3,540	1,240	1,750	1,140	488	444
7	450	877	559	e350	e370	e720	3,370	1,050	1,490	1,250	390	395
8	454	762	642	e500	e450	e720	3,250	1,010	1,340	1,240	358	372
9	441	660	624	e450	e470	e720	3,260	1,240	1,160	1,150	368	384
10	425	584	556	e470	e420	e700	3,030	1,370	1,220	1,060	382	369
11	483	588	e450	e500	e430	e680	2,930	1,380	1,090	929	450	419
12	468	657	e430	e420	e420	e680	2,820	1,270	1,180	908	444	413
13	446	688	516	e470	e420	e680	2,390	1,220	1,320	831	402	422
14	438	659	432	e480	e380	e680	2,120	1,330	1,650	724	391	471
15	490	630	412	e450	e370	e680	2,010	1,620	1,700	682	391	663
16	530	672	483	e470	e440	770	2,120	1,610	1,830	687	398	548
17	569	707	543	e520	e470	991	1,850	1,500	1,950	723	400	545
18	550	760	617	e500	e420	1,020	1,760	1,420	2,270	704	433	465
19	508	816	596	e500	e380	873	2,030	1,400	2,510	655	430	483
20	527	870	462	e500	e460	708	2,270	1,120	2,220	653	421	554
21	531	859	441	e500	e460	851	2,370	983	1,750	624	444	530
22	495	849	512	e500	e480	983	2,350	1,020	1,450	653	444	425
23	481	1,110	522	e500	e480	895	2,610	1,160	1,160	702	388	371
24	530	1,400	535	e500	e410	966	2,310	2,150	1,020	644	387	401
25	522	1,280	500	e500	e430	1,160	2,130	2,880	1,100	550	413	405
26	505	1,190	484	e440	e490	1,710	2,210	3,130	724	442	437	402
27	533	943	444	e410	e420	2,850	2,120	2,890	716	428	617	361
28	546	942	685	e430	e410	4,160	1,980	2,590	751	415	759	350
29	542	951	932	e440	e450	7,040	1,640	2,080	808	437	764	355
30	552	905	882	e480	---	7,660	1,640	1,770	907	445	644	313
31	591	---	921	e380	---	6,190	---	1,790	---	419	482	---
TOTAL	16,462	24,784	17,441	15,423	12,150	48,997	82,450	48,933	48,466	23,406	14,182	13,080
MEAN	531	826	563	498	419	1,581	2,748	1,578	1,616	755	457	436
MAX	757	1,400	932	726	490	7,660	5,220	3,130	3,080	1,250	764	663
MIN	425	584	412	350	300	520	1,640	983	716	415	358	313
CFSM	0.49	0.76	0.52	0.46	0.39	1.46	2.54	1.46	1.50	0.70	0.42	0.40
IN.	0.57	0.85	0.60	0.53	0.42	1.69	2.84	1.69	1.67	0.81	0.49	0.45

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	789	879	624	531	540	1,065	2,054	1,453	1,069	652	584	723
MAX	1,728	2,197	1,128	1,219	1,449	3,272	3,813	4,639	2,768	1,362	1,242	1,706
(WY)	(1986)	(1986)	(1966)	(1960)	(1984)	(1973)	(1979)	(1960)	(1993)	(1993)	(1974)	(1959)
MIN	310	328	250	268	282	424	485	538	228	300	285	264
(WY)	(1990)	(1977)	(1990)	(1990)	(1990)	(1964)	(1990)	(1977)	(1988)	(1989)	(1957)	(1989)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1953 - 2004	
ANNUAL TOTAL	308,383		365,774			
ANNUAL MEAN	845		999		914	
HIGHEST ANNUAL MEAN					1,559	1973
LOWEST ANNUAL MEAN					580	2000
HIGHEST DAILY MEAN	3,800	Apr 21	7,660	Mar 30	9,600	May 9, 1960
LOWEST DAILY MEAN	(a)170	Jan 19	(a)300	Feb 1	84	Aug 5, 1957
ANNUAL SEVEN-DAY MINIMUM	(a)226	Jan 17	370	Sep 24	172	Aug 4, 1957
MAXIMUM PEAK FLOW			8,110	Mar 30	(b)9,790	May 9, 1960
MAXIMUM PEAK STAGE			11.04	Mar 30	11.59	May 9, 1960
ANNUAL RUNOFF (CFSM)	0.782		0.925		0.846	
ANNUAL RUNOFF (INCHES)	10.62		12.60		11.49	
10 PERCENT EXCEEDS	1,830		2,140		1,790	
50 PERCENT EXCEEDS	563		644		664	
90 PERCENT EXCEEDS	342		402		352	

(a) Ice affected
(b) From rating curve extended above 5,000 ft^3/s on basis of computation of peak flow through dam gates
(e) Estimated due to ice effect or missing record

04071000 OCONTO RIVER NEAR GILLETT, WI

LOCATION.--Lat 44°51'55", long 88°18'00", in NE ¼ NW ¼ sec.34, T.28 N., R.18 E., Oconto County, Hydrologic Unit 04030104, on left bank 300 ft upstream from County Trunk Highway BB bridge, 2.0 mi upstream from Christy Brook, 2.0 mi south of Gillett, and at mile 29.

DRAINAGE AREA.--705 mi^2.

PERIOD OF RECORD.--June 1906 to April 1909, October 1913 to current year. Monthly discharge for some periods published in WSP 1307.

REVISED RECORDS.--WSP 1207: 1922. WSP 1307: 1907-8(M), 1914-16(M), 1918-21(M), 1923-33(M), 1937-38(M), 1943(M). WDR WI-79-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 732.87 ft above NGVD of 1929 (levels by Wisconsin Department of Transportation). See WSP 1727 for history of changes prior to Aug. 25, 1938.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	391	368	465	e370	e280	e410	2,290	975	1,170	576	332	330
2	374	361	e450	e340	e280	e430	2,120	932	1,340	541	330	325
3	364	361	e430	e420	e290	e460	1,950	893	1,530	503	330	319
4	366	452	e420	e390	e290	e480	1,830	849	1,510	555	341	310
5	364	528	e420	e310	e290	e500	1,750	792	1,360	646	368	302
6	354	564	e420	e310	e290	e500	1,690	744	1,200	751	373	297
7	349	e540	e420	e310	e290	e500	1,640	703	1,060	787	351	299
8	339	e470	e420	e310	e290	e500	1,630	754	911	799	331	297
9	315	e400	e420	e310	e290	e500	1,650	843	836	784	329	297
10	310	e430	e410	e310	e290	e500	1,670	958	840	713	331	293
11	308	470	e400	e320	e290	e500	1,650	993	871	648	339	289
12	313	454	e390	e320	e290	e490	1,570	985	916	618	333	285
13	333	432	e380	e310	e290	e490	1,470	995	966	575	322	291
14	353	423	e390	e300	e280	e470	1,360	988	1,050	527	311	299
15	347	422	e400	e300	e270	e460	1,260	975	1,110	533	291	325
16	337	407	e400	e290	e270	e460	1,170	968	1,190	507	293	313
17	331	391	e390	e300	e270	e460	1,110	954	1,580	486	295	330
18	327	409	e370	e300	e280	e460	1,080	912	1,680	476	297	336
19	325	430	e350	e290	e290	e460	1,090	835	1,780	457	302	352
20	333	441	e350	e280	e320	e480	1,130	755	1,650	446	325	337
21	336	438	e350	e280	e330	e500	1,220	713	1,460	452	320	316
22	329	432	e350	e280	e330	e500	1,270	692	1,270	445	298	287
23	316	558	e340	e280	e350	e500	1,290	751	1,070	419	294	284
24	317	647	e340	e280	e370	e700	1,280	985	919	386	291	278
25	321	640	e340	e280	e380	e1,100	1,250	1,090	862	376	302	276
26	321	597	e340	e280	e380	e1,700	1,200	1,230	844	367	316	276
27	319	556	e340	e280	e380	e2,000	1,150	1,350	775	362	346	275
28	323	536	e400	e280	e390	e2,400	1,140	1,320	701	353	362	272
29	333	509	e470	e280	e400	2,600	1,090	1,190	656	344	351	273
30	346	487	e460	e280	---	2,940	1,030	1,080	617	339	339	279
31	374	---	e400	e280	---	2,610	---	1,090	---	335	335	---
TOTAL	10,468	14,153	12,225	9,470	9,040	27,060	43,030	29,294	33,724	16,106	10,078	9,042
MEAN	338	472	394	305	312	873	1,434	945	1,124	520	325	301
MAX	391	647	470	420	400	2,940	2,290	1,350	1,780	799	373	352
MIN	308	361	340	280	270	410	1,030	692	617	335	291	272
CFSM	0.48	0.67	0.56	0.43	0.44	1.24	2.03	1.34	1.59	0.74	0.46	0.43
IN.	0.55	0.75	0.65	0.50	0.48	1.43	2.27	1.55	1.78	0.85	0.53	0.48

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1906 - 2004, BY WATER YEAR (WY)

MEAN	482	558	445	355	347	646	1,219	868	677	461	382	446
MAX	1,216	1,377	900	700	643	1,867	3,435	2,185	1,744	1,022	742	1,347
(WY)	(1942)	(1986)	(1907)	(1907)	(1984)	(1973)	(1922)	(1960)	(1916)	(1922)	(1960)	(1928)
MIN	199	259	216	206	204	240	379	357	197	226	158	190
(WY)	(1949)	(1934)	(1990)	(1957)	(1948)	(1934)	(1931)	(1931)	(1988)	(1988)	(1934)	(1933)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1906 - 2004	
ANNUAL TOTAL	190,898		223,690			
ANNUAL MEAN	523		611		574	
HIGHEST ANNUAL MEAN					930	1973
LOWEST ANNUAL MEAN					315	1931
HIGHEST DAILY MEAN	2,320	Apr 19	2,940	Mar 30	6,790	Apr 10, 1922
LOWEST DAILY MEAN	(a)210	Jan 24-30	(a)270	Feb 15-17	95	Jun 3, 1907
ANNUAL SEVEN-DAY MINIMUM	(a)210	Jan 24	276	Sep 24	137	Aug 9, 1908
MAXIMUM PEAK FLOW			(b)3,030	Mar 30	8,400	Apr 10, 1922
MAXIMUM PEAK STAGE			(a)5.95	Mar 28	(c)11.20	Apr 10 ,1922
INSTANTANEOUS LOW FLOW			(d)270	Sep 28-29	(f)93	Nov 26, 1941
ANNUAL RUNOFF (CFSM)	0.742		0.867		0.815	
ANNUAL RUNOFF (INCHES)	10.07		11.80		11.07	
10 PERCENT EXCEEDS	999		1,250		1,060	
50 PERCENT EXCEEDS	384		404		436	
90 PERCENT EXCEEDS	260		290		258	

(a) Ice affected
(b) Gage height, 5.33 ft
(c) From floodmarks, caused by failure of a dam at Pulcifer 4 mi above station
(d) May also have occurred additional days
(e) Estimated due to ice effect or missing record

04071765 OCONTO RIVER NEAR OCONTO, WI

LOCATION.--Lat 44°51'38", long 87°59'02", in NW ¼ NW ¼ sec.32, T.28 N., R.21 E., Oconto County, Hydrologic Unit 04030104, on left bank 30 ft upstream from County Highway J bridge, 0.7 mi downstream from mouth of Little River, and 4.6 mi west of Oconto.

DRAINAGE AREA.--966 mi^2.

PERIOD OF RECORD.--October 1988 to September 1990, October 1997 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 583.14 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Flow regulated by Machickanee Flowage (capacity, 556 acre-ft) 3.9 mi upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	508	458	691	e540	e330	e650	4,180	1,230	2,850	654	375	396
2	498	433	546	e470	e330	e750	3,410	1,170	2,470	626	343	356
3	466	448	529	e540	e330	e900	2,980	1,070	2,290	574	318	352
4	473	801	487	e630	e320	e930	2,610	1,020	2,280	663	394	366
5	461	906	439	e450	e310	e1,100	2,390	988	1,810	787	360	325
6	461	878	e490	e400	e350	e1,000	2,320	855	1,640	932	384	337
7	450	823	e470	e380	e330	e960	2,230	837	1,400	1,150	420	330
8	423	676	e480	e380	e350	e910	2,130	1,110	1,190	1,030	370	312
9	414	504	e470	e380	e350	e870	2,140	1,380	992	942	344	326
10	374	546	e490	e390	e370	e800	2,190	1,640	1,070	939	346	325
11	393	640	e440	e390	e410	e780	2,110	1,560	1,170	777	358	315
12	409	608	e460	e390	e400	e750	2,010	1,390	1,270	703	375	306
13	396	570	e490	e380	e390	e710	1,890	1,470	1,390	697	351	309
14	436	552	e460	e420	e380	e680	1,770	1,580	1,610	644	323	318
15	428	538	e440	e410	e380	e660	1,430	1,670	1,540	616	327	598
16	408	535	e430	e430	e380	e630	1,440	1,520	1,550	605	306	501
17	411	505	e440	e440	e380	e610	1,480	1,410	2,900	565	306	368
18	389	573	e450	e400	e380	e600	1,380	1,370	3,040	552	307	420
19	390	660	e430	e390	e400	e580	1,480	1,210	2,590	524	334	400
20	409	657	e420	e370	e500	e610	1,430	982	2,510	505	329	398
21	409	620	e400	e360	e490	e650	1,520	960	1,940	521	330	345
22	390	578	e400	e350	e490	e690	1,720	895	1,660	509	338	329
23	394	1,200	e390	e360	e500	774	1,630	1,300	1,400	464	326	296
24	383	1,670	e410	e350	e550	968	1,600	2,290	1,140	432	312	272
25	385	1,250	e410	e340	e540	1,520	1,680	2,020	1,080	418	353	294
26	403	1,040	e410	e340	e550	4,320	1,680	1,880	944	400	411	302
27	377	875	e410	e340	e550	5,530	1,600	1,890	953	397	405	299
28	406	815	e570	e330	e600	5,660	1,440	1,790	773	394	397	294
29	406	756	e750	e330	e600	8,100	1,500	1,660	797	382	424	277
30	423	696	e660	e360	---	7,030	1,340	1,380	689	342	378	289
31	445	---	e580	e320	---	5,420	---	1,970	---	377	359	---
TOTAL	13,018	21,811	14,942	12,360	12,240	56,142	58,710	43,497	48,938	19,121	11,003	10,355
MEAN	420	727	482	399	422	1,811	1,957	1,403	1,631	617	355	345
MAX	508	1,670	750	630	600	8,100	4,180	2,290	3,040	1,150	424	598
MIN	374	433	390	320	310	580	1,340	837	689	342	306	272
CFSM	0.43	0.75	0.50	0.41	0.44	1.87	2.03	1.45	1.69	0.64	0.37	0.36
IN.	0.50	0.84	0.58	0.48	0.47	2.16	2.26	1.68	1.88	0.74	0.42	0.40

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2004, BY WATER YEAR (WY)

MEAN	407	472	361	308	360	917	1,247	897	933	460	393	463
MAX	909	727	557	399	565	1,811	1,957	1,403	1,631	751	635	1,044
(WY)	(2003)	(2004)	(2002)	(2004)	(1998)	(2004)	(2004)	(2004)	(2004)	(2000)	(2002)	(1990)
MIN	240	280	251	240	263	459	423	448	370	260	261	196
(WY)	(2000)	(2000)	(1990)	(2000)	(1990)	(2001)	(1990)	(1998)	(1999)	(1989)	(1989)	(1999)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1989 - 2004	
ANNUAL TOTAL	257,376		322,137			
ANNUAL MEAN	705		880		601	
HIGHEST ANNUAL MEAN					880	2004
LOWEST ANNUAL MEAN					433	2000
HIGHEST DAILY MEAN	4,390	Apr 17	8,100	Mar 29	8,100	Mar 29, 2004
LOWEST DAILY MEAN	(a)230	(b)Jan 24-28	272	Sep 24	153	Sep 4, 1999
ANNUAL SEVEN-DAY MINIMUM	(a)231	Jan 24	290	Sep 24	181	(c)Jul 30, 1998
MAXIMUM PEAK FLOW			8,320	Mar 29	8,320	Mar 29, 2004
MAXIMUM PEAK STAGE			13.24	Mar 29	13.24	Mar 29, 2004
ANNUAL RUNOFF (CFSM)	0.730		0.911		0.623	
ANNUAL RUNOFF (INCHES)	9.91		12.41		8.46	
10 PERCENT EXCEEDS	1,560		1,740		1,210	
50 PERCENT EXCEEDS	464		522		399	
90 PERCENT EXCEEDS	270		330		240	

(a) Ice affected
(b) Also occurred Jan. 30 and 31
(c) Also occurred Sept. 3, 1999
(e) Estimated due to ice effect or missing record

LOCATION.--Lat 44°32'09", long 88°07'47", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.19, T.24 N., R.20 E., Brown County, Hydrologic Unit 04030103, on left bank upstream from County Trunk Highway FF bridge 2.2 mi southwest of Howard, and about 9 mi upstream from mouth.

DRAINAGE AREA.--108 mi^2.

PERIOD OF RECORD.--May 1988 to current year.

GAGE.--Continuous water-stage recorder since April 1988. Elevation of gage is 605 ft above NGVD of 1929, from topographic map.

REMARKS.-Records good except those for estimated daily discharges and discharges less than 0.5 ft^3/s, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	e4.4	59	e70	e2.3	e240	246	24	645	12	1.2	0.89
2	3.0	4.3	e39	e60	e2.3	e800	171	22	e350	12	1.1	0.93
3	4.4	5.1	e46	e100	e2.2	e900	131	19	e220	9.5	1.3	0.65
4	4.3	41	e41	e90	e2.1	e590	108	17	e140	21	1.1	0.40
5	3.7	108	e27	e66	e2.0	e550	88	15	105	14	1.2	0.28
6	4.5	117	e23	e53	e2.0	e900	76	14	80	17	0.83	0.63
7	5.0	77	e22	e44	e2.0	e700	71	14	61	25	0.67	0.77
8	5.5	51	e21	e38	e2.0	e560	65	36	52	29	0.71	0.36
9	4.6	e28	e21	e34	e2.0	e430	57	200	687	23	0.87	0.18
10	3.9	e26	e30	e31	e2.0	e320	51	220	1,180	19	0.65	0.12
11	3.2	25	e42	e29	e2.0	e220	46	153	822	15	0.47	0.10
12	2.7	24	e57	e27	e2.0	e160	41	116	888	12	0.60	0.09
13	3.4	24	e70	e24	e2.0	e140	35	194	646	11	0.43	0.08
14	4.4	23	e37	e21	e2.0	e120	31	373	591	9.5	0.33	0.27
15	4.1	21	e26	e18	e2.0	e110	e30	337	676	9.3	0.29	1.2
16	4.9	19	e19	e15	e2.1	e100	e31	236	404	8.1	0.22	0.92
17	5.7	17	e17	e13	e2.3	e93	32	144	673	7.7	0.13	0.92
18	5.1	23	e16	e12	e2.5	e85	31	102	727	7.8	0.17	0.29
19	4.9	45	e14	e10	e2.7	e90	32	74	394	5.6	0.32	0.14
20	4.4	85	e13	e9.0	e3.0	216	30	120	210	4.6	0.50	0.11
21	4.8	71	e14	e7.6	e3.5	e280	39	227	121	4.0	0.38	0.10
22	4.6	51	e15	e6.6	e4.3	e190	50	287	80	3.4	0.16	0.09
23	4.8	175	e13	e5.8	e5.6	e120	53	585	61	2.2	0.11	0.07
24	4.3	567	e12	e5.0	e7.2	112	39	1,220	47	1.6	0.10	0.06
25	4.1	e410	e11	e4.4	e9.3	153	41	878	38	1.6	0.69	0.05
26	3.9	e210	e11	e3.8	e12	377	53	479	30	1.6	0.89	0.03
27	4.1	131	e12	e3.4	e17	539	61	290	23	1.3	1.4	0.01
28	4.6	100	e46	e3.1	e32	426	49	186	21	1.4	0.90	0.00
29	4.1	85	e130	e2.8	e67	805	37	136	19	1.3	0.59	0.00
30	4.1	71	e120	e2.6	---	727	29	122	16	1.3	0.66	0.00
31	e4.1	---	e80	e2.4	---	386	---	345	---	1.1	1.1	---
TOTAL	132.3	2,638.8	1,104	811.5	201.4	11,439	1,854	7,185	10,007	292.9	20.07	9.74
MEAN	4.27	88.0	35.6	26.2	6.94	369	61.8	232	334	9.45	0.65	0.32
MAX	5.7	567	130	100	67	900	246	1,220	1,180	29	1.4	1.2
MIN	2.7	4.3	11	2.4	2.0	85	29	14	16	1.1	0.10	0.00
CFSM	0.04	0.81	0.33	0.24	0.06	3.42	0.57	2.15	3.09	0.09	0.01	0.00
IN.	0.05	0.91	0.38	0.28	0.07	3.94	0.64	2.47	3.45	0.10	0.01	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2004, BY WATER YEAR (WY)

MEAN	8.89	31.5	17.0	7.61	25.3	156	153	64.0	117	28.4	12.1	7.81
MAX	52.7	207	93.5	36.8	102	369	318	232	370	295	106	36.8
(WY)	(1996)	(1993)	(1993)	(1996)	(1998)	(2004)	(1994)	(2004)	(1990)	(1993)	(2003)	(1990)
MIN	0.14	1.02	0.59	0.11	0.51	16.4	9.40	2.79	0.00	0.00	0.00	0.00
(WY)	(2000)	(2000)	(1990)	(1990)	(1989)	(2000)	(1990)	(1988)	(1988)	(1988)	(1988)	(1989)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1988 - 2004	
ANNUAL TOTAL	16,829.41		35,695.71			
ANNUAL MEAN	46.1		97.5		53.5	
HIGHEST ANNUAL MEAN					123	1993
LOWEST ANNUAL MEAN					14.5	2000
HIGHEST DAILY MEAN	567	Nov 24	1,220	May 24	3,690	Jun 23, 1990
LOWEST DAILY MEAN	0.10	Jan 22	0.00	Sep 28-30	0.00 (a)	Jun 1, 1988
ANNUAL SEVEN-DAY MINIMUM	0.38	Jul 23	0.02	Sep 24	0.00 (a)	Jun 1, 1988
MAXIMUM PEAK FLOW			(b)1,400	May 24	(c)4,520	Jun 23, 1990
MAXIMUM PEAK STAGE			(d)17.67	Mar 3	(f)21.00	Jun 23, 1990
INSTANTANEOUS LOW FLOW			0.00	Sep 27-30	0.00 (a)	Jun 1, 1988
ANNUAL RUNOFF (CFSM)	0.427		0.903		0.495	
ANNUAL RUNOFF (INCHES)	5.80		12.30		6.73	
10 PERCENT EXCEEDS	135		325		125	
50 PERCENT EXCEEDS	9.4		19		6.9	
90 PERCENT EXCEEDS	2.3		0.60		0.51	

(a) Also occurred additional days
(b) Gage height, 16.16 ft
(c) Based on rating curve extended above 1,500 ft^3/s on basis of contracted-opening measurement of peak flow
(d) Ice affected
(e) Estimated due to ice effect or missing record
(f) Estimated from floodmarks

04072150 DUCK CREEK NEAR HOWARD, WI—Continued

PRECIPITATION QUANTITY

PERIOD OF RECORD.--November 2003 to September 2004 (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Rainfall estimated to be 0.00 for Dec. 10-12, 15-16, Jan. 1, 5, 12, 17-19, 21, 24, 27 and Feb. 2-3, 6-7, 12, 19-21, 23 because recorded precipitation interpreted as collector snowmelt. Rainfall data missing for the periods Oct. 31-Nov. 1, Feb. 8-10, Mar. 2-Apr. 13, 15-16.

EXTREMES FOR CURRENT YEAR.-- Maximum daily rainfall, 1.59 in., Nov. 23.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	0.00	0.00	0.00	0.62	---	0.00	0.11	0.00	0.11	0.00
2	---	0.00	0.00	0.56	0.00	0.00	---	0.00	0.00	0.00	0.07	0.00
3	---	0.81	0.00	0.00	0.00	---	---	0.00	0.00	0.07	0.01	0.00
4	---	0.76	0.00	0.00	0.00	---	---	0.00	0.00	1.09	0.00	0.00
5	---	0.00	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00
6	---	0.00	0.00	0.00	0.00	---	---	0.11	0.08	0.01	0.00	0.38
7	---	0.00	0.00	0.00	0.00	---	---	0.01	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	---	---	---	1.32	0.00	0.00	0.20	0.00
9	0.00	0.00	0.22	0.00	---	---	---	0.09	0.59	0.00	0.02	0.00
10	0.00	0.12	0.00	0.00	---	---	---	0.02	0.07	0.00	0.00	0.00
11	0.23	0.01	0.00	0.00	0.00	---	---	0.00	0.51	0.00	0.00	0.00
12	0.00	0.04	0.00	0.00	0.00	---	---	0.66	0.05	0.00	0.00	0.00
13	0.03	0.00	0.00	0.00	0.00	---	0.00	0.78	0.46	0.00	0.01	0.00
14	0.16	0.00	0.00	0.00	0.00	---	0.00	0.40	0.11	0.00	0.00	0.00
15	0.00	0.01	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.13
16	0.00	0.00	0.00	0.00	0.00	---	---	0.00	1.17	0.01	0.00	0.00
17	0.00	0.05	0.00	0.00	0.00	---	0.13	0.05	0.13	0.01	0.00	0.00
18	0.00	0.48	0.00	0.00	0.00	---	0.02	0.00	0.00	0.00	0.28	0.00
19	0.00	0.00	0.00	0.00	0.00	---	0.13	0.09	0.00	0.00	0.00	0.00
20	0.00	0.01	0.00	0.00	0.00	---	0.36	0.62	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	---	0.15	0.39	0.00	0.01	0.00	0.00
22	0.12	0.05	0.00	0.00	0.00	---	0.00	0.20	0.00	0.00	0.00	0.00
23	0.00	1.59	0.00	0.00	0.00	---	0.00	1.14	0.30	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	---	0.09	0.32	0.01	0.00	0.44	0.00
25	0.01	0.00	0.00	0.00	0.00	---	0.40	0.00	0.00	0.00	0.17	0.00
26	0.00	0.00	0.00	0.00	0.00	---	0.01	0.00	0.00	0.00	0.04	0.00
27	0.00	0.00	0.58	0.00	0.00	---	0.00	0.20	0.20	0.00	0.36	0.05
28	0.08	0.03	0.16	0.00	0.00	---	0.05	0.06	0.00	0.00	0.09	0.00
29	0.01	0.00	0.00	0.00	0.00	---	0.00	0.01	0.00	0.08	0.00	0.00
30	0.01	0.00	0.00	0.00	---	---	0.07	0.82	0.00	0.00	0.01	0.00
31	---	---	0.00	0.00	---	---	---	1.04	---	0.00	0.00	---
TOTAL	---	---	0.96	0.56	---	---	---	8.33	3.79	1.28	1.81	0.56

04072150 DUCK CREEK NEAR HOWARD, WI—Continued

WATER-QUALITY RECORD

PERIOD OF RECORD.--October 1988 to December 1992. April 1995 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: May 2002 to September 2004 (discontinued).
SPECIFIC CONDUCTANCE: May 2002 to September 2004 (discontinued).
SUSPENDED-SOLIDS DISCHARGE: October 2003 to September 2004.
TOTAL-PHOPHORUS DISCHARGE: October 2003 to September 2004.

INSTRUMENTATION.--Continuous water temperature recorder and specific conductance recorder from May 2002 to September 2004. Sensor located near midstream. Water-quality sampler October 2003 to September 2004.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Records for water temperature were faulty Oct. 31, Feb. 8-10, Mar. 1-Apr. 9, 13, 14, and Sept. 26, 27, 30. Records for specific conductance were faulty Oct. 31, Feb. 8-10, Mar. 1-Apr. 9, 13, 14, and Sept. 26, 27, 30. Chemical analyses by Green Bay Metropolitan Sewerage District Laboratory. Samples are point samples unless otherwise indicated.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum, 30.5°C, July 2, 21 and 2, 2002; minimum, 0.0° many days during 2003 water year.
SPECIFIC CONDUCTANCE: Maximum, 1,930 µS/cm, Jan. 15, 2003 (partial day); minimum, 340 µS/cm, June 4, 2002.
SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 1,730 tons, June 10, 2004; minimum daily, 0.00 tons, Sept. 27-30, 2004 (result of zero flow).
TOTAL-PHOPHORUS DISCHARGE: Maximum daily, 6,050 lbs, June 10, 2004; minimum daily, 0.00 lbs, Sept. 27-30, 2004 (result of zero flow).

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 27.5°C, July 20 and 22; minimum, 0.0°C, many days.
SPECIFIC CONDUCTANCE: Maximum, 1,380 µS/cm, Feb. 23; minimum, 310 µS/cm, Dec. 29.
SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 1,730 tons, June 10; minimum daily, 0.00 tons, Sept. 28-30 (result of zero flow).
TOTAL-PHOPHORUS DISCHARGE: Maximum daily, 6,050 lbs, June 10; minimum daily, 0.00 lbs, Sept. 27-30 (result of zero flow).

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	9.0	7.0	8.0	8.0	6.5	7.5	1.0	0.0	0.0	0.0	0.0	0.0
2	8.5	5.5	7.0	7.5	6.5	7.0	0.0	0.0	0.0	0.0	0.0	0.0
3	8.5	7.0	8.0	7.0	4.5	5.5	0.0	0.0	0.0	0.0	0.0	0.0
4	9.0	6.5	7.5	6.0	5.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0
5	8.5	5.5	7.0	6.0	5.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0
6	9.0	5.0	7.0	5.0	3.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0
7	10.5	7.0	8.5	3.0	1.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0
8	13.5	9.5	11.0	1.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0
9	14.0	11.0	12.5	0.5	0.0	0.0	0.5	0.0	0.5	0.0	0.0	0.0
10	15.0	11.5	13.0	1.5	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0
11	15.0	12.0	13.5	3.5	1.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0
12	14.5	12.0	13.0	3.5	2.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0
13	13.5	11.0	12.0	3.0	1.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
14	12.5	10.5	12.0	2.5	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
15	11.0	9.0	10.0	3.5	2.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0
16	10.0	7.5	8.5	4.0	3.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0
17	9.5	7.0	8.5	5.5	3.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0
18	11.5	8.0	9.5	6.5	5.5	6.0	0.0	0.0	0.0	0.0	0.0	0.0
19	11.0	8.0	9.5	6.0	4.5	5.0	0.0	0.0	0.0	0.0	0.0	0.0
20	13.0	8.5	10.5	6.0	4.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0
21	12.0	10.5	11.5	5.0	4.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0
22	10.5	8.5	9.0	4.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0
23	9.5	8.5	9.0	4.5	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0
24	9.0	7.0	8.0	4.0	1.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0
25	10.0	7.5	9.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	8.5	7.0	7.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	7.5	6.0	7.0	2.0	0.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0
28	7.5	6.5	7.0	2.0	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
29	7.5	6.0	7.0	1.5	0.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0
30	9.0	6.5	8.0	1.5	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
31	---	---	---	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0
MONTH	15.0	5.0	9.3	8.0	0.0	3.1	1.0	0.0	0.0	0.0	0.0	0.0

04072150 DUCK CREEK NEAR HOWARD, WI—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	0.0	0.0	0.0	---	---	---	---	---	---	13.0	9.5	11.0
2	0.0	0.0	0.0	---	---	---	---	---	---	11.5	8.5	10.0
3	0.0	0.0	0.0	---	---	---	---	---	---	13.5	7.5	10.5
4	0.0	0.0	0.0	---	---	---	---	---	---	15.5	10.0	12.5
5	0.0	0.0	0.0	---	---	---	---	---	---	14.0	11.0	12.5
6	0.0	0.0	0.0	---	---	---	---	---	---	15.5	11.5	13.0
7	0.0	0.0	0.0	---	---	---	---	---	---	16.0	11.5	13.5
8	---	---	---	---	---	---	---	---	---	13.0	11.0	11.5
9	---	---	---	---	---	---	---	---	---	12.0	10.5	11.0
10	---	---	---	---	---	---	10.0	7.5	8.5	13.5	11.0	12.5
11	0.0	0.0	0.0	---	---	---	8.0	5.5	7.0	16.0	12.5	14.0
12	0.0	0.0	0.0	---	---	---	6.5	4.5	5.5	20.0	14.0	17.0
13	0.0	0.0	0.0	---	---	---	---	---	---	19.0	16.5	18.0
14	0.0	0.0	0.0	---	---	---	---	---	---	17.5	14.0	16.0
15	0.0	0.0	0.0	---	---	---	12.0	6.5	9.5	14.5	12.0	13.0
16	0.0	0.0	0.0	---	---	---	15.5	10.0	13.0	15.5	12.0	13.5
17	0.0	0.0	0.0	---	---	---	15.5	12.5	14.0	17.5	13.5	15.5
18	0.0	0.0	0.0	---	---	---	16.0	12.0	14.0	18.0	14.5	16.0
19	0.0	0.0	0.0	---	---	---	16.5	14.5	15.5	19.0	13.5	16.5
20	0.0	0.0	0.0	---	---	---	14.5	11.0	12.0	20.0	15.5	17.5
21	0.0	0.0	0.0	---	---	---	11.5	9.5	10.5	17.5	15.0	16.0
22	0.0	0.0	0.0	---	---	---	13.5	8.5	10.5	15.0	13.0	14.0
23	0.0	0.0	0.0	---	---	---	12.5	8.0	10.5	13.0	11.5	12.5
24	0.0	0.0	0.0	---	---	---	12.0	8.0	10.0	11.5	11.0	11.0
25	0.0	0.0	0.0	---	---	---	10.5	8.5	9.0	12.0	11.0	11.5
26	0.0	0.0	0.0	---	---	---	11.0	7.5	9.0	14.5	12.0	13.0
27	0.0	0.0	0.0	---	---	---	12.0	6.5	9.0	16.0	13.5	14.0
28	0.0	0.0	0.0	---	---	---	16.0	8.5	12.0	16.5	13.0	14.5
29	0.0	0.0	0.0	---	---	---	15.5	13.0	14.5	14.0	12.5	13.0
30	---	---	---	---	---	---	13.5	10.0	11.0	13.5	12.5	13.0
31	---	---	---	---	---	---	---	---	---	13.5	13.0	13.0
MONTH	0.0	0.0	0.0	---	---	---	16.5	4.5	10.8	20.0	7.5	13.6
		JUNE			JULY			AUGUST			SEPTEMBER	
1	14.5	13.5	14.0	24.5	20.0	22.0	27.0	20.0	23.5	22.5	17.5	19.5
2	17.0	14.0	15.0	24.5	19.0	21.5	24.5	21.5	23.0	23.5	18.0	20.5
3	18.0	14.5	16.0	22.0	18.5	20.5	24.5	20.0	22.0	24.5	19.0	22.0
4	19.0	14.0	16.0	20.5	19.5	20.0	23.5	20.0	21.5	24.0	19.0	21.5
5	18.5	14.5	16.5	22.0	18.0	20.0	22.5	17.0	20.0	24.0	19.0	21.5
6	20.5	16.0	18.0	19.5	17.5	18.5	23.0	16.5	20.0	23.0	20.0	21.5
7	23.0	17.0	20.0	17.5	16.5	17.0	21.5	16.5	19.5	20.5	17.0	19.0
8	24.0	20.0	22.0	18.0	15.5	16.5	23.0	17.5	20.0	20.0	16.0	18.0
9	23.0	18.5	19.5	18.0	16.5	17.0	24.0	19.5	21.5	21.0	15.0	18.0
10	18.5	16.0	17.5	21.0	16.0	18.5	21.0	17.5	19.5	21.0	14.5	18.0
11	16.0	14.0	15.0	21.0	19.5	20.0	18.0	15.5	16.5	22.5	17.5	20.0
12	15.5	14.0	14.5	23.5	20.0	21.5	19.0	14.5	17.0	24.5	17.5	20.5
13	18.0	15.0	16.5	24.5	21.0	22.5	19.0	15.0	17.0	25.0	17.5	21.0
14	18.5	17.0	17.5	24.5	20.0	22.0	20.5	14.0	17.0	24.5	19.0	21.5
15	20.0	17.5	18.5	25.0	20.0	22.0	21.5	14.0	18.0	22.5	20.5	21.0
16	20.5	18.0	19.5	24.0	20.5	22.0	21.0	15.0	18.0	20.5	16.5	18.5
17	19.5	18.5	19.0	25.0	20.0	22.0	22.5	17.0	19.5	19.0	14.5	16.5
18	20.0	18.5	19.5	24.0	19.5	21.5	23.0	16.5	19.5	20.5	15.0	18.0
19	19.5	17.0	18.5	25.5	20.0	22.5	20.0	14.5	17.5	20.5	15.0	18.0
20	19.5	16.5	17.5	27.5	21.5	24.5	20.5	15.5	17.5	21.0	16.0	18.5
21	18.5	17.0	17.5	25.0	22.5	24.0	19.5	12.5	16.5	21.0	14.5	18.0
22	19.5	16.5	18.0	27.5	22.5	24.5	22.5	14.0	18.0	22.5	15.0	18.5
23	20.5	16.0	18.0	25.0	19.5	22.0	21.0	17.0	18.5	22.0	14.5	18.5
24	19.0	15.5	17.0	23.5	18.5	20.5	21.0	17.5	19.0	21.0	16.5	18.5
25	18.0	14.5	16.5	24.0	16.5	20.0	22.0	19.0	20.5	22.0	15.0	17.5
26	18.0	14.5	16.5	24.5	17.0	20.5	24.0	19.5	21.5	---	---	---
27	18.0	15.5	17.0	25.5	18.5	22.0	25.0	20.5	23.0	---	---	---
28	19.5	15.5	18.0	25.5	19.5	22.5	22.0	17.0	19.5	19.0	12.5	15.0
29	22.5	18.0	20.0	23.0	20.5	22.0	19.5	15.0	17.0	18.5	9.0	13.0
30	23.5	19.0	21.0	24.5	19.5	22.0	20.0	14.5	17.0	---	---	---
31	---	---	---	24.5	20.0	22.5	20.0	15.0	17.5	---	---	---
MONTH	24.0	13.5	17.7	27.5	15.5	21.1	27.0	12.5	19.2	25.0	9.0	19.0
YEAR	27.5	0.0	10.4									

04072150 DUCK CREEK NEAR HOWARD, WI—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	894	821	872	1,040	1,030	1,040	858	696	835	660	562	616
2	903	885	893	1,050	1,040	1,050	890	697	796	713	584	673
3	913	843	872	1,060	937	1,030	928	802	907	584	458	536
4	882	856	864	982	713	834	954	804	940	552	425	458
5	917	881	906	981	789	897	971	947	961	574	538	555
6	919	913	917	789	696	711	986	956	970	647	573	611
7	938	893	925	773	725	754	1,000	976	989	741	647	695
8	952	929	944	825	773	796	992	970	983	845	741	788
9	963	879	953	870	746	854	994	975	989	905	845	873
10	982	960	970	906	868	895	975	899	929	932	905	919
11	994	919	971	922	906	914	956	777	921	945	931	935
12	963	932	946	929	922	926	965	686	913	952	945	948
13	943	899	936	939	922	931	1,010	963	993	955	944	952
14	974	913	926	949	938	944	1,050	993	1,030	971	946	963
15	939	905	919	968	949	961	1,080	1,050	1,070	966	930	957
16	978	931	949	982	966	978	1,080	1,070	1,080	969	952	959
17	993	954	971	980	972	978	1,110	925	1,100	969	964	967
18	1,010	992	999	972	933	948	1,120	1,100	1,110	975	965	971
19	1,020	952	1,010	948	931	938	1,120	1,050	1,110	984	973	976
20	1,050	1,020	1,020	947	887	915	1,150	1,030	1,120	989	978	984
21	1,090	1,030	1,050	900	885	893	1,140	1,040	1,130	981	951	977
22	1,050	1,020	1,030	901	891	895	1,150	1,130	1,140	988	971	983
23	1,080	1,020	1,040	900	608	705	1,150	1,070	1,140	1,000	988	995
24	1,080	1,000	1,020	643	451	475	1,180	1,030	1,160	1,010	1,000	1,000
25	1,080	995	1,010	561	467	504	1,210	1,100	1,180	1,010	1,000	1,010
26	1,020	992	1,000	661	561	612	1,230	1,200	1,220	1,060	1,010	1,030
27	1,040	976	1,010	729	661	696	1,220	1,110	1,200	1,060	1,020	1,050
28	1,050	966	1,010	779	729	754	1,110	670	769	1,060	1,050	1,060
29	1,030	1,010	1,020	811	779	794	806	310	491	1,070	1,060	1,060
30	1,120	1,020	1,050	835	811	824	440	320	371	1,090	1,020	1,070
31	---	---	---	---	---	---	562	391	491	1,110	1,010	1,100
MONTH	1,120	821	967	1,060	451	848	1,230	310	969	1,110	425	893
		FEBRUARY			MARCH			APRIL			MAY	
1	1,260	1,080	1,150	---	---	---	---	---	---	853	828	842
2	1,220	1,130	1,170	---	---	---	---	---	---	861	830	846
3	1,190	1,170	1,180	---	---	---	---	---	---	859	833	849
4	1,220	884	1,210	---	---	---	---	---	---	863	839	854
5	1,230	1,220	1,220	---	---	---	---	---	---	855	837	848
6	1,220	1,210	1,220	---	---	---	---	---	---	858	839	850
7	1,210	1,200	1,200	---	---	---	---	---	---	864	844	853
8	---	---	---	---	---	---	---	---	---	863	802	830
9	---	---	---	---	---	---	---	---	---	872	739	800
10	---	---	---	---	---	---	808	797	803	778	739	760
11	1,230	1,210	1,220	---	---	---	811	800	806	823	778	796
12	1,210	1,200	1,210	---	---	---	814	797	807	839	823	833
13	1,210	1,200	1,200	---	---	---	---	---	---	861	734	825
14	1,210	1,200	1,210	---	---	---	---	---	---	746	706	726
15	1,210	1,170	1,210	---	---	---	836	727	796	797	746	768
16	1,230	1,090	1,210	---	---	---	833	767	804	823	797	809
17	1,250	1,170	1,230	---	---	---	833	795	816	848	823	833
18	1,250	1,240	1,250	---	---	---	848	806	830	858	829	847
19	1,250	1,240	1,240	---	---	---	831	803	819	867	749	824
20	1,240	1,180	1,230	---	---	---	834	795	817	839	791	813
21	1,250	1,220	1,230	---	---	---	829	799	817	825	721	744
22	1,300	1,250	1,280	---	---	---	832	796	817	748	728	737
23	1,380	1,300	1,350	---	---	---	827	798	815	747	606	697
24	1,360	1,240	1,310	---	---	---	837	803	821	606	525	552
25	1,320	1,280	1,300	---	---	---	828	809	822	601	533	567
26	1,300	1,270	1,280	---	---	---	831	809	822	642	601	622
27	1,300	1,260	1,280	---	---	---	835	791	816	702	637	669
28	1,270	1,250	1,260	---	---	---	830	798	817	739	702	719
29	1,250	988	1,170	---	---	---	841	814	830	770	738	753
30	---	---	---	---	---	---	851	833	847	780	748	769
31	---	---	---	---	---	---	---	---	---	748	585	667
MONTH	1,380	884	1,230	---	---	---	851	727	817	872	525	771

04072150 DUCK CREEK NEAR HOWARD, WI—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	665	562	610	838	772	804	883	837	859	824	778	797
2	733	665	705	845	764	806	860	825	846	817	725	800
3	773	733	754	848	771	812	852	813	834	837	743	817
4	801	773	787	830	704	748	845	814	830	826	796	815
5	828	792	804	831	770	811	851	826	837	834	791	816
6	830	799	818	831	784	805	865	838	848	838	770	798
7	843	797	824	827	803	822	861	838	849	842	722	800
8	852	797	828	838	811	828	854	822	840	869	842	859
9	835	315	470	831	793	812	838	808	821	908	839	862
10	413	331	374	817	797	809	837	819	828	870	782	845
11	520	413	475	828	802	815	843	813	828	850	816	834
12	556	520	544	836	819	825	850	811	831	835	818	826
13	613	556	588	856	822	835	845	774	827	838	817	826
14	634	544	603	863	837	850	856	817	834	836	640	786
15	572	528	541	876	844	858	855	817	834	824	693	754
16	645	572	615	883	847	866	849	823	835	829	740	804
17	617	430	512	889	840	872	850	801	829	837	695	770
18	500	442	458	913	771	844	856	685	815	857	837	850
19	598	500	555	784	734	761	821	789	804	871	823	861
20	663	598	634	834	765	791	812	778	793	869	855	862
21	708	663	686	867	833	848	823	713	810	864	847	854
22	737	708	725	880	851	868	848	737	822	860	842	849
23	751	737	746	889	865	877	842	802	821	858	840	845
24	768	747	760	896	848	873	826	753	810	851	831	842
25	785	768	780	882	734	861	798	751	772	861	831	846
26	809	782	800	877	845	861	801	763	779	---	---	---
27	821	793	810	871	841	858	802	767	784	---	---	---
28	825	792	814	875	843	861	825	799	813	855	818	848
29	835	794	821	877	844	861	832	792	810	864	657	846
30	832	780	810	869	837	855	806	777	794	---	---	---
31	---	---	---	868	839	856	812	781	795	---	---	---
MONTH	852	315	675	913	704	834	883	685	820	908	640	826
YEAR	1,380	310	875									

04072150 DUCK CREEK NEAR HOWARD, WI—Continued

SUSPENDED SOLIDS, DRIED AT 105 DEGREES CELSIUS, WATER, UNFILTERED, TONS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.030	0.060	0.71	e3.15	0.030	38.5	13.4	0.50	412	0.32	0.030	0.010
2	0.030	0.060	0.45	0.42	0.030	270	7.51	0.46	67.4	0.31	0.020	0.010
3	0.050	0.070	0.52	e5.34	0.030	121	4.64	0.42	34.6	0.23	0.030	0.008
4	0.050	0.77	0.44	e4.57	0.020	77.0	3.22	0.39	21.9	e0.74	0.020	0.005
5	0.050	2.52	0.28	0.48	0.020	117	2.26	0.36	16.4	e0.36	0.030	0.003
6	0.060	3.85	0.22	0.39	0.020	306	1.68	0.36	12.3	e0.51	0.020	0.007
7	0.060	2.42	0.20	0.33	0.020	235	1.38	0.37	9.49	e1.00	0.010	0.009
8	0.070	1.29	0.18	0.29	0.030	194	1.31	1.77	7.90	e1.29	0.010	0.004
9	0.060	0.57	0.17	0.27	0.030	108	1.21	22.9	1,060	0.51	0.020	0.002
10	0.050	0.50	0.24	0.25	0.030	58.5	1.16	14.0	1,730	0.42	0.010	0.001
11	0.040	0.48	e1.48	0.23	0.030	29.2	1.10	4.48	286	0.33	0.008	0.001
12	0.040	0.47	e2.32	0.22	0.030	15.4	1.04	3.51	216	0.27	0.010	0.001
13	0.050	0.47	e3.15	0.20	0.030	9.80	0.94	31.1	122	0.25	0.007	0.001
14	0.060	0.46	0.24	0.18	0.030	6.10	0.83	82.1	179	0.22	0.005	0.004
15	0.060	0.43	0.16	0.16	0.030	4.06	0.77	33.8	420	0.21	0.005	0.020
16	0.070	0.39	0.11	0.13	0.040	2.91	0.78	15.7	210	0.19	0.003	0.010
17	0.080	0.35	0.090	0.12	0.050	2.50	0.79	4.99	436	0.18	0.002	0.010
18	0.070	0.49	0.090	0.11	0.050	2.12	0.76	2.60	343	0.18	0.002	0.004
19	0.070	0.82	0.080	0.090	0.060	2.09	0.75	1.56	92.7	0.13	0.004	0.002
20	0.060	1.00	0.070	0.080	0.070	e11.3	0.70	7.29	18.8	0.11	0.007	0.002
21	0.060	0.84	0.080	0.070	0.090	e22.1	0.87	72.4	4.62	0.10	0.005	0.002
22	0.060	0.71	0.090	0.060	0.12	e8.25	1.09	65.9	2.70	0.080	0.002	0.002
23	0.060	19.1	0.080	0.060	0.17	2.08	1.13	165	2.00	0.050	0.001	0.001
24	0.060	158	0.070	0.050	0.24	2.08	0.82	473	1.49	0.040	0.001	0.001
25	0.060	50.9	0.070	0.040	0.33	5.60	0.85	174	1.19	0.040	0.009	0.001
26	0.050	11.3	0.070	0.040	0.44	76.9	1.06	42.3	0.90	0.040	0.010	0.001
27	0.060	3.48	0.080	0.040	0.51	149	1.19	18.0	0.69	0.030	0.020	0.000
28	0.060	1.42	e1.69	0.030	0.79	55.4	0.95	8.89	0.61	0.030	0.010	0.000
29	0.060	1.10	e7.89	0.030	1.42	485	0.71	5.03	0.52	0.030	0.007	0.000
30	0.060	0.89	e7.00	0.030	---	222	0.58	4.30	0.43	0.030	0.008	0.000
31	0.060	---	e3.84	0.030	---	34.8	---	152	---	0.020	0.010	---
TOTAL	1.760	265.210	32.160	17.490	4.790	2,673.69	55.48	1,409.48	5,710.64	8.250	0.336	0.122

WTR YR 2004 TOTAL 10,179.408

e Estimated

04072150 DUCK CREEK NEAR HOWARD, WI—Continued

PHOSPHORUS, WATER, UNFILTERED, POUNDS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.71	3.79	50.5	e115	1.31	453	140	10.3	1,060	14.5	1.08	0.64
2	1.69	3.60	30.6	23.6	1.32	2,920	92.9	9.15	426	13.4	0.96	0.67
3	2.52	4.34	35.4	e181	1.28	2,570	67.7	7.90	236	9.82	1.11	0.46
4	2.54	66.9	30.9	e159	1.24	1,460	53.6	7.00	135	e33.7	0.88	0.28
5	2.22	208	19.2	27.0	1.19	1,430	41.8	6.23	92.0	e21.3	0.94	0.19
6	2.75	267	15.3	21.9	1.21	1,820	34.5	5.89	62.7	e26.5	0.63	0.42
7	3.13	144	13.7	18.4	1.22	3,770	30.9	5.68	46.3	e41.1	0.51	0.52
8	3.48	69.1	12.3	16.1	1.24	4,750	27.7	19.2	176	e48.7	0.55	0.24
9	2.97	26.9	11.5	14.6	1.25	2,740	23.3	253	3,350	20.1	0.69	0.11
10	2.63	19.8	15.4	13.4	1.27	1,530	20.6	268	6,050	16.9	0.51	0.08
11	2.26	18.8	e60.2	12.7	1.28	790	18.0	155	1,370	13.9	0.37	0.07
12	1.96	18.0	e88.7	12.0	1.30	431	15.7	64.6	1,140	11.7	0.49	0.06
13	2.59	18.0	e115	10.8	1.33	284	13.3	101	938	11.1	0.35	0.06
14	3.50	17.4	14.8	9.57	1.36	192	12.0	262	1,130	9.92	0.27	0.18
15	3.41	15.9	9.71	8.30	1.40	141	11.5	137	1,470	10.1	0.24	0.84
16	4.22	14.3	6.65	7.01	1.50	102	12.0	88.8	823	9.05	0.19	0.65
17	5.09	12.7	5.60	6.14	1.68	75.6	12.5	95.5	1,430	9.03	0.11	0.65
18	4.70	17.4	5.24	5.74	1.87	55.3	12.4	84.9	1,520	9.46	0.15	0.21
19	4.71	34.1	4.64	4.84	2.07	e131	12.6	68.5	703	7.05	0.28	0.10
20	4.45	64.0	4.36	4.41	2.35	e402	12.1	126	408	6.00	0.43	0.08
21	4.98	49.9	4.75	3.77	3.17	e566	15.6	262	250	5.46	0.32	0.07
22	4.98	34.1	5.15	3.32	4.97	e343	20.2	322	157	4.73	0.14	0.07
23	5.35	236	4.53	2.95	8.27	71.7	21.6	749	113	2.93	0.09	0.06
24	4.71	1,380	4.23	2.57	13.6	66.2	16.1	1,550	81.7	2.07	0.08	0.05
25	4.35	832	3.92	2.29	22.4	86.0	17.1	536	63.2	1.99	0.55	0.04
26	4.03	325	3.97	2.00	31.8	264	22.2	241	46.8	1.85	0.70	0.02
27	4.09	181	4.38	1.82	24.2	527	25.7	142	34.4	1.50	1.05	0.00
28	4.43	122	e67.6	1.68	24.4	287	21.1	92.2	29.7	1.54	0.69	0.00
29	3.90	92.0	e253	1.53	55.6	1,110	16.0	68.3	24.8	1.29	0.44	0.00
30	3.77	68.2	e229	1.44	---	816	12.6	74.1	19.9	1.28	0.49	0.00
31	3.64	---	e136	1.35	---	238	---	557	---	1.01	0.78	---
TOTAL	110.76	4,364.23	1,266.23	696.23	217.08	30,421.8	853.3	6,369.25	23,386.5	368.98	16.07	6.82

WTR YR 2004 TOTAL 68,077.25

e Estimated

04072150 DUCK CREEK NEAR HOWARD, WI—Continued

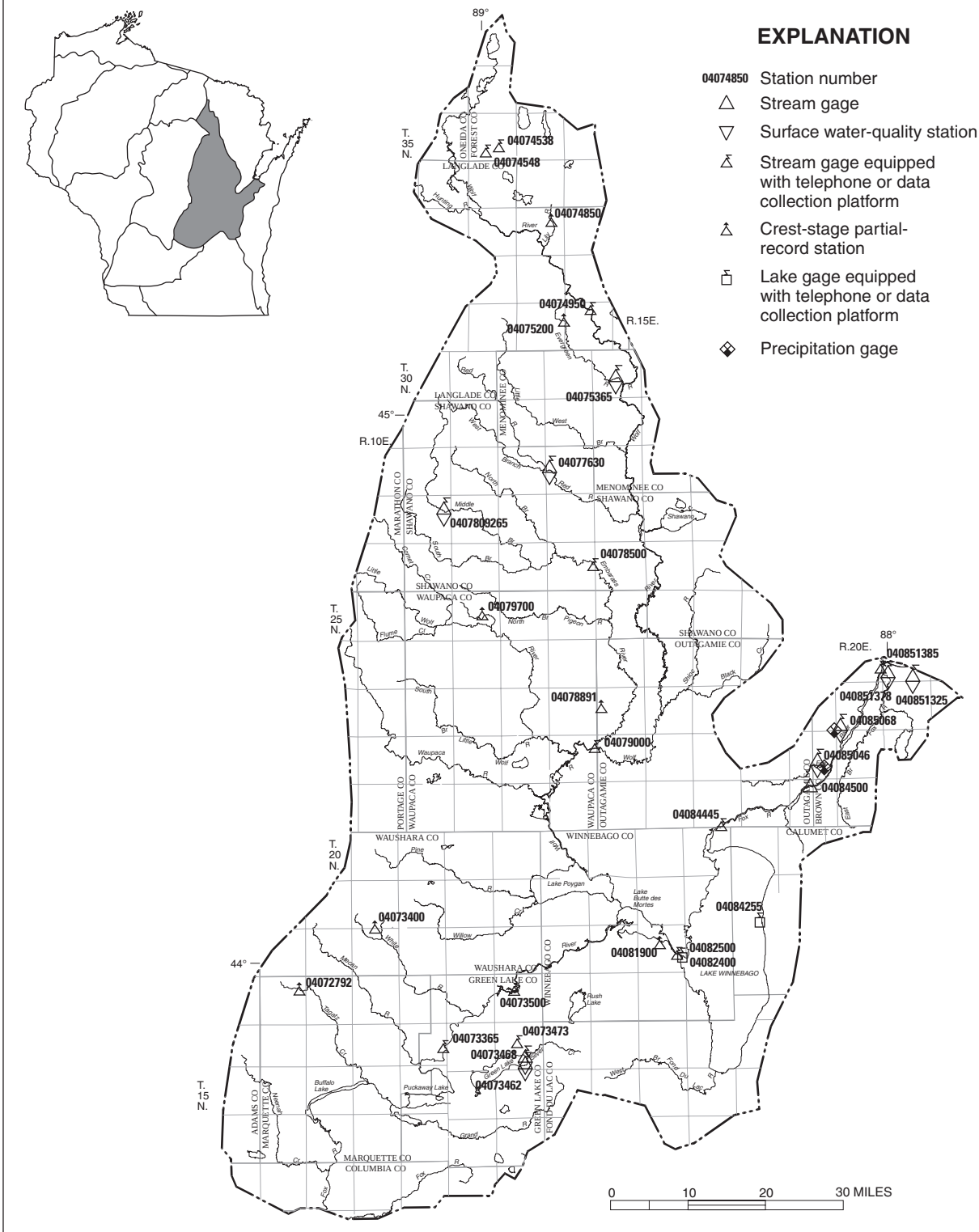
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Dis-charge, cfs (00060)	Instan-taneous dis-charge, cfs (00061)	Sam-pling method, code (82398)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Sus-pended sedi-ment concen-tration mg/L (80154)
OCT								
09...	1220	--	4.7	10	<5	.050	.120	--
23...	1152	--	4.9	10	<5	.220	.210	--
NOV								
04...	2215	--	73	50	8	.290	.410	--
05...	0945	--	102	50	8	--	.310	--
05...	2145	--	130	50	12	.280	.430	--
06...	0725	--	127	50	9	.280	.380	--
06...	0726	--	127	10	13	.280	.430	--
06...	0945	--	123	50	16	.270	.500	--
20...	1048	--	89	10	4	--	.140	--
24...	0930	--	605	50	136	--	.530	--
24...	2130	--	595	50	108	.230	.440	--
25...	0715	410	--	50	56	--	.500	--
25...	1215	410	--	50	44	--	.330	--
DEC								
04...	1245	41	--	10	4	--	.140	--
17...	1604	17	--	10	2	.050	.060	--
FEB								
12...	0914	2.0	--	10	5	.120	.120	--
26...	1030	12	--	10	14	.440	.560	--
28...	1145	32	--	50	10	--	.130	--
29...	2000	67	--	50	8	--	.170	--
MAR								
01...	0130	240	--	50	11	.130	.170	--
01...	1845	240	--	50	127	--	.520	--
02...	0530	800	--	50	139	--	.770	--
02...	0745	800	--	50	198	--	.870	562
02...	1145	800	--	50	166	--	.720	--
02...	1615	800	--	50	137	.250	.670	--
02...	1616	800	--	10	125	.250	.650	--
02...	2345	800	--	50	72	--	.580	--
03...	1030	900	--	50	85	.260	.600	514
03...	1031	900	--	10	51	.250	.440	--
03...	2200	900	--	50	63	--	.450	255
05...	1830	550	--	50	108	--	.520	--
06...	0415	900	--	50	118	--	.490	209
06...	1130	900	--	50	235	.300	.530	--
06...	1131	900	--	10	143	.260	.560	--
06...	2330	900	--	50	103	--	.490	--
07...	2200	700	--	50	169	--	1.85	--
24...	0815	--	109	10	6	--	.110	--
26...	1300	--	380	50	68	--	.100	--
27...	0100	--	567	50	170	--	.220	72
28...	1330	--	380	50	36	--	.110	--
29...	0415	--	595	50	116	.070	.150	--
29...	2215	--	983	50	432	--	.390	--
30...	1015	--	757	10	62	.090	.180	--
30...	2215	--	519	50	79	--	.130	--
31...	1150	--	383	50	27	.080	.110	--
APR								
07...	1135	--	73	70	7	.050	.080	--
13...	1000	--	36	10	10	.040	.070	--
29...	1040	--	37	10	7	--	.080	--
MAY								
09...	1015	--	207	10	54	--	.270	--
09...	1730	--	255	10	46	.110	.240	--
11...	0757	--	159	10	10	.180	.210	--
13...	1430	--	193	50	26	--	.050	--
13...	1930	--	292	50	124	--	.140	115
14...	0230	--	369	50	156	.050	.190	--
14...	1929	--	357	50	47	--	.090	--
14...	1930	--	357	50	52	--	.090	--
16...	0730	--	265	50	30	--	.060	--
17...	1530	--	135	70	12	--	.140	--
21...	1530	--	236	50	153	--	.220	--
23...	0330	--	389	50	66	--	.200	--
23...	1930	--	772	50	153	.110	.260	65
24...	1159	--	1,320	10	126	--	.280	--
24...	1200	--	1,320	50	232	.110	.300	213
25...	0001	--	1,210	50	128	--	.130	--
25...	1045	--	895	50	72	--	.110	--
26...	1300	--	469	10	29	--	.090	--
31...	1315	--	392	50	178	--	.280	--
31...	1600	--	557	50	238	--	.340	--

04072150 DUCK CREEK NEAR HOWARD, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Time	Dis-charge, cfs (00060)	Instan-taneous dis-charge, cfs (00061)	Sam-pling method, code (82398)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Sus-pended sedi-ment concen-tration mg/L (80154)
JUN								
01...	0400	--	687	50	192	.110	.340	--
02...	1050	350	--	50	64	--	.220	--
09...	0430	--	210	50	516	--	2.09	--
09...	0515	--	398	50	760	--	1.84	--
09...	0600	--	557	50	830	--	1.25	--
09...	0645	--	637	50	956	.130	1.13	--
09...	1229	--	610	10	468	.130	.670	--
09...	1500	--	859	50	484	.120	.650	1,080
10...	0415	--	1,250	50	944	--	1.40	--
11...	1415	--	779	50	100	--	.230	--
12...	0215	--	844	50	106	.140	.280	--
12...	1415	--	946	50	99	--	.210	85
14...	0215	--	512	50	64	.130	.320	--
17...	0115	--	475	50	242	--	.360	--
18...	0245	--	779	50	236	.120	.430	--
19...	0245	--	497	50	128	--	.320	--
21...	0900	--	118	10	13	--	.390	--
JUL								
07...	1620	--	27	10	8	.110	.150	--
22...	1330	--	3.2	10	9	--	.260	--
AUG								
05...	1245	--	1.3	10	8	.120	.140	--
19...	0933	--	.33	10	5	--	.160	--
SEP								
09...	1600	--	.15	10	4	.110	.120	--
29...	1630	--	.00	10	9	.110	.150	--



Base from U.S. Geological Survey 1:100,000 digital data; modified by Wisconsin Department of Natural Resources. Wisconsin Transverse Mercator projection.

FOX-WOLF RIVER BASIN

04073365 FOX RIVER AT PRINCETON, WI

LOCATION.--Lat 43°51'04", long 89°08'00", in SE ¼ NW ¼ SE ¼ sec.24, T.16 N., R.11 E., Green Lake County, Hydrologic Unit 04030201, on right bank at upstream side of bridge on State Highway 23 at Princeton, and at mile 105.

DRAINAGE AREA.--962 mi^2.

PERIOD OF RECORD.--July 2001 to current year.

GAGE.--Water-stage recorder. Datum of gage is 754.57 ft above NGVD of 1929.

REMARKS.--Records good except those for May 24-27 and May 30 to June 19 which are fair and estimated daily discharges, which are poor (see page 11). Occasional regulation by dams upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	365	615	928	e720	e460	1,050	1,500	868	2,860	2,600	1,080	696
2	380	599	867	e710	e470	982	1,490	827	2,930	2,470	1,040	701
3	397	567	919	e700	e480	1,000	1,450	813	2,940	2,370	996	694
4	376	628	917	e680	e480	1,090	1,430	808	2,920	2,320	958	689
5	383	688	896	e650	e490	1,290	1,420	764	2,880	2,240	918	691
6	387	703	877	e650	e510	1,410	1,390	753	2,820	2,180	899	694
7	387	713	869	e620	e520	1,480	1,350	680	2,720	2,130	872	653
8	392	678	843	e600	e530	1,550	1,300	777	2,640	2,080	856	629
9	389	693	799	e580	e540	1,630	1,250	900	2,570	2,030	839	626
10	389	707	778	e580	e540	1,680	1,210	980	2,560	1,990	809	635
11	404	695	768	e580	e540	1,710	1,170	1,030	3,010	1,950	771	626
12	416	704	764	e570	e540	1,690	1,130	1,020	3,230	1,900	743	609
13	403	689	e1,000	e560	e540	1,730	1,090	950	3,490	1,860	728	603
14	384	743	e980	e560	e540	1,760	1,050	1,070	3,700	1,800	717	591
15	406	773	e950	e560	e550	1,740	1,010	1,160	3,890	1,760	705	607
16	406	762	e870	e550	e560	1,720	981	1,220	e4,060	1,730	695	582
17	416	762	e820	e540	e570	1,700	934	1,270	e4,140	1,690	706	566
18	416	784	e800	e470	e580	1,680	972	1,280	e4,210	1,650	713	561
19	406	790	e770	e470	e600	1,660	995	1,290	e4,230	1,610	723	562
20	411	807	e780	e460	e620	1,630	933	1,390	4,190	1,580	714	556
21	380	767	e820	e450	e640	1,580	969	1,470	4,080	1,550	705	534
22	381	711	e820	e450	e680	1,570	971	1,640	3,930	1,510	714	520
23	374	874	e700	e460	e740	1,550	969	1,810	3,790	1,460	677	524
24	381	992	e670	e470	e780	1,520	949	1,970	3,670	1,430	647	530
25	380	880	e710	e470	e860	1,510	951	e2,100	3,490	1,390	541	505
26	377	921	e760	e470	e910	1,510	960	e2,180	3,310	1,340	566	495
27	371	960	e720	e460	e1,000	1,490	942	e2,310	3,140	1,290	653	489
28	396	938	e680	e460	1,120	1,500	982	2,360	3,000	1,250	630	449
29	601	932	e670	e450	1,140	1,520	986	2,430	2,850	1,210	648	476
30	694	950	e680	e450	---	1,510	880	2,540	2,730	1,160	674	483
31	652	---	e690	e460	---	1,500	---	2,760	---	1,100	681	---
TOTAL	12,900	23,025	25,115	16,860	18,530	46,942	33,614	43,420	99,980	54,630	23,618	17,576
MEAN	416	768	810	544	639	1,514	1,120	1,401	3,333	1,762	762	586
MAX	694	992	1,000	720	1,140	1,760	1,500	2,760	4,230	2,600	1,080	701
MIN	365	567	670	450	460	982	880	680	2,560	1,100	541	449
CFSM	0.43	0.80	0.84	0.57	0.66	1.57	1.16	1.46	3.46	1.83	0.79	0.61
IN.	0.50	0.89	0.97	0.65	0.72	1.82	1.30	1.68	3.87	2.11	0.91	0.68

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2004, BY WATER YEAR (WY)

MEAN	627	684	734	534	589	1,080	1,004	1,198	1,685	976	533	555
MAX	791	768	870	662	754	1,514	1,192	1,401	3,333	1,762	762	793
(WY)	(2002)	(2004)	(2002)	(2002)	(2002)	(2004)	(2002)	(2004)	(2004)	(2004)	(2004)	(2001)
MIN	416	599	523	395	372	598	700	953	685	511	368	365
(WY)	(2004)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2001 - 2004	
ANNUAL TOTAL	211,509		416,210			
ANNUAL MEAN	579		1,137		838	
HIGHEST ANNUAL MEAN					1,137	2004
LOWEST ANNUAL MEAN					563	2003
HIGHEST DAILY MEAN	1,220	May 18, 19	(e)4,230	Jun 19	(e)4,230	Jun 19, 2004
LOWEST DAILY MEAN	284	Sep 4	365	Oct 1	284	Sep 4, 2003
ANNUAL SEVEN-DAY MINIMUM	293	Sep 4	378	Oct 21	293	Sep 4, 2003
INSTANTANEOUS LOW FLOW			331	Oct 1	272	Sep 4, 2003
ANNUAL RUNOFF (CFSM)	0.602		1.18		0.871	
ANNUAL RUNOFF (INCHES)	8.18		16.09		11.84	
10 PERCENT EXCEEDS	877		2,360		1,390	
50 PERCENT EXCEEDS	536		820		680	
90 PERCENT EXCEEDS	340		460		406	

(e) Estimated

04073462 WHITE CREEK AT SPRING GROVE ROAD NEAR GREEN LAKE, WI

LOCATION.--Lat 43°48'58", long 88°55'42", in SE ¼ SE ¼ NW ¼ sec.34, T.16 N., R.13 E., Green Lake County, Hydrologic Unit 04030201, at culvert on Spring Grove Road at Forest Glen Beach, 2.6 mi southeast of Green Lake.

DRAINAGE AREA.--3.05 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1981 to June 1988, October 1996 to current year. Prior to October 2000, published as "at Forest Glen Beach".

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 800 ft, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.27	0.22	3.1	2.4	1.2	53	4.9	2.7	28	12	4.2	1.7
2	0.25	0.29	3.0	2.4	1.2	25	5.1	2.6	24	12	3.2	1.7
3	0.27	0.36	3.0	2.3	1.1	13	5.0	2.5	22	11	3.0	1.6
4	0.24	0.93	3.2	2.2	e1.2	e12	4.9	2.7	21	12	2.9	1.5
5	0.22	0.32	3.0	2.2	1.2	68	4.9	2.4	20	11	2.7	1.5
6	0.21	0.29	2.9	e2.1	e1.2	15	4.9	2.5	20	11	2.6	1.5
7	0.20	0.29	2.9	2.1	e1.2	14	4.6	2.4	18	10	2.5	1.4
8	0.19	0.27	2.9	2.0	e1.2	12	4.4	15	17	9.5	2.5	1.4
9	0.19	0.27	2.9	1.9	1.2	11	4.2	13	18	9.1	2.4	1.3
10	0.18	0.27	3.4	1.9	1.1	9.9	4.1	13	26	8.4	2.4	1.2
11	0.21	0.28	2.9	1.9	1.1	9.3	4.0	12	77	7.9	2.4	1.1
12	0.30	0.28	2.7	1.9	1.0	8.4	3.6	12	37	7.7	2.3	1.0
13	0.28	0.30	2.7	e1.8	e1.0	7.6	3.5	11	39	7.3	2.2	1.0
14	0.36	0.30	2.7	e1.8	1.0	7.5	3.4	11	33	6.7	2.1	0.97
15	0.32	0.29	2.7	e1.7	e1.0	6.4	3.4	11	27	6.3	2.1	1.0
16	0.33	0.30	2.8	1.7	e1.0	6.0	3.4	10	30	6.2	2.1	0.98
17	0.30	0.30	2.7	e1.7	0.99	5.6	3.1	9.7	30	6.0	2.1	0.88
18	0.28	0.63	2.6	e2.4	0.99	5.1	3.9	9.3	23	5.9	2.1	0.80
19	0.26	0.37	2.4	e3.5	0.99	5.6	3.5	8.8	21	5.6	2.1	0.75
20	0.25	0.37	2.4	e2.1	e1.0	7.1	3.3	31	20	5.2	2.0	0.71
21	0.24	0.36	2.4	1.7	0.99	5.9	3.5	19	20	5.5	1.9	0.68
22	0.24	0.37	2.4	e1.6	0.99	5.2	3.1	20	18	5.0	1.9	0.67
23	0.23	3.4	2.4	e1.5	1.0	4.8	2.9	75	21	4.4	1.8	0.63
24	0.23	2.9	2.3	e1.4	1.0	4.6	2.9	25	18	4.2	1.8	0.57
25	0.23	3.5	2.2	1.4	1.0	4.5	3.3	27	15	4.1	1.8	0.55
26	0.22	3.7	2.2	1.4	1.1	5.0	2.9	24	14	3.9	1.8	0.54
27	0.22	3.7	2.3	1.4	1.2	4.4	2.7	24	14	3.7	3.4	0.52
28	0.24	3.6	2.9	e1.4	1.6	5.0	2.8	20	14	3.6	2.0	0.52
29	0.24	3.5	2.7	e1.3	7.3	4.9	2.7	22	13	3.5	1.8	0.50
30	0.24	3.4	2.6	e1.2	---	4.9	2.7	56	13	3.5	1.8	0.48
31	0.22	---	2.5	e1.2	---	4.9	---	39	---	3.2	1.8	---
TOTAL	7.66	35.36	83.8	57.5	38.05	355.6	111.6	535.6	711	215.4	71.7	29.65
MEAN	0.25	1.18	2.70	1.85	1.31	11.5	3.72	17.3	23.7	6.95	2.31	0.99
MAX	0.36	3.7	3.4	3.5	7.3	68	5.1	75	77	12	4.2	1.7
MIN	0.18	0.22	2.2	1.2	0.99	4.4	2.7	2.4	13	3.2	1.8	0.48
CFSM	0.08	0.39	0.89	0.61	0.43	3.76	1.22	5.66	7.77	2.28	0.76	0.32
IN.	0.09	0.43	1.02	0.70	0.46	4.34	1.36	6.53	8.67	2.63	0.87	0.36

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2004, BY WATER YEAR (WY)

MEAN	2.52	2.72	2.40	1.65	2.93	6.78	6.75	5.59	5.74	3.46	2.28	2.76
MAX	12.9	12.7	7.47	5.28	9.29	16.1	15.7	17.3	23.7	6.95	4.39	18.5
(WY)	(1987)	(1986)	(1986)	(1983)	(1984)	(1986)	(1998)	(2004)	(2004)	(2004)	(1986)	(1986)
MIN	0.25	0.28	0.14	0.04	0.03	0.63	0.21	1.96	1.29	1.28	0.68	0.33
(WY)	(2004)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2000)	(1988)	(2003)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1982 - 2004	
ANNUAL TOTAL	371.28		2,252.92			
ANNUAL MEAN	1.02		6.16		3.96	
HIGHEST ANNUAL MEAN					7.94	1986
LOWEST ANNUAL MEAN					0.75	2003
HIGHEST DAILY MEAN	7.9	Mar 15	77	Jun 11	89	Sep 22, 1986
LOWEST DAILY MEAN	(a)0.01	(b)Jan 13-21	0.18	Oct 10	(a)0.01	(b)Jan 13-31, 2003
ANNUAL SEVEN-DAY MINIMUM	(a)0.01	(c)Jan 13	0.20	Oct 5	(a)0.01	(c)Jan 13, 2003
MAXIMUM PEAK FLOW			540	May 23	781	Sep 10, 1986
MAXIMUM PEAK STAGE			8.53	May 23	10.14	Sep 10, 1986
ANNUAL RUNOFF (CFSM)	0.334		2.02		1.30	
ANNUAL RUNOFF (INCHES)	4.53		27.48		17.66	
10 PERCENT EXCEEDS	2.9		18		9.3	
50 PERCENT EXCEEDS	0.32		2.7		2.5	
90 PERCENT EXCEEDS	0.01		0.30		0.37	

(a) Ice affected
(b) Also occurred Feb. 5-16 and Feb. 27 to Mar. 10
(c) Also occurred Jan. 20, Feb. 5, 27
(e) Estimated

04073462 WHITE CREEK AT FOREST GLEN BEACH NEAR GREEN LAKE, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1981 to June 1988, October 1996 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: October 1981 to June 1988, October 1996 to current year.
TOTAL AMMONIA-NITROGEN DISCHARGE: October 1981 to June 1988.
TOTAL-PHOSPHORUS DISCHARGE: October 1981 to June 1988, October 1996 to current year.

INSTRUMENTATION.--Automatic pumping sampler since December 1981.

REMARKS.--Records are fair, except those corresponding to estimated daily discharges which are fair to poor (see page 11).

EXTREMES FOR PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 51,300 mg/L, Apr. 3, 1982; minimum observed, 1 mg/L, Sept. 26, 1981, Nov. 28, 1984, Sept. 5, 1985, Jan. 14, 1987, Aug. 12. 1998, Sept. 2, 1998, and May 10, 2003.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 2,420 tons, Apr. 3, 1982; minimum daily, 0.00 ton, on many days during 1982, 1987, 1988, 1997, 1998, 1999, 2000, and 2003 water years.
TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 7.6 mg/L, May 31, 1987; minimum observed, <0.01 mg/L, many days.
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 1,760 lb, May 23, 2004; minimum daily, 0.00 lb, on may days during 2003.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 38,000 mg/L, Mar. 7; minimum observed, 6 mg/L, May 19.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 962 tons, May 23; minimum daily, 0.00 ton, on Oct. 10.
TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 8.77 mg/L, May 23; minimum observed, 0.028 mg/L, June 26.
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 1,760 lb, May 23; minimum daily, 0.05 lb, Oct. 1, 8-10.

SUSPENDED SEDIMENT DISCHARGE, TONS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.01	0.01	0.98	0.26	0.12	38	0.26	0.13	2.7	0.64	0.20	0.08
2	0.01	0.02	0.92	0.25	0.12	6.4	0.27	0.12	1.9	0.62	0.15	0.08
3	0.01	0.02	0.89	0.24	0.11	2.0	0.27	0.12	1.7	0.59	0.14	0.08
4	0.01	0.05	0.90	0.22	e0.11	e1.3	0.26	0.12	1.7	0.62	0.13	0.07
5	0.01	0.02	0.83	0.21	0.11	20	0.26	0.11	1.7	0.58	0.12	0.07
6	0.01	0.02	0.78	e0.32	e0.11	2.5	0.26	0.11	1.6	0.57	0.12	0.07
7	0.01	0.02	0.75	0.38	e0.11	1.7	0.24	0.11	1.5	0.53	0.12	0.06
8	0.01	0.02	0.72	0.35	e0.10	1.2	0.23	123	1.5	0.49	0.11	0.06
9	0.01	0.02	0.69	0.33	0.10	0.80	0.22	14	1.5	0.46	0.11	0.06
10	0.00	0.02	0.79	0.32	0.09	0.54	0.21	5.2	12	0.42	0.11	0.06
11	0.01	0.02	0.64	0.31	0.09	0.51	0.21	2.9	224	0.40	0.11	0.05
12	0.02	0.02	0.58	0.30	0.08	0.50	0.19	1.6	3.0	0.39	0.10	0.05
13	0.02	0.02	0.55	e0.28	e0.08	0.48	0.18	0.90	13	0.36	0.10	0.04
14	0.02	0.02	0.55	e0.28	0.08	0.44	0.17	0.65	2.6	0.33	0.10	0.04
15	0.02	0.02	0.52	e0.25	e0.07	0.34	0.17	0.60	1.8	0.31	0.09	0.04
16	0.02	0.02	0.53	0.25	e0.07	0.36	0.17	0.54	31	0.31	0.09	0.04
17	0.02	0.02	0.48	e0.24	0.07	0.40	0.16	0.48	4.5	0.30	0.09	0.04
18	0.02	0.04	0.45	e0.33	0.07	0.43	0.20	0.34	1.5	0.29	0.09	0.03
19	0.01	0.02	0.41	e0.48	0.07	0.58	0.18	0.45	1.3	0.27	0.09	0.03
20	0.01	0.02	0.39	e0.28	e0.07	0.83	0.17	290	1.2	0.25	0.09	0.03
21	0.01	0.02	0.38	0.22	0.06	0.72	0.18	43	1.1	0.27	0.08	0.03
22	0.01	0.02	0.37	e0.20	0.06	0.57	0.15	28	0.95	0.24	0.08	0.03
23	0.01	1.2	0.35	e0.19	0.06	0.39	0.14	962	9.1	0.21	0.08	0.03
24	0.01	1.4	0.32	e0.17	0.06	0.28	0.14	22	1.6	0.20	0.08	0.02
25	0.01	1.6	0.31	0.17	0.06	0.19	0.16	15	0.82	0.20	0.08	0.02
26	0.01	1.5	0.29	0.16	0.06	0.15	0.14	9.3	0.76	0.19	0.08	0.02
27	0.01	1.4	0.29	0.16	0.07	0.17	0.13	14	0.77	0.18	0.27	0.02
28	0.01	1.3	0.36	e0.16	0.09	0.24	0.13	1.6	0.77	0.17	0.10	0.02
29	0.01	1.2	0.33	e0.14	3.8	0.25	0.13	1.5	0.70	0.17	0.09	0.02
30	0.01	1.1	0.30	e0.13	---	0.25	0.13	363	0.67	0.16	0.09	0.02
31	0.01	---	0.28	e0.12	---	0.26	---	44	---	0.15	0.09	---
TOTAL	0.37	11.18	16.93	7.70	6.15	82.78	5.71	1,944.88	328.94	10.87	3.38	1.31

WTR YR 2004 TOTAL 2,420.20

e Estimated

04073462 WHITE CREEK AT FOREST GLEN BEACH NEAR GREEN LAKE, WI—Continued

PHOSPHORUS, WATER, UNFILTERED, POUNDS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.05	0.06	0.85	0.54	0.44	571	0.90	0.40	43	2.6	2.4	0.73
2	0.07	0.08	0.82	0.54	0.44	69	0.86	0.40	16	2.5	1.1	0.70
3	0.08	0.10	0.82	0.53	0.41	18	0.78	0.38	12	2.5	1.0	0.68
4	0.07	0.26	0.86	0.50	e0.44	e13	0.74	0.40	12	2.6	0.99	0.65
5	0.06	0.09	0.81	0.49	0.44	806	0.74	0.36	11	2.5	0.92	0.65
6	0.06	0.08	0.78	e0.66	e0.45	9.0	0.73	0.37	11	2.5	0.90	0.65
7	0.06	0.08	0.78	0.76	e0.45	14	0.69	0.40	10	2.4	0.88	0.61
8	0.05	0.08	0.76	0.73	e0.45	11	0.67	269	9.9	2.2	0.87	0.58
9	0.05	0.08	0.75	0.69	0.45	6.7	0.64	38	11	2.1	0.85	0.57
10	0.05	0.08	0.89	0.69	0.41	4.2	0.62	21	66	2.0	0.84	0.45
11	0.06	0.08	0.75	0.69	0.41	4.0	0.60	12	918	1.9	0.85	0.34
12	0.09	0.08	0.69	0.69	0.37	4.0	0.54	6.5	65	1.9	0.83	0.32
13	0.08	0.09	0.68	e0.66	e0.37	4.0	0.53	3.7	116	1.8	0.81	0.30
14	0.10	0.08	0.69	e0.66	0.37	3.4	0.51	2.8	49	1.7	0.78	0.28
15	0.09	0.08	0.67	e0.62	e0.37	2.3	0.51	2.8	42	1.6	0.77	0.29
16	0.09	0.09	0.71	0.62	e0.37	2.0	0.51	2.7	219	1.6	0.79	0.28
17	0.08	0.09	0.67	e0.62	0.37	1.7	0.48	2.6	152	1.6	0.79	0.24
18	0.08	0.18	0.64	e0.88	0.37	1.4	0.59	2.4	13	1.6	0.79	0.22
19	0.07	0.10	0.60	e1.3	0.37	2.0	0.53	1.9	6.3	1.5	0.79	0.20
20	0.07	0.10	0.58	e0.77	e0.38	3.3	0.51	618	5.1	1.4	0.77	0.18
21	0.07	0.10	0.59	0.62	0.37	2.2	0.54	59	4.3	1.5	0.73	0.18
22	0.07	0.10	0.58	e0.59	0.37	1.6	0.47	55	3.3	1.4	0.72	0.17
23	0.06	3.6	0.57	e0.55	0.39	1.4	0.43	1,760	49	1.3	0.70	0.16
24	0.06	0.92	0.54	e0.51	0.38	1.2	0.44	23	28	1.2	0.71	0.14
25	0.06	1.1	0.53	0.51	0.39	1.1	0.50	15	6.5	1.2	0.72	0.13
26	0.06	1.1	0.52	0.51	0.40	1.1	0.44	14	3.1	1.2	0.72	0.13
27	0.06	1.1	0.53	0.52	0.45	1.0	0.41	31	2.9	1.1	3.3	0.12
28	0.07	1.0	0.68	e0.52	0.61	1.2	0.42	10	3.0	1.1	0.82	0.12
29	0.07	0.98	0.64	e0.48	11	1.2	0.40	10	2.7	1.1	0.77	0.11
30	0.07	0.93	0.59	e0.44	---	1.1	0.40	780	2.7	1.1	0.76	0.10
31	0.06	---	0.57	e0.44	---	0.97	---	72	---	1.0	0.75	---
TOTAL	2.12	12.89	21.14	19.33	22.49	1,564.07	17.13	3,815.11	1,892.8	53.7	29.42	10.28
MEAN	0.07	0.43	0.68	0.62	0.78	50	0.57	123	63	1.7	0.95	0.34
MAX	0.10	3.6	0.89	1.3	11	806	0.90	1,760	918	2.6	3.3	0.73
MIN	0.05	0.06	0.52	0.44	0.37	0.97	0.40	0.36	2.7	1.0	0.70	0.10

CAL YR 2003 TOTAL 263.77 MEAN 0.72 MAX 83 MIN 0.00
WTR YR 2004 TOTAL 7,460.48 MEAN 20 MAX 1760 MIN 0.05

e Estimated

04073462 WHITE CREEK AT FOREST GLEN BEACH NEAR GREEN LAKE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Dis-charge, cfs (00060)	Instan-taneous dis-charge, cfs (00061)	Sam-pling method, code (82398)	Phos-phorus, water, unfltrd mg/L (00665)	Sus-pended sedi-ment concen-tration mg/L (80154)
NOV						
23...	1100	--	3.5	50	.553	200
27...	1815	--	3.7	50	.052	133
JAN						
06...	0340	2.1	--	50	.041	34
06...	0525	2.1	--	50	.042	31
06...	1010	2.1	--	50	.067	68
FEB						
04...	0555	1.2	--	50	.664	346
MAR						
01...	0240	--	12	50	.896	229
01...	1205	--	61	50	1.37	741
01...	1520	--	99	50	.997	271
02...	0210	--	46	50	.649	104
04...	0210	12	--	50	.195	43
05...	1205	--	63	50	.854	215
05...	1435	--	29	50	.277	83
07...	1440	--	13	50	.223	38,000
10...	1440	--	9.9	50	.073	19
13...	1440	--	7.6	50	.101	24
15...	1440	--	6.8	50	.065	19
19...	0240	--	4.9	50	.049	35
20...	0240	--	7.6	50	.096	43
22...	0240	--	5.4	50	.058	46
25...	1440	--	4.4	50	.045	16
26...	0240	--	5.7	50	.039	10
28...	2005	--	6.0	50	.046	19
APR						
03...	2005	--	4.9	50	.028	20
MAY						
08...	0340	--	4.3	50	.135	45
08...	1915	--	6.0	50	.249	98
08...	2035	--	38	50	.935	1,040
08...	2050	--	86	50	6.46	7,560
08...	2100	--	107	50	8.14	8,840
08...	2245	--	39	50	4.49	3,130
09...	1215	--	13	50	.509	255
14...	0015	--	11	50	.045	22
18...	0015	--	9.7	50	.051	18
19...	1645	--	8.8	50	.038	6
20...	0300	--	31	50	.554	572
20...	0340	--	149	50	9.74	13,200
20...	0355	--	207	50	8.32	9,880
20...	2055	--	14	50	.446	405
22...	0755	--	26	50	.642	349
23...	0535	--	48	50	.407	311
23...	0605	--	181	50	6.17	8,760
23...	0625	--	275	50	7.78	9,780
23...	0700	--	408	50	7.08	8,320
23...	0710	--	496	50	8.36	14,700
23...	0730	--	460	50	8.77	10,600
23...	0745	--	348	50	7.41	7,100
23...	0755	--	305	50	6.39	6,160
28...	0115	--	21	50	.097	30
30...	0115	--	20	50	.085	25
30...	1200	--	171	50	4.30	4,500
30...	1430	--	51	50	1.52	928
JUN						
02...	1635	--	23	50	.098	29
10...	1635	--	24	50	.113	33
11...	0015	--	142	50	1.89	1,830
11...	0105	--	281	50	--	2,160
16...	2215	--	54	50	.292	248
19...	0225	--	21	50	.058	23
23...	1430	--	16	50	.028	18
23...	2215	--	61	50	1.08	960
26...	1240	--	14	50	.037	20
SEP						
10...	0930	--	1.2	10	.080	--
10...	0931	--	1.2	50	.058	--

04073468 GREEN LAKE INLET AT COUNTY TRUNK HIGHWAY A NEAR GREEN LAKE, WI

LOCATION.--Lat 43°49'28", long 88°55'36", in NE ¼ SE ¼ SE ¼ sec.27, T.16 N., R.13 E., Green Lake County, Hydrologic Unit 04030201, on left bank at downstream side of County Trunk Highway A, 2.3 mi southeast of Green Lake.

DRAINAGE AREA.--53.5 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1987 to current year.

GAGE.--Water-stage recorder. Side-looking velocity meter system. Datum of gage is 790.00 ft above NGVD of 1929 (from Wisconsin Department of Natural Resources benchmark).

REMARKS.--Records fair, except those for estimated periods which are poor (see page 11). Flows fluctuate due to seiche from Green Lake. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.7	9.2	33	19	4.8	143	86	43	e507	124	e41	22
2	4.5	12	26	21	6.6	279	79	34	e510	106	e36	25
3	16	30	27	27	7.3	228	69	29	e500	100	e35	19
4	9.8	54	26	20	7.5	215	62	34	e450	105	e35	17
5	6.2	42	24	9.5	5.8	435	53	24	e370	104	e32	19
6	6.5	23	24	6.5	6.5	397	57	34	e300	110	e32	14
7	8.5	37	20	8.8	4.7	325	49	e40	e220	109	e31	18
8	5.6	19	23	9.0	4.8	278	53	e63	e190	112	e31	21
9	9.2	16	28	8.6	2.5	221	48	e81	e190	106	e33	15
10	10	15	53	7.6	5.3	173	48	e80	192	102	e31	16
11	0.97	18	39	12	3.0	136	44	e75	613	96	e31	20
12	15	-1.1	24	13	3.6	105	41	e70	662	91	e30	14
13	8.5	15	27	16	6.7	87	39	e99	682	85	e29	19
14	11	19	22	15	9.1	93	40	e85	601	83	e28	17
15	8.1	18	20	15	5.3	84	36	e75	498	72	e28	9.8
16	5.6	15	16	14	5.0	76	41	e64	417	66	e31	21
17	6.4	9.5	18	12	3.8	72	39	e62	444	64	e37	15
18	11	30	17	7.5	1.8	67	35	e58	408	61	e34	12
19	5.5	31	18	11	5.3	66	80	e60	412	59	e33	15
20	6.8	25	15	12	9.6	77	61	e139	349	56	e30	13
21	7.6	31	10	9.9	13	74	72	e146	e306	61	e28	14
22	8.8	23	14	5.9	12	64	67	e214	256	60	e27	15
23	7.6	116	16	4.6	15	68	57	e276	208	52	e25	8.3
24	7.2	103	12	4.3	19	67	56	e301	231	53	21	13
25	4.3	106	15	6.1	18	72	51	e378	190	46	13	14
26	e5.4	85	15	5.9	18	104	48	e388	176	49	21	12
27	5.9	68	14	7.4	19	96	45	e390	160	44	45	15
28	4.5	49	41	8.0	25	92	27	e320	157	42	35	8.8
29	9.9	43	35	6.1	60	122	65	e300	147	e41	27	15
30	8.3	31	31	7.0	---	106	35	e310	134	e39	24	13
31	3.7	---	27	6.9	---	96	---	e466	---	e37	19	---
TOTAL	235.07	1,091.6	730	336.6	308.0	4,518	1,583	4,738	10,480	2,335	933	469.9
MEAN	7.58	36.4	23.5	10.9	10.6	146	52.8	153	349	75.3	30.1	15.7
MAX	16	116	53	27	60	435	86	466	682	124	45	25
MIN	0.97	-1.1	10	4.3	1.8	64	27	24	134	37	13	8.3
CFSM	0.14	0.68	0.44	0.20	0.20	2.72	0.99	2.86	6.53	1.41	0.56	0.29
IN.	0.16	0.76	0.51	0.23	0.21	3.14	1.10	3.29	7.29	1.62	0.65	0.33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2004, BY WATER YEAR (WY)

MEAN	20.6	26.4	20.8	15.3	24.3	67.6	64.6	51.1	64.0	36.5	24.6	20.9
MAX	64.1	71.3	47.5	46.1	60.7	146	185	153	349	190	67.5	57.4
(WY)	(1996)	(1996)	(1993)	(1996)	(1996)	(2004)	(1993)	(2004)	(2004)	(1993)	(1990)	(2000)
MIN	7.00	12.2	5.73	3.13	4.28	19.1	23.2	16.1	4.57	3.78	5.03	9.01
(WY)	(1989)	(2000)	(1990)	(2003)	(2003)	(2003)	(2003)	(1988)	(1988)	(1988)	(1988)	(1988)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1987 - 2004	
ANNUAL TOTAL	7,329.08		27,758.17			
ANNUAL MEAN	20.1		75.8		36.7	
HIGHEST ANNUAL MEAN					79.9	1993
LOWEST ANNUAL MEAN					17.9	2003
HIGHEST DAILY MEAN	193	May 11	682	Jun 13	705	May 31, 1989
LOWEST DAILY MEAN	-7.1	Jan 10	-1.1	Nov 12	-7.1	Jan 10, 2003
ANNUAL SEVEN-DAY MINIMUM	1.2	Jan 21	4.3	Feb 6	1.2	Jan 21, 2003
ANNUAL RUNOFF (CFSM)	0.375		1.42		0.686	
ANNUAL RUNOFF (INCHES)	5.10		19.30		9.32	
10 PERCENT EXCEEDS	43		216		78	
50 PERCENT EXCEEDS	14		31		22	
90 PERCENT EXCEEDS	3.1		6.7		7.5	

(e) Estimated due to ice effect or missing record

04073468 GREEN LAKE INLET AT COUNTY TRUNK HIGHWAY A NEAR GREEN LAKE, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1987 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: February 1987 to current year.
TOTAL-PHOSPHORUS DISCHARGE: February 1987 to current year.

INSTRUMENTATION.--Automatic pumping sampler from March 1997; manual samples February 1987 to February 1997.

REMARKS.--Records are fair, except those corresponding to estimated daily discharges which are fair to poor (see page 11). Phosphorus analyses by the Wisconsin State Laboratory of Hygiene. Samples are point samples unless otherwise indicated.

COOPERATION.--Observer furnished by the Green Lake Sanitary District.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 1,030 mg/L, May 11, 2003; minimum observed, 0 mg/L, Mar. 25, 1988.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 456 tons, May 31, 1989; minimum daily, -3.1 ton, Apr. 5, 2000.
TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 1.45 mg/L, May 30, 1989; minimum observed, <0.02 mg/L, Oct. 10, 1991.
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 3,230 lb, May 31, 1989; minimum daily, -13 lb, Apr. 5, 2000.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 93 mg/L, Nov. 12; minimum observed, 5 mg/L, Mar. 24.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 58 tons, May 27; minimum daily, -0.54 tons, Jan. 10.
TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.389 mg/L, Mar. 5; minimum observed, 0.049 mg/L, Mar. 24.
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 844 lb, June 13; minimum daily, -0.82 lb, Nov. 12.

SUSPENDED SEDIMENT DISCHARGE, TONS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.64	1.8	7.4	2.3	0.29	32	4.6	3.1	e33	16	e5.7	2.1
2	0.44	2.4	5.8	2.3	0.40	25	3.2	2.6	e32	15	e5.2	2.4
3	1.6	6.0	6.0	2.6	0.44	13	2.0	2.6	e32	14	e5.2	1.8
4	1.0	11	5.7	1.7	0.45	8.9	1.4	3.5	e30	16	e5.3	1.6
5	0.64	8.9	5.2	0.70	0.35	23	4.2	2.6	e25	16	e5.0	1.8
6	0.69	5.0	5.2	0.44	0.39	48	8.4	4.2	e21	18	e5.2	1.3
7	0.92	8.2	4.3	0.59	0.28	21	7.8	e5.7	e16	17	e5.1	1.7
8	0.62	4.3	4.9	0.60	0.28	11	8.6	e8.9	e14	16	e5.3	2.0
9	1.0	3.7	5.9	0.57	0.15	9.2	8.0	e11	e14	13	e5.8	1.4
10	1.1	3.6	11	0.50	0.31	9.6	8.2	e11	14	12	e5.5	1.5
11	0.12	4.4	8.0	0.79	0.18	4.4	7.7	e10	47	9.7	e5.2	1.9
12	1.8	-0.27	4.9	0.86	0.21	3.1	7.4	e9.7	52	8.3	e4.6	1.3
13	1.0	3.6	5.4	1.0	0.39	2.6	7.2	e14	55	7.0	e4.2	1.8
14	1.4	4.5	4.4	0.98	0.53	2.8	7.6	e12	50	6.9	e3.7	1.6
15	1.0	4.1	4.0	0.98	0.31	2.5	6.9	e10	42	6.2	e3.4	0.94
16	0.73	3.3	3.1	0.91	0.29	2.3	6.7	e8.7	36	5.8	e3.5	2.0
17	0.85	2.0	3.5	0.77	0.22	2.1	5.2	e8.3	39	5.8	e3.9	1.4
18	1.5	6.1	3.6	0.48	0.10	2.0	5.2	e7.7	37	5.7	e3.3	1.1
19	0.77	5.8	4.1	0.70	0.31	2.0	17	e7.9	38	5.7	e3.2	1.4
20	0.97	3.2	3.6	0.77	0.60	2.3	8.7	e17	33	5.5	e2.9	1.2
21	1.1	3.4	2.6	0.63	0.89	2.2	8.1	e17	e29	6.2	e2.7	1.3
22	1.3	2.3	3.9	0.37	0.90	1.9	4.9	e22	25	6.3	e2.6	1.4
23	1.2	10	4.8	0.29	1.2	2.0	5.7	e26	21	5.6	e2.4	0.79
24	1.1	14	3.8	0.27	1.6	1.4	7.0	e26	24	5.9	2.0	1.2
25	0.70	23	4.3	0.38	1.6	1.6	6.4	e30	20	5.3	1.3	1.3
26	e0.89	20	3.8	0.37	1.7	3.4	6.0	e43	19	5.8	2.0	1.1
27	1.0	16	3.2	0.46	2.0	4.8	5.7	e58	18	5.3	4.3	1.4
28	0.78	11	8.2	0.49	3.7	6.8	3.6	e40	18	5.2	3.4	0.83
29	1.8	9.9	6.2	0.38	12	9.3	7.5	e32	18	e5.3	2.6	1.4
30	1.5	7.0	4.8	0.43	---	7.6	2.4	e28	17	e5.1	2.3	1.2
31	0.69	---	3.7	0.42	---	6.4	---	e35	---	e5.0	1.8	---
TOTAL	30.85	208.23	155.3	25.03	32.07	274.2	193.3	517.5	869	280.6	118.6	44.16

WTR YR 2004 TOTAL 2,748.84

e Estimated

04073468 GREEN LAKE INLET AT COUNTY TRUNK HIGHWAY A NEAR GREEN LAKE, WI—Continued

PHOSPHORUS, WATER, UNFILTERED, POUNDS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	6.9	21	6.1	1.5	98	37	27	e372	67	e25	13
2	3.4	9.0	16	6.7	2.1	277	32	21	e379	56	e22	14
3	12	22	16	8.6	2.4	294	26	18	e381	52	e22	11
4	7.3	41	15	6.4	2.4	288	22	22	e351	54	e22	9.7
5	4.6	32	14	3.0	1.9	672	28	16	e296	58	e20	11
6	4.8	18	13	2.1	2.1	785	47	23	e246	66	e20	7.9
7	6.2	28	11	2.8	1.5	487	43	e26	e185	68	e19	10
8	4.1	14	12	2.9	1.6	362	45	e42	e163	69	e20	12
9	6.7	12	14	2.8	0.81	230	40	e55	e167	64	e21	8.2
10	7.3	12	27	2.4	1.7	122	38	e55	174	61	e20	8.8
11	0.71	14	19	3.8	0.97	118	34	e52	663	56	e20	11
12	11	-0.82	11	4.2	1.2	76	31	e50	840	52	e19	7.9
13	6.1	11	12	5.1	2.2	54	28	e71	841	48	e19	11
14	7.9	14	9.9	4.8	2.9	56	28	e62	716	47	e18	9.6
15	5.8	13	8.8	4.8	1.7	49	24	e55	573	41	e18	5.5
16	4.0	10	6.8	4.5	1.6	43	28	e48	464	38	e20	12
17	4.6	6.5	7.5	3.8	1.2	39	28	e47	477	37	e24	8.5
18	7.9	20	6.9	2.4	0.58	35	23	e44	423	35	e22	6.8
19	4.0	19	7.0	3.5	1.7	34	56	e46	413	34	e21	8.5
20	4.9	11	5.7	3.8	3.1	38	48	e108	338	33	e19	7.3
21	5.5	13	3.7	3.2	4.2	35	40	e115	e286	36	e18	7.9
22	6.4	11	5.0	1.9	3.9	30	49	e171	231	35	e17	8.5
23	5.5	59	5.5	1.5	4.8	31	43	e224	182	31	e16	4.7
24	5.3	59	4.0	1.4	6.2	23	42	e247	195	31	13	7.3
25	3.2	68	5.0	2.0	5.8	24	35	e314	155	27	8.1	7.9
26	e4.0	56	5.0	1.9	5.8	43	31	e325	138	29	13	6.8
27	4.3	45	4.6	2.4	6.2	48	27	e322	117	26	27	8.4
28	3.3	32	13	2.6	8.3	56	16	e258	104	25	21	5.0
29	7.3	28	11	2.0	28	71	46	e236	89	e25	16	8.4
30	6.2	20	9.9	2.2	---	56	22	e238	75	e24	14	4.8
31	2.8	---	8.6	2.2	---	45	---	e349	---	e22	11	---
TOTAL	172.11	703.58	328.9	107.8	108.36	4,619	1,037	3,687	10,034	1,347	585.1	263.4

WTR YR 2004 TOTAL 22,993.25

e Estimated

04073468 GREEN LAKE INLET AT COUNTY TRUNK HIGHWAY A NEAR GREEN LAKE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Discharge, cfs (00060)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)
OCT						
15...	1345	--	23	50	.132	47
NOV						
12...	1515	--	99	50	.143	93
19...	1215	--	84	50	.121	73
20...	1515	--	141	50	.075	44
23...	1915	--	173	50	.096	32
25...	1230	--	207	50	.122	88
30...	2345	--	123	50	.120	--
DEC						
17...	1200	--	26	50	.077	72
24...	1245	--	28	50	.062	--
31...	1200	--	55	50	.059	--
MAR						
01...	1130	--	105	50	.134	--
01...	2330	--	276	50	.132	44
02...	2330	--	262	50	.243	24
03...	2330	--	223	50	.234	18
04...	2330	--	229	50	.262	13
05...	1130	--	504	50	.247	12
05...	2330	--	508	50	.389	47
06...	2330	--	334	50	.346	43
07...	1130	--	319	50	.262	20
08...	1130	--	292	50	.241	15
09...	1130	--	220	50	.224	11
09...	2330	--	206	50	.113	28
11...	1130	--	111	50	.171	11
24...	0845	--	64	50	.081	11
24...	0846	--	63	10	.051	5
24...	0847	--	61	10	.049	5
28...	1600	--	220	50	.118	30
31...	2115	--	131	50	.084	24
APR						
05...	1115	--	47	30	.060	6
05...	1120	--	54	50	.128	48
06...	2300	--	94	50	.166	58
15...	1515	--	119	50	.125	72
17...	1645	--	78	50	.133	47
18...	1415	--	106	50	.121	46
19...	0215	--	293	50	.106	--
19...	1415	--	108	50	.141	63
20...	1500	--	103	50	.157	51
21...	0615	--	157	50	.089	49
22...	0915	--	141	50	.139	24
24...	0115	--	147	50	.142	46
28...	1645	--	48	50	.102	47
29...	0500	--	152	50	.157	71
29...	1730	--	136	50	.114	24
MAY						
03...	1205	--	7.6	30	.115	30
03...	1206	--	7.3	50	.151	36
06...	0800	--	128	50	.127	41
06...	2145	--	139	50	.122	53
26...	1446	388	--	30	.156	27
26...	1447	388	--	50	.217	64
JUN						
01...	1604	507	--	50	.135	23
26...	2000	--	179	50	.144	40
30...	0800	--	136	50	.103	47
JUL						
04...	1215	--	67	50	.094	55
07...	0015	--	175	50	.117	62
13...	1215	--	14	50	.105	30
AUG						
10...	1200	31	--	50	.201	67
18...	1200	34	--	50	.121	36
SEP						
10...	1000	--	41	10	.105	--
10...	1001	--	37	50	.101	--

04073473 PUCHYAN RIVER DOWNSTREAM NORTH LAWSON DRIVE NEAR GREEN LAKE, WI

LOCATION.--Lat 43°51'27", long 88°56'47", in NE $^1/_4$ SE $^1/_4$ sec.16, T.16 N., R.13 E., Green Lake County, Hydrologic Unit 04030201, on right bank 220 ft downstream from bridge on North Lawson Drive, 1.0 mi northeast of dam at outlet of Green Lake at Green Lake.

DRAINAGE AREA.--105 mi^2.

PERIOD OF RECORD.--November 1996 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 777.47 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Flow regulated by dams 1.1 mi and 180 ft upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	19	23	34	30	64	133	71	880	376	80	54
2	14	20	e23	35	32	74	128	68	882	356	79	54
3	15	20	24	36	e35	78	119	66	848	344	77	54
4	13	25	24	34	e36	93	109	65	814	277	77	53
5	13	19	23	e33	e36	145	110	58	767	185	74	52
6	13	17	24	e32	e39	170	109	59	719	263	74	51
7	14	16	23	e31	41	247	104	57	698	312	72	46
8	14	17	25	e30	43	366	101	84	673	297	72	45
9	16	16	23	e30	43	366	99	102	625	286	72	45
10	18	17	27	30	43	356	96	131	636	281	65	46
11	19	17	e28	30	41	340	93	221	976	273	61	45
12	17	18	e28	30	42	320	89	219	879	267	57	44
13	16	15	e29	30	42	301	87	227	897	226	54	44
14	17	17	29	30	e41	284	91	233	874	189	54	44
15	22	19	29	30	e41	263	91	231	842	184	52	46
16	22	20	30	30	e41	251	76	225	814	172	52	43
17	22	20	29	31	e42	241	69	222	840	151	53	42
18	18	28	29	e31	42	234	76	231	822	148	54	41
19	17	26	e29	e30	43	218	75	239	777	140	53	41
20	17	25	e29	e29	48	193	71	296	758	139	51	40
21	19	25	29	30	51	170	77	292	715	140	50	38
22	21	25	28	e29	51	184	75	427	661	137	50	37
23	20	34	28	30	53	169	75	616	631	131	48	37
24	19	21	e28	e29	52	159	72	571	623	126	48	36
25	20	21	e28	e29	54	131	77	677	600	121	47	33
26	17	21	28	e29	53	133	76	783	568	116	47	29
27	17	21	30	e29	52	137	74	769	534	99	57	29
28	17	23	35	e29	55	154	81	727	508	84	53	28
29	15	24	34	e29	61	153	81	718	448	81	55	27
30	15	24	34	e29	---	137	72	769	396	78	57	26
31	17	---	35	e30	---	136	---	893	---	74	54	---
TOTAL	528	630	865	948	1,283	6,267	2,686	10,347	21,705	6,053	1,849	1,250
MEAN	17.0	21.0	27.9	30.6	44.2	202	89.5	334	724	195	59.6	41.7
MAX	22	34	35	36	61	366	133	893	976	376	80	54
MIN	13	15	23	29	30	64	69	57	396	74	47	26
CFSM	0.16	0.20	0.27	0.29	0.42	1.93	0.85	3.18	6.89	1.86	0.57	0.40
IN.	0.19	0.22	0.31	0.34	0.45	2.22	0.95	3.67	7.69	2.14	0.66	0.44

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

MEAN	22.4	16.7	20.3	23.9	37.6	86.8	131	150	189	86.6	43.5	38.2
MAX	44.2	30.5	51.0	36.6	56.0	202	256	334	724	195	72.4	103
(WY)	(2001)	(2001)	(2002)	(1997)	(1997)	(2004)	(2001)	(2004)	(2004)	(2004)	(1999)	(2000)
MIN	6.99	6.60	10.4	11.6	15.0	21.0	28.1	89.5	57.8	42.5	18.6	13.7
(WY)	(1999)	(1999)	(1999)	(2000)	(2000)	(2003)	(2003)	(2000)	(2003)	(2003)	(2003)	(1998)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1997 - 2004	
ANNUAL TOTAL	12,486.0		54,411			
ANNUAL MEAN	34.2		149		71.1	
HIGHEST ANNUAL MEAN					149	2004
LOWEST ANNUAL MEAN					32.5	2003
HIGHEST DAILY MEAN	283	May 13	976	Jun 11	976	Jun 11, 2004
LOWEST DAILY MEAN	6.1	Aug 26	13	Oct 4-6	2.8	Nov 8, 1998
ANNUAL SEVEN-DAY MINIMUM	7.2	Aug 24	14	Oct 1	3.3	Nov 3, 1998
MAXIMUM PEAK FLOW			1,190	Jun 11	1,190	Jun 11, 2004
MAXIMUM PEAK STAGE			6.61	Jun 11	6.61	Jun 11, 2004
ANNUAL RUNOFF (CFSM)	0.326		1.42		0.677	
ANNUAL RUNOFF (INCHES)	4.42		19.28		9.20	
10 PERCENT EXCEEDS	58		516		156	
50 PERCENT EXCEEDS	22		53		39	
90 PERCENT EXCEEDS	14		19		12	

(e) Estimated due to ice effect or missing record

04073500 FOX RIVER AT BERLIN, WI

LOCATION.--Lat 43°57'14", long 88°57'09", in NW ¼ NE ¼ sec.16, T.17 N., R.13 E., Green Lake County, Hydrologic Unit 04030201, on left bank, 0.4 mi downstream from government dam, 1.0 mi south of Huron Street bridge in Berlin, 2.5 mi upstream from Barnes Creek, and at mile 89.0.

DRAINAGE AREA.--1,340 mi^2.

PERIOD OF RECORD.--January 1898 to current year.

REVISED RECORDS.--WSP 1337: 1910. WDR WI-80-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 744.52 ft above mean tide at New York City (by U.S. Army Corps of Engineers). Prior to Oct. 27, 1954, nonrecording gage at site 0.3 mi upstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Usually less than about 10 ft^3/s was diverted into the basin from the Wisconsin River at Portage Canal throughout the year. Data-collection platform and gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	484	806	1,250	e920	e590	e1,300	2,230	1,290	4,250	4,260	1,490	932
2	455	784	1,190	e900	e610	e1,500	2,200	1,240	4,360	4,070	1,470	938
3	486	787	1,140	e900	e610	e1,800	2,180	1,190	4,380	3,890	1,430	933
4	498	857	1,200	e880	e620	e2,100	2,120	1,150	4,360	3,780	1,380	914
5	482	924	1,200	e840	e640	2,630	2,060	1,110	4,310	3,640	1,310	894
6	491	950	1,160	e840	e650	2,970	2,010	1,080	4,270	3,560	1,250	898
7	496	960	1,130	e800	e670	2,950	1,950	1,040	4,200	3,450	1,200	885
8	496	927	1,120	e780	e680	2,880	1,890	1,100	4,120	3,320	1,150	840
9	504	897	1,100	e740	e700	2,820	1,830	1,290	4,040	3,210	1,120	812
10	505	899	1,120	e740	e700	2,770	1,770	1,420	4,040	3,120	1,080	808
11	510	901	1,100	e740	e700	2,790	1,710	1,510	4,750	3,030	1,040	809
12	536	910	e890	e730	e700	2,730	1,650	1,590	5,200	2,950	988	794
13	527	909	e840	e720	e700	2,680	1,600	1,750	5,440	2,860	951	775
14	530	883	e930	e720	e700	2,680	1,540	1,800	5,580	2,760	924	764
15	508	885	e950	e720	e710	2,630	1,480	1,860	5,630	2,660	909	763
16	527	898	e1,000	e710	e720	2,580	1,440	1,910	5,630	2,570	894	804
17	532	887	e1,000	e690	e740	2,530	1,390	1,950	5,650	2,480	903	767
18	543	947	e1,000	e600	e750	2,480	1,380	1,980	5,670	2,400	898	744
19	536	995	e1,000	e600	e770	2,430	1,400	1,980	5,620	2,310	908	726
20	527	1,000	e1,000	e590	e780	2,410	1,410	2,040	5,630	2,230	911	726
21	521	1,000	e1,000	e580	e790	2,360	1,430	2,150	5,590	2,150	895	708
22	492	967	e980	e580	e820	2,310	1,450	2,390	5,510	2,080	883	686
23	497	1,080	e960	e590	e830	2,260	1,460	2,680	5,410	2,020	888	672
24	495	1,250	e940	e610	e840	2,200	1,450	2,980	5,330	1,950	855	678
25	505	1,320	e910	e600	e870	2,170	1,430	3,200	5,200	1,890	792	674
26	501	1,320	e900	e600	e920	2,170	1,420	3,350	5,080	1,830	727	653
27	495	1,330	e950	e590	e1,000	2,160	1,390	3,430	4,950	1,770	874	640
28	507	1,330	e1,000	e590	e1,100	2,170	1,360	3,490	4,830	1,710	932	621
29	564	1,280	e1,100	e580	e1,200	2,220	1,360	3,550	4,660	1,650	914	597
30	787	1,260	e1,000	e580	---	2,230	1,340	3,680	4,460	1,590	911	622
31	835	---	e960	e590	---	2,240	---	3,990	---	1,530	916	---
TOTAL	16,372	30,143	32,020	21,650	22,110	74,150	49,330	65,170	148,150	82,720	31,793	23,077
MEAN	528	1,005	1,033	698	762	2,392	1,644	2,102	4,938	2,668	1,026	769
MAX	835	1,330	1,250	920	1,200	2,970	2,230	3,990	5,670	4,260	1,490	938
MIN	455	784	840	580	590	1,300	1,340	1,040	4,040	1,530	727	597
CFSM	0.39	0.75	0.77	0.52	0.57	1.79	1.23	1.57	3.69	1.99	0.77	0.57
IN.	0.45	0.84	0.89	0.60	0.61	2.06	1.37	1.81	4.11	2.30	0.88	0.64

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1898 - 2004, BY WATER YEAR (WY)

MEAN	977	1,070	897	697	767	1,750	2,203	1,483	1,242	945	801	889
MAX	3,819	2,463	1,871	1,631	1,803	4,272	4,225	3,801	4,938	4,072	2,540	3,491
(WY)	(1987)	(1986)	(1986)	(1939)	(1966)	(1973)	(1979)	(1973)	(2004)	(1993)	(1993)	(1938)
MIN	347	380	369	311	318	495	667	600	367	384	346	364
(WY)	(1959)	(1977)	(1977)	(1959)	(1959)	(1964)	(1902)	(1934)	(1988)	(1988)	(1958)	(1958)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1898 - 2004	
ANNUAL TOTAL	298,952		596,685			
ANNUAL MEAN	819		1,630		1,146	
HIGHEST ANNUAL MEAN					2,203	1993
LOWEST ANNUAL MEAN					559	1964
HIGHEST DAILY MEAN	2,050	May 17, 18	5,670	Jun 18	6,900	Mar 17, 1946
LOWEST DAILY MEAN	322	Sep 5	455	Oct 2	217	Jun 27, 1988
ANNUAL SEVEN-DAY MINIMUM	340	Sep 4	485	Oct 1	(a)266	Jan 30, 1900
MAXIMUM PEAK FLOW			5,680	Jun 18	(b)6,900	Mar 17, 1946
MAXIMUM PEAK STAGE			16.23	Jun 18	16.23	Jun 18, 2004
INSTANTANEOUS LOW FLOW			447	Oct 2	210	Jun 27, 1988
ANNUAL RUNOFF (CFSM)	0.611		1.22		0.855	
ANNUAL RUNOFF (INCHES)	8.30		16.56		11.62	
10 PERCENT EXCEEDS	1,300		3,650		2,170	
50 PERCENT EXCEEDS	759		1,080		880	
90 PERCENT EXCEEDS	420		590		504	

(a) Ice affected
(b) Gage height 15.50 ft
(e) Estimated due to ice effect or missing record

04074538 SWAMP CREEK ABOVE RICE LAKE AT MOLE LAKE, WI

LOCATION.--Lat 45°29'18", long 88°57'49", in SW ¼ NW ¼ sec.26, T.35 N., R.12 E., Forest County, Hydrologic Unit 04030202, on right bank approximately 200 ft upstream from bridge on State Highway 55, on Mole Lake Indian Reservation.

DRAINAGE AREA.--46.3 mi^2.

PERIOD OF RECORD.--August 1977 to September 1983. October 1984 to December 1986. July 2001 to current year.

REVISED RECORDS.--WDR WI-82-1: Drainage area.

GAGE.--Water-stage recorder, crest-stage gage, and prior to Nov. 18, 2003, a concrete control. Datum of gage is 1,532.28 ft above NGVD of 1929 (levels by Wisconsin Department of Transportation).

REMARKS.--Records good except those for periods of ice effect and missing record, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	20	e17	e12	e9.4	e18	113	e42	66	29	27	20
2	19	20	e15	e12	e9.4	e18	108	e42	65	28	35	19
3	19	20	e14	e12	e10	e18	107	e41	50	27	49	18
4	20	23	e14	e11	e10	e18	97	e40	42	31	35	17
5	21	e23	e13	e11	e10	e19	86	43	38	31	27	16
6	19	e21	e13	e11	e10	e19	86	42	37	32	23	18
7	18	19	e13	e11	e10	e19	97	40	34	37	21	19
8	18	17	e13	e12	e10	e19	102	43	32	33	22	17
9	17	17	e13	e12	e10	e19	99	45	34	30	24	16
10	17	18	e13	e12	e9.6	e19	87	47	35	29	25	16
11	18	19	e13	e11	e10	e19	75	44	32	28	24	16
12	24	20	e12	e11	e10	e19	67	42	36	28	23	15
13	23	20	e13	e11	e9.2	e19	62	51	56	27	20	15
14	22	19	e13	e11	e9.2	e20	60	57	125	27	19	15
15	20	19	e13	e11	e9.2	e20	60	58	114	25	18	23
16	19	19	e13	e11	e10	e20	64	49	78	26	18	22
17	19	18	e12	e10	e11	e20	72	45	93	25	19	18
18	19	25	e12	e10	e10	e20	75	42	87	24	22	17
19	19	33	e13	e9.6	e11	e20	86	39	61	23	27	17
20	19	27	e13	e9.8	e11	e20	85	38	48	23	23	17
21	18	24	e13	e9.4	e13	e20	75	36	43	24	20	16
22	18	21	e13	e9.4	e14	e21	71	41	43	24	19	16
23	20	21	e12	e9.4	e16	e23	62	58	39	22	18	16
24	20	e21	e13	e9.4	e16	e20	58	97	37	21	18	17
25	19	e21	e14	e9.4	e16	e24	59	87	34	20	19	17
26	18	21	e14	e9.4	e17	54	60	60	32	20	18	17
27	18	19	e15	e9.4	e17	66	57	48	31	19	26	18
28	20	18	e15	e9.2	e17	81	55	43	30	19	25	18
29	24	17	e16	e9.4	e17	111	e44	39	29	18	22	17
30	22	17	e15	e9.4	---	119	e43	39	30	18	20	17
31	21	---	e13	e9.4	---	120	---	55	---	28	19	---
TOTAL	608	617	418	324.6	342.0	1,042	2,272	1,493	1,511	796	725	520
MEAN	19.6	20.6	13.5	10.5	11.8	33.6	75.7	48.2	50.4	25.7	23.4	17.3
MAX	24	33	17	12	17	120	113	97	125	37	49	23
MIN	17	17	12	9.2	9.2	18	43	36	29	18	18	15
CFSM	0.42	0.44	0.29	0.23	0.25	0.73	1.64	1.04	1.09	0.55	0.51	0.37
IN.	0.49	0.50	0.34	0.26	0.27	0.84	1.83	1.20	1.21	0.64	0.58	0.42

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2004, BY WATER YEAR (WY)

MEAN	32.2	28.3	23.9	20.6	19.8	30.8	61.7	46.7	41.2	30.8	23.4	26.7
MAX	52.9	52.9	39.2	31.3	28.1	48.4	79.8	64.0	57.8	48.6	40.1	40.3
(WY)	(1987)	(1986)	(1986)	(1986)	(1986)	(1983)	(1979)	(1983)	(1981)	(1978)	(1978)	(1977)
MIN	18.5	14.5	13.5	10.5	11.8	18.3	47.3	31.0	22.6	18.2	14.3	13.2
(WY)	(2002)	(1982)	(2004)	(2004)	(2004)	(1978)	(1980)	(1980)	(1982)	(2001)	(1981)	(1981)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1977 - 2004	
ANNUAL TOTAL	9,090		10,668.6			
ANNUAL MEAN	24.9		29.1		32.1	
HIGHEST ANNUAL MEAN					38.5	1986
LOWEST ANNUAL MEAN					24.8	1982
HIGHEST DAILY MEAN	141	Apr 17	125	Jun 14	212	Jun 15, 1981
LOWEST DAILY MEAN	(a)11	Jan 21-27	(a)9.2	(b)Jan 28	8.3	Aug 25, 1977
ANNUAL SEVEN-DAY MINIMUM	(a)11	Jan 21	(a)9.4	(b)Jan 22	9.2	Aug 13, 1982
MAXIMUM PEAK FLOW			136	Jun 14	228	Jun 15, 1981
MAXIMUM PEAK STAGE			2.72	Jun 14	(c)3.82	Jun 15, 1981
INSTANTANEOUS LOW FLOW			(a)		6.8	Aug 25, 1977
ANNUAL RUNOFF (CFSM)	0.538		0.630		0.694	
ANNUAL RUNOFF (INCHES)	7.30		8.57		9.42	
10 PERCENT EXCEEDS	45		60		56	
50 PERCENT EXCEEDS	19		20		26	
90 PERCENT EXCEEDS	13		11		16	

(a) Ice affected
(b) Also occurred additional days
(c) Site and datum then in use
(e) Estimated due to ice effect or missing record

04074548 SWAMP CREEK BELOW RICE LAKE AT MOLE LAKE, WI

LOCATION.--Lat 45°28'46", long 88°59'52", in NE $^1/_4$ NW $^1/_4$ sec.33, T.35 N., R.12 E., Forest County, Hydrologic Unit 04030202, on left bank approximately 100 ft downstream from bridge on County Trunk Highway M, 0.9 mi west of Mole Lake.

DRAINAGE AREA.--56.8 mi^2.

PERIOD OF RECORD.--August 1977 to September 1979. April 1982 to June 1985. July 2001 to current year.

REVISED RECORDS.--WDR WI-83-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,529.66 ft above National Geodetic Vertical Datum of 1929 (levels by Wisconsin Department of Transportation). Prior to July 1985, water-stage recorder at same site and approximately 1.0 ft higher datum.

REMARKS.--Records fair except for periods of estimated record, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	27	e25	e18	e17	e25	166	51	66	36	40	37
2	43	28	e26	e18	e17	e25	160	46	70	35	44	35
3	42	27	e20	e18	e16	e25	160	39	59	34	59	33
4	42	29	18	e17	e16	e26	154	37	47	38	62	31
5	41	30	17	e16	e16	e26	137	34	40	41	54	30
6	40	36	16	e16	e16	e26	127	34	38	42	47	29
7	41	30	17	e16	e16	e28	131	32	34	46	42	31
8	41	27	17	e16	e16	e28	145	33	34	45	41	32
9	40	24	18	e16	e16	e28	149	36	37	42	42	30
10	38	23	e20	e16	e16	e30	140	39	37	40	43	28
11	36	24	e25	e16	e16	e30	124	37	35	38	44	27
12	35	25	e18	e16	e16	e30	100	34	35	37	44	26
13	36	25	e17	e16	e16	e31	80	42	56	36	41	25
14	35	24	e17	e16	e16	e32	68	52	106	36	38	24
15	33	25	e16	e16	e16	e32	64	55	128	34	36	33
16	31	25	e16	e16	e16	e32	68	48	117	35	35	36
17	30	26	e16	e16	e17	e32	83	42	107	35	36	32
18	30	34	e16	e16	e17	e32	92	40	105	32	38	31
19	28	42	e16	e16	e17	e32	108	33	89	32	44	32
20	29	39	e16	e16	e17	e33	121	32	66	33	45	31
21	29	34	e16	e16	e18	e33	117	32	55	32	41	31
22	28	31	e16	e16	e19	e33	107	34	49	33	37	30
23	28	29	e17	e16	e19	e35	89	54	47	33	36	28
24	28	e28	e17	e16	e20	e37	73	86	43	31	34	26
25	28	e26	e17	e16	e21	e39	69	99	40	31	34	26
26	27	e24	e18	e16	e22	e45	61	81	39	32	34	25
27	26	24	e18	e16	e22	e56	51	60	37	31	37	25
28	27	23	e20	e16	e22	e76	48	49	36	30	41	24
29	28	21	e22	e17	e23	e100	49	41	36	30	40	23
30	28	e23	e22	e17	---	e130	52	40	34	31	37	23
31	27	---	e18	e17	---	e150	---	52	---	36	36	---
TOTAL	1,042	833	568	506	512	1,317	3,093	1,424	1,722	1,097	1,282	874
MEAN	33.6	27.8	18.3	16.3	17.7	42.5	103	45.9	57.4	35.4	41.4	29.1
MAX	47	42	26	18	23	150	166	99	128	46	62	37
MIN	26	21	16	16	16	25	48	32	34	30	34	23
CFSM	0.59	0.49	0.32	0.29	0.31	0.75	1.82	0.81	1.01	0.62	0.73	0.51
IN.	0.68	0.55	0.37	0.33	0.34	0.86	2.03	0.93	1.13	0.72	0.84	0.57

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2004, BY WATER YEAR (WY)

MEAN	49.0	41.1	36.7	31.9	32.4	45.8	87.7	66.1	52.8	41.3	38.1	41.1
MAX	70.7	53.4	45.5	38.2	50.7	66.5	120	88.2	84.7	68.8	60.5	59.2
(WY)	(2003)	(1983)	(1985)	(1983)	(1984)	(1979)	(1979)	(1979)	(1979)	(1978)	(1978)	(1977)
MIN	27.1	27.8	18.3	16.3	17.7	29.5	59.8	45.9	32.1	26.5	21.1	29.1
(WY)	(2002)	(2004)	(2004)	(2004)	(2004)	(1978)	(1984)	(2004)	(1982)	(2001)	(1982)	(2004)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1977 - 2004	
ANNUAL TOTAL	16,241		14,270			
ANNUAL MEAN	44.5		39.0		48.0	
HIGHEST ANNUAL MEAN					57.1	1979
LOWEST ANNUAL MEAN					39.0	2004
HIGHEST DAILY MEAN	202	Apr 21	166	Apr 1	209	Apr 22, 1979
LOWEST DAILY MEAN	16	(a)Dec 6	16	(a)Dec 6	15	Aug 18, 1982
ANNUAL SEVEN-DAY MINIMUM	(b)16	(a)Dec 15	(b)16	(a)Dec 15	15	Aug 17, 1982
MAXIMUM PEAK FLOW			172	Apr 1	210	Apr 21, 1979
MAXIMUM PEAK STAGE			3.74	Apr 1	(b)4.43	Apr 16, 2002
INSTANTANEOUS LOW FLOW			(b)		15	Oct 27, 1978
ANNUAL RUNOFF (CFSM)	0.783		0.686		0.844	
ANNUAL RUNOFF (INCHES)	10.64		9.35		11.47	
10 PERCENT EXCEEDS	67		68		79	
50 PERCENT EXCEEDS	36		32		40	
90 PERCENT EXCEEDS	23		16		26	

(a) Also occurred additional days
(b) Ice affected
(e) Estimated due to ice effect or missing record

04074950 WOLF RIVER AT LANGLADE, WI

LOCATION.--Lat 45°11'24", long 88°44'00", in SE ¼ SW ¼ sec.3, T.31 N., R.14 E., Langlade County, Hydrologic Unit 04030202, on left bank, upstream of bridge on State Highway 64 at Langlade, 1.5 mi east of White Lake, 3.0 mi upstream from White Lake Creek, and at about mile 170 above mouth.

DRAINAGE AREA.--463 mi^2.

PERIOD OF RECORD.--March 1966 to September 1979, October 1980 to current year.

REVISED RECORDS.--WDR WI-81-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 1,240 ft above NGVD of 1929, from topographic map. Prior to Oct. 1, 1976, nonrecording gage 50 ft downstream at same elevation.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	387	322	e370	e280	e220	e320	1,120	760	933	325	250	274
2	358	304	e310	e290	e230	e320	1,200	692	877	336	298	265
3	350	305	e310	e260	e230	e330	1,250	640	744	316	394	263
4	352	344	e300	e240	e230	e340	1,210	586	706	357	337	267
5	291	392	e290	e240	e230	e340	1,170	540	724	354	313	258
6	273	373	e280	e240	e230	e340	1,150	515	710	364	294	269
7	279	344	e280	e240	e230	e350	1,200	498	649	397	275	272
8	272	331	e280	e240	e230	e350	1,230	532	584	390	265	262
9	267	e330	e280	e240	e230	e350	1,210	530	514	369	270	252
10	256	e330	e270	e240	e230	e350	1,160	576	524	349	279	247
11	265	e320	e260	e240	e230	e340	1,100	563	585	334	284	240
12	300	e320	e250	e240	e220	e340	1,040	513	633	326	283	244
13	312	e320	e260	e240	e210	e330	986	524	671	317	279	259
14	286	e320	e260	e230	e210	e330	941	652	843	323	270	248
15	278	e320	e260	e230	e200	e330	902	678	845	312	260	283
16	273	e370	e250	e230	e200	e320	905	630	853	309	252	330
17	279	e370	e250	e230	e210	e320	928	619	965	313	249	336
18	269	e360	e250	e220	e220	e330	941	627	964	307	274	306
19	266	e350	e250	e220	e230	e340	977	620	880	296	253	282
20	262	e380	e250	e220	e250	e350	976	599	759	291	279	277
21	273	e370	e250	e220	e250	e360	994	563	657	296	264	257
22	269	e370	e250	e220	e260	e390	1,000	534	602	289	263	250
23	271	e380	e260	e220	e270	e450	960	587	550	273	258	273
24	265	e390	e260	e220	e270	e520	905	925	509	247	250	263
25	267	333	e260	e220	e280	e640	886	835	455	234	259	250
26	265	e360	e280	e220	e280	e790	875	760	423	234	254	240
27	262	e390	e300	e220	e280	e970	834	797	391	234	299	234
28	295	e360	e310	e220	e300	e1,100	795	848	373	237	306	230
29	332	e370	e300	e220	e300	e1,300	767	827	364	231	293	226
30	333	e370	e280	e220	---	e1,200	798	795	341	226	297	225
31	327	---	e280	e220	---	1,060	---	859	---	224	289	---
TOTAL	9,034	10,498	8,540	7,230	6,960	15,500	30,410	20,224	19,628	9,410	8,690	7,882
MEAN	291	350	275	233	240	500	1,014	652	654	304	280	263
MAX	387	392	370	290	300	1,300	1,250	925	965	397	394	336
MIN	256	304	250	220	200	320	767	498	341	224	249	225
CFSM	0.63	0.76	0.59	0.50	0.52	1.08	2.19	1.41	1.41	0.66	0.61	0.57
IN.	0.73	0.84	0.69	0.58	0.56	1.25	2.44	1.62	1.58	0.76	0.70	0.63

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2004, BY WATER YEAR (WY)

MEAN	431	434	361	308	309	463	820	614	486	366	325	396
MAX	813	788	578	548	482	1,227	1,330	1,312	1,013	874	632	813
(WY)	(1986)	(1986)	(1986)	(1969)	(1984)	(1973)	(1976)	(1973)	(1991)	(1968)	(1972)	(1968)
MIN	196	204	226	191	213	278	263	289	173	183	188	171
(WY)	(1977)	(1977)	(1977)	(1999)	(1982)	(1982)	(1990)	(1998)	(1988)	(1989)	(1989)	(1989)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1966 - 2004	
ANNUAL TOTAL	142,589		154,006			
ANNUAL MEAN	391		421		444	
HIGHEST ANNUAL MEAN					666	1973
LOWEST ANNUAL MEAN					326	1988
HIGHEST DAILY MEAN	1,300	Apr 21	(a)1,300	Mar 29	2,420	Apr 26, 1996
LOWEST DAILY MEAN	(a)150	Jan 23-29	(a)200	Feb 15, 16	137	Jul 7, 1988
ANNUAL SEVEN-DAY MINIMUM	(a)150	Jan 23	(a)210	Feb 12	142	Sep 28, 1989
MAXIMUM PEAK FLOW			(a)	Mar 29	2,440	Apr 26, 1996
MAXIMUM PEAK STAGE			(a)9.82	Mar 29	10.40	Apr 26, 1996
INSTANTANEOUS LOW FLOW			(a)		(b)102	Dec 17, 1999
ANNUAL RUNOFF (CFSM)	0.844		0.909		0.959	
ANNUAL RUNOFF (INCHES)	11.46		12.37		13.03	
10 PERCENT EXCEEDS	735		876		756	
50 PERCENT EXCEEDS	296		310		365	
90 PERCENT EXCEEDS	202		230		240	

(a) Ice affected
(b) Result of freezeup
(e) Estimated due to ice effect or missing record

04075365 EVERGREEN RIVER BELOW EVERGREEN FALLS NEAR LANGLADE, WI

LOCATION.--Lat 45°03'57", long 88°40'34", in NE ¼ SE ¼ sec.21, T.30 N., R.15 E., Menominee County, Hydrologic Unit 04030202, on right bank 200 ft upstream from bridge on Evergreen Falls road below Evergreen Falls.

DRAINAGE AREA.--64.5 mi^2.

PERIOD OF RECORD.--December 2002 to current water year.

REVISED RECORDS.--WDR WI-95-1: 1993(M).

GAGE.--Water-stage recorder. Elevation of gage is 990 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11).

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e63	55	e49	e35	e46	e58	105	78	122	73	e52	53
2	e59	54	e30	e64	e47	e57	102	74	112	70	e60	50
3	e59	56	e26	e53	e47	e54	103	71	92	70	e74	52
4	e60	74	e37	e23	e45	e52	96	69	82	82	e68	53
5	e59	89	e53	e37	e48	e49	92	67	79	79	e62	54
6	e57	74	e51	e36	e49	e54	96	67	78	89	e56	56
7	e55	e63	e47	e39	e48	e54	108	66	75	97	e56	61
8	e53	e26	56	e42	e47	e53	109	94	73	85	e56	57
9	52	e49	53	e43	e49	e53	103	103	84	80	e63	64
10	54	e65	e49	e45	e48	e56	94	99	99	76	e60	58
11	55	63	e36	e49	e48	e57	86	91	92	73	e56	54
12	71	54	e28	e52	e49	e56	82	78	105	73	e56	54
13	69	50	e40	e49	e49	e53	79	82	119	71	e53	52
14	64	48	e54	e44	e48	e63	81	92	144	69	52	52
15	62	49	e55	e44	e46	e65	84	94	116	67	51	62
16	62	50	e54	e46	e45	e62	88	81	100	72	51	65
17	62	50	e53	e45	e46	e60	92	75	136	78	53	58
18	61	55	e47	e43	e48	e59	97	73	116	70	55	55
19	61	63	e43	e41	e51	57	104	70	93	67	59	54
20	61	55	e33	e40	e53	56	98	73	85	65	54	53
21	59	52	e41	e42	e53	e52	99	69	82	65	50	60
22	58	51	e54	e41	e52	e51	99	75	80	64	50	86
23	60	61	e52	e41	e56	e52	87	101	78	e63	49	59
24	60	e67	e47	e40	e55	e53	80	149	85	e59	51	52
25	59	e49	e43	e41	e55	57	83	120	80	e57	58	50
26	59	e59	e48	e42	e54	85	86	96	78	e55	57	47
27	58	56	e55	e43	e55	120	81	89	76	e54	58	47
28	63	52	e78	e42	e57	144	78	89	76	e54	54	47
29	68	51	e82	e42	e59	258	77	83	74	e53	50	47
30	64	50	e60	e42	---	210	79	87	73	e53	48	48
31	57	---	e44	e42	---	120	---	116	---	e53	51	---
TOTAL	1,864	1,690	1,498	1,328	1,453	2,330	2,748	2,671	2,784	2,136	1,723	1,660
MEAN	60.1	56.3	48.3	42.8	50.1	75.2	91.6	86.2	92.8	68.9	55.6	55.3
MAX	71	89	82	64	59	258	109	149	144	97	74	86
MIN	52	26	26	23	45	49	77	66	73	53	48	47

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2004, BY WATER YEAR (WY)

MEAN	60.1	56.3	52.5	48.0	48.4	70.5	88.2	87.5	84.7	66.1	58.5	58.9
MAX	60.1	56.3	56.6	53.1	50.1	75.2	91.6	88.8	92.8	68.9	61.4	62.4
(WY)	(2004)	(2004)	(2003)	(2003)	(2004)	(2004)	(2004)	(2003)	(2004)	(2004)	(2003)	(2003)
MIN	60.1	56.3	48.3	42.8	46.7	65.9	84.8	86.2	76.7	63.3	55.6	55.3
(WY)	(2004)	(2004)	(2004)	(2004)	(2003)	(2003)	(2003)	(2004)	(2003)	(2003)	(2004)	(2004)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2003 - 2004	
ANNUAL TOTAL	23,381		23,885			
ANNUAL MEAN	64.1		65.3		65.3	
HIGHEST ANNUAL MEAN					65.3	2004
LOWEST ANNUAL MEAN					65.3	2004
HIGHEST DAILY MEAN	219	Apr 16	258	Mar 29	258	Mar 29, 2004
LOWEST DAILY MEAN	(a)26	(b)Nov 8	(a)23	Jan 4	(a)23	Jan 4, 2004
ANNUAL SEVEN-DAY MINIMUM	(a)42	Dec 1	(a)38	Jan 4	(a)38	Jan 4, 2004
MAXIMUM PEAK FLOW			274	Mar 29	274	Mar 29, 2004
MAXIMUM PEAK STAGE			4.87	Mar 29	4.87	Mar 29, 2004
10 PERCENT EXCEEDS	89		95		95	
50 PERCENT EXCEEDS	59		58		58	
90 PERCENT EXCEEDS	46		45		45	

(a) Ice affected
(b) Also occurred Dec. 3
(e) Estimated due to ice effect or missing record

04075365 EVERGREEN RIVER BELOW EVERGREEN FALLS, WI—Continued
(NATIONAL WATER-QUALITY ASSESSMENT STATION)

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--November 2002 to current year.

REMARKS.--Chemical analysis of some constituents done by the National Water-Quality Laboratory, and Wisconsin District Mercury Lab.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)
OCT													
08...	0830	53	70	742	12.7	108	7.7	334	7.2	39.8	19.7	1.53	2.36
NOV													
05...	0850	91	70	743	13.6	104	7.8	271	3.1	32.5	16.3	1.39	2.14
19...	1135	64	70	730	13.2	106	7.8	288	4.1	36.9	17.9	1.48	2.25
DEC													
02...	0825	17	70	754	16.1	111	7.9	307	-.2	37.7	18.6	1.30	2.09
JAN													
08...	0830	41	70	748	13.2	92	7.2	317	-.2	47.3	22.0	1.65	2.64
FEB													
05...	0900	48	70	754	15.0	103	7.4	312	-.3	40.4	19.7	1.51	2.43
MAR													
03...	0855	56	70	748	17.6	122	7.8	304	-.2	36.1	17.6	1.64	2.79
24...	1200	55	70	739	15.4	114	7.6	315	1.5	39.4	19.5	1.48	2.30
31...	1230	112	40	746	14.3	109	7.5	217	2.9	24.3	11.9	1.88	1.78
APR													
08...	1150	110	70	737	14.1	114	7.5	221	5.0	26.8	13.5	1.31	1.81
MAY													
04...	0800	69	70	736	12.1	104	7.6	299	7.1	38.5	18.2	1.40	2.39
24...	1245	152	40	741	11.9	106	7.5	200	9.0	25.6	12.4	1.11	1.89
JUN													
02...	0825	116	70	740	11.8	109	7.6	242	10.6	30.7	14.9	1.14	1.92
JUL													
14...	1240	70	70	741	10.6	113	8.0	321	17.0	37.4	18.4	1.35	2.39
AUG													
11...	1605	56	70	740	10.6	103	8.0	318	12.8	39.9	20.0	1.31	2.32
SEP													
20...	1135	53	70	751	12.0	115	8.0	334	12.8	40.5	18.8	1.61	2.38
27...	1105	47	70	746	11.9	112	8.0	341	11.6	39.9	19.0	1.54	2.35

04075365 EVERGREEN RIVER BELOW EVERGREEN FALLS, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Iron, water, fltrd, ug/L (01046)	Mercury water fltrd, ng/L (50287)	Mercury suspnd sedimnt total, ng/L (62976)	Methylmercury water fltrd, ng/L (50285)	Methylmercury suspnd sedimnt total, ng/L (62977)
OCT													
08...	167	3.74	8.9	.13	<.04	.78	<.02	<.04	14	.39	.561	.04	.045
NOV													
05...	136	3.92	8.5	.38	.06	.75	<.02	<.04	38	1.11	--	--	.139
19...	149	3.67	8.8	.14	<.04	.82	<.02	<.04	24	.67	--	.06	.044
DEC													
02...	162	3.60	9.5	.13	<.04	.88	<.02	<.04	21	.35	.781	<.04	--
JAN													
08...	188	4.29	10.8	E.08	<.04	1.12	<.02	<.04	15	.36	.584	<.04	--
FEB													
05...	167	3.96	9.4	.10	<.04	1.07	<.02	<.04	19	.34	1.66	<.04	--
MAR													
03...	151	4.76	8.5	.23	E.04	.93	<.02	E.02	18	.40	--	<.04	.179
24...	163	3.62	9.2	E.07	<.04	.98	<.02	<.04	13	.64	1.29	--	.083
31...	98	3.18	7.4	.42	.04	.60	E.01	E.02	64	2.88	2.27	--	.155
APR													
08...	111	2.96	6.3	.33	<.04	.61	<.02	<.04	56	2.56	1.60	--	.088
MAY													
04...	154	3.72	8.4	.14	<.04	.72	<.02	<.04	19	--	--	--	--
24...	97	2.77	5.8	.51	<.04	.32	<.02	<.04	101	4.60	--	.12	--
JUN													
02...	121	2.86	6.5	.37	<.04	.50	<.02	<.04	70	--	--	--	--
JUL													
14...	161	3.77	8.4	.17	<.04	.66	<.02	<.04	21	--	--	.08	--
AUG													
11...	165	3.42	8.4	.11	<.04	.75	<.02	<.04	20	--	--	--	--
SEP													
20...	164	3.38	8.0	.13	<.04	.68	<.02	<.04	22	--	--	--	--
27...	167	3.36	8.1	.10	<.04	.73	<.02	<.04	20	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Suspended sediment concentration mg/L (80154)
OCT	
08...	22
NOV	
05...	23
19...	28
DEC	
02...	28
JAN	
08...	23
FEB	
05...	38
MAR	
03...	41
24...	40
31...	38
APR	
08...	33
MAY	
04...	28
24...	50
JUN	
02...	33
JUL	
14...	30
AUG	
11...	28
SEP	
20...	28
27...	28

04077630 RED RIVER, AT MORGAN ROAD, NEAR MORGAN, WI

LOCATION.--Lat 44°53'53", long 88°50'39", in NW ¼ NE ¼ sec.19, T.28 N., R.14 E., Shawano County, Hydrologic Unit 04030202, on left bank 1.7 mi northwest of Morgan, 1.1 mi dowmstream of the confluence with the West Branch of the Red River, and 2.2 mi upstream of Smith Creek.

DRAINAGE AREA.--114 mi^2.

PERIOD OF RECORD.--October 1992 to current year.

REVISED RECORDS.--WDR WI-95-1: 1993(M).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 990 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	101	102	e100	e73	e110	486	152	270	118	100	94
2	100	99	124	e100	e75	e110	412	147	257	114	126	93
3	99	99	e130	e100	e76	e120	363	147	208	114	151	92
4	102	122	e110	e99	e76	e130	320	142	173	136	135	91
5	101	162	e100	e99	e76	e130	279	135	153	149	111	90
6	99	152	e100	e96	e76	e130	255	133	145	175	100	93
7	98	118	e100	e96	e76	e130	260	130	138	223	104	100
8	97	95	101	e95	e76	e120	268	153	132	216	102	98
9	95	e110	101	e95	e76	e120	254	182	147	174	121	94
10	93	e110	102	e93	e75	e130	231	196	181	148	119	96
11	92	e100	e100	e92	e74	e130	209	199	206	135	112	90
12	103	e100	e100	e91	e74	e130	190	179	239	168	114	89
13	107	e100	e100	e89	e74	e130	177	180	274	151	103	88
14	112	98	e100	e89	e73	e130	172	211	359	130	99	89
15	100	107	e100	e88	e72	e130	170	210	320	119	97	106
16	97	103	e110	e87	e72	e120	172	188	273	118	96	126
17	100	102	e110	e85	e73	e120	177	166	291	131	98	114
18	96	114	e100	e85	e75	e120	187	153	349	125	104	104
19	95	120	e100	e82	e76	e120	223	152	308	118	99	96
20	94	116	e99	e79	e80	e120	238	150	260	111	96	93
21	93	110	e99	e78	e82	e120	249	146	181	113	93	94
22	96	110	e99	e78	e83	e120	240	143	170	114	92	90
23	97	120	e97	e78	e84	e130	218	181	162	115	92	90
24	96	126	e95	e76	e90	e130	191	292	171	103	95	88
25	99	110	e95	e75	e93	e140	191	277	160	101	94	89
26	95	e130	e96	e75	e95	e270	200	237	145	101	96	90
27	94	125	e98	e76	e97	e480	190	194	137	100	100	89
28	99	114	e100	e77	e98	e600	225	183	134	98	104	90
29	108	109	e110	e75	e100	835	195	165	129	97	100	87
30	107	107	e110	e75	---	796	158	168	124	99	96	86
31	104	---	e100	e74	---	603	---	259	---	99	95	---
TOTAL	3,075	3,389	3,188	2,677	2,320	6,704	7,100	5,550	6,196	4,013	3,244	2,829
MEAN	99.2	113	103	86.4	80.0	216	237	179	207	129	105	94.3
MAX	112	162	130	100	100	835	486	292	359	223	151	126
MIN	92	95	95	74	72	110	158	130	124	97	92	86
CFSM	0.87	0.99	0.90	0.76	0.70	1.90	2.08	1.57	1.81	1.14	0.92	0.83
IN.	1.00	1.11	1.04	0.87	0.76	2.19	2.32	1.81	2.02	1.31	1.06	0.92

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2004, BY WATER YEAR (WY)

MEAN	124	127	106	92.0	95.4	134	211	165	168	126	121	113
MAX	175	221	164	126	124	216	331	254	313	217	209	160
(WY)	(1996)	(1993)	(1993)	(1993)	(1998)	(2004)	(1996)	(1993)	(1996)	(1996)	(1995)	(1993)
MIN	79.6	84.6	73.7	63.5	65.4	97.7	111	106	97.0	78.8	86.6	72.7
(WY)	(2000)	(2000)	(1999)	(1999)	(2003)	(2001)	(2000)	(2000)	(1999)	(1995)	(1999)	(1999)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1993 - 2004	
ANNUAL TOTAL	44,472		50,285			
ANNUAL MEAN	122		137		132	
HIGHEST ANNUAL MEAN					184	1996
LOWEST ANNUAL MEAN					104	1999
HIGHEST DAILY MEAN	(a)600	Apr 17	835	Mar 29	952	Jun 18, 1996
LOWEST DAILY MEAN	(b)56	Jan 26	(b)72	Feb 15	(b)56	(c)Jan 11, 1999
ANNUAL SEVEN-DAY MINIMUM	(b)57	Jan 21	(b)73	Feb 11	(b)57	Jan 21, 2003
MAXIMUM PEAK FLOW			(d)920	Mar 29	1,060	Jun 18, 1996
MAXIMUM PEAK STAGE			(b)8.69	Mar 28	8.88	Jun 18, 1996
INSTANTANEOUS LOW FLOW					(f)31	Dec 13, 1997
ANNUAL RUNOFF (CFSM)	1.07		1.21		1.16	
ANNUAL RUNOFF (INCHES)	14.51		16.41		15.72	
10 PERCENT EXCEEDS	190		223		207	
50 PERCENT EXCEEDS	103		107		110	
90 PERCENT EXCEEDS	70		85		80	

(a) Estimated
(b) Ice affected
(c) Also occurred Jan. 26, 2003
(d) Gage height, 8.61 ft
(e) Estimated due to ice effect or missing record
(f) Result of freezeup

04077630 RED RIVER AT MORGAN ROAD NEAR MORGAN, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: March to September 2004.

INSTRUMENTATION.--Continuous water temperature recorder since March 2004. Sensor located 15 ft stream-ward from left edge of water.

REMARKS.--Records represent water temperature at sensor within 0.5°C.

EXTREMES FOR CURRENT PERIOD.--
WATER TEMPERATURE: Maximum, 23.5°C, June 8; minimum, 0.5°C, March 28 and 29.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	4.8	1.0	3.0	12.3	8.1	10.0
2	---	---	---	---	---	---	6.0	1.7	4.0	10.7	8.0	9.0
3	---	---	---	---	---	---	4.5	3.0	3.5	11.6	5.4	8.5
4	---	---	---	---	---	---	5.5	1.8	3.5	14.5	8.4	11.5
5	---	---	---	---	---	---	6.2	2.2	4.5	12.5	9.2	11.0
6	---	---	---	---	---	---	9.1	4.3	6.5	13.8	9.1	11.5
7	---	---	---	---	---	---	8.5	5.2	7.0	13.7	10.0	12.0
8	---	---	---	---	---	---	7.7	5.7	6.5	11.9	9.2	10.0
9	---	---	---	---	---	---	7.8	4.2	6.0	10.9	8.8	9.5
10	---	---	---	---	---	---	6.5	4.9	5.5	14.0	10.5	12.0
11	---	---	---	---	---	---	5.0	3.5	4.5	15.2	11.3	13.5
12	---	---	---	---	---	---	4.4	2.2	3.5	19.0	13.6	16.0
13	---	---	---	---	---	---	7.6	2.0	4.5	17.2	15.4	16.5
14	---	---	---	---	---	---	9.0	5.1	7.0	15.4	10.8	13.0
15	---	---	---	---	---	---	9.9	6.0	8.0	13.9	8.7	11.5
16	---	---	---	---	---	---	12.9	7.9	10.5	16.0	11.2	13.5
17	---	---	---	---	---	---	14.7	10.4	12.5	15.5	13.2	14.5
18	---	---	---	---	---	---	13.4	10.7	12.0	17.6	12.8	15.0
19	---	---	---	---	---	---	13.2	11.3	12.5	17.5	13.0	15.5
20	---	---	---	---	---	---	11.3	8.1	9.0	20.3	15.2	17.5
21	---	---	---	---	---	---	8.1	7.1	7.5	18.7	13.2	15.0
22	---	---	---	---	---	---	9.7	6.1	8.0	13.6	11.7	12.5
23	---	---	---	---	---	---	9.9	6.3	8.0	13.4	10.7	12.0
24	---	---	---	0.6	0.5	0.5	9.7	6.8	8.5	12.3	9.8	11.0
25	---	---	---	0.6	0.4	0.5	8.4	6.7	7.5	12.6	10.6	11.5
26	---	---	---	0.5	0.4	0.5	7.8	5.6	6.5	15.4	10.4	13.0
27	---	---	---	0.5	0.4	0.5	8.5	4.3	6.5	15.3	12.2	13.5
28	---	---	---	0.5	0.3	0.5	13.9	6.8	10.0	16.0	11.1	13.5
29	---	---	---	0.8	0.3	0.5	14.0	11.7	13.0	14.3	11.6	12.5
30	---	---	---	1.2	0.4	1.0	12.6	9.3	10.5	11.9	10.8	11.5
31	---	---	---	3.4	0.8	2.0	---	---	---	13.9	11.6	12.5
MONTH	---	---	---	3.4	0.3	0.8	14.7	1.0	7.3	20.3	5.4	12.6

04077630 RED RIVER AT MORGAN ROAD NEAR MORGAN, WI—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	14.3	12.5	13.5	21.8	17.2	19.5	22.2	18.6	20.5	18.5	15.8	17.0
2	16.0	12.4	14.5	21.1	17.0	19.0	21.1	18.9	20.0	20.3	17.1	18.5
3	17.8	12.7	15.0	19.8	17.0	18.0	20.8	18.4	19.5	20.6	17.9	19.5
4	18.0	13.3	16.0	18.2	16.8	17.5	20.9	18.0	19.5	20.6	17.7	19.5
5	16.6	14.1	15.5	19.4	16.4	18.0	20.0	16.6	18.5	20.0	17.9	19.0
6	19.1	14.2	16.5	18.3	14.4	15.5	19.9	15.8	18.0	20.5	18.7	19.5
7	21.7	16.4	19.0	15.2	13.6	14.5	18.7	16.2	17.5	18.7	16.1	17.0
8	23.4	19.1	21.0	15.5	13.2	14.5	18.2	16.1	17.5	17.0	14.6	16.0
9	22.1	16.5	19.0	16.1	13.9	15.0	19.8	16.9	18.5	16.8	14.1	15.5
10	16.5	14.1	14.5	19.6	14.3	17.0	18.8	16.4	17.5	17.7	14.0	16.0
11	14.1	12.8	13.0	18.8	16.7	18.0	16.4	14.4	15.0	18.8	16.1	17.5
12	17.5	12.5	14.5	20.2	16.8	18.5	16.7	13.1	15.0	19.8	16.6	18.5
13	18.1	15.9	17.0	21.3	18.0	19.5	15.6	13.2	14.5	19.4	16.8	18.5
14	18.1	15.4	16.5	21.7	18.0	20.0	17.3	13.0	15.0	19.0	17.5	18.5
15	19.1	15.4	17.0	21.4	17.7	19.5	17.3	13.7	16.0	19.1	18.0	18.5
16	19.9	16.1	18.0	20.6	18.4	19.5	17.0	14.5	15.5	18.2	15.7	17.0
17	19.3	17.3	18.5	21.2	17.7	19.5	17.2	14.6	16.0	15.9	13.3	14.5
18	18.6	16.8	17.5	20.4	17.1	19.0	18.0	14.8	16.5	16.7	13.5	15.0
19	17.4	14.6	16.0	22.1	17.6	20.0	17.1	13.8	15.5	16.4	13.9	15.5
20	17.4	14.0	16.0	23.3	19.6	21.5	17.1	13.6	15.5	17.4	14.2	16.0
21	17.6	15.1	16.5	22.3	20.4	21.5	16.3	12.6	14.5	17.3	14.0	16.0
22	17.9	14.4	16.0	22.9	19.7	21.5	17.5	13.2	15.5	18.0	14.8	16.5
23	18.2	14.3	16.5	21.6	18.1	20.0	18.9	16.0	17.5	17.5	14.7	16.5
24	16.7	13.8	15.5	20.0	16.9	18.5	17.6	16.0	16.5	17.0	14.7	15.5
25	15.7	12.3	14.0	19.9	15.7	18.0	17.7	16.3	17.0	16.7	14.0	15.0
26	16.2	12.5	14.5	20.6	16.1	18.5	20.4	17.1	18.5	15.8	12.8	14.5
27	15.1	12.7	14.0	21.7	17.7	20.0	21.7	18.6	20.0	15.1	12.6	14.0
28	17.5	12.2	15.0	21.8	18.1	20.0	20.1	16.4	18.0	14.9	12.7	14.0
29	19.8	14.5	17.0	20.6	18.5	19.5	16.9	14.3	15.5	13.1	10.2	12.0
30	21.1	16.2	18.5	20.8	17.2	19.0	16.9	14.3	15.5	12.4	9.4	11.0
31	---	---	---	21.6	18.6	20.0	16.9	14.4	16.0	---	---	---
MONTH	23.4	12.2	16.2	23.3	13.2	18.7	22.2	12.6	17.0	20.6	9.4	16.4
YEAR	23.4	0.3	14.1									

0407809265 MIDDLE BRANCH EMBARRASS RIVER NEAR WITTENBERG, WI

LOCATION.--Lat 44°49'31", long 89°07'05", in NW ¼ NW ¼ sec.13, T.27 N., R.11 E., Shawano County, Hydrologic Unit 04030202, on right bank 60 ft upstream from Cardinal Lane, 2.5 mi east of Wittenberg, and 2.5 mi upstream from Wilson Creek.

DRAINAGE AREA.--76.3 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1989 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,118.24 ft above NGVD of 1929 (levels by Wisconsin Department of Transportation).

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Flow affected by pumping for irrigation many times during summer months. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	34	e40	e27	e21	e27	380	76	227	51	33	28
2	33	33	e38	e26	e22	e28	276	70	250	48	37	28
3	33	33	e35	e24	e22	e29	253	64	208	48	41	29
4	35	44	e32	e22	e21	e30	224	61	134	78	42	30
5	35	67	31	e22	e21	e31	185	57	92	104	37	29
6	33	74	31	e22	e22	e31	154	56	78	124	34	29
7	32	55	30	e22	e22	e32	154	54	71	179	33	30
8	31	e41	31	e22	e21	e32	162	59	64	179	34	30
9	30	e37	32	e22	e21	e33	156	82	93	108	35	29
10	29	36	34	e22	e21	e33	137	99	139	79	42	28
11	29	36	e29	e22	e20	e33	117	114	164	68	39	27
12	32	37	e29	e22	e20	e32	99	94	209	80	36	27
13	38	39	e28	e21	e20	e31	87	92	258	79	35	27
14	39	30	e27	e21	e19	e31	81	102	299	63	34	27
15	35	38	e27	e20	e19	e31	79	111	274	55	33	31
16	33	35	e28	e20	e18	e31	81	96	187	52	33	34
17	31	35	e28	e21	e19	e31	89	78	152	53	33	36
18	31	38	e28	e21	e20	e32	98	68	254	51	33	32
19	31	46	e27	e21	e20	e32	130	62	342	46	31	30
20	31	51	e28	e20	e20	e33	155	59	223	44	31	28
21	30	45	e26	e21	e20	e32	168	60	111	43	30	28
22	30	42	e26	e20	e20	e31	159	60	90	42	30	27
23	31	46	e26	e22	e21	e32	143	88	91	40	29	27
24	31	e55	e25	e22	e23	e34	112	193	88	39	29	28
25	31	e53	e23	e23	e24	e49	102	223	81	37	29	27
26	31	e51	e23	e23	e24	e160	109	187	70	36	29	27
27	30	50	e24	e23	e25	355	103	118	64	36	29	27
28	32	44	e27	e23	e25	493	92	111	61	35	29	27
29	35	41	e33	e22	e26	773	86	95	58	34	29	27
30	37	36	e34	e21	---	747	80	102	54	34	29	27
31	36	---	e30	e21	---	524	---	180	---	33	28	---
TOTAL	1,010	1,302	910	681	617	3,853	4,251	2,971	4,486	1,998	1,026	861
MEAN	32.6	43.4	29.4	22.0	21.3	124	142	95.8	150	64.5	33.1	28.7
MAX	39	74	40	27	26	773	380	223	342	179	42	36
MIN	29	30	23	20	18	27	79	54	54	33	28	27
CFSM	0.43	0.57	0.38	0.29	0.28	1.63	1.86	1.26	1.96	0.84	0.43	0.38
IN.	0.49	0.63	0.44	0.33	0.30	1.88	2.07	1.45	2.19	0.97	0.50	0.42

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2004, BY WATER YEAR (WY)

MEAN	51.9	52.5	36.1	27.4	30.4	69.4	139	95.1	93.9	49.2	45.1	48.8
MAX	107	128	73.3	45.7	44.1	124	241	167	222	96.3	100	97.9
(WY)	(2003)	(1993)	(1993)	(1996)	(1998)	(2004)	(1996)	(1993)	(1993)	(1996)	(1995)	(1992)
MIN	23.2	27.2	13.5	15.4	17.3	35.9	40.4	46.7	31.6	21.9	25.1	23.4
(WY)	(1990)	(1990)	(1990)	(2000)	(2003)	(2001)	(1990)	(1998)	(1995)	(1995)	(1998)	(1999)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1990 - 2004	
ANNUAL TOTAL	20,576		23,966			
ANNUAL MEAN	56.4		65.5		61.6	
HIGHEST ANNUAL MEAN					100	1993
LOWEST ANNUAL MEAN					43.0	1999
HIGHEST DAILY MEAN	537	Apr 18	773	Mar 29	773	Mar 29, 2004
LOWEST DAILY MEAN	(a)15	Feb 7	(a)18	Feb 16	(a)11	Dec 22, 23,1989
ANNUAL SEVEN-DAY MINIMUM	(a)16	(b)Feb 6	(a)19	(b)Feb 11	(a)12	Dec 17, 1989
MAXIMUM PEAK FLOW			878	Mar 29	905	Jun 19, 1996
MAXIMUM PEAK STAGE			(c)5.20	Mar 29	(c)5.20	Mar 29, 2004
ANNUAL RUNOFF (CFSM)	0.739		0.858		0.807	
ANNUAL RUNOFF (INCHES)	10.03		11.68		10.97	
10 PERCENT EXCEEDS	110		153		123	
50 PERCENT EXCEEDS	33		34		40	
90 PERCENT EXCEEDS	18		22		22	

(a) Ice affected
(b) Also occurred additional days
(c) Recorded gage height 5.20 ft, result of drawdown; outside crest-gage peak 5.40 ft
(e) Estimated due to ice effect or missing record

0407809265 MIDDLE BRANCH EMBARRASS RIVER NEAR WITTENBERG, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: December 1989 to current year.

INSTRUMENTATION.--Continuous water temperature recorder since December 1989. Sensor located at midstream.

REMARKS.--Records represent water temperature at sensor within 0.5°C.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum, 31.0°C, Aug. 7, 8, 2001; minimum, 0.0°C, on many days during winter.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 25.5°C, July 7; minimum, 0.0°C, many days in winter.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	9.3	6.5	8.0	6.6	4.8	5.5	0.7	0.0	0.0	0.2	0.0	0.0
2	9.0	5.4	7.0	6.0	5.1	5.5	0.4	0.0	0.0	0.1	0.0	0.0
3	9.0	6.9	7.5	5.5	3.3	4.0	0.3	0.0	0.0	0.3	0.0	0.0
4	8.9	5.6	7.0	4.1	3.3	3.5	1.4	0.0	0.5	0.0	0.0	0.0
5	9.3	5.1	7.0	3.5	2.2	3.0	1.9	0.2	1.0	0.2	0.0	0.0
6	10.0	5.3	7.5	2.5	0.8	1.5	1.7	0.0	1.0	0.1	0.0	0.0
7	11.0	6.2	8.5	1.1	0.0	0.5	1.9	0.0	1.0	0.3	0.0	0.0
8	12.8	8.2	10.5	0.3	0.0	0.0	2.3	0.9	1.5	0.1	0.0	0.0
9	13.5	9.2	11.0	0.7	0.0	0.5	1.8	0.9	1.5	0.2	0.0	0.0
10	14.6	10.1	12.0	2.2	0.3	1.5	0.9	0.0	0.0	0.4	0.0	0.0
11	15.3	11.3	13.0	3.7	0.8	2.0	0.2	0.0	0.0	0.0	0.0	0.0
12	14.0	11.2	12.5	2.5	0.4	1.5	0.3	0.0	0.0	0.0	0.0	0.0
13	13.6	11.2	12.5	1.5	0.0	0.5	0.4	0.0	0.0	0.3	0.0	0.0
14	12.9	9.8	11.5	3.0	0.1	1.5	0.1	0.0	0.0	0.2	0.0	0.0
15	11.3	8.5	10.0	3.0	2.1	2.5	0.0	0.0	0.0	0.1	0.0	0.0
16	10.1	7.0	8.5	3.4	2.2	2.5	0.0	0.0	0.0	0.0	0.0	0.0
17	9.8	6.6	8.0	4.2	1.7	3.0	0.0	0.0	0.0	0.1	0.0	0.0
18	10.7	7.0	9.0	4.9	2.8	4.0	0.1	0.0	0.0	0.2	0.0	0.0
19	10.7	6.9	8.5	4.4	2.4	3.5	0.2	0.0	0.0	0.3	0.0	0.0
20	12.2	7.3	9.5	5.5	2.5	4.0	0.2	0.0	0.0	0.4	0.0	0.0
21	11.3	8.9	10.0	3.8	2.6	3.0	0.4	0.0	0.0	0.1	0.0	0.0
22	8.9	6.9	8.0	2.6	2.0	2.5	0.3	0.0	0.0	0.2	0.0	0.0
23	9.1	7.4	8.0	2.4	1.3	2.0	0.0	0.0	0.0	0.0	0.0	0.0
24	8.0	6.0	7.0	1.3	0.0	0.0	0.3	0.0	0.0	0.4	0.0	0.0
25	8.7	6.1	7.0	0.2	0.0	0.0	0.4	0.0	0.0	0.2	0.0	0.0
26	6.9	5.0	6.0	0.8	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
27	7.2	4.4	5.5	1.4	0.3	1.0	0.1	0.0	0.0	0.3	0.0	0.0
28	6.7	4.3	5.5	1.1	0.1	0.5	0.4	0.0	0.0	0.3	0.0	0.0
29	5.9	4.7	5.0	0.9	0.0	0.5	0.1	0.0	0.0	0.4	0.0	0.0
30	6.9	4.7	5.5	1.8	0.0	0.5	0.3	0.0	0.0	0.3	0.0	0.0
31	6.8	5.7	6.0	---	---	---	0.2	0.0	0.0	0.5	0.0	0.0
MONTH	15.3	4.3	8.5	6.6	0.0	2.0	2.3	0.0	0.2	0.5	0.0	0.0

0407809265 MIDDLE BRANCH EMBARRASS RIVER NEAR WITTENBERG, WI—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	0.0	0.0	0.0	0.0	0.0	0.0	2.9	1.0	2.0	14.4	9.8	11.5
2	0.0	0.0	0.0	0.1	0.0	0.0	4.0	2.4	3.0	12.1	8.8	10.5
3	0.3	0.0	0.0	0.1	0.0	0.0	3.9	2.4	3.5	13.9	7.4	10.0
4	0.5	0.0	0.0	0.4	0.0	0.0	3.8	2.1	3.0	15.7	8.9	11.5
5	0.1	0.0	0.0	0.1	0.0	0.0	5.4	3.1	4.0	13.7	9.5	11.5
6	0.1	0.0	0.0	0.2	0.0	0.0	7.8	4.2	6.0	16.5	10.7	13.0
7	0.4	0.0	0.0	0.0	0.0	0.0	8.2	5.2	6.5	15.6	10.6	12.5
8	0.3	0.0	0.0	0.4	0.0	0.0	6.9	5.6	6.5	12.0	10.8	11.5
9	0.0	0.0	0.0	0.5	0.0	0.0	7.4	4.6	6.0	11.9	10.3	11.0
10	0.2	0.0	0.0	0.3	0.0	0.0	6.7	5.1	6.0	14.2	10.9	12.5
11	0.0	0.0	0.0	0.0	0.0	0.0	5.9	3.9	5.0	15.8	11.7	13.5
12	0.4	0.0	0.0	0.2	0.0	0.0	5.3	3.1	4.0	18.0	14.2	16.0
13	0.3	0.0	0.0	0.2	0.0	0.0	8.1	2.7	5.0	17.7	16.5	17.0
14	0.3	0.0	0.0	0.0	0.0	0.0	8.7	5.0	7.0	16.5	12.7	15.0
15	0.5	0.0	0.0	0.4	0.0	0.0	10.6	6.0	8.0	15.3	11.0	12.5
16	0.4	0.0	0.0	0.3	0.0	0.0	13.3	7.9	10.5	15.7	11.2	13.5
17	0.4	0.0	0.0	0.1	0.0	0.0	14.9	10.1	12.0	16.2	13.4	14.5
18	0.2	0.0	0.0	0.3	0.0	0.0	14.3	11.6	13.0	18.3	13.8	15.5
19	0.2	0.0	0.0	0.6	0.0	0.0	13.5	11.4	13.0	19.1	13.3	16.0
20	0.0	0.0	0.0	0.3	0.0	0.0	11.4	8.6	10.0	21.7	15.9	18.5
21	0.2	0.0	0.0	0.3	0.0	0.0	8.6	7.2	8.0	17.8	15.0	16.5
22	0.4	0.0	0.0	0.5	0.0	0.0	9.4	6.4	7.5	15.8	14.0	14.5
23	0.1	0.0	0.0	2.1	0.0	0.5	10.3	7.3	8.5	14.0	12.0	13.0
24	0.1	0.0	0.0	2.3	0.0	1.0	10.3	7.3	8.5	12.0	11.0	11.5
25	0.6	0.0	0.0	2.2	0.2	1.0	8.5	6.8	8.0	12.6	11.1	11.5
26	0.8	0.0	0.0	1.7	0.0	0.5	7.9	5.9	7.0	14.8	11.1	12.5
27	0.6	0.0	0.0	0.7	0.0	0.5	9.0	4.9	7.0	15.8	12.7	14.0
28	0.6	0.0	0.0	0.8	0.2	0.5	12.5	6.8	9.0	16.2	12.4	14.5
29	0.6	0.0	0.0	1.4	0.0	0.5	14.7	10.1	12.5	13.8	12.6	13.0
30	---	---	---	0.9	0.1	0.5	12.4	10.9	12.0	12.8	11.9	12.0
31	---	---	---	1.9	0.0	1.0	---	---	---	13.9	11.9	13.0
MONTH	0.8	0.0	0.0	2.3	0.0	0.2	14.9	1.0	7.4	21.7	7.4	13.3
		JUNE			JULY			AUGUST			SEPTEMBER	
1	15.0	13.4	14.0	23.9	18.4	20.5	25.3	19.9	22.0	21.3	16.7	18.5
2	16.7	13.7	15.0	24.0	18.2	20.5	23.0	19.9	21.0	22.6	17.5	19.5
3	16.7	14.5	15.5	21.1	18.6	20.0	23.5	20.2	21.5	23.3	17.8	20.0
4	19.0	14.9	16.5	20.7	18.8	19.5	23.3	19.1	21.0	23.4	18.2	20.5
5	17.5	15.3	16.5	19.5	17.5	18.5	23.3	17.5	20.0	22.8	18.7	20.5
6	19.7	15.5	17.5	17.7	15.8	16.5	23.3	16.8	19.5	21.7	19.2	20.5
7	21.0	16.2	18.5	15.8	14.3	15.0	20.1	17.0	18.5	20.3	17.3	18.5
8	23.9	18.9	21.0	15.4	13.8	14.5	21.0	17.5	19.0	19.5	15.9	17.5
9	21.5	18.0	20.0	15.7	14.1	15.0	21.4	17.9	19.5	19.9	14.6	17.0
10	18.0	14.9	16.5	19.3	14.6	16.5	19.1	16.7	18.5	20.6	14.7	17.5
11	14.9	13.3	14.0	18.5	16.1	17.5	17.1	15.0	16.0	21.7	16.8	19.0
12	15.5	12.9	14.0	21.6	17.7	19.0	18.8	13.9	16.0	22.2	17.3	19.5
13	18.0	15.3	17.0	22.0	18.4	20.0	18.5	13.2	15.5	22.0	17.0	19.5
14	18.8	16.9	17.5	23.1	18.9	20.5	19.8	13.0	16.0	21.3	18.4	20.0
15	18.5	17.0	17.5	23.9	18.6	21.0	20.0	13.5	16.5	20.8	18.0	19.5
16	19.7	17.7	18.5	22.4	19.4	20.5	17.6	14.8	16.0	19.4	16.0	17.5
17	20.5	18.0	19.0	23.2	18.8	20.5	19.5	15.9	17.0	18.2	14.8	16.5
18	19.3	17.3	18.5	22.8	18.0	20.0	20.0	15.2	17.5	19.0	14.9	16.5
19	17.4	16.0	17.0	24.2	18.4	21.0	19.8	14.5	17.0	18.8	14.9	16.5
20	17.5	15.2	16.5	25.6	19.5	22.0	19.7	14.9	17.0	19.7	15.2	17.0
21	17.6	15.7	16.5	23.6	20.4	22.0	19.6	13.2	16.0	20.1	14.6	17.0
22	18.6	15.5	17.0	25.3	20.9	22.5	20.4	14.6	17.0	20.4	15.4	17.5
23	19.5	15.6	17.0	24.0	19.4	21.5	19.9	16.6	18.0	20.2	15.1	17.5
24	18.0	15.2	16.5	22.4	18.5	20.0	18.3	16.8	17.5	17.4	16.1	16.5
25	17.2	14.3	16.0	23.3	17.1	20.0	19.3	17.3	18.0	18.6	15.0	16.5
26	17.6	13.9	15.5	24.0	17.0	20.0	22.1	17.4	19.5	18.3	13.2	15.5
27	17.0	13.8	15.5	24.4	18.0	20.5	23.5	18.4	20.5	18.0	13.3	15.5
28	18.9	13.7	16.0	24.4	18.5	21.0	20.0	17.6	19.0	16.7	13.1	15.0
29	21.2	15.3	18.0	22.6	19.4	20.5	20.1	15.8	18.0	16.2	11.1	13.5
30	23.1	16.7	19.5	23.9	18.4	21.0	19.9	16.0	17.5	15.5	10.3	13.0
31	---	---	---	24.6	19.4	21.5	19.7	15.3	17.5	---	---	---
MONTH	23.9	12.9	16.9	25.6	13.8	19.6	25.3	13.0	18.2	23.4	10.3	17.6
YEAR	25.6	0.0	8.7									

04078500 EMBARRASS RIVER NEAR EMBARRASS, WI

LOCATION.--Lat 44°43'29", long 88°44'10", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.18, T.26 N., R.15 E., Shawano County, Hydrologic Unit 04030202, on right bank 40 ft downstream from bridge on county road, 1.3 mi downstream from Mill Creek, and 4.0 mi northwest of Embarrass.

DRAINAGE AREA.--384 mi^2.

PERIOD OF RECORD.--June 1919 to September 1985, December 1993 to current year.

REVISED RECORDS.--WSP 1337: 1920-26(M), 1928, 1929-30(M), 1933-34, 1936-37, 1938(M), 1940. WDR WI-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 803.95 ft above NGVD of 1929. Prior to Aug. 23, 1938, nonrecording gage at same site and datum. Aug. 23, 1938 to May 8, 1984, at site 40 ft upstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Slight diurnal fluctuation caused by powerplants above station. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	177	158	201	e180	e100	e140	1,830	375	998	229	151	133
2	165	156	185	e170	e100	e150	1,400	354	1,020	218	161	134
3	166	157	e180	e170	e100	e150	1,120	310	903	209	198	133
4	160	206	e170	e170	e98	e150	961	294	608	247	213	130
5	176	332	e170	e170	e98	e160	852	263	488	356	190	128
6	166	382	e160	e170	e100	e160	742	270	378	443	167	126
7	159	338	165	e170	e98	e170	682	272	343	673	155	121
8	151	249	163	e170	e100	e170	681	299	308	685	149	122
9	146	e200	164	e160	e100	e170	670	428	324	529	159	128
10	141	e190	e170	e150	e100	e170	623	545	709	380	178	125
11	136	e200	e160	e140	e100	e170	565	584	917	332	185	123
12	136	e190	e180	e140	e98	e170	478	533	1,090	356	176	120
13	157	e190	e180	e130	e100	e160	433	460	1,180	539	165	118
14	169	e190	e180	e130	e100	e160	400	540	1,450	444	156	119
15	161	189	e170	e120	e100	e160	386	566	1,380	333	149	129
16	155	189	e160	e120	e100	e170	382	511	1,080	282	144	143
17	152	189	e160	e120	e100	e160	395	442	848	271	145	177
18	145	198	e160	e120	e110	e170	418	356	646	269	151	164
19	141	229	e160	e120	e110	e170	478	326	598	232	157	149
20	141	246	e160	e110	e110	e170	572	296	640	219	155	136
21	137	242	e160	e110	e110	e170	648	306	497	211	146	128
22	139	226	e160	e110	e110	e170	751	320	395	206	138	125
23	138	e240	e160	e110	e110	e190	655	378	326	196	133	122
24	141	e260	e170	e100	e120	e220	572	791	354	184	132	121
25	143	e260	e170	e98	e120	e330	472	984	319	175	140	119
26	139	266	e170	e98	e130	e930	530	844	309	168	144	121
27	140	270	e170	e96	e130	e1,700	499	640	282	164	156	121
28	143	248	e180	e97	e130	2,580	450	466	257	159	145	120
29	149	222	e190	e98	e140	3,630	403	428	260	156	141	117
30	156	214	e190	e98	---	3,740	386	409	250	155	139	117
31	160	---	e180	e98	---	2,680	---	711	---	154	135	---
TOTAL	4,685	6,826	5,298	4,043	3,122	19,590	19,434	14,301	19,157	9,174	4,853	3,869
MEAN	151	228	171	130	108	632	648	461	639	296	157	129
MAX	177	382	201	180	140	3,740	1,830	984	1,450	685	213	177
MIN	136	156	160	96	98	140	382	263	250	154	132	117
CFSM	0.39	0.59	0.45	0.34	0.28	1.65	1.69	1.20	1.66	0.77	0.41	0.34
IN.	0.45	0.66	0.51	0.39	0.30	1.90	1.88	1.39	1.86	0.89	0.47	0.37

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1919 - 2004, BY WATER YEAR (WY)

MEAN	262	283	194	149	157	390	750	441	361	218	188	237
MAX	1,324	932	908	377	517	1,386	1,892	1,324	1,105	826	579	886
(WY)	(1987)	(1986)	(1987)	(1939)	(1986)	(1973)	(1922)	(1973)	(1943)	(1978)	(1928)	(1938)
MIN	86.8	89.5	67.3	52.8	57.8	98.5	151	148	111	75.5	44.5	59.5
(WY)	(1949)	(1934)	(1934)	(1959)	(1959)	(1931)	(1931)	(1931)	(1977)	(1932)	(1931)	(1933)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1919 - 2004	
ANNUAL TOTAL	103,196		114,352			
ANNUAL MEAN	283		312		297	
HIGHEST ANNUAL MEAN					515	1973
LOWEST ANNUAL MEAN					126	1931
HIGHEST DAILY MEAN	2,150	Apr 18	3,740	Mar 30	6,280	Apr 10, 1922
LOWEST DAILY MEAN	(a)83	Feb 5-12	(a)96	Jan 27	24	Aug 3, 1931
ANNUAL SEVEN-DAY MINIMUM	(a)83	Feb 5	(a)98	Jan 25	27	Aug 2, 1931
MAXIMUM PEAK FLOW			4,070	Mar 30	(b)7,080	Apr 12, 1965
MAXIMUM PEAK STAGE			9.72	Mar 30	(b)12.13	Apr 12, 1965
ANNUAL RUNOFF (CFSM)	0.736		0.814		0.774	
ANNUAL RUNOFF (INCHES)	10.00		11.08		10.52	
10 PERCENT EXCEEDS	605		642		620	
50 PERCENT EXCEEDS	174		170		188	
90 PERCENT EXCEEDS	91		117		95	

(a) Ice affected
(b) Affected by failure of dam near Pella, 9.2 mi above station
(e) Estimated due to ice effect or missing record

04079000 WOLF RIVER AT NEW LONDON, WI

LOCATION.--Lat 44°23'32", long 88°44'25", in NE $^1/_4$ SE $^1/_4$ sec.12, T.22 N., R.14 E., Waupaca County, Hydrologic Unit 04030202, on right bank 100 ft downstream from Pearl Street bridge in New London, 0.2 mi downstream from Embarrass River, and at mile 56.3.

DRAINAGE AREA.--2,260 mi^2.

PERIOD OF RECORD.--March 1896 to current year. Prior to October 1913 monthly discharges only, published in WSP 1307.

REVISED RECORDS.--WSP 1114: 1943(M). WSP 1337: 1931. WDR WI-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 747.94 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Oct. 4, 1951, nonrecording gage.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter and data-collection platform at station.

COOPERATION.--Values prior to October 1913 taken from House Document 276, 72nd Congress, First Session (computed by Corps of Engineers).

EXTREMES OUTSIDE OF PERIOD OF RECORD.--Flood of Apr. 16, 1888, reached a stage of 11.6 ft, from information by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,170	986	1,900	e1,500	e740	e1,100	7,830	2,990	4,290	2,780	996	906
2	1,130	1,020	1,750	e1,500	e740	e1,300	8,580	2,890	4,450	2,550	988	897
3	1,100	1,050	1,630	e1,500	e740	e1,400	8,800	2,790	4,480	2,320	1,020	890
4	1,100	1,190	1,500	e1,400	e730	e1,700	8,460	2,680	4,440	2,120	1,050	880
5	1,100	1,360	1,460	e1,300	e730	e1,900	7,820	2,570	4,340	1,980	1,040	872
6	1,100	e1,500	1,470	e1,200	e740	e2,300	7,150	2,460	4,270	1,970	1,060	873
7	1,090	e1,600	1,420	e1,100	e750	e2,700	6,460	2,320	4,170	2,000	1,050	847
8	1,060	e1,600	1,410	e1,000	e740	e3,000	5,910	2,310	4,020	2,070	1,000	810
9	1,030	1,650	1,430	e930	e730	e3,300	5,450	2,450	4,080	2,110	1,020	804
10	998	1,560	e1,400	e890	e730	e3,500	5,080	2,550	3,920	2,110	996	808
11	980	1,470	e1,400	e880	e730	e3,600	4,790	2,610	3,990	2,140	981	819
12	971	1,410	e1,300	e880	e710	e3,500	4,550	2,690	4,180	2,470	964	809
13	955	1,430	e1,200	e850	e700	e3,400	4,340	2,760	4,320	2,340	954	802
14	967	1,420	e1,200	e840	e700	e3,200	4,140	2,870	4,460	2,210	954	802
15	979	1,400	e1,200	e830	e690	e3,100	3,940	2,990	4,640	2,110	947	804
16	1,000	1,360	e1,200	e840	e670	e3,000	3,770	3,060	4,910	1,970	933	823
17	1,030	1,350	e1,300	e820	e670	e2,900	3,600	3,070	5,630	1,820	928	841
18	1,000	1,420	e1,300	e820	e680	e2,800	3,440	3,040	6,090	1,680	928	852
19	972	1,500	e1,300	e810	e680	e2,700	3,310	2,980	6,200	1,580	932	862
20	968	1,570	e1,300	e790	e680	e2,600	3,210	2,970	6,080	1,490	923	876
21	951	1,610	e1,300	e790	e680	e2,500	3,180	2,970	5,770	1,410	917	864
22	933	1,610	e1,300	e770	e680	e2,600	3,170	3,010	5,390	1,350	906	829
23	932	1,750	e1,200	e760	e710	e2,600	3,170	3,130	5,020	1,290	880	805
24	929	2,090	e1,200	e760	e740	e2,600	3,160	3,350	4,710	1,250	868	795
25	930	2,250	e1,100	e760	e800	e2,700	3,160	3,550	4,380	1,210	870	769
26	925	2,280	e1,100	e760	e840	e2,800	3,180	3,720	4,050	1,150	886	749
27	924	2,270	e1,100	e760	e900	3,220	3,190	3,800	3,750	1,100	935	741
28	938	2,160	e1,100	e780	e910	3,600	3,180	3,810	3,490	1,070	973	741
29	947	2,040	e1,200	e780	e1,000	4,170	3,140	3,770	3,250	1,050	970	739
30	951	1,960	e1,300	e760	---	5,200	3,070	3,790	3,010	1,020	943	724
31	972	---	e1,400	e760	---	6,620	---	4,020	---	1,010	921	---
TOTAL	31,032	47,866	41,370	29,120	21,540	91,610	142,230	93,970	135,780	54,730	29,733	24,633
MEAN	1,001	1,596	1,335	939	743	2,955	4,741	3,031	4,526	1,765	959	821
MAX	1,170	2,280	1,900	1,500	1,000	6,620	8,800	4,020	6,200	2,780	1,060	906
MIN	924	986	1,100	760	670	1,100	3,070	2,310	3,010	1,010	868	724
CFSM	0.44	0.71	0.59	0.42	0.33	1.31	2.10	1.34	2.00	0.78	0.42	0.36
IN.	0.51	0.79	0.68	0.48	0.35	1.51	2.34	1.55	2.23	0.90	0.49	0.41

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1896 - 2004, BY WATER YEAR (WY)

MEAN	1,479	1,664	1,238	981	959	2,183	4,132	2,815	2,223	1,469	1,124	1,341
MAX	4,761	4,738	2,892	2,149	2,003	7,566	9,169	7,452	5,764	5,005	2,845	4,544
(WY)	(1987)	(1986)	(1993)	(1960)	(1984)	(1973)	(1922)	(1960)	(1993)	(1993)	(1924)	(1938)
MIN	533	617	555	523	523	679	1,157	901	595	581	443	429
(WY)	(1949)	(1934)	(1934)	(1959)	(1936)	(1964)	(1931)	(1931)	(1988)	(1988)	(1933)	(1933)

04079000 WOLF RIVER AT NEW LONDON, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1896 - 2004	
ANNUAL TOTAL	597,777		743,614			
ANNUAL MEAN	1,638		2,032		1,770	
HIGHEST ANNUAL MEAN					3,200	1973
LOWEST ANNUAL MEAN					866	1931
HIGHEST DAILY MEAN	5,170	Apr 25	8,800	Apr 3	15,500	Apr 13, 1922
LOWEST DAILY MEAN	(a)500	Jan 26-28	(a)670	Feb 16, 17	216	Aug 27, 1931
ANNUAL SEVEN-DAY MINIMUM	(a)507	Jan 23	(a)677	Feb 16	337	Sep 3, 1933
MAXIMUM PEAK FLOW			8,840	Apr 3	(b)15,500	Apr 13, 1922
MAXIMUM PEAK STAGE			9.40	Apr 3	(c)11.83	Apr 3, 1979
ANNUAL RUNOFF (CFSM)	0.725		0.899		0.797	
ANNUAL RUNOFF (INCHES)	9.84		12.24		10.64	
10 PERCENT EXCEEDS	3,330		4,170		3,500	
50 PERCENT EXCEEDS	1,230		1,350		1,280	
90 PERCENT EXCEEDS	620		766		713	

(a) Ice affected
(b) Gage-height, 11.4 ft
(c) Backwater from ice
(e) Estimated due to ice effect or missing record

04082400 FOX RIVER AT OSHKOSH, WI

LOCATION.--Lat 44°00'49", long 88°32'27" in SW ¼ SW ¼ sec.24, T.18 N., R.16 E., Winnebago County, Hydrologic Unit 04030201, on right bank about 400 ft downstream from U.S. Highway 45 and State Highway 26 bridge, at Oshkosh.

DRAINAGE AREA.--5,310 mi^2.

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Water-stage recorder and an acoustical velocity meter (AVM) system. Single-path transducer installation.

REMARKS.--Records fair, except those for estimated daily discharges and days with negative mean daily flow, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,540	8.8	6,130	2,550	2,040	3,090	9,830	e5,300	14,500	8,920	2,190	2,690
2	125	2,600	-234	4,020	2,090	5,020	10,600	e5,200	12,900	9,330	2,460	2,620
3	2,790	-1,310	2,460	5,550	2,230	5,180	14,100	e5,000	12,500	8,170	930	2,150
4	1,790	5,740	2,870	2,630	1,830	5,610	9,800	e4,800	12,300	11,500	3,150	1,870
5	510	5,980	3,250	4,040	2,090	7,100	10,200	e4,800	12,000	7,010	3,340	423
6	2,200	3,880	2,640	1,640	2,150	8,240	11,500	e4,700	12,200	8,960	3,760	4,630
7	2,880	4,940	2,800	2,620	1,970	10,100	10,800	e4,500	11,000	9,960	1,860	2,150
8	2,120	1,040	3,410	2,850	1,800	8,570	11,500	e4,700	11,700	8,170	2,030	513
9	1,190	3,160	3,000	2,790	2,140	8,930	11,600	e5,000	9,830	6,530	5,410	2,960
10	1,370	2,880	5,780	2,610	2,170	9,230	9,920	e5,700	9,210	7,520	4,710	477
11	2,140	3,810	3,670	2,720	2,040	12,200	8,850	e5,800	9,770	7,140	2,230	3,470
12	3,880	8,290	215	2,900	2,140	7,550	9,140	e6,000	15,500	7,850	-2,300	996
13	1,750	3,040	2,300	2,310	1,920	9,340	9,280	e6,000	16,100	8,270	2,120	506
14	3,150	-2,250	2,420	2,600	2,160	11,500	8,500	e6,200	16,000	6,090	1,670	2,840
15	2,740	2,630	2,520	1,990	2,000	8,890	7,010	e6,200	14,700	5,270	2,130	2,060
16	1,420	2,850	3,440	2,160	1,990	8,830	7,790	e6,400	15,400	4,820	2,280	4,470
17	274	-419	2,640	2,780	2,120	9,060	6,620	e6,900	16,800	5,290	2,990	-1,680
18	2,190	6,210	2,800	2,830	2,080	8,960	6,920	7,620	17,200	5,970	4,110	1,750
19	-496	4,480	3,130	1,510	2,210	7,970	10,100	5,780	15,600	5,450	1,270	1,560
20	5,060	2,420	2,290	1,980	2,600	10,800	1,640	7,720	15,200	3,930	2,010	2,430
21	1,050	2,750	2,870	2,270	2,250	7,470	10,800	5,590	14,300	5,170	806	3,290
22	-295	1,720	2,950	1,860	2,020	7,100	5,430	7,280	15,400	4,190	2,640	2,360
23	3,590	7,060	3,190	e1,900	2,360	6,620	7,800	9,710	13,900	3,280	-923	930
24	581	9,200	2,460	1,960	2,290	7,400	3,920	10,800	14,800	1,990	1,390	5,050
25	3,780	1,650	2,130	1,890	2,270	6,930	7,350	8,920	13,100	4,600	3,990	-14
26	4,090	5,420	2,180	2,190	2,350	7,720	8,770	11,100	12,700	4,330	2,780	1,360
27	1,450	6,390	1,940	2,170	2,360	6,270	e6,200	10,200	11,800	3,470	2,560	1,760
28	2,960	8,770	3,320	1,960	2,470	7,380	e5,600	10,000	12,300	2,960	1,260	1,680
29	1,860	2,300	4,080	1,760	2,630	10,600	e5,500	8,190	11,500	3,120	1,900	971
30	-242	7,320	2,920	e1,800	---	9,310	e5,400	5,860	10,700	1,310	3,290	1,150
31	5,340	---	5,000	1,910	---	9,120	---	15,800	---	4,110	1,380	---
TOTAL	63,787	112,559.8	90,571	76,750	62,770	252,090	252,470	217,770	400,910	184,680	69,423	57,422
MEAN	2,058	3,752	2,922	2,476	2,164	8,132	8,416	7,025	13,360	5,957	2,239	1,914
MAX	5,340	9,200	6,130	5,550	2,630	12,200	14,100	15,800	17,200	11,500	5,410	5,050
MIN	-496	-2,250	-234	1,510	1,800	3,090	1,640	4,500	9,210	1,310	-2,300	-1,680
CFSM	0.39	0.71	0.55	0.47	0.41	1.53	1.58	1.32	2.52	1.12	0.42	0.36
IN.	0.45	0.79	0.63	0.54	0.44	1.77	1.77	1.53	2.81	1.29	0.49	0.40

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2004, BY WATER YEAR (WY)

MEAN	3,108	3,828	3,280	2,544	2,775	5,143	7,886	6,454	6,237	4,583	3,149	2,931
MAX	6,411	6,201	6,811	3,673	3,930	8,132	12,870	11,050	13,360	13,440	5,915	5,541
(WY)	(1996)	(1996)	(1993)	(1992)	(1999)	(2004)	(1993)	(1993)	(2004)	(1993)	(1993)	(2000)
MIN	1,875	2,520	2,031	1,855	1,597	3,089	3,928	3,333	2,645	1,939	2,032	1,581
(WY)	(1999)	(1998)	(1999)	(2003)	(2003)	(2003)	(2000)	(1998)	(1994)	(1995)	(1998)	(1998)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1992 - 2004	
ANNUAL TOTAL	1,179,678.8		1,841,202.8			
ANNUAL MEAN	3,232		5,031		4,328	
HIGHEST ANNUAL MEAN					7,221	1993
LOWEST ANNUAL MEAN					3,268	2003
HIGHEST DAILY MEAN	13,300	May 11	17,200	Jun 18	18,600	Jun 25, 1993
LOWEST DAILY MEAN	-2,400	Apr 16	-2,300	Aug 12	-6,270	Nov 1, 1992
ANNUAL SEVEN-DAY MINIMUM	1,240	Aug 22	1,310	Oct 16	511	Oct 23, 1999
ANNUAL RUNOFF (CFSM)	0.609		0.947		0.815	
ANNUAL RUNOFF (INCHES)	8.26		12.90		11.07	
10 PERCENT EXCEEDS	6,430		10,800		8,520	
50 PERCENT EXCEEDS	2,660		3,460		3,480	
90 PERCENT EXCEEDS	1,030		1,390		1,420	

(e) Estimated due to ice effect or missing record

04082500 LAKE WINNEBAGO AT OSHKOSH, WI

LOCATION.--Lat 44°00'35", long 88°31'38", in NE ¼ NE ¼ sec.25, T.18 N., R.16 E., Winnebago County, Hydrologic Unit 04030203, at 905 Bay Shore Drive, 800 ft east of mouth of the upper Fox River.

DRAINAGE AREA.--5,880 mi^2, at lake outlet at Menasha Dam. Area of Lake Winnebago, 215 mi^2.

PERIOD OF RECORD.--October 1938 to current year in reports of Geological Survey. Records from July 1882 to September 1938 in files of Geological Survey and U.S. Army Corps of Engineers. A report on Fox River by U.S. Army Corps of Engineers, published as House Document No. 146, 67th Congress, 2nd session, contains semi-monthly records of inflow of Lake Winnebago for the period 1896-1917.

REVISED RECORD.--WDR WI-83-1: Drainage area.

GAGE.--Water-stage recorder. Nonrecording gage read once daily October 1938 to October 1978. Datum of gage is 745.05 ft above mean tide at New York City (levels by U.S. Army Corps of Engineers). Datum of Deuchman gage is 745.00 ft above mean tide at New York City.

REMARKS.--Lake elevations controlled by dams at Menasha and Neenah, which are operated in the interest of navigation. Crests of both dams are at elevation 746.73 ft. Present limits of regulation are from 21 ¼ in. above the crest of Menasha dam to crest during navigation season, plus additional 18 in. below crest during winter. Oshkosh staff gage gives true level of lake, while Deuchman gage readings are affected by loss of head in the channel between lake and dam. Data-collection platform and gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height observed, 5.33 ft (Deuchman gage) Nov. 8, 1881; minimum observed, -2.00 ft (Deuchman gage) Nov. 28, 1891.

EXTREMES FOR CURRENT YEAR.--Maximum daily mean gage height, 3.77 ft, June 19; minimum recorded, 1.48 ft, Apr. 19.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.57	2.46	2.39	2.46	2.08	1.64	2.02	2.23	3.15	3.46	2.97	3.01
2	2.56	2.47	2.44	2.46	2.07	1.71	2.01	2.26	3.23	3.40	2.99	3.01
3	2.52	2.57	2.43	2.46	2.07	1.74	2.00	2.29	3.22	3.34	3.02	3.01
4	2.57	2.58	2.44	2.49	2.05	1.74	2.10	2.26	3.21	3.27	3.04	3.00
5	2.57	2.57	2.45	2.48	2.02	1.87	2.11	2.36	3.19	3.28	3.01	2.99
6	2.54	2.54	2.46	2.47	2.03	1.94	2.11	2.36	3.17	3.20	2.98	2.95
7	2.53	2.47	2.45	2.46	2.01	1.97	2.13	2.42	3.15	3.13	2.99	3.00
8	2.53	2.48	2.45	2.44	1.99	2.00	2.13	2.54	3.12	3.08	2.97	3.01
9	2.52	2.44	2.47	2.43	1.97	2.00	2.13	2.69	3.16	3.06	2.94	2.98
10	2.52	2.44	2.53	2.43	1.95	2.01	2.17	2.75	3.19	3.00	2.95	2.95
11	2.49	2.46	2.52	2.41	1.94	2.04	2.17	2.78	3.46	2.95	2.94	2.93
12	2.51	2.37	2.56	2.40	1.92	2.06	2.13	2.77	3.55	2.90	2.96	2.95
13	2.51	2.49	2.52	2.39	1.90	2.05	2.10	2.82	3.62	2.89	2.93	2.94
14	2.54	2.52	2.50	2.37	1.88	2.08	2.08	2.87	3.68	2.93	2.93	2.91
15	2.51	2.51	2.48	2.36	1.86	2.09	2.06	2.89	3.72	2.95	2.92	2.88
16	2.50	2.52	2.47	2.35	1.84	2.08	2.02	2.84	3.71	2.95	2.90	2.90
17	2.48	2.53	2.47	2.35	1.82	2.07	2.01	2.79	3.76	2.96	2.93	2.92
18	2.46	2.54	2.46	2.35	1.80	2.07	1.98	2.82	3.76	2.93	2.92	2.89
19	2.47	2.56	2.45	2.32	1.77	2.07	1.90	2.79	3.77	2.91	2.93	2.87
20	2.43	2.56	2.44	2.30	1.77	2.05	2.02	2.81	3.75	2.92	2.92	2.84
21	2.49	2.58	2.43	2.28	1.77	2.06	1.90	2.87	3.75	2.91	2.92	2.82
22	2.48	2.59	2.42	2.26	1.75	2.02	1.98	2.88	3.73	2.94	2.87	2.84
23	2.46	2.66	2.42	2.25	1.75	1.99	1.96	3.02	3.72	2.94	2.92	2.83
24	2.46	2.63	2.43	2.24	1.73	1.97	2.03	3.07	3.69	2.93	2.89	2.78
25	2.46	2.66	2.43	2.22	1.70	1.96	1.99	3.06	3.68	2.90	2.89	2.81
26	2.45	2.64	2.42	2.21	1.67	1.96	1.95	3.03	3.65	2.90	2.91	2.80
27	2.45	2.60	2.41	2.19	1.65	1.95	2.05	3.01	3.63	2.91	3.01	2.80
28	2.40	2.53	2.43	2.17	1.63	1.94	2.07	2.99	3.59	2.90	3.05	2.81
29	2.43	2.53	2.44	2.15	1.62	1.97	2.11	2.96	3.54	2.90	3.03	2.77
30	2.45	2.44	2.46	2.13	---	2.02	2.19	2.98	3.50	2.94	2.99	2.76
31	2.43	---	2.45	2.10	---	2.02	---	3.00	---	2.94	3.01	---
MEAN	2.49	2.53	2.46	2.33	1.86	1.97	2.05	2.75	3.50	3.02	2.96	2.90
MAX	2.57	2.66	2.56	2.49	2.08	2.09	2.19	3.07	3.77	3.46	3.05	3.01
MIN	2.40	2.37	2.39	2.10	1.62	1.64	1.90	2.23	3.12	2.89	2.87	2.76

04084255 LAKE WINNEBAGO NEAR STOCKBRIDGE, WI

LOCATION.--Lat 44°04'17", long 88°19'52", Stockbridge Indian Reservation, Calumet County, Hydrologic Unit 04030203, on east shore of Lake Winnebago, 300 ft south of County Highway E and 1.6 mi west of Stockbridge.

DRAINAGE AREA.--5,880 mi^2, at lake outlet at Menasha Dam. Area of Lake Winnebago, 215 mi^2.

PERIOD OF RECORD.--November 1982 to current year.

GAGE.--Water-stage recorder. Datum of gage is 745.05 ft above mean tide of New York City (levels by U. S. Army Corps of Engineers).

REMARKS.--Lake elevations controlled by dams at Menasha and Neenah, which are operated in the interest of navigation. Crests of both dams are at elevation 746.73 ft. Present limits of regulation are from 21 $\frac{1}{4}$ in. above the crest of Menasha dam to crest during navigation season, plus additional 18 in. below crest during winter. Data-collection platform and gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily mean gage height, 3.85 ft, July 9, 11, 1993; minimum observed, 0.30 ft, Mar. 1, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum daily mean gage height, 3.81 ft, June 20; minimum recorded, 1.55 ft, Mar. 1.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.57	2.41	2.55	2.40	2.03	1.59	1.93	2.15	3.16	3.42	2.97	2.98
2	2.54	2.40	2.40	2.41	2.01	1.67	1.95	2.16	3.17	3.33	2.99	2.98
3	2.60	2.36	2.37	2.45	2.02	1.69	1.95	2.24	3.18	3.27	2.95	2.98
4	2.53	2.52	2.38	2.42	1.99	1.69	2.02	2.28	3.17	3.27	2.92	2.98
5	2.49	2.60	2.37	2.46	1.97	1.84	2.04	2.29	3.16	3.19	2.93	2.97
6	2.48	2.57	2.39	2.44	1.98	1.90	2.06	2.31	3.14	3.16	2.96	3.03
7	2.48	2.53	2.39	2.41	1.97	1.96	2.08	2.25	3.15	3.13	2.97	3.00
8	2.48	2.43	2.40	2.39	1.93	1.96	2.07	2.45	3.12	3.10	2.96	2.91
9	2.46	2.43	2.40	2.38	1.92	1.96	2.10	2.63	3.08	3.02	3.01	2.93
10	2.46	2.41	2.44	2.37	1.90	1.96	2.09	2.72	3.06	2.96	3.05	2.94
11	2.46	2.43	2.59	2.36	1.89	2.01	2.06	2.71	3.29	2.91	3.02	2.94
12	2.54	2.52	2.51	2.36	1.87	2.01	2.04	2.73	3.51	2.87	2.90	2.93
13	2.49	2.61	2.46	2.34	1.84	1.99	2.03	2.79	3.60	2.88	2.88	2.91
14	2.48	2.49	2.45	2.32	1.82	2.05	2.02	2.82	3.66	2.91	2.89	2.91
15	2.53	2.45	2.42	2.30	1.81	2.05	1.98	2.83	3.68	2.93	2.88	2.95
16	2.49	2.46	2.44	2.29	1.79	2.03	1.95	2.80	3.69	2.91	2.89	2.94
17	2.46	2.46	2.43	2.30	1.77	2.02	1.93	2.79	3.72	2.87	2.91	2.86
18	2.45	2.49	2.42	2.30	1.74	2.02	2.03	2.75	3.77	2.89	2.95	2.85
19	2.40	2.56	2.41	2.28	1.72	2.01	2.01	2.72	3.76	2.91	2.95	2.83
20	2.42	2.54	2.38	2.25	1.73	2.02	1.85	2.75	3.81	2.89	2.91	2.83
21	2.43	2.49	2.37	2.23	1.73	2.01	1.89	2.73	3.77	2.90	2.89	2.83
22	2.41	2.40	2.37	2.22	1.69	1.97	1.88	2.81	3.76	2.92	2.91	2.82
23	2.41	2.65	2.38	2.20	1.69	1.93	1.91	2.90	3.76	2.88	2.81	2.80
24	2.41	2.89	2.38	2.19	1.67	1.90	1.88	3.04	3.77	2.86	2.82	2.86
25	2.42	2.73	2.38	2.17	1.65	1.89	1.94	3.03	3.72	2.86	2.86	2.81
26	2.45	2.61	2.37	2.15	1.62	1.91	2.05	3.02	3.66	2.86	2.88	2.78
27	2.41	2.56	2.35	2.15	1.60	1.89	2.04	2.97	3.62	2.87	2.99	2.75
28	2.44	2.58	2.37	2.13	1.58	1.89	2.08	2.93	3.61	2.90	2.95	2.68
29	2.44	2.56	2.39	2.10	1.57	1.95	2.12	2.89	3.56	2.92	2.96	2.74
30	2.35	2.49	2.41	2.08	---	1.91	2.10	2.81	3.50	2.91	2.98	2.74
31	2.40	---	2.41	2.06	---	1.92	---	3.02	---	2.94	2.97	---
MEAN	2.46	2.52	2.41	2.29	1.81	1.92	2.00	2.69	3.49	2.99	2.93	2.88
MAX	2.60	2.89	2.59	2.46	2.03	2.05	2.12	3.04	3.81	3.42	3.05	3.03
MIN	2.35	2.36	2.35	2.06	1.57	1.59	1.85	2.15	3.06	2.86	2.81	2.68

04084445 FOX RIVER AT APPLETON, WI

LOCATION.--Lat 44°14'53", long 88°25'23" in NW ¼ SE ¼ sec.34, T.21 N., R.17 E., Outagamie County, Hydrologic Unit 04030204, on left bank at south end of Lutz Park, approximately 2,600 ft upstream of Memorial Drive bridge at Appleton.

DRAINAGE AREA.--5,950 mi^2.

PERIOD OF RECORD.--July 1986 to current year.

GAGE.--Water-stage recorder. Side-looking velocity meter system.

REMARKS.--Records good (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,590	1,720	7,550	3,650	3,510	4,280	10,400	2,290	15,100	14,900	2,040	2,090
2	2,560	1,760	5,590	3,680	3,670	5,370	10,500	2,300	14,800	14,200	2,030	2,110
3	2,820	1,770	3,720	3,830	3,640	6,040	10,100	2,390	14,700	14,100	2,010	2,120
4	2,640	3,850	2,950	3,730	3,590	6,940	10,400	2,520	14,700	14,000	1,890	2,080
5	2,550	6,840	2,930	3,740	3,550	9,570	10,900	2,450	14,600	13,700	1,830	2,110
6	2,570	7,410	3,000	3,560	3,660	11,100	11,000	2,460	14,500	13,700	1,940	2,280
7	2,560	6,340	3,090	3,570	3,580	10,800	11,000	2,410	14,600	12,800	1,960	2,020
8	2,510	4,790	3,110	3,620	3,520	10,600	10,900	2,900	14,500	12,000	2,050	1,860
9	2,500	4,360	3,040	3,600	3,460	10,400	10,900	3,090	14,200	11,900	2,100	1,890
10	2,410	3,710	3,710	3,620	3,430	10,500	11,000	4,500	14,000	11,700	1,990	2,000
11	2,420	2,590	4,310	3,630	3,370	10,600	10,900	6,610	15,400	11,600	1,910	2,020
12	2,570	2,450	4,110	3,620	3,380	10,500	10,800	7,440	16,200	10,400	1,800	1,940
13	2,530	2,350	4,260	3,630	3,400	10,500	10,700	9,210	16,200	7,100	1,800	1,950
14	2,480	2,490	4,250	3,640	3,330	10,700	10,700	10,700	16,300	4,640	1,860	2,020
15	2,440	2,460	4,080	3,590	3,300	10,500	10,700	10,700	16,300	5,300	1,900	2,200
16	2,320	2,440	3,860	3,530	3,320	10,500	10,500	10,800	16,300	5,760	1,940	1,950
17	2,360	2,720	3,800	3,580	3,430	10,600	10,200	10,800	16,600	5,700	2,030	1,830
18	2,410	3,310	3,750	3,530	3,740	10,500	10,400	10,500	16,600	5,740	1,940	1,790
19	2,340	3,550	3,730	3,480	3,780	10,500	10,200	10,400	16,300	5,710	1,900	1,850
20	1,930	4,340	3,720	3,460	3,950	10,500	9,880	10,600	16,500	5,430	1,900	1,890
21	858	4,690	3,710	3,520	3,840	10,500	8,720	11,900	16,600	4,980	1,810	1,840
22	1,370	4,550	3,320	3,460	3,800	10,300	6,750	13,800	16,300	3,690	1,980	1,760
23	1,880	5,740	2,750	3,560	3,790	9,710	5,090	14,500	16,500	3,000	1,780	1,720
24	1,840	7,350	2,630	3,490	3,970	9,090	5,080	15,000	16,300	3,140	1,770	1,760
25	1,840	9,800	2,840	3,390	4,050	9,130	5,240	14,800	16,200	3,150	1,770	1,640
26	1,800	9,350	2,840	3,600	4,030	9,530	5,240	14,500	15,900	3,130	1,890	1,630
27	1,810	8,990	2,850	3,770	4,020	10,300	4,320	14,400	15,800	2,600	2,110	1,610
28	1,940	8,690	3,070	3,690	4,040	10,500	2,450	13,900	15,700	2,110	1,970	1,330
29	1,820	8,760	3,040	3,660	4,040	10,900	2,450	14,000	15,600	1,910	1,930	1,480
30	1,770	8,680	3,240	3,560	---	10,400	2,250	14,000	15,500	1,890	2,070	1,190
31	1,730	---	3,680	3,520	---	10,300	---	14,700	---	1,900	2,060	---
TOTAL	68,168	147,850	112,530	111,510	106,190	301,660	259,670	280,570	468,800	231,880	59,960	55,960
MEAN	2,199	4,928	3,630	3,597	3,662	9,731	8,656	9,051	15,630	7,480	1,934	1,865
MAX	2,820	9,800	7,550	3,830	4,050	11,100	11,000	15,000	16,600	14,900	2,110	2,280
MIN	858	1,720	2,630	3,390	3,300	4,280	2,250	2,290	14,000	1,890	1,770	1,190
CFSM	0.37	0.83	0.61	0.60	0.62	1.64	1.45	1.52	2.63	1.26	0.33	0.31
IN.	0.43	0.92	0.70	0.70	0.66	1.89	1.62	1.75	2.93	1.45	0.37	0.35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2004, BY WATER YEAR (WY)

MEAN	3,748	4,597	4,056	3,686	3,699	5,072	6,492	5,975	6,171	4,039	2,840	3,124
MAX	13,510	7,863	7,509	5,575	5,422	9,731	11,920	11,900	15,630	15,110	6,259	8,899
(WY)	(1987)	(1996)	(1993)	(1987)	(1987)	(2004)	(1993)	(1993)	(2004)	(1993)	(1993)	(1986)
MIN	1,413	2,312	2,541	2,535	1,862	2,445	2,688	2,682	1,243	944	971	1,226
(WY)	(2000)	(2000)	(1990)	(1990)	(2003)	(2000)	(1990)	(1988)	(1988)	(1988)	(1988)	(1988)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1986 - 2004	
ANNUAL TOTAL	1,271,848		2,204,748			
ANNUAL MEAN	3,485		6,024		4,423	
HIGHEST ANNUAL MEAN					8,107	1993
LOWEST ANNUAL MEAN					2,995	1988
HIGHEST DAILY MEAN	9,800	Nov 25	16,600	Jun 17	18,000	Jul 6, 1993
LOWEST DAILY MEAN	858	Oct 21	858	Oct 21	840	Aug 17, 1988
ANNUAL SEVEN-DAY MINIMUM	1,370	Jan 28	1,520	Sep 24	899	Jul 9, 1988
ANNUAL RUNOFF (CFSM)	0.586		1.01		0.743	
ANNUAL RUNOFF (INCHES)	7.95		13.78		10.10	
10 PERCENT EXCEEDS	6,780		14,200		8,660	
50 PERCENT EXCEEDS	2,820		3,680		3,630	
90 PERCENT EXCEEDS	1,700		1,890		1,710	

04084468 GARNERS CREEK AT PARK STREET AT KAUKAUNA, WI

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January to September 2004.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January to August 2004 (discontinued).

INSTRUMENTATION.--Continuous specific conductance recorder from January to September 2004. Sensor located near midstream.

REMARKS.--Records for specific conductance were faulty May 5.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 4,630 µS/cm, Feb. 24, 2004; minimum, 274 µS/cm, May 23, 2004.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 4,630 µS/cm, Feb. 24; minimum, 274 µS/cm, May 23.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	1,380	1,240	1,300
7	---	---	---	---	---	---	---	---	---	1,470	1,380	1,430
8	---	---	---	---	---	---	---	---	---	1,560	1,470	1,520
9	---	---	---	---	---	---	---	---	---	1,550	1,480	1,520
10	---	---	---	---	---	---	---	---	---	1,510	1,440	1,490
11	---	---	---	---	---	---	---	---	---	1,440	1,390	1,420
12	---	---	---	---	---	---	---	---	---	1,390	1,350	1,370
13	---	---	---	---	---	---	---	---	---	1,480	1,350	1,430
14	---	---	---	---	---	---	---	---	---	1,570	1,440	1,520
15	---	---	---	---	---	---	---	---	---	1,460	1,370	1,410
16	---	---	---	---	---	---	---	---	---	1,370	1,360	1,370
17	---	---	---	---	---	---	---	---	---	1,420	1,360	1,380
18	---	---	---	---	---	---	---	---	---	1,450	1,420	1,420
19	---	---	---	---	---	---	---	---	---	1,560	1,450	1,540
20	---	---	---	---	---	---	---	---	---	1,700	1,550	1,580
21	---	---	---	---	---	---	---	---	---	1,900	1,700	1,810
22	---	---	---	---	---	---	---	---	---	1,900	1,840	1,880
23	---	---	---	---	---	---	---	---	---	1,840	1,720	1,800
24	---	---	---	---	---	---	---	---	---	1,720	1,630	1,670
25	---	---	---	---	---	---	---	---	---	1,630	1,570	1,600
26	---	---	---	---	---	---	---	---	---	1,570	1,550	1,560
27	---	---	---	---	---	---	---	---	---	1,550	1,520	1,540
28	---	---	---	---	---	---	---	---	---	1,520	1,480	1,500
29	---	---	---	---	---	---	---	---	---	1,490	1,470	1,480
30	---	---	---	---	---	---	---	---	---	1,490	1,470	1,480
31	---	---	---	---	---	---	---	---	---	1,540	1,490	1,520
MONTH	---	---	---	---	---	---	---	---	---	1,900	1,240	1,520

04084468 GARNERS CREEK AT PARK STREET AT KAUKAUNA, WI—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1,620	1,540	1,580	910	502	772	1,310	1,270	1,290	1,310	1,270	1,300
2	1,630	1,610	1,620	765	544	688	1,330	1,300	1,320	1,340	1,300	1,320
3	1,710	1,620	1,680	1,060	765	955	1,350	1,300	1,330	1,320	1,310	1,320
4	1,740	1,610	1,690	1,210	1,040	1,130	1,370	1,320	1,350	1,320	1,310	1,310
5	1,610	1,560	1,580	1,210	386	642	1,370	1,260	1,330	---	---	---
6	1,560	1,550	1,560	966	530	794	1,290	1,060	1,210	1,330	1,300	1,310
7	1,610	1,550	1,570	994	901	936	1,270	1,020	1,170	1,360	1,320	1,340
8	1,760	1,610	1,720	1,170	962	1,080	1,150	1,050	1,110	1,350	355	829
9	1,710	1,600	1,660	1,260	1,120	1,180	1,160	1,050	1,130	762	410	643
10	1,670	1,600	1,620	1,300	1,220	1,250	1,150	1,080	1,130	922	761	844
11	1,720	1,670	1,710	1,340	1,160	1,240	1,180	1,140	1,160	1,030	922	970
12	1,710	1,690	1,700	1,480	381	1,050	1,210	1,170	1,200	1,070	354	1,010
13	1,890	1,690	1,780	1,490	370	1,040	1,230	1,150	1,200	781	363	630
14	1,930	1,890	1,910	1,520	1,270	1,370	1,200	1,130	1,170	852	620	762
15	1,920	1,890	1,900	1,400	1,310	1,340	1,200	1,140	1,180	905	695	814
16	1,900	1,860	1,870	1,430	1,400	1,420	1,220	1,150	1,190	1,010	899	956
17	1,950	1,860	1,910	1,490	1,420	1,440	1,240	1,150	1,200	1,080	1,010	1,050
18	1,950	1,820	1,880	1,960	1,480	1,610	1,340	1,180	1,260	1,100	1,070	1,090
19	1,820	1,770	1,800	2,120	1,640	1,860	1,310	1,190	1,260	1,100	1,070	1,090
20	2,170	1,700	1,810	1,640	1,390	1,480	1,320	1,200	1,280	1,100	626	802
21	3,700	2,170	3,210	1,580	1,390	1,490	1,350	1,130	1,240	854	468	737
22	4,310	3,630	3,840	1,640	1,580	1,610	1,230	1,120	1,210	724	528	616
23	4,340	3,820	4,150	1,640	1,560	1,600	1,260	1,230	1,240	772	274	530
24	4,630	3,470	3,950	1,630	1,570	1,600	1,270	1,240	1,250	723	369	571
25	3,470	3,050	3,290	1,630	1,360	1,540	1,320	1,160	1,240	888	723	815
26	3,240	2,520	2,850	1,360	1,130	1,210	1,300	1,200	1,240	979	888	933
27	2,700	2,180	2,450	1,250	1,210	1,230	1,240	1,220	1,220	1,030	862	993
28	2,300	1,440	1,910	1,290	740	1,180	1,250	1,240	1,250	968	785	883
29	1,440	751	1,150	1,010	740	901	1,260	1,240	1,250	1,010	966	984
30	---	---	---	1,200	1,010	1,120	1,270	1,250	1,260	1,030	306	926
31	---	---	---	1,270	1,200	1,230	---	---	---	551	308	482
MONTH	4,630	751	2,120	2,120	370	1,230	1,370	1,020	1,230	1,360	274	929
		JUNE			JULY			AUGUST			SEPTEMBER	
1	680	542	619	1,150	1,110	1,130	1,240	760	1,040	---	---	---
2	711	542	625	1,190	1,150	1,160	822	636	713	---	---	---
3	807	711	763	1,190	1,190	1,190	734	636	678	---	---	---
4	860	807	830	1,190	976	1,100	794	734	760	---	---	---
5	904	840	875	976	899	913	848	794	821	---	---	---
6	954	902	931	904	548	683	906	848	878	---	---	---
7	1,020	954	985	785	690	745	927	906	919	---	---	---
8	1,060	992	1,040	822	740	786	941	927	935	---	---	---
9	1,050	864	981	882	822	854	938	926	930	---	---	---
10	915	657	740	916	882	899	946	929	938	---	---	---
11	727	314	502	966	916	940	971	945	957	---	---	---
12	790	550	692	1,010	964	991	1,000	971	987	---	---	---
13	868	373	698	1,030	818	1,000	1,020	992	1,000	---	---	---
14	821	544	713	818	676	719	1,040	1,020	1,030	---	---	---
15	962	821	893	870	769	824	1,070	1,040	1,060	---	---	---
16	1,020	944	987	935	870	906	1,110	1,070	1,090	---	---	---
17	944	355	593	978	935	958	---	---	---	---	---	---
18	1,130	704	816	1,010	978	991	---	---	---	---	---	---
19	1,170	919	963	1,040	1,010	1,020	---	---	---	---	---	---
20	1,050	984	1,020	1,070	1,040	1,050	---	---	---	---	---	---
21	1,070	1,050	1,060	1,110	1,070	1,090	---	---	---	---	---	---
22	1,090	1,020	1,070	1,140	1,110	1,130	---	---	---	---	---	---
23	1,020	812	982	1,160	1,140	1,150	---	---	---	---	---	---
24	1,040	838	1,000	1,180	1,160	1,170	---	---	---	---	---	---
25	1,030	953	981	1,190	1,170	1,180	---	---	---	---	---	---
26	1,090	1,030	1,060	1,210	1,050	1,190	---	---	---	---	---	---
27	1,120	1,090	1,110	1,220	1,200	1,210	---	---	---	---	---	---
28	1,140	1,060	1,110	1,230	1,220	1,220	---	---	---	---	---	---
29	1,130	1,080	1,110	1,230	1,170	1,210	---	---	---	---	---	---
30	1,110	1,090	1,090	1,240	1,110	1,190	---	---	---	---	---	---
31	---	---	---	1,230	1,110	1,160	---	---	---	---	---	---
MONTH	1,170	314	895	1,240	548	1,020	1,240	636	921	---	---	---
YEAR	4,630	274	1,240									

04084500 FOX RIVER AT RAPIDE CROCHE DAM, NEAR WRIGHTSTOWN, WI

LOCATION.--Lat 44°19'03", long 88°11'50", in SE $^1/_4$ sec.4, T.21 N., R.19 E., Outagamie County, Hydrologic Unit 04030204, at Rapide Croche Dam, 2.0 mi upstream from Wrightstown, and 18 mi upstream from mouth.

DRAINAGE AREA.--6,010 mi^2.

PERIOD OF RECORD.--March 1896 to September 1917 (monthly discharge only), October 1917 to current year.

REVISED RECORD.--WDR WI-80-1: Drainage area. WDR WI-81-1: 1980.

GAGE.--Recording headwater and tailwater gages and electric generation are read 24 times a day and used to compute the discharge records.

REMARKS.--Flow regulated by storage in Lake Winnebago (see sta. 04082500 and 04084255). Daily discharges determined from records of flow through turbines, head, gate openings, and lockages through navigation canal. Usually less than about 20 ft^3/s is diverted into basin from Wisconsin River at Portage Canal throughout the year.

COOPERATION.--Figures of daily discharge furnished by Kaukauna Electric and Water Department. Records reviewed by Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,580	1,630	7,160	4,010	3,810	4,800	11,100	2,330	14,400	13,800	1,930	2,000
2	2,470	1,590	5,810	4,020	3,810	5,820	11,200	2,310	14,000	13,400	1,820	2,180
3	2,860	1,790	3,650	4,120	3,820	6,510	11,100	2,270	14,200	13,400	1,870	2,160
4	2,460	3,450	2,790	3,880	3,580	6,920	10,700	2,460	14,000	13,400	1,950	2,150
5	2,470	7,010	3,000	3,520	3,640	10,300	11,600	2,240	13,900	12,500	1,540	2,170
6	2,460	8,100	2,900	3,680	3,680	10,900	12,300	2,420	13,600	13,800	1,860	2,340
7	2,500	7,250	3,120	3,440	3,460	11,200	11,800	2,490	13,600	12,900	2,030	2,080
8	2,460	5,280	3,060	4,020	3,540	11,000	11,700	3,080	14,400	12,000	2,150	1,880
9	2,430	4,420	3,050	3,840	3,600	10,100	11,800	3,500	14,000	11,800	2,190	1,760
10	2,460	4,300	3,820	3,560	3,500	11,300	11,800	3,970	13,400	11,600	2,010	2,010
11	2,250	2,740	4,240	3,550	3,580	11,300	11,500	6,800	14,800	11,400	1,920	2,080
12	2,390	2,410	4,180	3,690	3,470	10,800	11,600	7,690	15,700	10,400	1,870	1,770
13	2,500	2,430	4,360	3,650	3,380	10,500	11,600	9,550	15,700	7,270	1,600	1,970
14	2,220	2,400	4,410	3,520	3,300	11,000	11,700	10,800	15,500	4,700	1,840	1,930
15	2,240	2,460	4,350	3,510	3,360	10,800	11,600	10,900	15,500	5,070	1,920	2,060
16	2,160	2,380	4,180	3,680	3,530	10,700	11,300	10,900	15,500	5,850	1,980	1,620
17	2,280	2,530	4,160	3,700	3,670	10,700	10,900	10,900	16,100	5,790	2,130	1,930
18	2,470	3,770	3,700	3,450	3,870	10,700	10,700	10,500	16,400	5,800	1,730	2,100
19	2,210	3,620	3,940	3,640	3,990	10,900	11,100	10,500	15,800	5,940	2,020	1,910
20	2,010	4,500	3,820	3,500	4,130	10,900	10,500	10,900	15,800	5,670	1,960	2,150
21	650	5,010	4,120	3,610	4,100	10,700	9,300	12,200	15,900	5,300	1,770	1,980
22	1,110	4,680	3,630	3,360	4,100	10,900	8,200	13,700	15,700	3,860	2,090	1,760
23	1,780	6,760	2,830	3,390	4,130	10,600	5,270	14,900	16,000	2,780	1,800	1,690
24	1,780	5,560	2,530	3,430	4,320	9,560	5,350	15,100	16,000	3,410	1,690	1,630
25	1,890	7,940	2,860	3,420	4,180	10,300	5,490	14,700	15,800	3,120	1,830	1,460
26	1,710	8,740	2,960	3,650	4,360	10,100	5,710	13,900	15,400	3,300	1,890	1,610
27	1,700	8,510	3,030	3,870	4,360	11,500	5,270	14,000	15,000	2,680	2,200	1,530
28	1,930	8,210	3,390	3,810	4,430	11,600	1,540	13,400	14,900	1,900	1,900	1,180
29	1,830	8,200	3,120	3,730	4,660	12,400	2,600	13,900	14,800	1,760	1,690	1,400
30	1,780	8,200	3,470	3,550	---	11,500	2,130	14,100	14,300	1,630	2,120	1,120
31	1,690	---	3,990	3,710	---	11,000	---	14,600	---	1,620	1,950	---
TOTAL	65,730	145,870	115,630	113,510	111,360	317,310	278,460	281,010	450,100	227,850	59,250	55,610
MEAN	2,120	4,862	3,730	3,662	3,840	10,240	9,282	9,065	15,000	7,350	1,911	1,854
MAX	2,860	8,740	7,160	4,120	4,660	12,400	12,300	15,100	16,400	13,800	2,200	2,340
MIN	650	1,590	2,530	3,360	3,300	4,800	1,540	2,240	13,400	1,620	1,540	1,120

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1896 - 2004, BY WATER YEAR (WY)

MEAN	3,297	3,982	3,984	3,974	4,038	4,974	7,181	6,129	5,200	3,489	2,665	2,819
MAX	14,230	12,740	9,879	7,831	7,831	12,440	19,360	20,160	15,000	15,600	9,623	11,020
(WY)	(1987)	(1985)	(1983)	(1960)	(1939)	(1973)	(1929)	(1960)	(2004)	(1993)	(1924)	(1938)
MIN	728	1,242	1,562	1,432	1,768	1,596	1,590	1,260	1,098	983	761	709
(WY)	(1933)	(1931)	(1959)	(1977)	(1977)	(1964)	(1954)	(1931)	(1931)	(1931)	(1936)	(1933)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1896 - 2004	
ANNUAL TOTAL	1,266,804		2,221,690			
ANNUAL MEAN	3,471		6,070		4,318	
HIGHEST ANNUAL MEAN					8,427	1993
LOWEST ANNUAL MEAN					1,626	1931
HIGHEST DAILY MEAN	9,500	May 19	16,400	Jun 18	24,000	Apr 18, 1952
LOWEST DAILY MEAN	377	Jan 29	650	Oct 21	138	Aug 2, 1936
ANNUAL SEVEN-DAY MINIMUM	1,190	Sep 4	1,420	Sep 24	499	Sep 20, 1933
10 PERCENT EXCEEDS	6,770		13,800		7,890	
50 PERCENT EXCEEDS	2,820		3,820		3,590	
90 PERCENT EXCEEDS	1,460		1,830		1,670	

04085046 APPLE RIVER AT SNIDERVILLE, WI

LOCATION.--Lat 44°21'18", long 88°11'28", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.27, T.22 N., R.19 E., Brown County, Hydrologic Unit 04030204, on left bank 500 ft downstream of County Trunk Highway U, 2.0 mi upstream from Christy Brook and 2.0 mi north of Plum Creek on County Trunk Highway U.

DRAINAGE AREA.--45.8 mi^2.

PERIOD OF RECORD.--October 2003 to September 2004.

GAGE.--Water-stage recorder. Elevation of gage is 640 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges and those rated under 0.5 cfs, which are poor (see page 11).

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	2.5	11	e13	e0.80	e480	45	4.1	244	3.5	0.75	1.3
2	0.98	2.6	12	e18	e0.84	e360	30	3.9	107	2.7	0.79	1.1
3	1.4	3.3	8.7	e36	e0.90	e240	22	3.5	57	2.3	0.92	0.80
4	2.7	61	6.7	e24	e0.90	169	17	3.1	33	3.3	0.74	0.50
5	5.3	80	6.0	e14	e0.90	818	14	2.9	22	4.5	0.73	0.35
6	3.7	31	5.5	e12	e0.92	967	12	2.6	16	8.4	0.58	0.41
7	2.5	15	5.1	e10	e0.96	325	12	2.4	12	22	0.50	0.37
8	1.9	8.6	5.1	e10	e1.0	185	11	19	9.4	13	0.47	0.35
9	1.4	6.5	5.2	e10	e1.1	103	9.5	70	142	8.4	0.40	0.60
10	1.6	4.7	e30	e12	e1.1	70	8.4	42	227	6.2	0.42	0.65
11	2.1	4.9	e52	e14	e1.2	81	7.4	27	288	4.8	0.43	0.52
12	3.1	7.0	e62	e12	e1.3	44	6.5	19	378	3.9	0.96	0.54
13	3.9	6.0	e66	e10	e1.4	39	5.9	158	200	5.9	0.75	0.32
14	7.6	5.3	e30	e9.8	e1.4	47	5.4	174	278	15	0.61	0.26
15	5.8	4.5	e20	e9.2	e1.6	50	5.0	157	109	8.8	0.41	0.18
16	3.8	4.0	e16	e6.8	e1.6	32	5.0	68	56	5.0	0.31	0.21
17	3.5	3.6	e14	e5.8	e1.8	23	5.4	34	175	3.5	0.37	0.18
18	3.1	6.1	e12	e4.6	e2.0	20	5.6	22	110	2.5	0.44	0.18
19	2.8	35	e9.1	e2.8	e2.2	26	5.5	16	50	2.0	1.3	0.32
20	2.8	24	e7.0	e2.0	e2.6	56	5.1	59	27	1.6	1.7	0.62
21	3.0	14	e6.4	e1.8	e6.0	50	5.9	91	17	1.5	1.7	0.44
22	2.6	9.0	e6.4	e1.6	e7.8	29	9.5	214	15	1.3	1.2	0.27
23	2.3	567	e6.6	e1.0	e8.4	22	7.7	603	12	1.1	1.0	0.19
24	2.0	455	e5.8	e0.96	e18	20	6.2	836	11	0.89	0.83	0.15
25	2.0	118	e5.4	e0.94	e72	31	6.1	216	9.7	0.72	0.76	0.15
26	2.2	58	e4.8	e0.94	e100	151	9.5	105	7.2	0.61	0.83	0.11
27	2.4	32	e5.1	e0.96	e140	131	9.1	60	5.6	0.50	1.4	0.08
28	2.7	24	e21	e0.93	e220	112	6.8	41	5.2	0.42	5.8	0.06
29	2.6	19	e44	e0.86	e380	426	5.5	31	4.9	0.39	4.4	0.06
30	2.6	14	e29	e0.82	---	142	4.6	31	4.4	0.39	2.5	0.05
31	2.4	---	e20	e0.82	---	74	---	374	---	0.49	1.7	---
TOTAL	87.98	1,625.6	537.9	247.63	978.72	5,323	308.6	3,489.5	2,632.4	135.61	35.70	11.32
MEAN	2.84	54.2	17.4	7.99	33.7	172	10.3	113	87.7	4.37	1.15	0.38
MAX	7.6	567	66	36	380	967	45	836	378	22	5.8	1.3
MIN	0.98	2.5	4.8	0.82	0.80	20	4.6	2.4	4.4	0.39	0.31	0.05
CFSM	0.06	1.18	0.38	0.17	0.74	3.75	0.22	2.46	1.92	0.10	0.03	0.01
IN.	0.07	1.32	0.44	0.20	0.79	4.32	0.25	2.83	2.14	0.11	0.03	0.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2004, BY WATER YEAR (WY)

MEAN	2.84	54.2	17.4	7.99	33.7	172	10.3	113	87.7	4.37	1.15	0.38
MAX	2.84	54.2	17.4	7.99	33.7	172	10.3	113	87.7	4.37	1.15	0.38
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)
MIN	2.84	54.2	17.4	7.99	33.7	172	10.3	113	87.7	4.37	1.15	0.38
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR	
ANNUAL TOTAL			15,413.96	
ANNUAL MEAN			42.1	
HIGHEST DAILY MEAN	567	Nov 23	967	Mar 6
LOWEST DAILY MEAN	0.98	Oct 2	0.05	Sep 30
ANNUAL SEVEN-DAY MINIMUM	2.3	Oct 22	0.09	Sep 24
MAXIMUM PEAK FLOW			1,820	Mar 6
MAXIMUM PEAK STAGE			8.34	Mar 6
ANNUAL RUNOFF (CFSM)			0.920	
ANNUAL RUNOFF (INCHES)			12.52	
10 PERCENT EXCEEDS			109	
50 PERCENT EXCEEDS			5.8	
90 PERCENT EXCEEDS			0.51	

(e) Estimated due to ice effect or missing record

04085046 APPLE CREEK AT SNIDERVILLE, WI—Continued

PRECIPITATION QUANTITY

PERIOD OF RECORD.--November 2003 to September 2004 (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Rainfall estimated to be 0.00 for Dec. 15-16, Jan. 5, Feb. 2-3, 9-10, 12, 19-21, 23, and Mar. 2-3, 5-7, 10, 13-14, 18-19 because recorded precipitation interpreted as collector snowmelt.

EXTREMES FOR CURRENT YEAR.-- Maximum daily rainfall, 2.28 in., Nov. 23.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.00	0.00	0.13	0.00
2	0.00	0.00	0.00	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00
3	0.45	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.01	0.00
4	0.00	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.55	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.01	0.36	0.00	0.16
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.03	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.09	1.18	0.00	0.00	0.21	0.00
9	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.82	0.00	0.02	0.00
10	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.02	0.17	0.00	0.00	0.00
11	0.29	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.66	0.00	0.02	0.01
12	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.70	0.06	0.01	0.00	0.00
13	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.24	1.12	0.65	0.00	0.00
14	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.01	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.10
16	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.78	0.00	0.02	0.00
17	0.00	0.04	0.00	0.00	0.00	0.00	0.09	0.03	0.05	0.00	0.09	0.00
18	0.00	0.45	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.29	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.08	0.00	0.00	0.01	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.88	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.53	0.07	0.00	0.00	0.00
22	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.00
23	0.01	2.28	0.00	0.00	0.00	0.00	0.00	1.79	0.12	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.02	0.01	0.00	0.12	0.00
25	0.00	0.00	0.00	0.00	0.00	0.18	0.25	0.00	0.00	0.00	0.04	0.00
26	0.00	0.00	0.00	0.00	0.00	0.08	0.01	0.00	0.00	0.00	0.17	0.00
27	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.11	0.22	0.00	0.32	0.01
28	0.04	0.00	0.17	0.00	0.00	0.58	0.00	0.00	0.00	0.00	0.07	0.00
29	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.06	0.00	0.15	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.03	0.79	0.00	0.00	0.00	0.00
31	0.03	---	0.00	0.00	---	0.00	---	0.45	---	0.00	0.00	---
TOTAL	1.05	4.58	0.53	0.39	0.00	1.27	1.04	7.57	4.10	1.82	1.57	0.28

WTR YR 2004 TOTAL 24.20

04085046 APPLE CREEK AT SNIDERVILLE, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 2003 to September 2004.

PERIOD OF DAILY RECORD.--
SUSPENDED-SOLIDS DISCHARGE: October 2003 to September 2004.
TOTAL-PHOSPHORUS DISCHARGE: October 2003 to September 2004.

INSTRUMENTATION.--Water-quality sampler October 2003 to September 2004.

REMARKS.--Chemical analyses by the Green Bay Metropolitan Sewerage District Laboratory. Samples are point samples unless otherwise indicated.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 2,600 tons, Nov. 23, 2003; minimum daily, 0.001 tons, Sept. 26-30, 2004.
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 8,840 lbs, Nov. 23, 2004; minimum daily, 0.02 lbs, Sept. 30, 2004.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 2,600 tons, Nov. 23; minimum daily, 0.001 tons, Sept. 26-30.
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 8,840 lbs, Nov. 23; minimum daily, 0.02 lbs, Sept. 30.

SUSPENDED SOLIDS, DRIED AT 105 DEGREES CELSIUS, WATER, UNFILTERED, TONS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.010	0.030	2.11	0.17	0.009	111	5.18	0.060	75.3	0.23	0.020	0.030
2	0.010	0.040	2.08	0.23	0.009	178	2.78	0.050	15.7	0.18	0.020	0.020
3	0.020	0.050	1.24	e4.78	0.010	87.4	1.63	0.050	5.59	0.15	0.020	0.020
4	e0.030	12.6	0.81	0.30	0.010	53.8	0.99	0.040	3.31	0.21	0.020	0.010
5	e0.10	6.32	0.62	0.18	0.010	1,130	0.64	0.040	2.49	0.28	0.020	0.007
6	0.050	1.83	0.49	0.15	0.010	690	0.45	0.040	1.98	0.69	0.010	0.007
7	0.030	1.07	0.38	0.12	0.010	184	0.35	0.030	1.63	3.41	0.010	0.006
8	0.030	0.58	0.33	0.12	0.010	87.4	0.26	1.17	1.40	1.49	0.010	0.006
9	0.020	0.41	0.50	0.12	0.010	39.7	0.20	6.06	193	0.68	0.010	0.010
10	0.020	0.28	6.62	0.15	0.010	21.9	0.16	2.07	142	0.36	0.010	0.010
11	0.020	0.27	e10.0	0.17	0.010	20.6	0.13	1.49	197	0.26	0.010	0.008
12	0.030	0.36	e14.3	0.15	0.010	9.16	0.10	1.37	216	0.20	0.030	0.008
13	e0.050	0.29	e16.2	0.12	0.020	6.67	0.080	159	158	e0.47	0.020	0.005
14	e0.21	0.24	1.73	0.12	0.020	6.40	0.070	58.7	267	e2.14	0.020	0.004
15	e0.12	0.20	0.73	0.11	0.020	5.75	0.070	25.1	52.1	e0.90	0.010	0.003
16	0.040	0.16	0.37	0.080	0.020	2.99	0.070	4.84	23.7	0.22	0.010	0.003
17	0.040	0.14	0.21	0.070	0.030	1.79	0.070	1.84	141	0.15	0.010	0.002
18	0.040	0.25	0.16	0.050	0.030	1.26	0.080	1.18	32.8	0.11	0.020	0.002
19	0.030	3.35	0.12	0.030	0.040	1.31	0.070	0.91	6.96	0.080	0.050	0.004
20	0.030	0.94	0.090	0.020	0.050	2.33	0.070	13.9	2.76	0.060	0.060	0.008
21	0.040	0.45	0.090	0.020	0.12	1.74	0.080	19.3	1.34	0.050	0.060	0.006
22	0.030	0.30	0.080	0.020	0.17	0.80	e0.28	84.6	1.12	0.040	0.040	0.003
23	0.030	2,600	0.090	0.010	0.20	0.50	0.10	1,190	0.94	0.040	0.030	0.002
24	0.030	1,140	0.080	0.010	0.46	0.40	0.080	880	0.80	0.030	0.030	0.002
25	0.030	60.9	0.070	0.010	1.97	1.66	0.080	65.3	0.71	0.020	0.020	0.002
26	0.030	25.5	0.060	0.010	3.04	54.9	e0.28	16.8	0.52	0.020	0.020	0.001
27	0.030	12.1	0.070	0.010	5.29	23.4	e0.26	8.83	0.40	0.020	0.040	0.001
28	0.040	7.66	e1.62	0.010	17.3	55.7	0.090	5.97	0.37	0.010	e0.46	0.001
29	0.040	5.01	e7.15	0.010	78.3	532	0.070	4.42	0.34	0.010	e2.90	0.001
30	0.030	3.25	e3.09	0.009	---	32.1	0.060	8.91	0.30	0.010	0.060	0.001
31	0.030	---	0.26	0.010	---	10.7	---	460	---	0.010	0.040	---
TOTAL	1.290	3,884.580	71.750	7.369	107.198	3,355.36	14.830	3,022.070	1,546.56	12.530	4.090	0.193

WTR YR 2004 TOTAL 12,027.820

e Estimated

04085046 APPLE CREEK AT SNIDERVILLE, WI—Continued

PHOSPHORUS, WATER, UNFILTERED, POUNDS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.94	1.56	15.8	11.3	0.69	1,470	42.9	1.80	450	6.98	1.07	1.26
2	0.80	1.36	17.7	15.5	0.73	1,280	28.4	1.73	171	5.31	1.07	1.11
3	1.11	1.69	11.9	e107	0.78	649	20.5	1.56	109	4.34	1.18	0.81
4	2.18	195	8.84	20.8	0.78	422	15.5	1.40	62.0	6.02	0.89	0.51
5	e6.18	160	7.64	12.1	0.78	3,880	12.3	1.31	41.7	7.99	0.84	0.37
6	e3.62	56.5	6.85	10.4	0.79	3,010	10.7	1.20	29.5	14.5	0.65	0.44
7	1.92	31.8	6.10	8.65	0.83	807	10.2	1.13	21.7	e45.3	0.56	0.40
8	1.43	18.1	5.92	8.64	0.86	429	9.19	20.6	16.6	e25.3	0.52	0.39
9	1.04	13.7	6.19	8.64	0.95	222	7.11	90.1	627	14.8	0.44	0.68
10	1.04	9.73	70.9	10.4	0.95	139	5.48	56.0	555	11.1	0.46	0.71
11	1.17	10.1	e186	12.1	1.04	149	4.22	44.9	551	8.84	0.47	0.55
12	1.50	14.2	e241	10.4	1.13	75.6	3.24	20.1	852	7.36	e1.40	0.55
13	e3.92	12.0	126	8.65	1.28	62.5	2.63	385	527	11.5	0.80	0.31
14	e10.6	10.7	47.7	8.47	1.35	68.4	2.32	204	904	e29.6	0.64	0.24
15	e7.07	8.97	26.2	7.95	1.64	69.1	2.14	104	307	e16.4	0.44	0.16
16	2.54	7.85	17.4	5.89	1.74	40.7	2.15	30.6	148	10.5	0.33	0.18
17	2.85	6.95	12.7	5.02	2.07	27.5	2.32	20.0	626	7.41	0.39	0.14
18	3.10	11.7	10.4	3.98	2.44	22.1	2.42	14.6	255	5.60	0.45	0.14
19	3.49	e103	7.88	2.43	2.84	26.2	2.39	13.6	101	4.57	e1.96	0.24
20	4.15	e58.7	6.06	1.73	3.55	e118	2.22	124	62.5	3.75	e2.64	0.45
21	5.56	17.7	5.53	1.56	8.67	e103	2.54	159	44.2	3.44	e2.64	0.30
22	5.80	9.42	5.53	1.38	12.0	23.2	e14.0	454	37.9	3.05	1.20	0.18
23	5.95	8,840	5.70	0.87	13.7	16.4	3.34	3,510	31.4	2.45	1.02	0.12
24	4.55	3,580	5.01	0.83	31.0	14.7	2.66	1,410	26.5	1.94	0.82	0.09
25	3.82	215	4.67	0.81	131	28.7	2.64	155	23.2	1.48	0.75	0.08
26	3.56	101	4.15	0.81	189	255	e14.0	63.0	16.7	1.20	0.81	0.06
27	3.31	54.5	4.41	0.83	286	163	e13.3	34.4	12.6	0.94	1.38	0.04
28	3.23	39.3	e48.1	0.80	650	300	2.94	22.6	11.5	0.75	e10.3	0.03
29	2.64	29.1	e145	0.74	1,210	1,440	2.39	16.3	10.3	0.65	e7.60	0.03
30	2.20	21.5	e77.8	0.71	---	158	2.02	46.8	9.00	0.61	e4.05	0.02
31	1.76	---	17.3	0.79	---	71.4	---	1,410	---	0.73	1.61	---
TOTAL	103.03	13,641.13	1,162.38	290.18	2,558.59	15,540.5	248.16	8,418.73	6,640.30	264.41	49.38	10.59

WTR YR 2004 TOTAL 48,927.38

e Estimated

04085046 APPLE CREEK AT SNIDERVILLE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Dis-charge, cfs (00060)	Instan-taneous dis-charge, cfs (00061)	Sam-pling method, code (82398)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Sus-pended sedi-ment concen-tration mg/L (80154)
OCT								
09...	0940	--	1.5	10	<5	.040	.140	--
13...	1850	--	4.2	50	<4	--	.080	--
23...	1034	--	2.4	10	<5	.420	.500	--
NOV								
04...	0950	--	41	50	72	1.00	1.27	--
04...	1135	--	59	50	114	.390	.750	--
04...	1350	--	82	50	102	.420	.730	--
04...	1835	--	107	50	82	.390	.600	--
05...	0635	--	99	50	34	.310	.430	--
05...	1045	--	83	50	14	.300	.370	--
06...	1012	--	31	10	19	.220	.280	--
06...	1200	--	30	50	31	.180	.440	--
06...	1201	--	30	10	30	.330	.460	--
20...	0955	--	25	10	12	--	.350	--
23...	0345	--	45	50	368	--	.960	--
23...	0605	--	198	50	1,170	--	2.32	1,230
23...	0755	--	396	50	1,220	--	2.61	--
23...	1315	--	745	50	1,160	.390	1.97	1,080
23...	1845	--	927	50	2,460	--	4.63	--
24...	0240	--	805	50	1,850	.410	2.91	--
24...	0745	--	563	50	780	--	1.08	--
24...	1150	--	392	50	440	.250	.680	--
24...	1151	--	392	10	144	.260	.490	--
24...	1315	--	351	50	264	--	.750	--
25...	0245	--	154	50	220	--	.370	--
DEC								
10...	2025	30	--	50	120	--	.640	--
17...	1634	14	--	10	5	.120	.160	--
FEB								
12...	1334	1.3	--	10	<4	.130	.160	--
26...	1345	100	--	10	11	.320	.360	--
27...	0650	140	--	50	16	--	.350	--
27...	2310	140	--	50	15	--	.530	--
28...	1920	220	--	50	45	--	.650	--
29...	1610	380	--	50	106	--	.660	--
29...	1905	380	--	50	111	--	.640	--
29...	2050	380	--	50	90	.370	.640	--
MAR								
01...	1040	480	--	50	62	.290	.500	--
01...	1041	480	--	10	56	.360	.530	--
02...	0001	360	--	50	182	--	.800	--
02...	0245	360	--	50	190	--	.650	350
02...	1510	360	--	50	225	.250	.840	--
02...	1511	360	--	10	254	.220	.830	--
03...	0310	240	--	50	158	.190	.500	--
03...	1135	240	--	50	145	.150	.580	--
03...	1136	240	--	10	113	.190	.450	--
05...	0915	--	335	50	287	--	.760	--
05...	1210	--	724	50	618	--	1.34	--
05...	1515	--	1,090	50	642	.380	1.45	--
05...	2125	--	1,760	50	610	--	.700	646
06...	0955	--	1,040	50	190	.220	.630	--
06...	0956	--	1,040	10	172	.190	.540	--
06...	2100	--	367	50	262	--	.530	--
24...	1045	--	19	10	7	.120	.130	--
26...	0600	--	91	50	119	--	.290	--
26...	2155	--	191	50	146	--	.400	266
27...	2155	--	105	50	34	--	.160	--
28...	2200	--	213	50	496	.150	1.01	--
28...	2345	--	305	50	644	.180	.910	--
29...	0500	--	523	50	600	.140	.960	747
30...	0010	--	218	50	150	--	.300	--
30...	1110	--	136	10	66	.080	.180	--
APR								
08...	1000	--	12	10	9	.120	.160	--
13...	1400	--	5.3	10	<5	.040	.080	--
29...	1130	--	5.3	10	<5	--	.080	--

04085046 APPLE CREEK AT SNIDERVILLE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Residue total at 105 deg. C, suspended, mg/L (00530)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)
MAY							
08...	2005	38	50	28	--	.230	--
09...	0135	74	50	52	.220	.290	--
10...	0135	53	50	19	--	.230	--
11...	0955	28	10	20	.300	.350	--
13...	0730	47	50	32	--	.130	--
13...	0955	145	50	198	--	.240	--
13...	1330	240	50	548	.070	.610	--
13...	1331	240	10	528	.070	.590	--
14...	1330	157	50	83	--	.180	--
15...	0130	195	50	88	--	.160	--
16...	1330	61	50	24	--	.080	--
17...	1615	30	10	19	--	.120	--
20...	0620	38	50	108	--	.520	--
21...	0225	97	50	90	.180	.350	--
21...	1425	76	50	68	--	.330	--
22...	1035	227	50	204	.190	.480	--
22...	2235	230	50	128	.180	.380	--
23...	0850	520	50	1,350	--	1.73	--
23...	1335	828	50	1,280	--	1.72	1,960
23...	1635	820	50	632	.180	1.08	1,580
23...	1636	819	10	572	--	.900	--
23...	2250	962	50	508	--	.820	--
24...	1050	899	50	330	.150	.250	424
25...	0115	353	50	162	--	.160	--
25...	1900	159	50	86	--	.130	--
26...	1139	105	10	55	--	.110	--
30...	2250	75	50	262	--	.560	--
31...	0150	243	50	448	--	1.28	--
31...	1220	418	50	568	--	.800	--
31...	1855	475	50	266	.210	.560	50
JUN							
01...	0350	328	50	138	.180	.400	--
02...	0110	140	50	72	--	.300	--
03...	0930	59	10	34	--	.360	--
09...	1255	80	50	126	--	.350	--
09...	1420	167	10	170	.180	.370	--
09...	1450	186	50	242	.190	.480	--
09...	1905	325	50	1,060	--	1.57	1,200
09...	2200	400	50	516	.110	.810	--
10...	0630	276	50	214	--	.480	--
11...	1205	265	50	322	.240	.280	--
11...	1935	453	50	292	.160	.480	--
12...	0735	444	50	222	--	.460	298
13...	1400	164	50	238	--	.440	--
14...	0040	521	50	620	--	.830	--
14...	0900	300	50	336	--	.600	--
16...	2355	63	50	384	--	.720	--
17...	1700	207	50	332	.250	.760	--
18...	1700	88	50	70	--	.370	--
21...	1000	17	10	29	--	.500	--
JUL							
07...	1245	25	10	58	.180	.310	--
22...	1237	1.2	10	13	--	.450	--
AUG							
05...	1555	.70	10	9	.180	.210	--
19...	1015	1.6	10	14	--	.190	--
SEP							
09...	1502	.70	10	6	.190	.210	--
29...	1425	.07	10	4	.050	.090	--

04085068 ASHWAUBENON CREEK NEAR LITTLE RAPIDS, WI

LOCATION.--Lat 44°24'51", long 88°07'37" in NW $^1/_4$ NW $^1/_4$ sec.6, T.22 N., R.20 E., Brown County, Hydrologic Unit 04030204, on left bank 10 ft downstream from Creamery Road bridge and 2 mi north of Little Rapids.

DRAINAGE AREA.--19.9 mi^2.

PERIOD OF RECORD.--November 1976 to November 1977 (fragmentary, instantaneous discharge only, discontinued), October 2003 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 620 ft above NGVD of 1929.

REMARKS.--Records good, except those that are estimated and those under 0.5 cfs, which are poor (see page 11).

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.07	0.76	3.6	e2.7	e0.26	e200	9.2	1.3	138	0.89	0.30	0.11
2	0.08	0.77	3.0	e4.3	e0.30	e250	6.1	1.2	22	0.77	0.27	0.09
3	0.27	0.93	2.1	e22	e0.28	e89	4.8	1.1	7.8	0.74	0.29	0.09
4	0.31	6.1	1.7	e15	e0.26	e57	4.0	1.1	4.2	2.4	0.21	0.09
5	0.33	19	1.6	e8.9	e0.25	291	3.2	1.1	3.0	2.4	0.17	0.09
6	0.22	6.0	1.5	e2.7	e0.28	204	3.1	1.0	2.5	2.0	0.12	0.16
7	0.17	2.8	1.4	e1.7	e0.29	104	3.1	0.98	2.1	2.2	0.13	0.10
8	0.16	1.3	1.4	e1.9	e0.30	55	3.0	13	1.8	1.7	0.14	0.07
9	0.21	0.77	e1.4	e1.7	e0.31	25	2.7	49	50	1.3	0.18	0.07
10	0.33	0.60	e15	e1.5	e0.31	17	2.4	19	29	1.1	0.15	0.11
11	0.37	0.69	e23	e1.2	e0.32	e17	2.3	9.0	107	1.00	0.16	0.08
12	0.54	0.77	e8.0	e0.88	e0.31	15	2.1	9.0	109	0.91	0.18	0.07
13	0.55	0.67	e3.7	e0.73	e0.35	11	1.8	62	71	0.91	0.19	0.08
14	0.66	0.60	3.5	e0.64	e0.35	e13	1.7	108	294	0.86	0.17	0.08
15	0.65	0.55	2.8	e0.51	e0.38	e14	1.8	67	43	0.77	0.17	0.10
16	0.63	0.52	2.8	e0.48	e0.39	e9.8	1.8	17	10	0.67	0.17	0.14
17	0.58	0.46	2.9	e0.54	e0.46	7.5	1.9	6.7	178	0.61	0.24	0.12
18	0.56	0.70	2.5	e0.50	e0.51	6.0	1.9	4.0	40	0.54	0.26	0.09
19	0.54	2.0	2.1	e0.45	e0.56	10	1.9	2.9	9.4	0.49	0.25	0.08
20	0.59	2.9	1.8	e0.40	e0.66	29	1.7	48	4.3	0.45	0.20	0.06
21	0.52	2.0	1.7	e0.39	e1.3	18	2.1	40	2.9	0.42	0.14	0.05
22	0.64	1.3	1.7	e0.37	e1.8	8.0	2.3	116	2.4	0.41	0.14	0.06
23	0.71	126	1.7	e0.31	e2.5	6.0	2.1	305	2.0	0.38	0.16	0.04
24	0.70	104	1.5	e0.28	e3.9	5.8	1.7	297	1.7	0.32	0.23	0.06
25	0.70	17	1.4	e0.27	e9.0	10	2.0	44	1.5	0.28	0.36	0.09
26	0.70	8.3	1.3	e0.26	e19	48	2.4	16	1.3	0.27	0.45	0.06
27	0.72	6.1	1.4	e0.25	e30	37	2.1	8.1	1.2	0.26	0.83	0.05
28	0.75	5.9	e27	e0.26	e50	32	1.8	5.2	1.3	0.23	0.51	0.04
29	0.77	5.7	e30	e0.25	e130	164	1.6	4.0	1.1	0.26	0.27	0.05
30	0.79	4.5	e15	e0.24	---	31	1.4	5.7	1.0	0.36	0.18	0.04
31	0.79	---	e6.5	e0.27	---	15	---	169	---	0.31	0.14	---
TOTAL	15.61	329.69	175.0	71.88	254.63	1,799.1	80.0	1,432.38	1,142.5	26.21	7.36	2.42
MEAN	0.50	11.0	5.65	2.32	8.78	58.0	2.67	46.2	38.1	0.85	0.24	0.08
MAX	0.79	126	30	22	130	291	9.2	305	294	2.4	0.83	0.16
MIN	0.07	0.46	1.3	0.24	0.25	5.8	1.4	0.98	1.0	0.23	0.12	0.04
CFSM	0.03	0.55	0.28	0.12	0.44	2.92	0.13	2.32	1.91	0.04	0.01	0.00
IN.	0.03	0.62	0.33	0.13	0.48	3.36	0.15	2.68	2.14	0.05	0.01	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2004, BY WATER YEAR (WY)

MEAN	0.50	11.0	2.87	2.32	4.99	34.1	2.67	46.2	38.1	0.47	0.24	0.08
MAX	0.50	11.0	5.65	2.32	8.78	58.0	2.67	46.2	38.1	0.85	0.24	0.08
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)
MIN	0.50	11.0	0.09	2.32	1.05	10.2	2.67	46.2	38.1	0.09	0.24	0.08
(WY)	(2004)	(2004)	(1977)	(2004)	(1977)	(1977)	(2004)	(2004)	(2004)	(1977)	(2004)	(2004)

SUMMARY STATISTICS	FOR 2004 WATER YEAR	
ANNUAL TOTAL	5,336.78	
ANNUAL MEAN	14.6	
HIGHEST ANNUAL MEAN		
LOWEST ANNUAL MEAN		
HIGHEST DAILY MEAN	305	May 23
LOWEST DAILY MEAN	0.04	(a)Sep 23
ANNUAL SEVEN-DAY MINIMUM	0.06	Sep 23
MAXIMUM PEAK FLOW	560	Mar 5
MAXIMUM PEAK STAGE	9.44	Mar 5
ANNUAL RUNOFF (CFSM)	0.733	
ANNUAL RUNOFF (INCHES)	9.98	
10 PERCENT EXCEEDS	31	
50 PERCENT EXCEEDS	1.3	
90 PERCENT EXCEEDS	0.14	

(a) Also occurred Sept. 28, 30
(e) Estimated due to ice effect or missing record

04085068 ASHWAUBENON CREEK NEAR LITTLE RAPIDS, WI—Continued

PRECIPITATION QUANTITY

PERIOD OF RECORD.--November 2003 to September 2004 (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Rainfall estimated to be 0.00 for Dec. 10, 14-16, Feb. 20-21, 23, and Mar. 6 because recorded precipitation interpreted as collector snowmelt. Rainfall data missing for the period Mar. 1-29.

EXTREMES FOR CURRENT YEAR.-- Maximum daily rainfall, 2.27 in., Nov. 23.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.20	0.00
2	0.00	0.00	0.00	0.13	0.00	---	0.00	0.00	0.00	0.00	0.14	0.00
3	0.11	1.08	0.00	0.00	0.00	---	0.00	0.00	0.00	0.06	0.02	0.00
4	0.00	0.80	0.00	0.00	0.00	---	0.00	0.00	0.00	0.89	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	---	0.15	0.00	0.03	0.46	0.00	0.30
7	0.00	0.00	0.00	0.00	0.00	---	0.00	0.05	0.00	0.02	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	---	0.07	1.97	0.00	0.00	0.18	0.00
9	0.00	0.00	0.24	0.00	0.00	---	0.01	0.00	1.69	0.01	0.00	0.00
10	0.00	0.23	0.00	0.00	0.00	---	0.00	0.02	0.16	0.00	0.00	0.00
11	0.00	0.01	0.00	0.00	0.00	---	0.00	0.00	0.62	0.00	0.00	0.00
12	0.00	0.08	0.00	0.00	0.00	---	0.00	1.03	0.15	0.03	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	---	0.00	0.06	0.62	0.19	0.01	0.00
14	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00	0.03	0.00	0.00	0.00
15	0.00	0.01	0.00	0.00	0.00	---	0.12	0.00	0.00	0.00	0.00	0.20
16	0.00	0.00	0.00	0.00	0.00	---	0.04	0.00	1.11	0.06	0.03	0.00
17	0.00	0.04	0.00	0.00	0.00	---	0.11	0.01	0.08	0.00	0.05	0.00
18	0.00	0.46	0.00	0.00	0.00	---	0.00	0.02	0.00	0.00	0.51	0.00
19	0.00	0.00	0.00	0.00	0.00	---	0.02	0.09	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	---	0.28	0.85	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	---	0.06	0.53	0.05	0.00	0.00	0.00
22	0.00	0.04	0.00	0.00	0.00	---	0.00	0.26	0.00	0.00	0.00	0.00
23	0.00	2.27	0.00	0.00	0.00	---	0.00	1.61	0.06	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	---	0.07	0.03	0.00	0.00	0.33	0.00
25	0.00	0.00	0.00	0.00	0.00	---	0.27	0.00	0.00	0.00	0.05	0.00
26	0.00	0.00	0.00	0.00	0.00	---	0.01	0.00	0.00	0.00	0.14	0.00
27	0.00	0.00	0.20	0.00	0.00	---	0.00	0.02	0.23	0.00	0.67	0.02
28	0.08	0.00	0.21	0.00	0.00	---	0.02	0.00	0.01	0.00	0.05	0.00
29	0.02	0.00	0.00	0.00	0.00	---	0.00	0.05	0.00	0.09	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.03	0.86	0.00	0.00	0.00	0.00
31	0.03	---	0.00	0.00	---	0.00	---	0.75	---	0.00	0.00	---
TOTAL	0.24	5.02	0.65	0.13	0.00	---	1.26	8.21	4.84	1.81	2.38	0.52

04085068 ASHWAUBENON CREEK NEAR LITTLE RAPIDS, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 2003 to September 2004.

PERIOD OF DAILY RECORD.--
SUSPENDED-SOLIDS DISCHARGE: October 2003 to September 2004.
TOTAL-PHOSPHORUS DISCHARGE: October 2003 to September 2004.

INSTRUMENTATION.--Water-quality sampler October 2003 to September 2004.

REMARKS.--Chemical analyses by the Green Bay Metropolitan Sewerage District Laboratory. Samples are point samples unless otherwise indicated.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 544 tons, May 23, 2004; minimum daily, 0.001 tons, Oct. 1-2, 2003.
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 1,860 lbs, May 23, 2004; minimum daily, 0.03 lbs, Sept. 23, 27-28, 30, 2004.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 544 tons, May 23; minimum daily, 0.001 tons, Oct. 1-2.
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 1,860 lbs, June 1; minimum daily, 0.03 lbs, Sept. 23, 27-28, 30.

SUSPENDED SOLIDS, DRIED AT 105 DEGREES CELSIUS, WATER, UNFILTERED, TONS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.001	0.020	0.36	0.030	0.003	33.9	0.85	0.020	76.0	0.060	0.020	0.005
2	0.001	0.020	0.26	0.050	0.003	71.3	0.45	0.020	4.34	0.060	0.020	0.004
3	0.004	0.030	0.16	e4.30	0.003	21.8	0.28	0.020	1.04	0.060	0.020	0.004
4	0.005	0.36	0.11	e2.50	0.003	7.19	0.19	0.020	0.52	e0.37	0.010	0.004
5	0.005	1.64	0.090	0.10	0.003	232	0.12	0.020	0.36	e0.37	0.008	0.003
6	0.004	0.24	0.070	0.030	0.003	89.7	0.090	0.020	0.29	e0.28	0.006	0.006
7	0.003	0.090	0.060	0.020	0.003	e116	0.070	0.020	0.24	e0.32	0.006	0.003
8	0.003	0.040	0.050	0.020	0.003	8.68	0.060	4.83	0.20	0.14	0.007	0.003
9	0.003	0.020	0.060	0.020	0.003	2.69	0.050	14.5	109	0.11	0.009	0.002
10	0.005	0.020	2.02	0.020	0.003	1.50	0.050	1.38	19.6	0.10	0.008	0.004
11	0.006	0.020	2.33	0.010	0.003	1.28	0.050	0.17	93.0	0.090	0.009	0.003
12	0.009	0.020	0.61	0.010	0.003	0.94	0.050	4.87	67.5	0.080	0.010	0.002
13	0.009	0.020	0.19	0.008	0.004	0.65	0.040	75.0	46.5	0.080	0.010	0.003
14	0.010	0.010	0.12	0.007	0.004	0.62	0.040	126	365	0.080	0.010	0.003
15	0.010	0.010	0.070	0.006	0.004	0.58	0.040	23.1	18.4	0.070	0.010	0.004
16	0.010	0.010	0.040	0.005	0.005	0.35	0.040	2.98	2.60	0.070	0.010	0.005
17	0.010	0.009	0.030	0.006	0.005	0.23	0.040	0.93	416	0.060	0.020	0.004
18	0.010	0.010	0.030	0.005	0.006	0.16	0.040	0.42	18.5	0.060	0.020	0.003
19	0.010	0.030	0.020	0.005	0.007	0.24	0.040	0.29	1.70	0.050	0.020	0.003
20	0.010	0.050	0.020	0.004	0.008	e8.90	0.040	25.4	0.49	0.050	0.010	0.002
21	0.010	0.040	0.020	0.004	0.020	0.31	0.040	12.1	0.21	0.050	0.009	0.002
22	0.010	0.040	0.020	0.004	0.020	0.12	0.050	47.4	0.15	0.050	0.009	0.002
23	0.010	142	0.020	0.003	0.030	0.080	0.040	544	0.13	0.040	0.010	0.002
24	0.010	42.3	0.020	0.003	0.050	0.10	0.040	237	0.11	0.030	0.010	0.002
25	0.010	4.16	0.020	0.003	0.13	1.32	0.040	14.5	0.10	0.030	0.020	0.004
26	0.010	1.65	0.010	0.003	0.56	20.1	0.050	2.21	0.090	0.020	0.020	0.003
27	0.020	1.05	0.020	0.003	1.77	5.76	0.040	1.31	0.080	0.020	e0.040	0.002
28	0.020	0.88	e6.60	0.003	3.65	27.6	0.030	1.12	0.090	0.020	0.030	0.002
29	0.020	0.74	e7.80	0.003	17.1	160	0.030	1.13	0.080	0.020	0.010	0.002
30	0.020	0.52	e2.50	0.003	---	5.66	0.030	2.48	0.070	0.020	0.008	0.002
31	0.020	---	0.070	0.003	---	1.71	---	214	---	0.020	0.006	---
TOTAL	0.288	196.049	23.800	7.191	23.409	821.470	3.020	1,357.260	1,242.390	2.880	0.415	0.093

WTR YR 2004 TOTAL 3,678.265

e Estimated

04085068 ASHWAUBENON CREEK NEAR LITTLE RAPIDS, WI—Continued

PHOSPHORUS, WATER, UNFILTERED, POUNDS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.09	2.93	9.75	4.18	0.14	708	14.0	1.34	452	1.65	0.27	0.08
2	0.09	2.77	7.98	6.38	0.16	974	8.52	1.25	60.4	1.48	0.23	0.07
3	e0.42	3.14	5.53	e208	0.14	370	6.05	1.22	20.4	1.46	0.23	0.07
4	e0.51	22.9	4.47	e127	0.13	203	4.68	1.22	10.5	e6.61	0.16	0.07
5	e0.51	121	4.14	e65.4	0.12	1,370	3.40	1.23	7.25	e6.61	0.13	0.07
6	0.32	39.4	3.87	3.55	0.13	852	2.98	1.21	5.78	4.33	0.09	e1.89
7	0.26	16.0	3.61	2.14	0.13	229	2.72	1.22	4.83	4.79	0.10	0.08
8	0.25	7.15	3.59	2.31	0.13	115	2.48	30.3	4.17	3.59	0.11	0.06
9	0.37	3.81	3.55	2.00	0.13	50.7	2.16	120	388	2.74	0.14	0.05
10	0.62	2.74	37.8	1.71	0.13	32.6	1.91	40.8	155	2.22	0.12	0.09
11	0.78	2.92	61.4	1.32	0.12	31.0	1.84	12.4	466	1.90	0.12	0.06
12	e1.37	3.04	21.4	0.94	0.12	25.5	1.68	21.2	332	1.67	0.14	0.06
13	e1.74	2.46	9.78	0.75	0.15	19.1	1.49	237	267	1.60	0.14	0.07
14	1.90	2.02	9.02	0.64	0.16	20.7	1.43	450	1,250	1.46	0.13	0.06
15	2.07	1.74	7.13	0.49	0.19	21.4	1.48	180	143	1.25	0.13	0.08
16	2.22	1.52	7.11	0.45	0.21	14.4	1.52	39.4	61.8	1.05	0.13	0.11
17	2.27	1.25	7.42	0.49	0.27	10.6	1.62	15.1	1,240	0.92	e0.40	0.09
18	2.42	1.73	6.12	0.44	0.33	8.08	1.61	7.37	154	0.79	e0.42	0.07
19	2.58	e8.50	4.91	0.38	0.40	e15.7	1.61	4.98	23.6	0.69	e0.42	0.06
20	3.10	e14.3	4.06	0.33	0.52	e68.9	1.48	198	8.06	0.61	0.15	0.05
21	3.76	3.99	3.70	0.31	1.11	e34.2	1.84	147	4.18	0.55	0.11	0.04
22	4.15	2.45	3.59	0.28	1.68	8.93	2.04	397	3.47	0.50	0.10	0.04
23	4.93	729	3.47	0.23	2.56	6.41	1.88	1,860	2.95	0.45	0.12	0.03
24	4.67	490	3.08	0.20	4.36	6.01	1.59	985	2.60	0.37	0.17	0.04
25	4.34	63.6	2.75	0.19	11.0	11.7	1.84	57.2	2.34	0.31	e0.53	0.06
26	4.06	23.5	2.49	0.17	27.4	111	2.28	15.7	2.17	0.29	0.35	0.05
27	3.91	17.1	2.54	0.16	100	85.7	2.01	7.86	2.06	0.27	e1.23	0.03
28	3.79	16.4	e270	0.16	221	117	1.75	5.06	2.20	0.23	0.40	0.03
29	3.64	15.6	e309	0.15	428	664	1.55	3.83	1.97	0.26	e0.33	0.04
30	3.51	12.4	e127	0.14	---	63.4	1.43	10.9	1.82	0.34	0.14	0.03
31	3.27	---	e43.8	0.15	---	24.7	---	813	---	0.28	0.11	---
TOTAL	67.92	1,635.36	994.06	431.04	800.92	6,272.73	82.87	5,667.79	5,079.55	51.27	7.35	3.63

WTR YR 2004 TOTAL 21,094.49

e Estimated

04085068 ASHWAUBENON CREEK NEAR LITTLE RAPIDS, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Dis-charge, cfs (00060)	Instan-taneous dis-charge, cfs (00061)	Sam-pling method, code (82398)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Sus-pended sedi-ment concen-tration mg/L (80154)
OCT								
09...	1135	--	.17	10	6	.170	.320	--
23...	1115	--	.71	10	7	1.14	1.32	--
NOV								
04...	1835	--	8.5	50	25	.410	.710	--
04...	2210	--	13	50	30	.430	.650	--
04...	2345	--	17	50	22	.610	.780	--
05...	0110	--	21	50	53	.700	.900	--
05...	0350	--	24	50	24	.470	.610	--
05...	1255	--	20	50	48	1.23	1.61	--
05...	1256	--	20	10	46	.810	1.68	--
05...	1945	--	14	50	22	1.17	1.54	--
06...	1115	--	5.2	10	13	.890	1.15	--
20...	1014	--	3.2	10	6	--	.400	--
23...	0330	--	7.8	50	244	--	.710	--
23...	0535	--	32	50	328	--	1.09	--
23...	0845	--	66	50	560	--	1.51	674
23...	1045	--	95	50	700	.320	1.29	--
23...	1305	--	155	50	520	--	1.27	--
23...	1500	--	196	50	416	.430	1.13	--
24...	1039	--	97	10	72	--	.810	--
24...	1735	--	50	50	184	.510	.930	--
24...	2335	--	32	50	124	--	.940	--
25...	0400	--	20	50	92	--	.810	--
DEC								
10...	1225	15	--	50	67	--	.470	--
10...	2115	15	--	50	59	--	.480	--
11...	0750	23	--	50	33	--	.510	--
11...	1330	23	--	50	42	--	.500	--
17...	1122	--	2.8	10	4	.180	.470	--
FEB								
12...	1048	.31	--	10	<4	.050	.070	--
26...	1345	19	--	10	11	.230	.250	--
27...	1245	30	--	50	30	--	.560	--
27...	1540	30	--	50	20	--	.860	--
28...	1540	50	--	50	30	--	.860	--
29...	0250	130	--	50	35	--	.640	--
29...	1850	130	--	50	73	--	.570	--
MAR								
01...	0001	200	--	50	43	.480	.710	--
01...	1150	200	--	50	99	.360	.700	--
01...	1151	200	--	10	44	.490	.570	--
02...	0610	250	--	50	117	--	.730	180
02...	1425	250	--	50	126	.510	.790	194
02...	1426	250	--	10	121	.500	.750	--
03...	0515	89	--	50	74	.430	.650	--
03...	1110	89	--	50	63	.390	.670	--
03...	1111	89	--	10	103	.350	.660	--
05...	0800	--	84	50	251	--	.850	--
05...	1000	--	164	50	339	--	1.01	--
05...	1425	--	447	50	376	--	.890	411
05...	1725	--	519	50	328	.230	.900	--
05...	1726	--	519	10	316	.350	.890	--
06...	0530	--	364	50	163	--	.790	--
06...	1030	--	166	50	141	.450	.830	--
06...	1031	--	165	10	137	.410	.760	--
06...	1240	--	105	50	132	--	.800	--
24...	1200	--	5.5	10	4	.160	.190	--
26...	0310	--	25	50	108	--	.260	--
26...	1220	--	58	50	156	--	.490	--
28...	0020	--	27	50	17	--	.410	--
28...	2135	--	62	50	1,020	--	1.39	--
29...	0050	--	107	50	640	--	.960	757
29...	0445	--	211	50	488	.190	.830	--
29...	1530	--	134	50	174	--	.600	--
APR								
08...	1020	--	3.1	10	7	.120	.150	--
13...	1115	--	1.8	10	9	.100	.150	--
29...	1105	--	1.6	10	<7	--	.180	--

04085068 ASHWAUBENON CREEK NEAR LITTLE RAPIDS, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Residue total at 105 deg. C, suspended, mg/L (00530)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)
MAY							
08...	1905	29	50	183	--	.470	--
09...	0335	62	50	164	.250	.450	--
10...	0335	25	50	40	--	.470	--
11...	1049	8.9	10	5	.180	.230	--
12...	2110	14	50	178	--	.340	--
13...	0005	45	50	756	--	.920	--
13...	1251	57	50	146	.200	.340	--
13...	1323	56	50	474	--	.700	--
14...	0220	136	50	724	.260	1.09	--
14...	1255	82	50	274	.270	.610	--
14...	1256	82	50	332	.280	.700	--
14...	2320	107	50	180	--	.540	--
15...	1505	51	50	107	--	.480	--
16...	1210	15	50	62	--	.430	--
17...	1600	5.9	10	50	--	.360	--
20...	0310	13	50	221	--	.890	--
20...	1030	45	50	278	--	.910	--
20...	1820	81	50	188	.320	.710	--
21...	0815	34	50	82	--	.660	--
22...	0010	63	50	236	--	.730	--
22...	0645	108	50	214	--	.680	--
22...	1845	132	50	112	.340	.600	--
23...	0225	88	50	82	--	.570	--
23...	0815	122	50	1,050	--	1.57	--
23...	1440	456	50	836	--	1.26	936
23...	1755	528	50	716	.230	1.11	--
23...	1756	528	50	676	--	1.12	--
24...	0555	387	50	344	--	.770	484
24...	1945	159	50	180	--	.300	--
25...	0240	72	50	168	--	.270	--
25...	0805	48	50	124	--	.240	--
26...	1112	15	10	45	--	.180	--
30...	2155	13	50	164	--	.480	--
31...	0305	45	50	404	--	.780	--
31...	1145	107	50	400	--	.880	--
31...	1445	213	50	564	--	1.06	695
31...	1705	300	50	568	.260	1.02	--
JUN							
01...	0505	234	50	210	--	.600	555
01...	2305	44	50	90	.280	.520	--
03...	1000	8.2	10	47	--	.480	--
09...	0250	29	50	1,550	--	2.00	--
09...	0835	64	50	1,400	.270	1.81	--
09...	1540	63	10	496	.490	1.23	--
09...	2035	48	50	284	--	.980	--
11...	0635	57	50	224	.290	.990	--
11...	1410	136	50	364	--	.520	--
12...	0210	144	50	160	--	.650	--
13...	0905	47	50	74	--	.480	--
13...	2345	159	50	624	--	1.05	312
14...	1140	396	50	496	.250	1.00	--
14...	1141	396	10	488	--	.490	--
15...	1130	37	10	126	--	.620	--
16...	2340	15	50	984	--	1.57	--
17...	0420	164	50	1,930	--	1.12	--
17...	0735	229	50	1,150	.230	1.65	--
18...	0325	66	50	220	--	.790	--
18...	1850	22	50	92	--	.560	--
21...	1020	2.7	50	24	--	.260	--
JUL							
07...	1410	2.2	10	30	.310	.410	--
22...	1300	.43	10	42	--	.230	--
AUG							
05...	1710	.17	10	17	.120	.140	--
19...	1000	.23	10	26	--	.140	--
SEP							
09...	1324	.08	10	12	.130	.150	--
29...	1216	.05	10	16	.100	.130	--

040851325 BAIRD CREEK AT SUPERIOR ROAD AT GREEN BAY, WI

LOCATION.--Lat 44°30'04", long 87°56'10" in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.3, T.23 N., R.21 E., Brown County, Hydrologic Unit 04030204, on left bank 10 ft upstream from Superior Road bridge and 0.9 mi north of County Road V, in Green Bay, WI.

DRAINAGE AREA.--15.74 mi^2.

PERIOD OF RECORD.--October 2003 to September 2004.

GAGE.--Water-stage recorder. Elevation of gage is 670 ft above NGVD of 1929.

REMARKS.--Records good, except those that are estimated and those under 0.5 cfs, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.53	1.7	21	7.8	0.74	e77	62	1.2	214	2.9	0.59	0.42
2	0.59	1.7	21	e9.4	0.70	e180	43	1.1	223	2.6	0.56	0.40
3	1.1	2.4	15	e16	0.68	299	30	1.0	152	2.3	0.61	0.39
4	0.70	13	10	e16	0.63	236	22	0.97	97	3.6	0.62	0.39
5	0.68	5.6	7.9	e12	0.65	289	17	0.91	62	2.4	0.52	0.40
6	1.0	3.6	6.8	e8.8	0.65	262	14	0.91	41	4.2	0.63	1.2
7	1.1	2.9	6.3	e8.8	0.62	244	11	0.85	30	2.9	0.57	0.41
8	0.67	2.4	5.7	e8.0	0.68	176	9.6	7.2	22	2.5	0.71	0.40
9	0.75	2.1	5.6	e8.0	0.64	134	7.8	16	84	2.1	0.55	0.39
10	0.89	2.2	22	e7.2	0.61	96	6.4	14	105	1.9	0.43	0.33
11	1.1	2.5	26	e5.0	0.61	81	5.1	9.1	154	1.7	0.44	0.30
12	1.1	2.2	23	e3.2	0.64	71	4.0	6.5	156	1.6	0.46	0.29
13	0.83	2.2	15	e2.7	0.69	65	3.1	7.7	139	1.6	0.61	0.27
14	0.98	2.2	10	e2.6	e0.68	36	2.7	21	108	1.3	0.43	0.27
15	0.83	2.2	8.1	e2.5	e0.69	36	2.7	24	74	1.2	0.39	0.63
16	0.81	2.1	7.6	e2.2	e0.71	34	2.4	17	51	1.2	0.39	0.34
17	0.81	2.1	7.2	e2.0	e0.72	25	2.2	12	100	0.97	0.41	0.28
18	0.83	3.0	6.5	e1.8	0.77	23	2.1	9.1	81	0.90	0.57	0.27
19	0.75	2.9	5.8	e1.6	0.69	26	1.9	6.6	68	0.91	0.48	0.25
20	0.79	2.9	5.9	e1.4	e0.74	39	1.9	31	47	0.93	0.39	0.23
21	0.85	2.8	4.4	e1.4	e0.83	32	2.5	29	32	0.85	0.50	0.28
22	0.92	2.6	3.7	e1.2	e0.92	27	2.2	57	22	0.88	0.35	0.28
23	0.98	100	3.3	e1.2	e1.0	21	1.9	158	17	0.67	0.35	0.26
24	0.91	61	3.2	e1.1	e1.0	19	1.7	224	12	0.61	0.39	0.25
25	0.92	49	2.8	e1.1	e1.0	22	2.1	213	9.2	0.60	0.51	0.27
26	0.92	43	2.9	e1.0	e1.1	55	2.1	155	6.9	0.63	0.59	0.26
27	0.92	44	2.9	e1.0	e1.3	55	1.9	108	5.8	0.74	0.78	0.26
28	1.0	39	16	e0.94	e3.6	71	2.0	79	4.9	0.54	0.41	0.26
29	1.3	32	15	e0.85	e22	135	1.6	54	4.0	0.91	0.42	0.30
30	2.0	26	10	0.81	---	110	1.4	45	3.4	0.68	0.41	0.27
31	2.0	---	8.0	0.76	---	86	---	177	---	0.58	0.52	---
TOTAL	29.56	461.3	308.6	138.36	46.29	3,062	270.3	1,487.14	2,125.2	47.40	15.59	10.55
MEAN	0.95	15.4	9.95	4.46	1.60	98.8	9.01	48.0	70.8	1.53	0.50	0.35
MAX	2.0	100	26	16	22	299	62	224	223	4.2	0.78	1.2
MIN	0.53	1.7	2.8	0.76	0.61	19	1.4	0.85	3.4	0.54	0.35	0.23
CFSM	0.06	0.98	0.63	0.28	0.10	6.28	0.57	3.05	4.50	0.10	0.03	0.02
IN.	0.07	1.09	0.73	0.33	0.11	7.24	0.64	3.51	5.02	0.11	0.04	0.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2004, BY WATER YEAR (WY)

MEAN	0.95	15.4	9.95	4.46	1.60	98.8	9.01	48.0	70.8	1.53	0.50	0.35
MAX	0.95	15.4	9.95	4.46	1.60	98.8	9.01	48.0	70.8	1.53	0.50	0.35
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)
MIN	0.95	15.4	9.95	4.46	1.60	98.8	9.01	48.0	70.8	1.53	0.50	0.35
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)

SUMMARY STATISTICS	FOR 2004 WATER YEAR	
ANNUAL TOTAL	8,002.29	
ANNUAL MEAN	21.9	
HIGHEST ANNUAL MEAN		
LOWEST ANNUAL MEAN		
HIGHEST DAILY MEAN	299	Mar 3
LOWEST DAILY MEAN	0.23	Sep 20
ANNUAL SEVEN-DAY MINIMUM	0.26	Sep 18
MAXIMUM PEAK FLOW	(a)444	May 31
MAXIMUM PEAK STAGE	(b)5.66	Mar 1
ANNUAL RUNOFF (CFSM)	1.39	
ANNUAL RUNOFF (INCHES)	18.91	
10 PERCENT EXCEEDS	71	
50 PERCENT EXCEEDS	2.2	
90 PERCENT EXCEEDS	0.42	

(a) Gage height 5.16 ft
(b) Ice affected
(e) Estimated due to ice effect or missing record

040851325 BAIRD CREEK AT SUPERIOR ROAD AT GREEN BAY, WI—Continued

PRECIPITATION QUANTITY

PERIOD OF RECORD.--October 2003 to September 2004 (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Rainfall estimated to be 0.00 for Dec. 10, 15-16, 18, Jan. 1, 14, Feb. 18-21, 23, and Mar. 2-3, 5-7, 11, 13-14, 18-19 because recorded precipitation interpreted as collector snowmelt.

EXTREMES FOR CURRENT YEAR.-- Maximum daily rainfall, 2.13 in., May 31.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.10	0.00	0.08	0.00
2	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
3	0.06	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.00
4	0.00	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.00	0.00
5	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.05	0.01	0.50	0.00	0.60
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.15	1.25	0.00	0.00	0.25	0.00
9	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.12	1.36	0.00	0.00	0.00
10	0.00	0.19	0.00	0.00	0.00	0.10	0.00	0.03	0.09	0.00	0.00	0.00
11	0.22	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.00	0.00	0.00
12	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.45	0.19	0.00	0.00	0.00
13	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.50	0.15	0.06	0.00
14	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.10	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.60
16	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.59	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.08	0.16	0.00	0.00	0.00
18	0.00	0.31	0.00	0.00	0.00	0.00	0.03	0.01	0.00	0.00	0.23	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.87	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.43	0.00	0.00	0.00	0.00
22	0.10	0.03	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.00
23	0.01	2.05	0.00	0.00	0.00	0.00	0.00	1.69	0.16	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.09	0.00	0.00	0.08	0.00
25	0.01	0.00	0.00	0.00	0.00	0.20	0.19	0.00	0.00	0.00	0.04	0.00
26	0.00	0.00	0.00	0.00	0.00	0.20	0.04	0.00	0.00	0.00	0.02	0.00
27	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.36	0.20	0.00	0.36	0.03
28	0.04	0.00	0.16	0.00	0.00	0.87	0.03	0.00	0.00	0.00	0.07	0.00
29	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0.27	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.01	0.06	0.67	0.00	0.00	0.00	0.00
31	0.02	---	0.00	0.00	---	0.00	---	2.13	---	0.00	0.00	---
TOTAL	0.65	4.07	0.47	0.40	0.00	1.64	1.31	9.12	4.03	1.42	1.21	1.23

WTR YR 2004 TOTAL 25.55

040851325 BAIRD CREEK AT SUPERIOR ROAD AT GREEN BAY, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 2003 to September 2004.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January to April 2004 (discontinued).
SUSPENDED-SOLIDS DISCHARGE: October 2003 to September 2004.
TOTAL-PHOSPHORUS DISCHARGE: October 2003 to September 2004.

INSTRUMENTATION.--Continuous specific conductance record from January to April 2004. Water-quality sampler October 2003 to September 2004.

REMARKS.--Records for specific conductance were faulty Feb. 15-25. Chemical analyses by the Green Bay Metropolitan Sewerage District Laboratory. Samples are point samples unless otherwise indicated.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,250 µS/cm, Feb. 26, 2004; minimum, 81 µS/cm, Mar. 3, 2004.
SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 426 tons, Mar. 5, 2004; minimum daily, 0.001 tons, Sept. 28, 30, 2004.
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 1,820 lbs, Mar. 3, 2004; minimum daily, 0.12 lbs, Sept. 20, 2004.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,250 µS/cm, Feb. 26; minimum, 81 µS/cm, Mar. 3.
SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 426 tons, Mar. 5; minimum daily, 0.001 tons, Sept. 28, 30.
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 1,820 lbs, Mar. 3; minimum daily, 0.12 lbs, Sept. 20.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	770	740	760
7	---	---	---	---	---	---	---	---	---	779	751	768
8	---	---	---	---	---	---	---	---	---	763	742	753
9	---	---	---	---	---	---	---	---	---	750	731	742
10	---	---	---	---	---	---	---	---	---	734	725	730
11	---	---	---	---	---	---	---	---	---	727	706	718
12	---	---	---	---	---	---	---	---	---	716	688	700
13	---	---	---	---	---	---	---	---	---	699	663	687
14	---	---	---	---	---	---	---	---	---	687	664	674
15	---	---	---	---	---	---	---	---	---	665	651	660
16	---	---	---	---	---	---	---	---	---	654	641	647
17	---	---	---	---	---	---	---	---	---	699	635	652
18	---	---	---	---	---	---	---	---	---	666	629	643
19	---	---	---	---	---	---	---	---	---	642	626	636
20	---	---	---	---	---	---	---	---	---	633	613	624
21	---	---	---	---	---	---	---	---	---	616	601	609
22	---	---	---	---	---	---	---	---	---	610	598	604
23	---	---	---	---	---	---	---	---	---	598	581	589
24	---	---	---	---	---	---	---	---	---	585	571	579
25	---	---	---	---	---	---	---	---	---	575	561	568
26	---	---	---	---	---	---	---	---	---	564	555	560
27	---	---	---	---	---	---	---	---	---	558	552	554
28	---	---	---	---	---	---	---	---	---	557	549	552
29	---	---	---	---	---	---	---	---	---	574	550	555
30	---	---	---	---	---	---	---	---	---	856	574	711
31	---	---	---	---	---	---	---	---	---	902	856	887
MONTH	---	---	---	---	---	---	---	---	---	902	549	660

040851325 BAIRD CREEK AT SUPERIOR ROAD AT GREEN BAY, WI—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	902	893	900	415	227	321	605	585	596	---	---	---
2	894	886	891	272	101	227	622	604	613	---	---	---
3	888	885	886	264	81	138	637	621	630	---	---	---
4	912	884	899	288	91	158	647	636	641	---	---	---
5	936	912	927	270	102	223	659	647	652	---	---	---
6	915	893	902	278	266	272	683	656	666	---	---	---
7	897	892	895	302	273	288	694	679	686	---	---	---
8	912	893	905	327	302	320	713	681	695	---	---	---
9	907	889	899	365	285	338	724	713	716	---	---	---
10	897	885	892	404	365	388	---	---	---	---	---	---
11	907	893	902	438	404	420	---	---	---	---	---	---
12	903	892	899	496	417	459	---	---	---	---	---	---
13	918	895	906	514	466	492	---	---	---	---	---	---
14	937	913	929	649	514	562	---	---	---	---	---	---
15	---	---	---	594	541	572	---	---	---	---	---	---
16	---	---	---	589	551	578	---	---	---	---	---	---
17	---	---	---	600	580	591	---	---	---	---	---	---
18	---	---	---	728	598	625	---	---	---	---	---	---
19	---	---	---	679	619	641	---	---	---	---	---	---
20	---	---	---	628	603	613	---	---	---	---	---	---
21	---	---	---	690	578	600	---	---	---	---	---	---
22	---	---	---	715	589	626	---	---	---	---	---	---
23	---	---	---	628	599	611	---	---	---	---	---	---
24	---	---	---	628	624	626	---	---	---	---	---	---
25	---	---	---	639	625	634	---	---	---	---	---	---
26	1,250	1,050	1,160	687	497	618	---	---	---	---	---	---
27	1,160	959	1,080	679	628	656	---	---	---	---	---	---
28	1,100	751	968	670	466	630	---	---	---	---	---	---
29	771	328	620	561	320	529	---	---	---	---	---	---
30	---	---	---	569	558	563	---	---	---	---	---	---
31	---	---	---	586	560	575	---	---	---	---	---	---
MONTH	1,250	328	914	728	81	480	724	585	655	---	---	---
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
YEAR	1,250	81	648									

040851325 BAIRD CREEK AT SUPERIOR ROAD AT GREEN BAY, WI—Continued

SUSPENDED SOLIDS, DRIED AT 105 DEGREES CELSIUS, WATER, UNFILTERED, TONS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.006	0.020	e5.62	0.050	0.008	33.2	5.84	0.020	93.3	0.12	0.010	0.010
2	0.006	0.020	e6.23	0.070	0.008	200	3.27	0.020	48.9	0.10	0.010	0.010
3	0.010	0.060	e2.67	e3.08	0.008	204	1.88	0.020	20.6	0.080	0.010	0.010
4	0.008	0.67	0.69	e3.08	0.008	251	1.13	0.020	10.6	0.12	0.010	0.010
5	0.007	0.35	0.42	e1.63	0.008	426	0.70	0.020	5.77	0.080	0.008	0.010
6	0.010	0.14	0.29	0.070	0.008	203	0.48	0.020	3.75	0.12	0.010	0.25
7	0.010	0.11	0.21	0.070	0.008	e233	0.30	0.020	2.77	0.080	0.010	0.006
8	0.007	0.080	0.15	0.060	0.009	e144	0.26	0.15	2.45	0.070	0.010	0.005
9	0.008	0.070	0.12	0.060	0.008	e91.1	0.21	0.34	113	0.060	0.010	0.005
10	0.010	0.070	e6.88	0.060	0.008	e49.6	0.17	0.30	33.0	0.050	0.009	0.004
11	0.010	0.070	e9.02	0.040	0.008	17.3	0.14	0.20	162	0.050	0.010	0.004
12	0.030	0.060	e6.88	0.030	0.009	e28.1	0.11	0.15	123	0.040	0.010	0.003
13	0.010	0.050	e2.67	0.020	0.009	e24.1	0.080	0.20	56.2	0.040	0.010	0.003
14	0.010	0.050	0.090	0.020	0.009	4.34	0.070	3.36	12.6	0.030	0.010	0.003
15	0.010	0.050	0.060	0.020	0.008	3.58	0.070	2.07	4.69	0.030	0.010	0.006
16	0.010	0.040	0.050	0.020	0.008	2.88	0.060	0.69	2.61	0.030	0.010	0.003
17	0.010	0.040	0.040	0.020	0.008	1.78	0.050	0.40	63.4	0.030	0.010	0.003
18	0.010	0.050	0.040	0.020	0.008	1.32	0.050	0.29	8.47	0.020	0.020	0.002
19	0.010	0.050	0.030	0.010	0.007	1.23	0.050	0.24	4.34	0.020	0.020	0.002
20	0.010	0.050	0.030	0.010	0.008	1.57	0.040	9.94	2.06	0.030	0.010	0.002
21	0.010	0.050	0.030	0.010	0.008	1.07	0.060	3.28	2.36	0.020	0.020	0.002
22	0.010	0.060	0.020	0.010	0.009	0.76	0.050	21.4	1.75	0.020	0.010	0.002
23	0.010	312	0.020	0.010	0.009	0.49	0.040	278	1.22	0.020	0.010	0.002
24	0.010	64.8	0.020	0.010	0.009	0.40	0.040	161	0.83	0.020	0.010	0.002
25	0.010	28.7	0.020	0.010	0.009	0.90	0.040	43.2	0.58	0.010	0.020	0.002
26	0.010	20.0	0.020	0.010	0.009	e16.4	0.040	23.2	0.40	0.010	0.020	0.002
27	0.010	16.0	0.020	0.010	0.010	e15.8	0.040	13.1	0.32	0.020	0.020	0.002
28	0.010	11.3	e3.08	0.010	0.24	107	0.040	7.97	0.25	0.010	0.010	0.001
29	0.020	7.13	0.10	0.009	5.37	149	0.030	5.81	0.19	0.020	0.010	0.002
30	0.030	e9.80	e2.67	0.009	---	18.6	0.030	5.32	0.15	0.010	0.010	0.001
31	0.030	---	e1.09	0.008	---	9.87	---	193	---	0.010	0.010	---
TOTAL	0.362	471.940	49.280	8.546	5.836	2,241.39	15.370	773.750	781.56	1.370	0.367	0.369

WTR YR 2004 TOTAL 4,350.140

e Estimated

040851325 BAIRD CREEK AT SUPERIOR ROAD AT GREEN BAY, WI—Continued

PHOSPHORUS, WATER, UNFILTERED, POUNDS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.23	0.59	e70.2	9.70	0.83	410	69.4	0.76	722	4.39	0.46	0.27
2	0.26	0.59	e74.8	11.5	0.78	1,370	46.3	0.69	718	3.88	0.42	0.26
3	0.46	1.60	e44.4	e48.5	0.75	1,820	31.7	0.64	472	3.55	0.43	0.25
4	0.30	24.9	17.9	e48.5	0.70	1,150	22.7	0.61	273	5.48	0.42	0.26
5	0.29	11.6	13.6	14.6	0.71	1,380	16.9	0.58	158	3.79	0.34	0.26
6	0.44	8.26	11.5	10.7	0.72	946	13.6	0.59	95.4	6.56	0.41	1.68
7	0.47	6.54	10.5	10.7	0.68	e1,540	9.89	0.56	62.8	4.56	0.37	0.24
8	0.29	5.11	9.18	9.67	0.75	e1,080	8.64	7.04	42.1	3.77	e0.60	0.21
9	0.33	4.45	8.81	9.64	0.70	e770	6.78	17.1	441	3.12	0.35	0.19
10	0.50	4.47	e79.5	8.65	0.66	e492	5.34	14.7	335	2.81	0.27	0.16
11	0.80	4.85	e93.9	6.00	0.67	150	4.13	9.39	538	2.50	0.27	0.15
12	0.86	4.20	e79.5	3.86	0.69	e324	3.12	6.65	460	2.32	0.28	0.14
13	0.62	3.94	21.7	3.20	0.74	e289	2.35	7.77	384	2.24	e0.50	0.13
14	0.67	3.89	14.4	3.09	0.72	51.8	2.04	21.6	230	1.79	0.26	0.14
15	0.52	3.71	11.0	2.99	0.73	47.6	1.95	26.3	167	1.57	0.24	e0.52
16	0.47	3.46	10.2	2.64	0.74	42.2	1.74	17.3	130	1.59	0.23	0.17
17	0.43	3.32	9.41	2.35	0.75	29.0	1.58	13.7	497	1.26	0.24	0.14
18	0.41	4.64	8.36	2.11	0.79	23.9	1.45	9.82	201	1.15	e0.46	0.14
19	0.34	4.37	7.44	1.87	0.71	24.9	1.32	6.72	156	1.14	e0.37	0.13
20	0.33	4.12	7.53	1.63	0.75	35.1	1.30	65.3	97.5	1.15	0.23	0.12
21	0.32	3.47	5.70	1.62	0.84	26.3	1.66	53.7	46.9	1.03	0.30	0.14
22	0.32	4.57	4.74	1.39	0.92	20.8	1.48	156	31.8	1.04	0.21	0.15
23	0.32	1,010	4.24	1.38	1.01	15.0	1.22	848	23.9	0.77	0.21	0.14
24	0.30	249	4.11	1.26	1.03	13.7	1.07	687	17.7	0.67	0.24	0.13
25	0.30	175	3.56	1.26	1.02	36.9	1.33	239	13.3	0.63	0.31	0.14
26	0.30	144	3.65	1.14	1.08	167	1.30	132	9.99	0.63	e0.48	0.14
27	0.30	135	3.65	1.14	1.27	148	1.16	129	8.54	0.71	e0.68	0.14
28	0.34	112	e48.5	1.07	5.29	420	1.21	135	7.16	0.50	0.26	0.14
29	0.42	e124	e109	0.97	73.2	969	0.97	99.3	5.90	0.81	0.27	0.16
30	0.67	e98.9	e114	0.91	---	192	0.82	81.5	5.07	0.58	0.26	0.15
31	0.69	---	9.89	0.86	---	98.6	---	812	---	0.47	0.33	---
TOTAL	13.30	2,164.55	914.87	224.90	100.23	14,082.8	264.45	3,600.32	6,350.06	66.46	10.70	6.99

WTR YR 2004 TOTAL 27,799.63

e Estimated

040851325 BAIRD CREEK AT SUPERIOR ROAD AT GREEN BAY, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Dis-charge, cfs (00060)	Instan-taneous dis-charge, cfs (00061)	Sam-pling method, code (82398)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Sus-pended sedi-ment concen-tration mg/L (80154)
OCT								
09...	1335	--	.75	10	<4	.040	.080	--
12...	0100	--	5.7	50	34	--	.160	--
23...	0940	--	.92	10	<5	.150	.060	--
NOV								
05...	1515	--	5.0	50	32	.330	.460	--
05...	1516	--	5.0	10	15	.360	.440	--
20...	0912	--	2.9	10	6	--	.270	--
23...	0245	--	56	50	1,500	--	2.73	--
23...	0340	--	79	50	910	--	1.52	--
23...	0535	--	108	50	1,440	--	2.02	--
23...	0730	--	141	50	1,390	.380	2.87	--
23...	1740	--	98	50	968	--	1.38	1,220
24...	0540	--	65	50	488	--	.770	--
24...	1740	--	56	50	260	--	.720	--
DEC								
17...	1708	--	7.5	10	2	.190	.240	--
FEB								
12...	1624	--	.65	10	<5	.120	.200	--
26...	1515	1.1	--	10	<3	.160	.180	--
28...	1735	3.6	--	50	52	--	.380	--
29...	1445	22	--	50	119	--	.660	--
MAR								
01...	0245	77	--	50	43	.640	.910	--
01...	1220	77	--	50	188	--	.970	--
01...	1650	77	--	50	199	.520	1.06	--
01...	1651	77	--	10	222	.440	1.08	--
02...	0450	180	--	50	162	--	1.29	532
02...	1010	180	--	50	656	.500	1.78	--
02...	2210	180	--	50	226	.360	1.26	757
03...	1220	--	287	50	166	.360	.950	--
03...	1221	--	286	10	237	.290	.920	--
05...	0920	--	368	50	2,690	--	2.99	--
05...	1035	--	392	50	864	--	1.60	820
05...	1625	--	358	50	666	.470	.630	--
05...	1626	--	357	10	370	.470	.920	--
06...	1200	--	249	50	744	.320	1.10	--
24...	1500	--	19	10	7	.090	.120	--
28...	1920	--	77	50	242	--	.630	--
28...	2025	--	125	50	1,140	--	1.65	--
28...	2135	--	175	50	1,470	.290	2.51	--
29...	2135	--	131	50	126	--	.930	--
APR								
13...	0745	--	3.2	10	<10	.090	.140	--
29...	1200	--	1.6	10	<7	--	.110	--
MAY								
11...	1140	--	9.0	10	8	.110	.190	--
14...	1200	--	20	50	41	--	.160	--
15...	0001	--	29	50	85	.210	.290	--
15...	1200	--	23	50	22	--	.200	--
17...	1700	--	11	10	11	--	.210	--
20...	0145	--	20	50	102	--	.320	--
20...	0215	--	45	50	266	.110	.540	--
20...	1415	--	33	50	96	.200	.400	--
21...	0215	--	26	50	47	--	.340	--
21...	1415	--	27	50	36	--	.360	--
22...	1225	--	66	50	130	.340	.580	--
23...	0830	--	136	50	524	.350	1.17	--
23...	0910	--	213	50	1,400	--	1.89	--
23...	0935	--	248	50	1,560	--	2.17	1,740
23...	1015	--	294	50	1,640	.260	2.09	--
23...	1849	--	185	50	280	--	.570	--
23...	1850	--	185	50	312	.200	.520	324
24...	0025	--	251	50	560	--	.910	585
25...	0025	--	226	50	112	.230	.380	--
25...	1225	--	217	50	74	--	.180	--
26...	1355	--	149	10	54	--	.150	--
28...	1235	--	78	10	36	--	.340	--
31...	1850	--	299	10	532	.320	.980	--

040851325 BAIRD CREEK AT SUPERIOR ROAD AT GREEN BAY, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Residue total at 105 deg. C, suspended, mg/L (00530)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)
JUN							
01...	0945	203	50	164	--	.620	--
01...	1750	239	50	126	.350	.660	--
02...	0550	242	50	100	--	.660	--
03...	1045	159	10	48	.350	.580	--
05...	1545	56	10	33	.410	.460	--
09...	0235	57	50	206	--	.700	--
09...	0415	120	50	1,620	.260	1.90	--
09...	1615	86	50	248	--	.760	--
09...	1638	85	10	160	.350	.670	--
10...	0415	93	50	108	--	.640	--
11...	0650	157	50	170	--	.660	--
12...	0135	184	50	568	.210	.820	--
13...	0135	132	50	40	--	.360	--
13...	1505	170	50	360	--	.760	399
14...	0305	125	50	56	--	.420	--
15...	0305	84	50	28	--	.440	--
17...	0020	72	50	140	--	.560	--
17...	0125	134	50	580	.320	1.54	--
18...	0125	81	50	52	--	.520	--
20...	1325	45	50	15	--	.430	--
21...	1100	32	10	31	--	.260	--
JUL							
07...	1025	3.0	10	10	.190	.290	--
22...	1400	.80	10	10	--	.220	--
AUG							
05...	1405	.49	10	6	.100	.120	--
19...	1050	.50	10	12	--	.110	--
27...	1530	1.4	280	--	--	--	--
SEP							
06...	0935	9.1	50	176	--	.410	--
09...	1140	.47	10	5	.005	.090	--
29...	1038	.34	10	2	.080	.100	--

040851378 EAST RIVER AT MONROE STREET AT GREEN BAY, WI

LOCATION.--Lat 44°31'02", long 88°00'24" in SW ¼ SW ¼ sec. 30, T.24 N., R.21 E., Brown County, Hydrologic Unit 04030204, on right bank upstream side Monroe Street bridge and 0.2 mi upstream of the Fox River.

DRAINAGE AREA.--145 mi^2.

PERIOD OF RECORD.--December 2003 to September 2004.

GAGE.--Water-stage recorder. Side-looking velocity meter system. Elevation of gage is 585 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except those for days with negative mean daily flow, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	e-14	e-0.40	1,100	225	20	2,190	75	23	13
2	---	---	---	e103	e13	e1,990	189	78	1,040	33	43	27
3	---	---	---	e189	e6.0	e1,930	141	77	435	-22	22	33
4	---	---	---	e111	e28	1,040	137	18	229	175	11	28
5	---	---	---	e114	e-6.0	1,770	94	72	139	111	131	e25
6	---	---	---	e83	e7.0	2,660	65	-10	128	91	47	e18
7	---	---	---	e8.1	e25	1,350	87	68	14	208	44	e20
8	---	---	---	e-10	e23	810	96	197	80	94	29	e10
9	---	---	---	e24	15	455	124	347	783	56	60	e16
10	---	---	---	e45	e35	311	59	152	411	79	54	-1.2
11	---	---	---	e31	e-6.0	312	112	118	564	62	1.3	16
12	---	---	---	e42	e44	266	82	147	515	68	-8.8	32
13	---	---	---	e39	e54	118	63	168	381	69	64	-12
14	---	---	---	e11	e28	227	91	415	500	113	70	-6.3
15	---	---	---	e-0.30	13	164	34	370	335	107	19	51
16	---	---	130	e32	10	140	9.0	161	138	5.4	1.8	29
17	---	---	64	e72	e25	123	69	-2.0	836	85	16	7.6
18	---	---	133	e50	e13	134	62	243	394	100	-6.8	-1.7
19	---	---	e84	e32	e-27	118	42	34	309	29	119	6.8
20	---	---	e60	e6.0	e45	238	29	310	120	40	11	29
21	---	---	e52	e21	e75	192	92	271	76	50	36	19
22	---	---	e28	e27	e49	119	108	599	158	65	-9.5	-0.78
23	---	---	e31	e4.0	e53	148	16	1,430	97	65	62	-7.6
24	---	---	e80	e26	e91	71	62	2,550	107	28	-40	69
25	---	---	e61	e-6.0	e101	106	105	1,380	44	56	59	14
26	---	---	e18	e22	e89	343	87	563	93	43	27	4.9
27	---	---	e38	e18	e125	328	124	290	113	26	74	-28
28	---	---	e73	e10	e180	277	14	333	68	51	70	90
29	---	---	e180	e42	e391	1,010	-10	164	65	11	50	44
30	---	---	e72	e23	---	580	121	192	21	27	50	37
31	---	---	e104	e6.0	---	330	---	1,650	---	48	45	---
TOTAL	---	---	1,208	1,160.80	1,498.60	18,760	2,529.0	12,405.0	10,383	2,048.4	1,174.0	581.72
MEAN	---	---	75.5	37.4	51.7	605	84.3	400	346	66.1	37.9	19.4
MAX	---	---	180	189	391	2,660	225	2,550	2,190	208	131	90
MIN	---	---	18	-14	-27	71	-10	-10	14	-22	-40	-28
CFSM	---	---	0.52	0.26	0.36	4.18	0.58	2.76	2.39	0.46	0.26	0.13
IN.	---	---	0.31	0.30	0.38	4.82	0.65	3.18	2.67	0.53	0.30	0.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2004, BY WATER YEAR (WY)

MEAN	---	---	75.5	37.4	51.7	605	84.3	400	346	66.1	37.9	19.4
MAX	---	---	75.5	37.4	51.7	605	84.3	400	346	66.1	37.9	19.4
(WY)	---	---	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)
MIN	---	---	75.5	37.4	51.7	605	84.3	400	346	66.1	37.9	19.4
(WY)	---	---	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)

SUMMARY STATISTICS FOR 2004 WATER YEAR

ANNUAL TOTAL	51,748.52	
ANNUAL MEAN	178	
HIGHEST DAILY MEAN	2,660	Mar 6
LOWEST DAILY MEAN	-40	Aug 24
ANNUAL SEVEN-DAY MINIMUM	7.5	Sep 17
ANNUAL RUNOFF (CFSM)	1.23	
ANNUAL RUNOFF (INCHES)	13.29	
10 PERCENT EXCEEDS	390	
50 PERCENT EXCEEDS	65	
90 PERCENT EXCEEDS	6.0	

(e) Estimated due to missing record

040851378 EAST RIVER AT MONROE STREET AT GREEN BAY, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 2003 to September 2004.

PERIOD OF DAILY RECORD.--
SUSPENDED-SOLIDS DISCHARGE: December 2003 to September 2004.
TOTAL-PHOSPHORUS DISCHARGE: December 2003 to September 2004.

INSTRUMENTATION.--Water-quality sampler December 2003 to September 2004.

REMARKS.--Chemical analyses by the Green Bay Metropolitan Sewerage District Laboratory. Samples are point samples and are composite of four discrete samples collected during periods of positive flow. Negative loads are due to flow reversals. Suspended sediment and total-phosphorus loads have been calculated at this site for the 1986 water year. Loads for this period are published in U.S. Geological Survey Open-File Report 89-245.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 5240 tons, June 1, 2004; minimum daily, -6.62 tons, Aug. 24, 2004, due to flow reversal.
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 17,400 lbs, June 1, 2004; minimum daily, -54.5 lbs, Aug. 24, 2004, due to flow reversal.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 5240 tons, June 1; minimum daily, -6.62 tons, Aug. 24, due to flow reversal.
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 17,400 lbs, June 1; minimum daily, -54.5 lbs, Aug. 24, due to flow reversal.

SUSPENDED SOLIDS, DRIED AT 105 DEGREES CELSIUS, WATER, UNFILTERED, TONS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	-0.68	-0.004	94.2	39.3	1.76	5,240	8.03	3.05	2.55
2	---	---	---	5.02	0.14	398	27.7	6.90	2,100	3.66	6.34	5.31
3	---	---	---	8.96	0.060	771	17.9	7.07	627	-2.45	3.54	6.61
4	---	---	---	5.13	0.28	306	15.0	1.74	234	20.1	1.91	5.72
5	---	---	---	5.08	-0.060	620	9.21	7.04	101	13.2	24.4	5.19
6	---	---	---	3.56	0.060	2,050	6.94	-0.97	58.2	11.1	9.57	3.75
7	---	---	---	0.33	0.22	420	10.4	7.10	1.96	25.8	9.59	4.15
8	---	---	---	-0.34	0.19	65.7	13.0	21.3	10.3	12.0	6.84	2.08
9	---	---	---	0.72	0.12	28.8	18.9	38.9	130	7.34	15.0	3.31
10	---	---	---	1.21	0.28	19.1	10.2	17.7	88.4	10.5	13.4	-0.23
11	---	---	---	0.75	-0.050	19.5	21.7	13.7	148	8.51	0.38	3.29
12	---	---	---	0.95	0.35	23.1	17.5	17.0	125	9.35	-2.06	6.60
13	---	---	---	0.83	0.44	14.9	12.4	20.4	81.8	8.46	14.6	-2.43
14	---	---	---	0.22	0.23	38.5	16.0	68.3	95.9	12.1	15.7	-1.31
15	---	---	---	-0.004	0.11	25.7	5.43	77.8	63.5	9.99	4.21	10.4
16	---	---	2.56	0.56	0.080	19.0	1.30	25.1	31.0	0.49	0.40	6.00
17	---	---	1.74	1.18	0.21	14.4	8.75	-0.16	437	6.00	3.27	1.59
18	---	---	3.58	0.77	0.12	13.6	7.10	33.5	196	6.19	-1.32	-0.34
19	---	---	2.27	0.46	-0.25	10.4	4.35	4.97	122	1.62	22.6	1.39
20	---	---	1.62	0.080	0.44	18.0	2.84	60.4	38.1	2.21	2.13	5.94
21	---	---	1.41	0.28	0.77	12.6	8.53	69.9	19.4	2.84	6.36	3.98
22	---	---	0.76	0.36	0.54	6.90	9.56	159	34.7	3.79	-1.58	-0.14
23	---	---	0.85	0.060	0.71	8.38	1.39	1,090	18.8	3.90	10.2	-1.64
24	---	---	2.38	0.35	1.52	4.05	4.96	1,090	18.1	1.73	-6.62	15.1
25	---	---	2.01	-0.080	2.10	6.40	8.02	467	6.58	3.53	9.98	3.20
26	---	---	0.66	0.29	2.30	32.1	6.41	170	12.1	2.82	4.72	1.13
27	---	---	1.52	0.24	4.05	50.3	9.33	79.2	12.9	1.90	13.1	-6.31
28	---	---	3.23	0.13	7.78	79.2	1.13	74.4	6.95	4.18	12.6	17.3
29	---	---	8.78	0.51	22.7	744	-0.79	28.4	6.66	1.04	9.19	7.17
30	---	---	3.85	0.27	---	303	10.0	35.7	2.23	2.80	9.34	2.67
31	---	---	5.43	0.070	---	95.6	---	1,640	---	5.62	8.56	---
TOTAL	---	---	---	37.266	45.436	6,312.43	324.46	5,333.15	10,067.58	208.35	229.40	112.03

040851378 EAST RIVER AT MONROE STREET AT GREEN BAY, WI—Continued

PHOSPHORUS, WATER, UNFILTERED, POUNDS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	-14.5	-0.43	2,990	414	15.9	17,000	86.0	46.9	15.9
2	---	---	---	113	15.5	6,340	292	63.6	5,720	37.8	96.7	32.1
3	---	---	---	212	7.69	6,720	183	65.9	1,450	-24.5	55.3	38.6
4	---	---	---	128	38.1	3,450	150	15.5	503	194	30.7	32.3
5	---	---	---	133	-8.55	5,850	89.9	59.6	307	123	403	28.4
6	---	---	---	99.1	10.9	12,300	68.6	-7.81	288	99.5	163	20.4
7	---	---	---	10.5	42.1	5,000	105	54.1	28.5	224	168	22.5
8	---	---	---	-12.7	41.7	1,450	133	154	156	101	123	11.3
9	---	---	---	31.8	28.5	739	196	267	1,570	59.5	273	17.9
10	---	---	---	62.4	59.9	521	107	119	863	82.6	225	-1.24
11	---	---	---	44.9	-8.74	552	232	107	1,200	64.4	5.86	17.7
12	---	---	---	63.0	58.4	568	187	159	1,050	70.0	-28.5	35.4
13	---	---	---	60.9	63.6	312	122	216	740	72.3	183	-13.0
14	---	---	---	18.1	29.3	709	142	637	940	121	179	-6.97
15	---	---	---	-0.41	12.0	496	43.3	640	711	117	43.6	55.7
16	---	---	134	55.9	8.35	393	9.34	228	339	6.61	3.82	31.9
17	---	---	65.9	131	22.4	322	56.7	-1.55	2,260	96.4	30.3	8.41
18	---	---	133	95.1	13.0	326	41.5	326	994	116	-12.1	-1.80
19	---	---	83.2	63.3	-29.7	267	23.4	47.4	693	34.7	203	7.32
20	---	---	58.3	12.4	54.8	500	15.9	417	242	46.8	18.9	31.3
21	---	---	49.6	38.9	102	377	50.9	376	137	57.7	55.7	21.2
22	---	---	26.3	45.4	73.5	218	60.7	1,050	265	74.0	-13.7	-0.78
23	---	---	28.6	6.30	81.5	251	9.40	3,790	154	73.1	86.9	-8.99
24	---	---	74.6	35.8	142	113	35.7	5,720	160	31.3	-54.5	84.2
25	---	---	58.2	-7.29	160	156	61.4	3,470	62.7	61.1	79.5	18.1
26	---	---	17.7	25.1	144	469	52.0	1,680	124	47.2	36.3	6.47
27	---	---	37.4	20.6	205	419	77.6	769	142	31.3	97.0	-37.4
28	---	---	73.3	11.5	300	379	9.63	566	81.6	67.8	90.6	121
29	---	---	184	48.4	704	2,720	-6.89	255	76.4	16.6	63.7	59.7
30	---	---	75.8	26.9	---	1,510	88.6	321	24.7	44.3	62.6	25.5
31	---	---	110	7.14	---	723	---	7,270	---	87.5	55.4	---
TOTAL	---	---	---	1,565.54	2,370.82	57,140	3,050.68	28,849.64	38,281.9	2,320.01	2,770.98	673.12

040851378 EAST RIVER AT MONROE STREET AT GREEN BAY, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Dis-charge, cfs (00060)	Sam-pling method, code (82398)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)
DEC					
23...	31	50	10	.180	.170
30...	72	50	20	--	2.81
JAN					
06...	83	50	16	--	.220
20...	6.0	50	5	--	.380
26...	22	50	<5	--	.210
FEB					
02...	13	50	<4	--	.220
09...	15	50	<3	--	.360
16...	10	50	3	--	.150
22...	49	50	4	--	.280
MAR					
01...	1,100	50	29	.330	.530
03...	1,930	50	177	--	.660
04...	1,040	50	99	--	.610
05...	1,770	50	110	--	.570
06...	2,660	50	384	--	.940
07...	1,350	50	109	.370	.730
08...	810	50	24	--	.290
11...	312	50	22	--	.320
14...	227	50	67	--	.600
22...	119	50	21	--	2.62
28...	277	50	92	--	.220
29...	1,010	50	342	.200	.570
APR					
05...	94	50	35	--	.170
19...	42	50	38	--	.100
26...	87	50	27	--	.110
MAY					
03...	77	50	34	--	.160
10...	152	50	43	--	.140
15...	370	50	86	--	.340
16...	161	50	54	--	.250
21...	271	50	104	--	.250
22...	599	50	75	--	.310
23...	1,430	50	386	.250	.550
24...	2,550	50	140	--	.390
27...	290	10	100	--	.640
27...	290	10	102	--	.340
30...	192	50	49	--	.260
31...	1,650	50	384	.190	.840
JUN					
01...	2,190	50	1,040	--	1.66
06...	128	50	190	--	.430
07...	14	50	37	--	.350
11...	564	50	102	--	.400
14...	500	50	70	.170	.340
17...	836	50	228	--	.520
21...	76	50	93	.170	.330
28...	68	50	--	.220	--
JUL					
06...	91	50	--	.220	--
12...	68	50	52	.420	.190
19...	29	50	20	--	.220
26...	43	50	24	--	.200
AUG					
02...	43	50	--	.080	--
09...	60	50	94	.200	.870
16...	1.8	50	79	--	.370
23...	62	50	61	--	.260
30...	50	50	--	.110	--
SEP					
05...	25	50	77	.090	.210
20...	29	50	76	--	.200
27...	-28	50	86	.080	.250

040851385 FOX RIVER, AT OIL TANK DEPOT, AT GREEN BAY, WI

LOCATION.--Lat 44°31'43", long 88°00'36" in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 25, T.24 N., R.20 E., Brown County, Hydrologic Unit 04030204, about 0.5 mi upstream of Interstate Highway 43 bridge in Green Bay, and 0.8 mi upstream from mouth.

DRAINAGE AREA.--6,330 mi^2.

PERIOD OF RECORD.--October 1988 to current year.

GAGE.--Water-stage recorder. Side-looking velocity meter system.

REMARKS.--Records fair except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

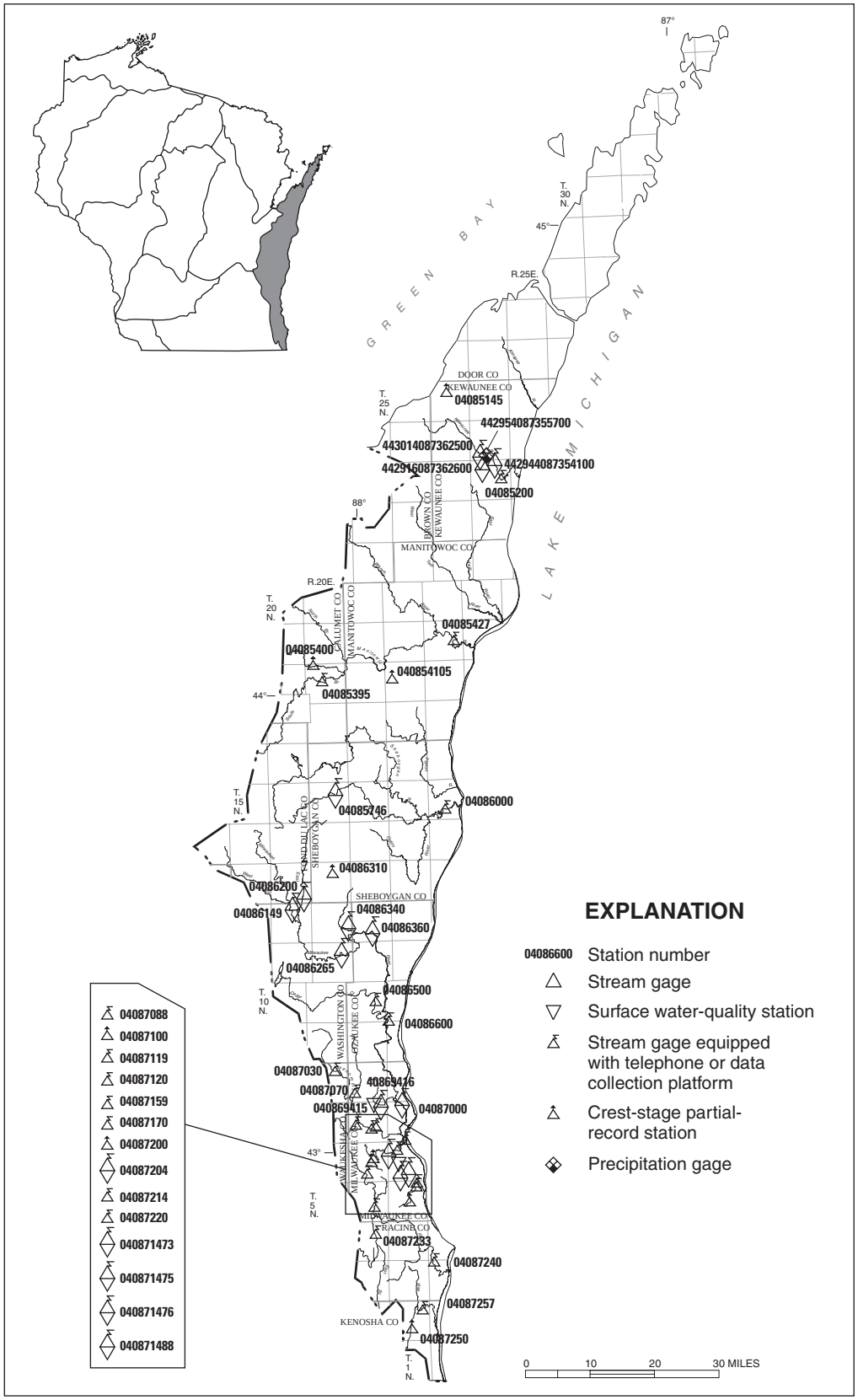
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,710	2,020	7,300	2,750	3,580	7,030	10,000	1,860	18,700	13,900	1,240	e2,290
2	2,910	1,520	5,710	4,210	3,610	10,200	10,300	2,140	15,300	12,600	2,130	e2,270
3	2,320	1,160	4,010	4,300	4,140	8,690	10,200	2,700	14,500	12,600	1,830	e2,290
4	2,660	3,690	2,410	3,840	3,640	8,290	9,360	2,250	14,500	14,000	2,300	e2,400
5	2,450	6,910	3,140	4,300	3,430	14,300	10,300	2,470	13,400	12,400	2,600	e2,290
6	2,370	7,730	2,890	4,250	3,670	16,400	10,100	1,640	13,600	12,600	2,150	e2,240
7	2,040	6,250	2,860	3,290	3,490	12,600	10,400	1,710	13,600	12,700	1,880	e2,390
8	2,090	4,270	3,050	3,530	3,440	12,700	10,100	2,910	13,900	10,800	1,720	e2,730
9	2,240	3,480	2,710	3,820	3,380	10,700	10,600	4,220	14,600	10,800	1,810	e2,000
10	2,100	3,550	4,380	4,120	3,660	11,100	9,980	3,060	13,600	10,600	1,440	e2,110
11	2,390	2,650	4,530	3,700	3,100	10,700	10,500	5,610	15,900	10,800	1,790	e2,110
12	1,980	2,760	4,560	4,140	3,440	11,100	10,200	7,250	17,700	8,940	1,920	e2,270
13	2,090	2,700	4,470	3,940	3,910	10,200	10,100	9,020	16,400	7,050	2,560	e2,000
14	2,460	1,100	4,580	3,450	3,600	11,200	10,300	11,600	16,800	5,410	2,970	e2,150
15	2,390	1,760	4,270	3,720	3,420	10,100	9,760	11,600	16,500	4,970	1,600	e1,910
16	2,440	2,770	3,860	3,850	3,490	10,300	9,340	10,600	15,700	4,820	1,510	e2,330
17	2,160	2,450	4,230	4,150	3,680	10,500	9,350	8,360	18,200	5,360	1,690	e2,660
18	1,820	3,040	3,900	3,900	3,720	10,400	9,340	11,500	16,500	5,800	1,360	e1,890
19	3,120	3,650	4,590	3,730	3,500	10,500	9,930	9,330	15,800	5,340	2,490	e2,040
20	1,730	4,390	3,960	3,620	3,790	11,000	8,650	10,200	15,700	5,210	2,180	e2,070
21	1,060	3,460	2,940	3,560	4,400	10,200	8,430	10,700	15,800	4,620	1,820	e2,070
22	1,280	3,450	4,230	4,000	3,550	10,200	6,940	15,600	16,300	4,150	654	e1,960
23	2,110	10,300	2,640	3,330	3,500	10,100	4,480	18,200	15,900	2,770	2,990	e1,800
24	2,000	9,330	2,900	3,710	4,170	8,260	4,480	21,700	16,000	3,010	1,630	e1,980
25	1,380	9,450	3,020	3,390	4,410	8,730	4,910	16,600	15,300	3,460	2,090	e1,890
26	2,030	8,000	2,790	3,320	4,220	9,760	4,910	14,400	15,500	3,200	1,320	e1,770
27	1,770	8,530	2,950	4,370	4,400	10,700	5,630	13,700	15,400	2,970	e1,930	e1,820
28	1,300	8,440	2,950	4,520	4,700	10,900	2,030	14,100	15,100	1,040	2,610	e1,650
29	2,050	8,000	4,080	3,940	5,380	13,000	644	13,300	15,000	1,370	e1,990	e1,620
30	1,300	8,840	3,020	3,780	---	10,900	2,240	13,300	14,400	1,890	1,630	e1,580
31	1,980	---	3,960	3,650	---	10,200	---	18,400	---	2,400	e2,200	---
TOTAL	64,730	145,650	116,890	118,180	110,420	330,960	243,504	290,030	465,600	217,580	60,034	62,580
MEAN	2,088	4,855	3,771	3,812	3,808	10,680	8,117	9,356	15,520	7,019	1,937	2,086
MAX	3,120	10,300	7,300	4,520	5,380	16,400	10,600	21,700	18,700	14,000	2,990	2,730
MIN	1,060	1,100	2,410	2,750	3,100	7,030	644	1,640	13,400	1,040	654	1,580
CFSM	0.33	0.77	0.60	0.60	0.60	1.69	1.28	1.48	2.45	1.11	0.31	0.33
IN.	0.38	0.86	0.69	0.69	0.65	1.94	1.43	1.70	2.74	1.28	0.35	0.37

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2004, BY WATER YEAR (WY)

MEAN	3,327	4,799	4,328	3,798	3,780	5,843	7,342	6,697	7,287	4,648	3,273	3,134
MAX	8,504	8,668	9,446	6,092	5,814	10,680	13,660	13,220	15,520	15,620	6,855	6,172
(WY)	(1996)	(1993)	(1993)	(1993)	(1996)	(2004)	(1993)	(1993)	(2004)	(1993)	(1993)	(1993)
MIN	1,019	2,037	2,977	2,768	1,873	2,394	3,010	2,710	2,484	2,011	1,767	1,355
(WY)	(2000)	(2000)	(1990)	(1990)	(2003)	(2000)	(1990)	(1998)	(1994)	(2003)	(2002)	(1998)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1989 - 2004	
ANNUAL TOTAL	1,261,756		2,226,158			
ANNUAL MEAN	3,457		6,082		4,854	
HIGHEST ANNUAL MEAN					9,102	1993
LOWEST ANNUAL MEAN					3,512	2000
HIGHEST DAILY MEAN	10,300	Nov 23	21,700	May 24	33,800	Jun 23, 1990
LOWEST DAILY MEAN	526	Jul 6	644	Apr 29	-3,260	Nov 4, 1990
ANNUAL SEVEN-DAY MINIMUM	1,250	Jul 3	1,620	Oct 28	203	Jul 27, 2000
ANNUAL RUNOFF (CFSM)	0.546		0.961		0.767	
ANNUAL RUNOFF (INCHES)	7.42		13.08		10.42	
10 PERCENT EXCEEDS	6,720		13,900		9,500	
50 PERCENT EXCEEDS	2,910		3,880		3,880	
90 PERCENT EXCEEDS	1,480		1,820		1,820	

(e) Estimated due to missing record



Base from U.S. Geological Survey 1:100,000 digital data; modified by Wisconsin Department of Natural Resources. Wisconsin Transverse Mercator projection.

LAKE MICHIGAN BASIN

LOCATION.--Lat 44°27'30", long 87°33'23", in SE ¼ SW ¼ sec.14, T.23 N., R.24 E., Kewaunee County, Hydrologic Unit 04030102, on left bank just upstream from bridge on County Trunk Highway F, 2.3 mi west of Kewaunee, and about 7.0 mi upstream from mouth.

DRAINAGE AREA.--127 mi^2.

PERIOD OF RECORD.--Annual maximum, water years 1958-65, and occasional low-flow measurements, water years 1963-64. September 1964 to June 1996, November 1997 to current year. No winter records for years 1965 and 1966.

REVISED RECORDS.--WDR WI-79-1: Drainage area. WDR WI-85-1: 1962(M), 1965(M), 1967-69(M), 1971(M), 1973-74(M), 1976(M), 1978(M), 1980-82(M).

GAGE.--Water-stage recorder. Datum of gage is 579.64 ft above NGVD of 1929 (Wisconsin State Highway Commission benchmark). Apr. 3, 1957, to Sept. 2, 1964, crest-stage gage only at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	15	48	46	e22	e230	213	54	1,900	69	32	24
2	14	15	38	44	e22	e1,200	161	52	840	61	30	22
3	16	17	38	e64	e22	1,740	130	49	400	57	33	21
4	17	57	36	e70	e22	850	111	47	241	63	30	20
5	17	65	33	e50	e22	989	97	45	171	67	27	20
6	15	48	32	e38	e22	1,810	96	45	139	70	26	22
7	14	35	30	e38	e22	787	97	48	119	75	25	26
8	14	28	31	e32	e22	573	94	125	108	67	24	24
9	14	25	31	e28	e23	425	92	296	609	59	25	22
10	13	24	e50	e26	e23	323	83	210	878	56	26	21
11	13	26	e76	e22	e23	352	77	145	615	52	24	20
12	15	28	e62	e21	e23	253	71	112	674	49	24	19
13	15	27	e56	e21	e23	198	67	156	513	48	23	19
14	17	25	53	e20	e23	184	65	177	490	145	23	18
15	17	24	45	e20	e24	182	62	219	358	141	22	19
16	16	23	46	e20	e24	170	62	165	228	98	21	20
17	16	22	46	e21	e24	150	64	118	307	67	21	17
18	16	27	46	e21	e25	132	66	99	404	52	21	17
19	15	31	38	e21	e26	128	65	86	245	46	22	17
20	15	31	33	e21	e28	220	60	168	160	42	22	16
21	15	28	36	e21	e28	274	70	223	126	42	21	15
22	15	26	34	e21	e30	183	74	261	112	40	20	14
23	16	178	32	e21	e30	144	66	603	98	37	19	14
24	15	350	29	e22	e32	127	60	2,060	96	34	19	14
25	15	242	29	e22	e32	140	65	1,080	94	33	25	14
26	15	138	27	e22	e31	234	74	496	82	31	27	14
27	15	89	29	e22	e34	333	68	297	76	30	42	14
28	16	69	38	e21	e40	276	64	211	78	29	44	15
29	15	58	75	e21	e50	726	60	162	73	30	32	15
30	15	51	68	e22	---	572	56	143	75	32	27	15
31	16	---	52	e22	---	310	---	392	---	34	25	---
TOTAL	471	1,822	1,317	881	772	14,215	2,490	8,344	10,309	1,756	802	548
MEAN	15.2	60.7	42.5	28.4	26.6	459	83.0	269	344	56.6	25.9	18.3
MAX	17	350	76	70	50	1,810	213	2,060	1,900	145	44	26
MIN	13	15	27	20	22	127	56	45	73	29	19	14
CFSM	0.12	0.48	0.33	0.22	0.21	3.61	0.65	2.12	2.71	0.45	0.20	0.14
IN.	0.14	0.53	0.39	0.26	0.23	4.16	0.73	2.44	3.02	0.51	0.23	0.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2004, BY WATER YEAR (WY)

MEAN	42.9	61.8	49.4	34.6	60.3	249	195	87.2	92.0	39.9	31.8	50.6
MAX	221	458	226	265	314	567	450	354	483	342	113	454
(WY)	(1985)	(1986)	(1993)	(1973)	(1984)	(1986)	(1993)	(1973)	(1990)	(1993)	(1975)	(1986)
MIN	10.1	10.9	9.10	8.14	11.0	38.8	26.0	21.2	12.3	8.29	7.90	8.98
(WY)	(1967)	(1977)	(1977)	(2003)	(2003)	(2000)	(2000)	(1977)	(1988)	(1965)	(1970)	(1966)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1964 - 2004	
ANNUAL TOTAL	16,848.0		43,727			
ANNUAL MEAN	46.2		119		82.9	
HIGHEST ANNUAL MEAN					178	1993
LOWEST ANNUAL MEAN					27.8	2000
HIGHEST DAILY MEAN	976	Apr 17	2,060	May 24	5,950	Jun 23, 1990
LOWEST DAILY MEAN	5.8	Jan 24	13	Oct 10, 11	5.8	Jan 24, 2003
ANNUAL SEVEN-DAY MINIMUM	(a)6.1	Jan 19	14	Oct 6	(a)6.1	Jan 19, 2003
MAXIMUM PEAK FLOW			2,490	Jun 1	(b)8,570	Jun 23, 1990
MAXIMUM PEAK STAGE			13.61	Jun 1	(c)16.03	Mar 30, 1960
INSTANTANEOUS LOW FLOW			(d)9.9	Dec 20	(d)3.8	Dec 15, 1997
ANNUAL RUNOFF (CFSM)	0.363		0.941		0.653	
ANNUAL RUNOFF (INCHES)	4.94		12.81		8.87	
10 PERCENT EXCEEDS	92		265		165	
50 PERCENT EXCEEDS	20		38		30	
90 PERCENT EXCEEDS	8.6		16		12	

(a) Ice affected
(b) Gage height, 16.00 ft, from crest-stage gage
(c) Backwater from ice
(d) Result of freezeup
(e) Estimated due to ice effect or missing record

442944087354100 DISCOVERY FARMS WATERWAY SITE NO. 1 NEAR KEWAUNEE, WI

LOCATION.--Lat 44°29'44", long 87°35'41", Kewaunee County, Hydrologic Unit 04030102, 1,700 ft west of intersection of Ryan Radio Rd. and County Hwy B, 700 ft south of Ryan Radio Rd. in waterway, 5.0 mi northwest of Kewaunee, WI.

DRAINAGE AREA.--to be determined.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 2003 to September 2004.

GAGE.--Water-stage recorder. Water levels are controlled by 2.5 ft H flume. Datum of gage is 740 ft above sea level, from topographic map.

REMARKS.--Records excellent. Note that discharge is the daily sum, in cubic feet.

DAILY SUM DISCHARGE, CUBIC FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	e0	0	0	0	32,880	0	0	0	0	0	0
2	---	e0	0	5,648	0	54,890	0	0	0	0	0	0
3	---	e0	0	0	0	549	0	0	0	0	0	0
4	---	e0	0	0	0	703	0	0	0	0	0	0
5	---	e0	0	0	0	68,520	0	0	0	0	0	0
6	---	e0	0	0	0	0	0	0	0	0	0	0
7	---	e0	0	0	0	4,469	0	0	0	0	0	0
8	---	e0	0	0	0	0	0	13,330	0	0	0	0
9	---	e0	0	0	0	0	0	0	39,560	0	0	0
10	---	e0	0	0	0	0	0	0	0	0	0	0
11	---	e0	0	0	0	0	0	0	1,907	0	0	0
12	---	e0	0	0	0	0	0	86	71	0	0	0
13	---	e0	0	0	0	0	0	116	187	0	0	0
14	---	e0	0	0	0	95	0	82	0	0	0	0
15	---	e0	0	0	0	0	0	0	0	0	0	0
16	---	e0	0	0	0	0	0	0	0	0	0	0
17	---	e0	0	0	0	0	0	0	4,855	0	0	0
18	---	e0	0	0	0	0	0	0	0	0	0	0
19	---	e0	0	0	0	0	0	0	0	0	0	0
20	---	e0	0	0	0	0	0	71	0	0	0	0
21	---	e0	0	0	0	0	0	51	0	0	0	0
22	---	0	0	0	0	0	0	27	0	0	0	0
23	---	681	0	0	0	0	0	95,260	0	0	0	0
24	---	0	0	0	0	0	0	19,150	0	0	0	0
25	---	0	0	0	0	0	0	0	0	0	0	0
26	---	0	0	0	0	0	0	0	0	0	0	0
27	---	0	0	0	0	0	0	0	0	0	0	0
28	---	0	0	0	0	89	0	0	0	0	0	0
29	---	0	0	0	128	0	0	0	0	0	0	0
30	---	0	0	0	---	0	0	0	0	0	0	0
31	---	---	0	0	---	0	---	29,130	---	0	0	---
TOTAL	---	681	0	5,648	128	162,195	0	157,303	46,580	0	0	0
MEAN	---	23	0	182	4	5,232	0	5,074	1,553	0	0	0
MAX	---	681	0	5,648	128	68,520	0	95,260	39,560	0	0	0
MIN	---	0	0	0	0	0	0	0	0	0	0	0

e Estimated

442944087354100 DISCOVERY FARMS WATERWAY SITE NO. 1 NEAR KEWAUNEE, WI

WATER QUALITY RECORDS

PERIOD OF RECORD.--December 2003 to September 2004.

INSTRUMENTATION.--Water-quality sampler since December 2003.

REMARKS.--Chemical analyses by the Water and Environmental Analysis Lab (formerly the Environmental Task Force Lab) at the University of Wisconsin-Stevens Point. Samples with start and end dates/times are flow-composite samples which represent the event-mean concentation for the specified runoff period. Samples with only start dates/times are discrete samples collected by the same automatic point sampler. Runoff perods which were not sampled have zero subsamples. The sample runoff volume is the total flow that occurs between the start and end time of each flow-composite sample. The storm runoff volume is the total flow that occurs between the time that runoff starts and ends. In most cases, the sample runoff volume is slightly less than the storm runoff volume. A storm load (in pounds) can be computed by multiplying the storm runoff volume (in cubic feet) by the constituent concentration (in mg/L) and a factor of 6.2428x10^-5.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DISCRETE SAMPLES

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Chloride, water, fltrd, mg/L (00940)	Residue on evap. at 105degC wat unf mg/L (00500)	Residue total at 105 deg. C, suspended, mg/L (00530)	Residue volatile, suspended, mg/L (00535)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Hydrolyzable phosphorus, water, fltrd, mg/L (00672)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Phosphorus, water, fltrd, mg/L (00666)
MAR													
14...	1138	.028	50	1.5	168	38	6	1.8	2.3	.6	.47	1.21	.35
14...	1208	.024	50	1.5	142	18	4	2.0	2.2	.6	.47	1.20	.458
JUN													
12...	0457	.030	50	6.5	390	26	11	1.97	2.40	.18	.56	.08	.742
13...	1408	.111	50	6.5	348	64	16	1.77	2.67	.22	.69	.21	.786

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)
MAR		
14...	.469	46
14...	.547	30
JUN		
12...	1.078	64
13...	1.084	96

442944087354100 DISCOVERY FARMS WATERWAY SITE NO. 1 NEAR KEWAUNEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
COMPOSITE SAMPLES

Date	End date	Time	End time	Sampling method, code (82398)	Chloride, water, fltrd, mg/L (00940)	Residue on evap. at 105degC wat unf mg/L (00500)	Residue total at 105 deg. C, suspended, mg/L (00530)	Residue volatile, suspended, mg/L (00535)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Hydrolyzable phosphorus, water, fltrd, mg/L (00672)	Nitrite + nitrate water fltrd, mg/L as N (00631)
NOV 23-23	20031123	0726	0905	50	6.0	641	546	53	1.28	3.23	.15	1.68	.95
JAN 02-02	20040102	1756	2204	50	1.5	413	306	43	2.58	4.30	.50	.873	3.33
MAR 01-03	20040303	0926	0252	50	.5	80	25	11	2.4	2.3	1.6	.38	.82
MAR 05-05	20040305	0512	0629	50	1.0	66	8	4	1.2	1.1	.4	.32	.73
MAR 05-05	20040305	0512	1812	50	.5	65	10	2	8.2	8.4	.5	.21	.74
MAR 05-05	20040305	0630	0829	50	.5	76	7	1	7.8	7.9	.4	.36	.74
MAR 05-05	20040305	0830	1107	50	1.0	52	12	2	8.2	8.1	.3	.37	.84
MAR 05-05	20040305	1108	1812	50	.5	82	14	4	8.7	9.3	.4	.49	.88
MAR 07-07	20040307	0853	1711	50	.5	113	7	4	14.8	15.1	.6	.74	1.57
MAR 28-28	20040328	1910	2018	50	4.0	296	75	11	1.6	2.4	.1	.67	.59
MAY 08-08	20040508	1748	2201	50	<.5	514	408	43	1.26	2.48	.45	.807	1.01
MAY 12-12	20040512	2023	2101	50	5.0	342	225	34	2.08	3.72	.22	1.08	1.37
MAY 13-13	20040513	1741	1824	50	2.5	346	131	22	2.58	3.81	.48	.885	.71
MAY 20-20	20040520	0152	0229	50	3.0	278	173	30	1.16	2.58	.20	.915	.86
MAY 23-23	20040523	0558	1243	50	.5	260	124	14	.71	1.30	.14	.710	.34
MAY 23-23	20040523	1727	2117	50	1.5	356	187	24	.98	1.77	.17	1.07	.44
MAY 23-24	20040524	2232	0317	50	1.0	497	372	48	.40	2.02	.13	.665	.24
MAY 31-31	20040531	0811	1202	50	1.5	316	83	13	1.54	5.37	.21	1.108	.61
MAY 31-31	20040531	1408	1906	50	.5	216	82	12	1.06	1.43	.14	.902	.37
JUN 09-09	20040609	0203	0608	50	2.0	266	135	14	1.33	2.40	.27	.804	.85
JUN 11-11	20040611	0346	0942	50	2.5	272	40	7	1.56	2.07	.21	.91	.13
JUN 17-17	20040617	0025	0335	50	5.5	565	81	14	1.74	3.15	.37	1.51	1.23

442944087354100 DISCOVERY FARMS WATERWAY SITE NO. 1 NEAR KEWAUNEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)	Sample runoff volume, cubic feet (99906)
NOV 23-23	1.68	2.92	606	661
JAN 02-02	.975	1.644	323	5,618
MAR 01-03	.37	.40	26	88,083
MAR 05-05	1.80	1.93	12	7,272
MAR 05-05	2.12	2.31	14	68,510
MAR 05-05	1.91	2.02	12	21,003
MAR 05-05	1.98	2.28	19	24,130
MAR 05-05	2.42	2.71	18	15,627
MAR 07-07	3.39	3.49	10	4,441
MAR 28-28	.62	1.08	98	78
MAY 08-08	.800	1.46	425	13,263
MAY 12-12	1.125	1.815	176	74
MAY 13-13	.942	1.369	95	111
MAY 20-20	.903	1.497	195	66
MAY 23-23	.683	1.060	118	35,240
MAY 23-23	1.026	1.497	177	6,989
MAY 23-24	.639	1.115	370	72,174
MAY 31-31	1.115	1.964	98	3,559
MAY 31-31	.900	1.218	94	25,560
JUN 09-09	.914	1.28	158	39,560
JUN 11-11	1.035	1.229	62	1,894
JUN 17-17	1.753	1.997	51	4,847

Discovery Farms Waterway Site No 1 near Kewaunee, WI

Station ID: 442944087354100

Storm Beginning Date	Storm Beginning Time	Storm Ending Date	Storm Ending Time	Storm Runoff Volume, Cubic Feet	Peak Discharge (CFS)	Number of Subsamples
11-23-03	0715	11-23-03	0910	664	0.24	11
01-02-04	1752	01-02-04	2225	5632	1.00	24
02-29-04	1500	02-29-04	1900	128	0.01	0
03-01-04	0900	03-03-04	0400	88106	1.67	19
03-03-04	1500	03-03-04	1900	204	0.03	0
03-04-04	1357	03-04-04	1740	696	0.10	0
03-05-04	0511	03-05-04	0629	7272	3.24	2
03-05-04	0629	03-05-04	0829	21192	3.63	6
03-05-04	0829	03-05-04	1107	24280	2.78	6
03-05-04	1107	03-05-04	1900	15776	2.38	4
03-05-04	0511	03-05-04	1900	68520	3.63	18
03-07-04	0800	03-07-04	1800	4469	0.27	4
03-14-04	1121	03-14-04	1152	48	0.04	1
03-14-04	1152	03-14-04	1232	47	0.04	1
03-28-04	1900	03-28-04	2047	89	0.03	2
05-08-04	1700	05-08-04	2208	13330	2.11	24
05-12-04	2000	05-12-04	2115	86	0.05	5
05-13-04	1740	05-13-04	1838	116	0.09	4
05-14-04	1100	05-14-04	1400	82	0.01	0
05-20-04	0148	05-20-04	0240	68	0.05	4
05-21-04	1740	05-21-04	1852	51	0.02	0
05-22-04	0146	05-22-04	0242	20	0.01	0
05-23-04	0556	05-23-04	1256	35244	4.25	26
05-23-04	1725	05-23-04	2122	6991	1.08	9
05-23-04	2230	05-24-04	0326	72178	16.42	6
05-31-04	0806	05-31-04	1215	3564	0.61	12
05-31-04	1407	05-31-04	1915	25563	3.45	10
06-09-04	0202	06-09-04	0611	39561	7.52	15
06-11-04	0300	06-11-04	0955	1907	0.24	12
06-12-04	0431	06-12-04	0548	71	0.03	1
06-13-04	1400	06-13-04	1500	187	0.13	1
06-17-04	0021	06-17-04	0338	4855	0.93	13

442916087362600 DISCOVERY FARMS WATERWAY SITE NO. 2 NEAR KEWAUNEE, WI

LOCATION.--Lat 44°29'16", long 87°36'26", Kewaunee County, Hydrologic Unit 04030102, 1 mi west of intersection of Ryan Radio Rd. and County Hwy B, 3,500 ft south of Ryan Radio Rd. in waterway, 5.4 mi northwest of Kewaunee, WI.

DRAINAGE AREA.--to be determined.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 2003 to September 2004.

GAGE.--Water-stage recorder. Water levels are controlled by 2.5 ft H flume. Datum of gage is 750 ft above sea level, from topographic map.

REMARKS.--Records excellent. Note that discharge is the daily sum, in cubic feet.

DAILY SUM DISCHARGE, CUBIC FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	e0	0	0	0	19,900	0	0	0	0	0	0
2	---	e0	0	2,816	0	64,840	0	0	0	0	0	0
3	---	e0	0	15	0	9,048	0	0	0	0	0	0
4	---	e0	0	0	0	220	0	0	0	0	0	0
5	---	e0	0	0	0	25,450	0	0	0	0	0	0
6	---	e0	0	0	0	0	0	0	0	0	0	0
7	---	e0	0	0	0	1,652	0	0	0	0	0	0
8	---	e0	0	0	0	0	0	2,650	0	0	0	0
9	---	e0	0	0	0	0	0	0	21,250	0	0	0
10	---	e0	0	0	0	0	0	0	64	0	0	0
11	---	e0	0	0	0	0	0	0	2,821	0	0	0
12	---	e0	0	0	0	0	0	286	930	0	0	0
13	---	e0	0	0	0	0	0	1,544	1,068	0	0	0
14	---	e0	0	0	0	325	0	1,842	0	0	0	0
15	---	e0	0	0	0	0	0	0	0	0	0	0
16	---	e0	0	0	0	0	0	0	0	0	0	0
17	---	e0	0	0	0	0	0	0	3,465	0	0	0
18	---	e0	0	0	0	0	0	0	0	0	0	0
19	---	e0	0	0	0	0	0	0	0	0	0	0
20	---	e0	0	0	298	0	0	0	0	0	0	0
21	---	e0	0	0	0	0	0	453	0	0	0	0
22	---	0	0	0	0	68	0	877	0	0	0	0
23	---	150	0	0	0	125	0	42,780	0	0	0	0
24	---	0	0	0	0	0	0	20,040	0	0	0	0
25	---	0	0	0	0	0	0	0	0	0	0	0
26	---	0	0	0	0	0	0	0	0	0	0	0
27	---	0	0	0	0	0	0	0	0	0	0	0
28	---	0	194	0	0	2,478	0	0	0	0	0	0
29	---	0	0	0	2,292	0	0	0	0	0	0	0
30	---	0	0	0	---	189	0	0	0	0	0	0
31	---	---	0	0	---	0	---	12,570	---	0	0	---
TOTAL	---	150	194	2,831	2,590	124,295	0	83,042	29,598	0	0	0
MEAN	---	5	6	91	89	4,010	0	2,679	987	0	0	0
MAX	---	150	194	2,816	2,292	64,840	0	42,780	21,250	0	0	0
MIN	---	0	0	0	0	0	0	0	0	0	0	0

e Estimated

442916087362600 DISCOVERY FARMS WATERWAY SITE NO. 2 NEAR KEWAUNEE, WI

WATER QUALITY RECORDS

PERIOD OF RECORD.--December 2003 to September 2004.

INSTRUMENTATION.--Water-quality sampler since December 2003.

REMARKS.--Chemical analyses by the Water and Environmental Analysis Lab (formerly the Environmental Task Force Lab) at the University of Wisconsin-Stevens Point. Samples with start and end dates/times are flow-composite samples which represent the event-mean concentation for the specified runoff period. Samples with only start dates/times are discrete samples collected by the same automatic point sampler. Runoff perods which were not sampled have zero subsamples. The sample runoff volume is the total flow that occurs between the start and end time of each flow-composite sample. The storm runoff volume is the total flow that occurs between the time that runoff starts and ends. In most cases, the sample runoff volume is slightly less than the storm runoff volume. A storm load (in pounds) can be computed by multiplying the storm runoff volume (in cubic feet) by the constituent concentration (in mg/L) and a factor of 6.2428x10^-5.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DISCRETE SAMPLES

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Chloride, water, fltrd, mg/L (00940)	Residue on evap. at 105degC wat unf mg/L (00500)	Residue total at 105 deg. C, suspended, mg/L (00530)	Residue volatile, suspended, mg/L (00535)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Hydrolyzable phosphorus, water, fltrd, mg/L (00672)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Phosphorus, water, fltrd, mg/L (00666)
FEB													
20...	1241	.012	50	3.5	74	12	4	2.73	3.57	1.7	.11	6.0	.09
20...	1411	.004	50	2.5	78	12	5	2.2	2.32	1.4	.19	5.6	.17

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)
FEB		
20...	.14	55
20...	.25	39

442916087362600 DISCOVERY FARMS WATERWAY SITE NO. 2 NEAR KEWAUNEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
COMPOSITE SAMPLES

Date	End date	Time	End time	Sampling method, code (82398)	Chloride, water, fltrd, mg/L (00940)	Residue on evap. at 105degC wat unf mg/L (00500)	Residue total at 105 deg. C, suspended, mg/L (00530)	Residue volatile, suspended, mg/L (00535)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Hydrolyzable phosphorus, water, fltrd, mg/L (00672)	Nitrite + nitrate water fltrd, mg/L as N (00631)
NOV 23-23	20031123	0727	0813	50	5.0	2,188	2,122	191	.61	8.85	.06	.183	.38
FEB 29-29	20040229	1238	2055	50	1.5	71	4	4	5.2	5.57	3.7	<.01	.61
FEB 29-MAR 01	20040301	1238	1124	50	3.0	65	8	7	14.1	14.3	9.1	<.01	.51
MAR 01-01	20040301	0525	1724	50	1.0	101	4	3	8.4	8.43	5.7	<.01	.64
MAR 01-02	20040302	1725	0724	50	.5	47	2	2	4.6	4.74	3.3	<.01	.55
MAR 02-02	20040302	0725	1607	50	1.0	61	4	4	5.0	5.05	3.3	<.01	.65
MAR 02-03	20040303	1608	0807	50	1.0	66	3	3	4.62	4.74	3.2	<.01	.66
MAR 03-03	20040303	0808	2055	50	1.5	81	4	3	3.72	3.68	2.6	.09	.62
MAR 05-05	20040305	0459	0624	50	.5	96	19	3	9.9	10.9	.8	<.03	.71
MAR 05-05	20040305	0459	2059	50	.5	108	21	3	1.83	1.91	.7	.12	1.48
MAR 05-05	20040305	0625	0837	50	1.0	112	7	1	10.3	10.6	.8	<.03	.77
MAR 05-05	20040305	0838	1110	50	.5	111	26	5	11.4	11.3	.8	<.03	.89
MAR 05-05	20040305	1111	2059	50	.5	112	12	1	12.8	12.7	.8	.11	1.02
MAR 14-14	20040314	0934	1236	50	3.0	276	119	15	2.0	2.5	.8	.12	1.26
MAR 28-28	20040328	1845	2319	50	6.0	696	490	50	1.3	3.0	.2	.19	1.10
MAR 30-30	20040330	1637	1836	50	16.5	340	10	2	1.4	1.5	--	.176	1.06
MAY 08-08	20040508	1824	2255	50	1.0	531	306	33	.82	1.75	.21	.214	.60
MAY 12-12	20040512	2127	2325	50	6.0	308	124	14	1.24	1.93	.29	.322	.85
MAY 13-13	20040513	1757	2200	50	5.5	427	229	23	1.14	2.06	.19	.161	.49
MAY 14-14	20040514	1030	1753	50	6.5	368	64	9	1.17	1.64	.12	.153	.09
MAY 21-21	20040521	1842	2150	50	8.5	331	65	10	1.23	1.86	.22	.165	.08
MAY 22-22	20040522	0216	0634	50	8.0	389	74	12	1.50	2.07	.24	.13	.02
MAY 22-22	20040522	0950	1437	50	8	361	22	5	1.27	1.56	.11	.124	<.02
MAY 23-23	20040523	0617	1344	50	1.5	342	204	19	.64	1.29	.12	.072	.14
MAY 23-23	20040523	1730	2212	50	2.0	442	280	30	.68	1.7	.08	.063	.17
MAY 23-24	20040524	2213	1445	50	1.0	407	310	34	.41	1.32	.07	.052	.19
MAY 31-31	20040531	0906	1215	50	4.0	298	96	14	1.27	1.85	.19	.093	.02
MAY 31-31	20040531	1411	1836	50	2.0	246	104	12	.79	1.49	.26	.041	<.02
JUN 09-09	20040609	0213	0558	50	1.5	90	34	9	.57	1.27	.07	.080	<.02
JUN 11-11	20040611	0346	1306	50	9.0	264	21	5	1.53	1.87	.07	.044	.13
JUN 12-12	20040612	0427	0726	50	8.5	328	28	8	1.04	1.83	.07	.095	<.02
JUN 13-13	20040613	1418	1627	50	9.0	309	30	5	1.37	1.68	.07	.085	.1
JUN 17-17	20040617	0040	0410	50	6.5	229	122	24	1.37	3.78	.29	.211	<.02

442916087362600 DISCOVERY FARMS WATERWAY SITE NO. 2 NEAR KEWAUNEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Sus-pended sedi-ment concen-tration mg/L (80154)	Sample runoff volume, cubic feet (99906)
NOV 23-23	.175	3.37	2,077	99
FEB 29-29	<.01	<.01	21	96,047
FEB 29-MAR 01	<.01	<.01	17	3,483
MAR 01-01	<.01	<.01	21	10,349
MAR 01-02	<.01	<.01	31	15,208
MAR 02-02	<.01	<.01	28	39,622
MAR 02-03	<.01	<.01	30	23,398
MAR 03-03	.05	.03	33	3,843
MAR 05-05	.47	.76	18	3,919
MAR 05-05	.53	.80	28	25,415
MAR 05-05	.41	.60	7	7,015
MAR 05-05	.50	.84	33	7,679
MAR 05-05	.73	.94	17	6,639
MAR 14-14	.162	.362	212	306
MAR 28-28	.04	1.29	230	2,453
MAR 30-30	--	.19	20	161
MAY 08-08	.211	.744	290	2,637
MAY 12-12	.310	.721	132	261
MAY 13-13	.167	.642	194	1,504
MAY 14-14	.160	.358	92	1,818
MAY 21-21	.155	.383	6	432
MAY 22-22	.141	.319	107	498
MAY 22-22	.137	.239	41	315
MAY 23-23	.082	.452	236	17,233
MAY 23-23	.063	.589	323	4,282
MAY 23-24	.049	.517	332	41,271
MAY 31-31	.094	.341	125	2,643
MAY 31-31	.084	.393	117	9,904
JUN 09-09	.070	.257	73	21,242
JUN 11-11	.148	.247	33	2,812
JUN 12-12	.062	.208	42	918
JUN 13-13	.078	.230	52	1,045
JUN 17-17	.257	.728	130	3,444

Discovery Farms Waterway Site No 2 near Kewaunee, WI

Station ID: 442916087362600

Storm Beginning Date	Storm Beginning Time	Storm Ending Date	Storm Ending Time	Storm Runoff Volume, Cubic Feet	Peak Discharge (CFS)	Number of Subsamples
11-23-03	0721	11-23-03	0940	150	0.08	7
12-28-03	0400	12-28-03	0745	194	0.03	0
01-02-04	1725	01-03-04	0100	2829	0.34	0
02-20-04	0800	02-20-04	1325	260	0.03	1
02-20-04	1325	02-20-04	2204	37	0.01	1
02-29-04	1200	03-01-04	0524	3493	0.10	7
03-01-04	0524	03-01-04	1724	10352	0.42	6
03-01-04	1724	03-02-04	0724	15224	0.51	7
03-02-04	0724	03-02-04	1607	39645	1.91	4
03-02-04	1607	03-03-04	0807	23398	1.28	8
03-03-04	0807	03-03-04	2145	3864	0.18	5
02-29-04	1200	03-03-04	2145	96072	1.91	37
03-04-04	1100	03-04-04	1600	220	0.02	0
03-05-04	0457	03-05-04	0624	3920	1.29	2
03-05-04	0624	03-05-04	0837	7093	1.29	8
03-05-04	0837	03-05-04	1110	7725	0.97	6
03-05-04	1110	03-05-04	2330	6709	0.64	4
03-05-04	0457	03-05-04	2330	25447	1.29	20
03-07-04	0700	03-07-04	1800	1652	0.10	0
03-14-04	0905	03-14-04	1320	325	0.05	4
03-22-04	2000	03-23-04	0430	192	0.01	0
03-28-04	1830	03-28-04	2350	2478	0.48	10
03-30-04	1625	03-30-04	1940	186	0.03	3
05-08-04	1817	05-08-04	2335	2650	0.56	22
05-12-04	2110	05-13-04	0036	295	0.08	11
05-13-04	1753	05-13-04	2300	1534	0.47	11
05-14-04	1025	05-14-04	1900	1842	0.17	35
05-21-04	1838	05-21-04	2240	453	0.10	12
05-22-04	0207	05-22-04	0747	530	0.08	8
05-22-04	0937	05-22-04	1600	347	0.03	5
05-23-04	0616	05-23-04	1500	17256	2.42	18
05-23-04	1727	05-23-04	2212	4284	1.25	11
05-23-04	2212	05-24-04	1500	41278	9.24	13
05-31-04	0903	05-31-04	1240	2654	0.80	9
05-31-04	1408	05-31-04	1900	9914	1.88	9
06-09-04	0211	06-09-04	0630	21253	10.12	14
06-10-04	0213	06-10-04	0400	64	0.01	0
06-11-04	0343	06-11-04	1334	2821	0.25	16
06-12-04	0416	06-12-04	0748	927	0.24	6
06-13-04	1412	06-13-04	1650	1068	0.40	3
06-17-04	0035	06-17-04	0435	3460	1.09	12

443012087362500 DISCOVERY FARMS WATERWAY SITE NO. 3 NEAR KEWAUNEE, WI

LOCATION.--Lat 44°30'12", long 87°36'25", Kewaunee County, Hydrologic Unit 04030102, 1 mi west of intersection of Ryan Radio Rd. and County Hwy B, 2,400 ft north of Ryan Radio Rd. in waterway, 5.6 mi northwest of Kewaunee, WI.

DRAINAGE AREA.--to be determined.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 2003 to September 2004.

GAGE.--Water-stage recorder. Water levels are controlled by 2.5 ft H flume. Datum of gage is 740 ft above sea level, from topographic map.

REMARKS.--Records excellent. Note that discharge is the daily sum, in cubic feet.

DAILY SUM DISCHARGE, CUBIC FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	e0	0	0	0	39,500	0	0	0	0	0	0
2	---	e0	0	0	0	55,300	0	0	0	0	0	0
3	---	e0	0	0	0	7,290	0	0	0	0	0	0
4	---	e0	0	0	0	2,930	0	0	0	0	0	0
5	---	e0	0	0	0	57,700	0	0	0	0	0	0
6	---	e0	0	0	0	0	0	0	0	0	0	0
7	---	e0	0	0	0	10,300	0	0	0	0	0	0
8	---	e0	0	0	0	16	0	10,100	0	0	0	0
9	---	e0	0	0	0	0	0	0	29,700	0	0	0
10	---	e0	0	0	0	0	0	0	330	0	0	0
11	---	e0	0	0	0	0	0	0	5,010	0	0	0
12	---	e0	0	0	0	0	0	350	710	0	0	0
13	---	e0	0	0	0	0	0	250	1,020	0	0	0
14	---	e0	0	0	0	4,990	0	1,840	0	0	0	0
15	---	e0	0	0	0	0	0	0	0	0	0	0
16	---	e0	0	0	0	0	0	0	0	0	0	0
17	---	e0	0	0	0	0	0	0	6,410	0	0	0
18	---	e0	0	0	0	270	0	0	0	0	0	0
19	---	e0	0	0	0	410	0	0	0	0	0	0
20	---	e0	0	0	280	260	0	390	0	0	0	0
21	---	e0	0	0	0	0	0	550	0	0	0	0
22	---	0	0	0	0	0	0	940	0	0	0	0
23	---	710	0	0	0	0	0	65,500	0	0	0	0
24	---	0	0	0	0	0	0	5,630	0	0	0	0
25	---	0	0	0	0	0	0	0	0	0	0	0
26	---	0	0	0	0	0	0	0	0	0	0	0
27	---	0	0	0	0	0	0	0	0	0	0	0
28	---	0	0	0	76	1,910	0	0	0	0	0	0
29	---	0	0	0	3,480	0	0	0	0	0	0	0
30	---	0	0	0	---	280	0	0	0	0	0	0
31	---	---	0	0	---	0	---	27,800	---	0	0	---
TOTAL	---	710	0	0	3,836	181,156	0	113,350	43,180	0	0	0
MEAN	---	24	0	0	130	5,840	0	3,660	1,440	0	0	0
MAX	---	710	0	0	3,480	57,700	0	65,500	29,700	0	0	0
MIN	---	0	0	0	0	0	0	0	0	0	0	0

e Estimated

443012087362500 DISCOVERY FARMS WATERWAY SITE NO. 3 NEAR KEWAUNEE, WI

WATER QUALITY RECORDS

PERIOD OF RECORD.--December 2003 to September 2004.

INSTRUMENTATION.--Water-quality sampler since December 2003.

REMARKS.--Chemical analyses by the Water and Environmental Analysis Lab (formerly the Environmental Task Force Lab) at the University of Wisconsin-Stevens Point. Samples with start and end dates/times are flow-composite samples which represent the event-mean concentation for the specified runoff period. Samples with only start dates/times are discrete samples collected by the same automatic point sampler. Runoff perods which were not sampled have zero subsamples. The sample runoff volume is the total flow that occurs between the start and end time of each flow-composite sample. The storm runoff volume is the total flow that occurs between the time that runoff starts and ends. In most cases, the sample runoff volume is slightly less than the storm runoff volume. A storm load (in pounds) can be computed by multiplying the storm runoff volume (in cubic feet) by the constituent concentration (in mg/L) and a factor of 6.2428x10^-5.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DISCRETE SAMPLES

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Chloride, water, fltrd, mg/L (00940)	Residue on evap. at 105degC wat unf mg/L (00500)	Residue total at 105 deg. C, suspended, mg/L (00530)	Residue volatile, suspended, mg/L (00535)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Hydrolyzable phosphorus, water, fltrd, mg/L (00672)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Phosphorus, water, fltrd, mg/L (00666)
MAR													
05...	0844	1.805	50	.5	81	21	5	8.8	9.6	.5	.11	.79	.7

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)
MAR		
05...	.97	28

443012087362500 DISCOVERY FARMS WATERWAY SITE NO. 3 NEAR KEWAUNEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
COMPOSITE SAMPLES

Date	End date	Time	End time	Sampling method, code (82398)	Chloride, water, fltrd, mg/L (00940)	Residue on evap. at 105degC wat unf mg/L (00500)	Residue total at 105 deg. C, suspended, mg/L (00530)	Residue volatile, suspended, mg/L (00535)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Hydrolyzable phosphorus, water, fltrd, mg/L (00672)	Nitrite + nitrate water fltrd, mg/L as N (00631)
NOV 23-23	20031123	0340	0600	50	4.0	412	214	28	1.28	3.52	.21	.488	.96
NOV 23-23	20031123	0723	1016	50	3.5	584	514	53	.78	3.60	.13	.337	.66
FEB 20-20	20040220	1125	2338	50	2.0	122	17	3	3.7	4.12	3.3	.25	6.5
FEB 29-MAR 01	20040301	1154	0602	50	1.5	84	9	4	6.8	7.35	5.4	.06	1.62
FEB 29-MAR 04	20040304	1154	2310	50	4.5	58	13	4	2.80	2.82	2.4	.12	1.04
MAR 01-02	20040302	0603	0902	50	.5	50	13	3	3.5	3.74	2.7	.08	.81
MAR 02-02	20040302	0903	1803	50	.5	50	18	3	2.4	2.21	1.6	.16	.47
MAR 02-03	20040303	1804	1003	50	1.5	57	7	2	2.3	2.38	1.6	.18	.59
MAR 03-04	20040304	1004	0852	50	1.0	73	2	<2	2.2	2.40	1.5	.2	.79
MAR 04-04	20040304	0853	2310	50	1.0	79	6	2	1.81	1.88	1.1	.18	.84
MAR 05-05	20040305	0436	0654	50	.5	79	28	3	8.7	9.6	.4	.12	.86
MAR 05-05	20040305	0436	2036	50	.5	65	20	4	9.5	10.0	.5	.14	.89
MAR 05-05	20040305	0655	0824	50	1.0	67	15	3	8.6	9.2	.4	.10	.8
MAR 05-05	20040305	1003	2036	50	.5	117	14	4	10.4	11.0	.5	.17	.97
MAR 14-14	20040314	0312	1609	50	2.0	134	26	5	1.9	2.1	.8	.12	1.40
MAR 28-28	20040328	1759	2256	50	3.0	496	292	36	1.1	2.3	.1	.19	.62
MAR 30-30	20040330	1502	1856	50	7.5	220	22	6	1.6	1.6	--	.152	1.25
MAY 08-08	20040508	1745	2152	50	<.5	365	270	32	.97	1.92	.38	.160	.58
MAY 12-12	20040512	2035	2151	50	3.0	202	91	14	2.17	3.19	.87	.320	1.00
MAY 13-13	20040513	1803	1939	50	4.5	291	47	6	2.67	3.12	.64	.227	.69
MAY 14-14	20040514	0929	1542	50	6.5	292	17	3	1.7	1.91	.06	.103	.29
MAY 20-20	20040520	0145	0344	50	3.0	224	82	18	1.48	2.20	.41	.249	.65
MAY 21-21	20040521	1758	2030	50	4.0	272	40	10	2.19	2.73	.36	.132	.51
MAY 22-22	20040522	0145	0438	50	6.5	332	36	11	2.37	2.99	.36	.139	.27
MAY 23-23	20040523	0554	1326	50	1.5	178	70	12	1.07	1.46	.21	.089	.35
MAY 23-23	20040523	1731	2214	50	4.0	251	50	9	1.26	1.70	.15	.090	.35
MAY 23-24	20040524	2217	0416	50	1.0	258	156	24	.69	1.65	.22	.088	.26
MAY 31-31	20040531	0827	1155	50	4.0	234	40	10	1.55	2.23	.23	.082	.41
MAY 31-31	20040531	1400	1942	50	2.5	174	51	9	1.11	1.52	.11	.066	.22
JUN 09-09	20040609	0210	0833	50	2.0	119	54	12	1.17	2.38	.21	.058	.23
JUN 11-11	20040611	0319	1232	50	5.0	280	37	7	1.70	2.28	.26	.080	.14
JUN 12-12	20040612	0434	0722	50	8.5	298	26	6	1.78	2.15	.21	.072	.15
JUN 13-13	20040613	1404	1624	50	9.0	294	25	7	2.53	2.68	.37	.073	.70
JUN 17-17	20040617	0020	0335	50	5.0	171	78	16	1.76	3.20	.41	.158	.56

443012087362500 DISCOVERY FARMS WATERWAY SITE NO. 3 NEAR KEWAUNEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Sus-pended sedi-ment concen-tration mg/L (80154)	Sample runoff volume, cubic feet (99906)
NOV 23-23	.514	1.25	347	155
NOV 23-23	.321	1.35	611	558
FEB 20-20	.22	.29	45	270
FEB 29-MAR 01	.04	.11	24	5,202
FEB 29-MAR 04	.08	.15	32	108,333
MAR 01-02	.06	.12	44	55,071
MAR 02-02	.15	.20	24	33,099
MAR 02-03	.25	.21	32	7,505
MAR 03-04	.18	.18	3	5,323
MAR 04-04	.16	.16	11	2,134
MAR 05-05	.57	.91	27	13,779
MAR 05-05	.71	.95	26	57,041
MAR 05-05	.61	.87	23	10,296
MAR 05-05	.83	1.09	18	21,027
MAR 14-14	.141	.206	36	4,933
MAR 28-28	.01	1.00	302	1,899
MAR 30-30	--	.18	21	254
MAY 08-08	.167	.637	286	10,062
MAY 12-12	.301	.608	119	327
MAY 13-13	.232	.412	81	239
MAY 14-14	.222	.291	24	1,828
MAY 20-20	.252	.514	116	388
MAY 21-21	.142	.304	49	547
MAY 22-22	.160	.315	62	612
MAY 23-23	.086	.264	107	34,987
MAY 23-23	.096	.249	76	3,801
MAY 23-24	.091	.450	180	32,272
MAY 31-31	.118	.289	73	5,597
MAY 31-31	.107	.266	54	22,194
JUN 09-09	.053	.350	89	29,656
JUN 11-11	.054	.230	56	5,001
JUN 12-12	.068	.235	55	702
JUN 13-13	.094	.294	98	1,008
JUN 17-17	.297	.510	75	6,405

Discovery Farms Waterway Site No 3 near Kewaunee, WI

Station ID: 443012087362500

Storm Beginning Date	Storm Beginning Time	Storm Ending Date	Storm Ending Time	Storm Runoff Volume, Cubic Feet	Peak Discharge (CFS)	Number of Subsamples
11-23-03	0336	11-23-03	0601	155	0.06	12
11-23-03	0719	11-23-03	1016	559	0.20	9
02-20-04	1035	02-20-04	2146	284	0.03	24
02-28-04	1315	02-28-04	1601	65	0.01	0
02-29-04	1148	03-01-04	0602	5203	0.14	9
03-01-04	0602	03-02-04	0902	55075	1.11	13
03-02-04	0902	03-02-04	1803	33130	1.52	4
03-02-04	1803	03-03-04	1003	7528	0.40	8
03-03-04	1003	03-04-04	0852	5323	0.18	10
03-04-04	0852	03-04-04	2310	2135	0.10	4
02-29-04	1148	03-04-04	2310	108394	1.52	48
03-04-04	2310	03-05-04	0654	13905	3.47	4
03-05-04	0654	03-05-04	0824	10415	2.22	5
03-05-04	0824	03-05-04	1002	11940	2.21	1
03-05-04	1002	03-05-04	2036	21287	2.29	5
03-04-04	2310	03-05-04	2338	57548	3.47	15
03-07-04	0500	03-08-04	0140	10314	0.52	0
03-14-04	0250	03-14-04	2202	4993	0.45	15
03-18-04	1211	03-18-04	1701	265	0.03	0
03-19-04	1014	03-19-04	2225	397	0.02	0
03-20-04	0832	03-20-04	1401	257	0.02	0
03-28-04	1753	03-28-04	2301	1902	0.34	9
03-30-04	1435	03-30-04	1905	268	0.04	3
05-08-04	1741	05-08-04	2157	10066	2.05	24
05-12-04	2015	05-12-04	2203	346	0.16	13
05-13-04	1800	05-13-04	1949	245	0.08	6
05-14-04	0916	05-14-04	1551	1836	0.18	20
05-20-04	0144	05-20-04	0401	393	0.14	10
05-21-04	1754	05-21-04	2031	550	0.13	13
05-22-04	0133	05-22-04	0450	620	0.13	11
05-22-04	0919	05-22-04	1235	317	0.06	0
05-23-04	0547	05-23-04	1354	35003	5.21	23
05-23-04	1730	05-23-04	2214	3801	0.74	10
05-23-04	2214	05-24-04	0500	32294	8.40	8
05-31-04	0824	05-31-04	1203	5602	1.18	11
05-31-04	1358	05-31-04	1945	22195	3.38	11
06-09-04	0209	06-09-04	0843	29661	11.19	14
06-10-04	0053	06-10-04	0415	322	0.04	0
06-11-04	0315	06-11-04	1255	5012	0.47	17
06-12-04	0428	06-12-04	0731	708	0.16	6
06-13-04	1400	06-13-04	1631	1013	0.28	5
06-17-04	0018	06-17-04	0347	6411	1.75	12

442954087355700 DISCOVERY FARMS WEATHER STATION NEAR KEWAUNEE, WI—Continued

LAKE MICHIGAN BASIN

442954087355700 DISCOVERY FARMS WEATHER STATION NEAR KEWAUNEE, WI

LOCATION.--Lat 44°29'54", long 87°35'57", Kewaunee County, Hydrologic Unit 04030102, 2,700 ft west of intersection of Ryan Radio Rd. and County Hwy B, 50 ft north of Ryan Radio Rd., 5.3 mi northwest of Kewaunee, WI.

PERIOD OF RECORD.--November 2003 to September 2004.

GAGE.--Tipping-bucket rain gage with electronic datalogger.

REMARKS.--Gage established Nov. 21, 2003. Rainfall for Nov. 1-21 and Aug. 19-Sept. 14 estimated from National Weather Service gage in Green Bay, WI. Rainfall estimated to be 0.00 for Feb. 19 and Mar. 6 because recorded precipitation was interpreted as collector snowmelt.

EXTREMES FOR CURRENT PERIOD.--Maximum daily rainfall, 2.43 in., June 9.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	e0.00	0.00	0.00	0.00	0.38	0.00	0.01	0.03	0.00	0.09	e0.00
2	---	e0.00	0.00	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.22	e0.00
3	---	e0.76	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.03	0.00	e0.00
4	---	e0.75	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.44	0.00	e0.00
5	---	e0.00	0.00	0.00	0.00	1.27	0.00	0.00	0.00	0.00	0.00	e0.00
6	---	e0.00	0.00	0.00	0.00	0.00	0.18	0.10	0.01	0.48	0.00	e0.26
7	---	e0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	e0.00
8	---	e0.00	0.00	0.00	0.00	0.00	0.14	2.38	0.00	0.00	0.22	e0.00
9	---	e0.00	0.17	0.00	0.00	0.00	0.01	0.04	2.43	0.00	0.00	e0.00
10	---	e0.16	0.72	0.00	0.00	0.06	0.00	0.02	0.18	0.00	0.00	e0.00
11	---	e0.01	0.00	0.00	0.00	0.03	0.00	0.00	0.56	0.00	0.01	e0.00
12	---	e0.01	0.00	0.00	0.00	0.00	0.00	0.51	0.20	0.00	0.01	e0.00
13	---	e0.00	0.00	0.00	0.00	0.07	0.00	0.34	0.30	0.10	0.03	e0.00
14	---	e0.00	0.00	0.00	0.00	0.15	0.08	0.30	0.01	0.00	0.00	e0.15
15	---	e0.02	0.03	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.39
16	---	e0.00	0.04	0.00	0.00	0.00	0.01	0.00	0.03	0.15	0.00	0.00
17	---	e0.06	0.00	0.00	0.00	0.00	0.08	0.06	0.90	0.00	0.06	0.00
18	---	e0.46	0.00	0.00	0.00	0.05	0.07	0.01	0.00	0.00	0.02	0.00
19	---	e0.00	0.00	0.00	0.00	0.13	0.01	0.00	0.00	0.00	e0.00	0.00
20	---	e0.00	0.00	0.00	0.45	0.00	0.28	0.88	0.00	0.00	e0.00	0.00
21	---	e0.00	0.00	0.00	0.01	0.00	0.16	0.45	0.01	0.48	e0.00	0.00
22	---	0.04	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	e0.00	0.00
23	---	1.70	0.00	0.00	0.11	0.00	0.00	2.52	0.09	0.00	e0.00	0.00
24	---	0.00	0.00	0.00	0.00	0.00	0.04	0.01	0.00	0.00	e0.47	0.00
25	---	0.00	0.00	0.00	0.00	0.13	0.24	0.00	0.00	0.00	e0.08	0.00
26	---	0.00	0.00	0.00	0.00	0.14	0.12	0.00	0.00	0.00	e0.14	0.00
27	---	0.00	0.04	0.00	0.00	0.00	0.00	0.14	0.21	0.00	e0.64	0.12
28	---	0.01	0.22	0.00	0.00	0.81	0.14	0.00	0.01	0.00	e0.10	0.01
29	---	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.14	0.53	e0.00	0.00
30	---	0.00	0.00	0.00	---	0.26	0.08	0.41	0.00	0.12	e0.00	0.00
31	---	---	0.00	0.00	---	0.00	---	1.12	---	0.00	e0.00	---
TOTAL	---	3.98	1.22	0.43	0.57	3.73	1.71	9.56	5.11	2.33	2.09	0.93

e Estimated

04085395 SOUTH BRANCH MANITOWOC RIVER AT HAYTON, WI

LOCATION.--Lat 44°01'29", long 88°07'05", in SW ¼ SW ¼ sec.16, T.18 N., R.20 E., Calumet County, Hydrologic Unit 04030101, on left bank 100 ft downstream from Weeks Road bridge, at Hayton.

DRAINAGE AREA.--109 mi^2.

PERIOD OF RECORD.--July 1993 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 808 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	15	55	e27	e24	e110	171	54	809	87	44	22
2	9.0	17	63	e26	e25	e210	151	50	647	77	46	20
3	15	21	60	e24	e26	e260	134	47	501	72	40	18
4	15	77	49	e24	e25	301	124	43	416	90	35	16
5	13	92	46	e23	e26	585	114	40	370	91	30	15
6	11	79	44	e22	e26	772	107	40	335	90	26	19
7	12	60	40	e22	e27	708	100	37	302	87	24	17
8	11	42	40	22	e28	621	93	278	266	84	22	17
9	10	30	40	20	28	557	87	528	233	79	22	16
10	9.9	27	e58	19	28	468	79	379	216	74	22	16
11	11	32	e68	18	29	393	74	302	501	68	21	15
12	17	36	e56	19	29	296	68	262	946	64	20	13
13	19	36	e44	19	25	249	64	278	864	64	20	12
14	19	34	e40	19	29	207	60	322	744	61	19	12
15	17	34	38	20	27	164	56	328	650	56	18	16
16	15	33	41	19	28	143	53	279	575	52	17	16
17	14	33	41	e18	29	130	52	224	535	49	21	13
18	14	48	38	e17	29	116	90	182	501	46	18	12
19	13	55	34	17	29	110	92	148	435	44	17	11
20	14	49	29	e18	32	121	78	142	364	42	17	10
21	13	42	30	e18	29	126	91	172	306	40	16	13
22	15	38	29	e18	26	116	96	279	259	39	15	11
23	16	138	29	e19	25	107	84	519	219	36	14	8.1
24	16	154	26	e21	24	104	73	654	200	34	15	5.6
25	15	105	25	e20	23	109	78	592	178	30	18	5.0
26	15	82	23	e21	25	135	79	539	153	28	16	6.9
27	15	70	23	e22	28	139	72	497	132	27	42	10
28	17	65	33	e21	e32	152	66	445	122	25	41	10
29	16	59	45	e20	e60	205	58	388	111	28	31	8.3
30	16	63	39	e22	---	217	54	379	99	32	26	7.8
31	16	---	35	e23	---	195	---	614	---	36	24	---
TOTAL	437.9	1,666	1,261	638	821	8,126	2,598	9,041	11,989	1,732	757	391.7
MEAN	14.1	55.5	40.7	20.6	28.3	262	86.6	292	400	55.9	24.4	13.1
MAX	19	154	68	27	60	772	171	654	946	91	46	22
MIN	9.0	15	23	17	23	104	52	37	99	25	14	5.0
CFSM	0.13	0.51	0.37	0.19	0.26	2.40	0.79	2.68	3.67	0.51	0.22	0.12
IN.	0.15	0.57	0.43	0.22	0.28	2.77	0.89	3.09	4.09	0.59	0.26	0.13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2004, BY WATER YEAR (WY)

MEAN	18.2	25.3	18.7	13.1	39.6	111	120	92.4	96.9	55.2	21.4	24.0
MAX	40.0	55.5	40.7	21.6	86.7	262	328	292	400	232	49.4	137
(WY)	(2001)	(2004)	(2004)	(1997)	(1999)	(2004)	(2001)	(2004)	(2004)	(1993)	(1999)	(2000)
MIN	7.17	10.9	8.74	3.60	3.26	37.8	43.3	30.1	12.1	2.46	8.48	4.02
(WY)	(1995)	(1995)	(1995)	(2003)	(2003)	(2003)	(2003)	(1995)	(1995)	(1995)	(1995)	(1998)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1993 - 2004	
ANNUAL TOTAL	12,235.1		39,458.6			
ANNUAL MEAN	33.5		108		52.4	
HIGHEST ANNUAL MEAN					108	2004
LOWEST ANNUAL MEAN					17.3	1995
HIGHEST DAILY MEAN	378	May 12	946	Jun 12	946	Jun 12, 2004
LOWEST DAILY MEAN	2.6	Sep 7, 8	5.0	Sep 25	0.92	Jul 31, 1995
ANNUAL SEVEN-DAY MINIMUM	2.8	Sep 5	7.7	Sep 24	1.5	Jul 26, 1995
MAXIMUM PEAK FLOW			1,010	Jun 12	1,010	Jun 12, 2004
MAXIMUM PEAK STAGE			7.41	Jun 12	7.41	Jun 12, 2004
INSTANTANEOUS LOW FLOW			4.4	Sep 24, 25	0.89	(a)Jul 30, 1995
ANNUAL RUNOFF (CFSM)	0.308		0.989		0.481	
ANNUAL RUNOFF (INCHES)	4.18		13.47		6.54	
10 PERCENT EXCEEDS	66		311		120	
50 PERCENT EXCEEDS	19		39		24	
90 PERCENT EXCEEDS	3.1		15		7.3	

(a) Also occurred July 31 to Aug. 1, 1995
(e) Estimated due to ice effect or missing record

04085427 MANITOWOC RIVER AT MANITOWOC, WI

LOCATION.--Lat 44°06'26", long 87°42'55", in NE ¼ NW ¼ sec.23, T.19 N., R.23 E., Manitowoc County, Hydrologic Unit 04030101, on right bank 300 ft upstream from bridge on County Trunk Highway JJ, just west of the Manitowoc city limits and 6.6 mi upstream from mouth.

DRAINAGE AREA.--526 mi^2.

PERIOD OF RECORD.--July 1972 to September 1996, December 1997 to current year.

REVISED RECORDS.--WDR WI-79-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 610.12 ft above NGVD of 1929.

REMARKS.--Records good except for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	31	409	e120	e58	e210	989	243	2,890	668	103	97
2	30	38	e290	e120	e58	e800	918	225	2,720	611	105	86
3	35	41	e300	e120	e58	e1,300	864	213	2,150	560	109	76
4	34	85	e290	e110	e58	e1,500	832	198	1,870	546	99	67
5	36	124	e260	e99	e58	e1,900	770	186	1,700	528	91	61
6	38	163	e210	e92	e58	e1,800	717	166	1,570	489	88	59
7	37	168	e210	e93	e58	e2,000	677	151	1,470	451	81	57
8	35	e150	172	e95	e58	e1,900	635	337	1,380	411	71	59
9	37	e140	157	e98	e58	e1,800	602	621	1,300	367	70	54
10	36	e130	196	e100	e58	e1,800	566	661	1,240	327	63	50
11	32	122	e210	e110	e58	1,860	520	676	1,340	292	66	49
12	32	116	e170	e110	e59	e1,500	478	693	1,560	256	61	47
13	32	127	e160	e100	e59	e1,500	439	767	1,580	248	54	47
14	42	119	e150	e98	e59	1,540	398	837	1,630	229	47	44
15	38	93	e160	e92	e58	1,460	356	870	1,540	198	45	43
16	39	94	e170	e85	e59	1,350	319	841	1,460	174	45	46
17	42	94	e160	e85	e63	1,270	298	817	1,450	155	49	50
18	124	104	e150	e80	e66	1,200	294	799	1,400	142	49	50
19	111	117	e140	e76	e66	1,150	303	766	1,320	131	56	42
20	65	141	e130	e73	e66	1,120	300	748	1,260	123	58	39
21	45	138	e130	e70	e62	1,110	319	759	1,200	108	52	36
22	40	129	e140	e67	e62	1,050	350	937	1,140	103	48	36
23	36	186	e130	e65	e65	988	347	1,270	1,080	100	46	37
24	32	352	e120	e63	e63	916	338	1,540	1,030	90	45	36
25	31	372	e110	e61	e61	881	341	1,760	982	81	48	34
26	30	414	e120	e60	e62	891	354	1,540	927	76	45	39
27	33	469	e130	e59	e64	880	351	1,450	877	72	115	36
28	35	465	e140	e58	e66	924	324	1,410	834	68	135	32
29	34	442	e150	e58	e70	1,200	300	1,340	781	68	125	30
30	35	424	e140	e58	---	1,160	264	1,410	725	84	119	32
31	36	---	e130	e58	---	1,100	---	2,690	---	93	106	---
TOTAL	1,291	5,588	5,534	2,633	1,768	40,060	14,563	26,921	42,406	7,849	2,294	1,471
MEAN	41.6	186	179	84.9	61.0	1,292	485	868	1,414	253	74.0	49.0
MAX	124	469	409	120	70	2,000	989	2,690	2,890	668	135	97
MIN	29	31	110	58	58	210	264	151	725	68	45	30
CFSM	0.08	0.35	0.34	0.16	0.12	2.46	0.92	1.65	2.69	0.48	0.14	0.09
IN.	0.09	0.40	0.39	0.19	0.13	2.83	1.03	1.90	3.00	0.56	0.16	0.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2004, BY WATER YEAR (WY)

MEAN	179	233	174	109	183	819	920	414	326	142	76.5	134
MAX	1,465	1,367	575	503	1,104	1,951	2,672	991	1,414	1,071	343	1,711
(WY)	(1987)	(1986)	(1983)	(1973)	(1984)	(1985)	(1979)	(1978)	(2004)	(1993)	(1986)	(1986)
MIN	18.8	23.1	16.3	20.4	20.1	219	181	53.8	18.1	13.6	13.7	14.9
(WY)	(1977)	(1977)	(1977)	(1977)	(2003)	(2003)	(2000)	(1977)	(1988)	(1988)	(1988)	(1976)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1972 - 2004	
ANNUAL TOTAL	55,185		152,378			
ANNUAL MEAN	151		416		311	
HIGHEST ANNUAL MEAN					728	1986
LOWEST ANNUAL MEAN					82.7	1977
HIGHEST DAILY MEAN	1,550	May 11	2,890	Jun 1	8,000	Mar 31, 1979
LOWEST DAILY MEAN	(a)13	Mar 10	29	Oct 1	7.0	Oct 3, 1989
ANNUAL SEVEN-DAY MINIMUM	(a)15	Mar 8	33	Oct 24	8.1	Sep 28, 1989
MAXIMUM PEAK FLOW			3,880	May 31	(b)8,280	Mar 31, 1979
MAXIMUM PEAK STAGE			10.50	May 31	(c)13.30	Mar 25, 1986
INSTANTANEOUS LOW FLOW			27	Oct 1	6.8	(d)Jul 8, 1988
ANNUAL RUNOFF (CFSM)	0.287		0.792		0.592	
ANNUAL RUNOFF (INCHES)	3.90		10.78		8.04	
10 PERCENT EXCEEDS	389		1,340		825	
50 PERCENT EXCEEDS	79		130		117	
90 PERCENT EXCEEDS	19		39		30	

(a) Ice affected
(b) Gage height, 13.24 ft
(c) From floodmarks
(d) Also occurred Oct. 3-5, 1989
(e) Estimated due to ice effect or missing record

04085746 MULLET RIVER AT OLD WADE HOUSE AT GREENBUSH, WI

LOCATION.--Lat 43°46'39", long 88°05'07", in SE ¼ SE ¼ sec.10, T.15 N., R.20 E., Sheboygan County, Hydrologic Unit 04030101, on right bank about 300 ft upstream of Plank Road bridge in Greenbush, located in Old Wade House Historic site.

DRAINAGE AREA.--24.3 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 2001 to current year.

GAGE.--Water-stage recorder. Datum of gage is 963.96 ft above NGVD of 1929.

REMARKS.--Records fair except those for estimated daily discharges, which are poor (see page 11). Flow partly regulated by sawmill at Old Wade House, May-September. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	5.6	28	9.2	e2.9	24	50	12	121	33	14	8.2
2	1.5	6.1	22	11	e2.9	40	46	11	93	29	16	7.8
3	2.0	7.8	14	11	e3.1	47	43	9.7	78	27	17	7.1
4	2.2	44	8.3	7.6	e2.9	54	39	9.0	73	36	18	6.6
5	1.9	45	7.2	8.9	e3.1	84	35	8.3	71	31	16	6.3
6	1.8	33	6.7	8.3	e3.3	78	32	8.0	67	29	15	6.1
7	1.7	17	6.4	7.5	e3.4	75	27	7.4	63	27	13	5.7
8	1.6	13	6.7	7.3	e3.4	71	24	57	58	25	12	5.4
9	1.7	13	9.4	7.3	e3.5	65	21	74	54	24	11	5.3
10	1.6	13	23	7.4	e3.6	63	18	58	56	24	9.9	5.0
11	1.5	15	20	7.3	e3.7	63	16	55	137	23	9.3	4.8
12	2.6	17	14	6.3	e3.9	48	14	53	155	23	9.2	4.7
13	2.9	21	11	5.3	e3.9	48	13	53	111	22	8.7	4.4
14	2.9	23	10	4.9	e3.9	51	12	54	123	21	8.3	4.3
15	3.0	24	10	4.6	e3.8	43	11	52	140	20	7.9	4.4
16	2.8	25	11	4.5	e3.8	40	11	46	138	19	7.5	4.7
17	2.8	26	9.1	4.7	e3.9	36	11	42	133	17	10	4.3
18	3.2	29	9.6	4.6	e3.9	30	16	39	117	16	9.2	4.2
19	3.3	31	8.4	4.3	4.3	26	18	35	101	14	8.5	3.8
20	3.2	31	7.3	4.0	4.4	30	17	63	89	13	8.1	3.6
21	3.2	30	7.7	e3.9	4.5	29	21	63	81	12	7.6	3.5
22	3.3	29	8.3	e3.5	4.6	26	22	83	73	11	7.2	3.3
23	3.7	33	8.6	e3.3	4.8	28	21	103	67	9.9	6.8	3.1
24	3.8	35	7.6	e3.2	5.1	28	20	111	67	9.1	6.8	2.9
25	4.4	34	8.2	e3.1	5.3	30	21	91	64	8.5	8.0	3.2
26	4.3	33	7.6	e3.2	6.1	37	19	83	59	7.7	8.0	3.4
27	4.3	32	8.2	e3.2	7.0	42	18	80	55	7.0	10	1.6
28	4.6	31	11	e3.1	8.5	49	16	77	56	6.3	8.7	1.6
29	4.7	30	12	e3.1	12	60	15	75	49	6.0	9.1	1.6
30	4.6	30	10	e3.0	---	55	13	78	39	11	8.9	1.7
31	4.8	---	9.2	e2.9	---	53	---	119	---	11	8.5	---
TOTAL	91.7	756.5	340.5	171.5	129.5	1,453	660	1,709.4	2,588	572.5	318.2	132.6
MEAN	2.96	25.2	11.0	5.53	4.47	46.9	22.0	55.1	86.3	18.5	10.3	4.42
MAX	4.8	45	28	11	12	84	50	119	155	36	18	8.2
MIN	1.5	5.6	6.4	2.9	2.9	24	11	7.4	39	6.0	6.8	1.6
CFSM	0.12	1.04	0.45	0.23	0.18	1.93	0.91	2.27	3.55	0.76	0.42	0.18
IN.	0.14	1.16	0.52	0.26	0.20	2.22	1.01	2.62	3.96	0.88	0.49	0.20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2004, BY WATER YEAR (WY)

MEAN	7.32	14.3	10.1	4.64	7.17	28.6	24.3	33.3	30.7	7.92	5.88	5.10
MAX	11.3	25.2	14.1	6.14	15.5	46.9	35.6	55.1	86.3	18.5	10.3	12.1
(WY)	(2002)	(2004)	(2002)	(2002)	(2002)	(2004)	(2002)	(2004)	(2004)	(2004)	(2004)	(2001)
MIN	2.96	5.09	5.32	2.24	1.69	10.9	15.4	17.2	9.20	3.59	1.70	1.51
(WY)	(2004)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2003)	(2001)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2001 - 2004	
ANNUAL TOTAL	3,448.13		8,923.4			
ANNUAL MEAN	9.45		24.4		15.2	
HIGHEST ANNUAL MEAN					24.4	2004
LOWEST ANNUAL MEAN					7.71	2003
HIGHEST DAILY MEAN	50	May 11, 12	155	Jun 12	155	Jun 12, 2004
LOWEST DAILY MEAN	0.42	Sep 9	1.5	Oct 2, 11	0.42	Sep 9, 2003
ANNUAL SEVEN-DAY MINIMUM	0.46	Sep 3	1.7	Oct 5	0.46	Sep 3, 2003
MAXIMUM PEAK FLOW			197	Jun 11	197	Jun 11, 2004
MAXIMUM PEAK STAGE			5.67	Jun 11	5.67	Jun 11, 2004
ANNUAL RUNOFF (CFSM)	0.389		1.00		0.626	
ANNUAL RUNOFF (INCHES)	5.28		13.66		8.51	
10 PERCENT EXCEEDS	25		64		37	
50 PERCENT EXCEEDS	4.4		11		8.2	
90 PERCENT EXCEEDS	1.0		3.2		1.8	

(e) Estimated due to ice effect of missing record

04085746 MULLET RIVER AT OLD WADE HOUSE AT GREENBUSH, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 2001 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: June 2001 to current year (no winter records).
DISSOLVED OXYGEN: June 2001 to current year (no winter records).

INSTRUMENTATION.--Continuous water-temperature recorder dissolved-oxyten recorder since June 2001.

REMARKS.--Records represent water temperature at sensor within 0.5°C.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum, 29.0°C, Aug. 8, 2001; minimum, 3.5°C, Oct. 28, 2001.
DISSOLVED OXYGEN: Maximum, 15.7 mg/L, Oct. 17, 2003; minimum, 3.1 mg/L, June 17, 2004.

EXTREMES FOR CURRENT PERIOD (OCTOBER, MAY-SEPTEMBER).--
WATER TEMPERATURE: Maximum, 25.0°C, June 8; minimum, 5.5°C, Oct. 5.
DISSOLVED OXYGEN: Maximum, 15.7 mg/L, Oct. 17; minimum, 3.1 mg/L, June 17.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	9.0	7.5	8.0	---	---	---	---	---	---	---	---	---
2	9.0	5.5	7.5	---	---	---	---	---	---	---	---	---
3	8.0	7.0	7.5	---	---	---	---	---	---	---	---	---
4	9.0	6.5	7.5	---	---	---	---	---	---	---	---	---
5	9.0	5.5	7.5	---	---	---	---	---	---	---	---	---
6	10.0	6.0	8.0	---	---	---	---	---	---	---	---	---
7	13.0	8.0	10.5	---	---	---	---	---	---	---	---	---
8	16.5	11.5	13.5	---	---	---	---	---	---	---	---	---
9	16.0	13.0	14.5	---	---	---	---	---	---	---	---	---
10	17.0	13.0	14.5	---	---	---	---	---	---	---	---	---
11	17.5	14.0	15.5	---	---	---	---	---	---	---	---	---
12	16.0	12.5	14.0	---	---	---	---	---	---	---	---	---
13	14.0	11.5	12.5	---	---	---	---	---	---	---	---	---
14	13.0	10.5	12.0	---	---	---	---	---	---	---	---	---
15	12.0	9.0	10.0	---	---	---	---	---	---	---	---	---
16	10.0	7.5	9.0	---	---	---	---	---	---	---	---	---
17	9.5	6.5	8.0	---	---	---	---	---	---	---	---	---
18	12.0	8.0	10.0	---	---	---	---	---	---	---	---	---
19	12.0	8.5	10.0	---	---	---	---	---	---	---	---	---
20	14.0	9.5	11.5	---	---	---	---	---	---	---	---	---
21	13.0	10.5	12.0	---	---	---	---	---	---	---	---	---
22	10.5	8.5	9.0	---	---	---	---	---	---	---	---	---
23	9.0	8.0	8.5	---	---	---	---	---	---	---	---	---
24	9.0	6.5	8.0	---	---	---	---	---	---	---	---	---
25	10.0	8.0	9.0	---	---	---	---	---	---	---	---	---
26	8.5	6.5	7.5	---	---	---	---	---	---	---	---	---
27	8.5	6.0	7.0	---	---	---	---	---	---	---	---	---
28	7.5	6.5	7.0	---	---	---	---	---	---	---	---	---
29	7.5	6.0	7.0	---	---	---	---	---	---	---	---	---
30	9.5	6.5	8.0	---	---	---	---	---	---	---	---	---
31	10.0	9.0	9.5	---	---	---	---	---	---	---	---	---
MONTH	17.5	5.5	9.8	---	---	---	---	---	---	---	---	---

04085746 MULLET RIVER AT OLD WADE HOUSE AT GREENBUSH, WI—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	---	---	---	11.5	9.5	10.5
2	---	---	---	---	---	---	---	---	---	11.5	8.0	9.5
3	---	---	---	---	---	---	---	---	---	13.5	7.0	10.0
4	---	---	---	---	---	---	---	---	---	15.5	9.0	12.0
5	---	---	---	---	---	---	---	---	---	14.0	10.0	12.0
6	---	---	---	---	---	---	---	---	---	16.0	11.0	13.0
7	---	---	---	---	---	---	---	---	---	15.0	11.0	13.0
8	---	---	---	---	---	---	---	---	---	14.0	7.0	10.5
9	---	---	---	---	---	---	---	---	---	15.0	10.5	12.5
10	---	---	---	---	---	---	---	---	---	15.5	13.5	14.5
11	---	---	---	---	---	---	---	---	---	16.0	13.5	15.0
12	---	---	---	---	---	---	---	---	---	22.0	15.0	18.5
13	---	---	---	---	---	---	---	---	---	21.0	18.0	19.5
14	---	---	---	---	---	---	---	---	---	19.0	13.5	16.0
15	---	---	---	---	---	---	---	---	---	16.5	11.5	14.0
16	---	---	---	---	---	---	---	---	---	17.5	12.0	15.0
17	---	---	---	---	---	---	---	---	---	19.5	14.5	17.0
18	---	---	---	---	---	---	---	---	---	18.5	16.0	17.0
19	---	---	---	---	---	---	---	---	---	18.0	13.0	16.0
20	---	---	---	---	---	---	---	---	---	21.5	16.0	18.5
21	---	---	---	---	---	---	---	---	---	18.5	14.0	15.5
22	---	---	---	---	---	---	---	---	---	16.5	13.0	14.5
23	---	---	---	---	---	---	---	---	---	15.5	13.5	14.5
24	---	---	---	---	---	---	---	---	---	14.5	12.5	13.5
25	---	---	---	---	---	---	---	---	---	15.0	12.0	13.0
26	---	---	---	---	---	---	---	---	---	17.5	13.0	15.0
27	---	---	---	---	---	---	---	---	---	18.0	14.0	16.0
28	---	---	---	---	---	---	---	---	---	18.0	13.5	15.5
29	---	---	---	---	---	---	---	---	---	15.5	13.0	13.5
30	---	---	---	---	---	---	---	---	---	13.5	12.5	13.0
31	---	---	---	---	---	---	---	---	---	15.0	13.5	14.0
MONTH	---	---	---	---	---	---	---	---	---	22.0	7.0	14.3
		JUNE			JULY			AUGUST			SEPTEMBER	
1	16.0	14.0	15.0	22.0	19.5	20.5	20.5	18.5	19.5	19.5	16.0	17.5
2	18.5	15.0	16.5	21.5	18.5	20.0	21.5	19.5	20.0	21.0	17.5	19.0
3	19.0	14.5	16.5	21.0	18.5	20.0	21.5	19.5	20.5	21.0	18.0	19.5
4	19.5	14.5	17.0	20.5	19.0	19.5	21.0	19.0	20.0	20.5	18.0	19.0
5	19.0	15.5	17.5	20.0	18.0	19.0	20.0	17.5	19.0	21.0	18.5	19.5
6	21.0	17.0	19.0	18.5	17.5	18.0	20.0	16.5	18.0	21.0	18.5	20.0
7	23.0	19.5	21.5	18.0	16.5	17.0	19.0	17.5	18.0	19.0	16.5	18.0
8	25.0	22.0	23.5	17.0	15.5	16.5	---	---	---	18.0	15.5	16.5
9	24.0	20.5	23.0	17.5	16.0	16.5	---	---	---	18.0	15.0	16.5
10	20.5	16.0	17.5	18.5	15.5	17.0	---	---	---	18.0	14.5	16.5
11	16.0	13.5	14.5	19.5	17.0	18.5	---	---	---	19.5	16.5	18.0
12	17.5	13.5	15.5	20.5	19.0	19.5	16.5	14.0	15.0	20.5	17.0	19.0
13	19.5	17.0	18.0	22.0	19.0	20.5	16.0	14.0	15.0	20.0	17.5	19.0
14	21.0	18.5	19.5	21.5	19.5	20.5	17.0	13.0	15.0	21.0	18.5	20.0
15	21.5	18.5	20.0	22.0	18.5	20.5	18.0	13.5	15.5	21.5	19.5	20.5
16	22.0	19.0	20.5	21.0	19.5	20.5	17.5	15.0	16.0	20.0	16.5	18.0
17	21.5	21.0	21.0	21.0	19.0	20.0	18.0	15.5	17.0	17.0	14.0	16.0
18	21.5	20.0	20.5	21.0	18.0	19.5	19.0	15.5	17.5	17.5	14.5	16.0
19	20.0	17.5	18.5	22.0	18.5	20.0	18.0	15.0	16.5	18.5	15.5	17.0
20	20.0	16.5	18.0	23.5	20.0	21.5	18.0	15.0	16.5	19.0	15.5	17.0
21	19.0	18.0	18.5	23.0	21.0	22.0	17.5	13.5	15.5	18.5	15.0	17.0
22	19.0	17.0	18.0	23.5	21.5	22.5	18.5	14.0	16.5	18.0	14.5	16.5
23	18.5	17.0	18.0	21.5	19.0	20.5	18.0	16.5	17.0	18.5	15.5	17.0
24	17.5	15.0	16.0	20.0	17.5	19.0	17.5	16.0	17.0	19.0	17.0	17.5
25	17.0	13.5	15.5	20.0	16.0	18.0	19.0	17.5	18.0	18.5	15.5	16.5
26	17.5	14.5	16.0	20.5	16.0	18.0	21.0	18.0	19.5	18.5	13.0	15.0
27	18.0	15.0	16.5	21.5	17.0	19.0	21.5	19.5	20.5	17.5	13.0	14.5
28	19.0	16.0	17.5	22.0	18.0	20.0	20.0	16.5	18.5	16.5	12.5	14.5
29	20.5	17.0	19.0	20.5	19.0	20.0	17.5	15.0	16.5	14.5	10.0	12.0
30	22.0	18.5	20.0	---	---	---	17.0	14.5	16.0	14.0	9.5	11.5
31	---	---	---	21.0	17.5	19.0	18.0	15.0	16.5	---	---	---
MONTH	25.0	13.5	18.3	23.5	15.5	19.4	21.5	13.0	17.4	21.5	9.5	17.1
YEAR	25.0	5.5	16.0									

04085746 MULLET RIVER AT OLD WADE HOUSE AT GREENBUSH, WI—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	14.1	11.0	12.4	---	---	---	---	---	---	---	---	---
2	14.9	11.8	13.0	---	---	---	---	---	---	---	---	---
3	13.5	11.4	12.2	---	---	---	---	---	---	---	---	---
4	14.6	11.1	12.6	---	---	---	---	---	---	---	---	---
5	15.0	11.9	12.9	---	---	---	---	---	---	---	---	---
6	15.0	11.7	12.9	---	---	---	---	---	---	---	---	---
7	14.0	9.4	11.6	---	---	---	---	---	---	---	---	---
8	13.1	8.3	10.0	---	---	---	---	---	---	---	---	---
9	13.4	8.0	9.8	---	---	---	---	---	---	---	---	---
10	13.8	7.8	9.8	---	---	---	---	---	---	---	---	---
11	13.4	6.4	9.1	---	---	---	---	---	---	---	---	---
12	10.8	5.4	7.2	---	---	---	---	---	---	---	---	---
13	12.2	6.2	8.6	---	---	---	---	---	---	---	---	---
14	11.0	7.1	8.5	---	---	---	---	---	---	---	---	---
15	12.9	8.2	10.1	---	---	---	---	---	---	---	---	---
16	14.4	9.2	11.3	---	---	---	---	---	---	---	---	---
17	15.7	10.7	12.6	---	---	---	---	---	---	---	---	---
18	14.5	10.3	11.8	---	---	---	---	---	---	---	---	---
19	15.3	10.1	11.9	---	---	---	---	---	---	---	---	---
20	15.3	9.5	11.7	---	---	---	---	---	---	---	---	---
21	13.5	8.8	10.2	---	---	---	---	---	---	---	---	---
22	13.9	8.8	10.6	---	---	---	---	---	---	---	---	---
23	13.6	9.8	11.0	---	---	---	---	---	---	---	---	---
24	14.9	10.2	11.6	---	---	---	---	---	---	---	---	---
25	13.8	9.7	11.3	---	---	---	---	---	---	---	---	---
26	14.0	10.3	11.6	---	---	---	---	---	---	---	---	---
27	15.1	11.0	12.4	---	---	---	---	---	---	---	---	---
28	13.6	10.9	11.6	---	---	---	---	---	---	---	---	---
29	14.7	10.8	12.1	---	---	---	---	---	---	---	---	---
30	15.1	10.0	12.0	---	---	---	---	---	---	---	---	---
31	11.1	8.5	9.9	---	---	---	---	---	---	---	---	---
MONTH	15.7	5.4	11.1	---	---	---	---	---	---	---	---	---
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	12.3	7.1	9.3
6	---	---	---	---	---	---	---	---	---	11.3	8.0	9.2
7	---	---	---	---	---	---	---	---	---	12.4	7.9	9.9
8	---	---	---	---	---	---	---	---	---	9.8	6.8	8.6
9	---	---	---	---	---	---	---	---	---	7.7	5.7	6.9
10	---	---	---	---	---	---	---	---	---	7.4	5.4	6.1
11	---	---	---	---	---	---	---	---	---	7.9	5.3	6.4
12	---	---	---	---	---	---	---	---	---	7.9	4.3	5.9
13	---	---	---	---	---	---	---	---	---	7.0	3.8	5.1
14	---	---	---	---	---	---	---	---	---	7.0	3.8	5.3
15	---	---	---	---	---	---	---	---	---	9.2	5.3	7.0
16	---	---	---	---	---	---	---	---	---	9.0	5.5	6.9
17	---	---	---	---	---	---	---	---	---	8.1	5.0	6.2
18	---	---	---	---	---	---	---	---	---	7.6	4.7	6.0
19	---	---	---	---	---	---	---	---	---	7.4	5.7	6.4
20	---	---	---	---	---	---	---	---	---	6.1	3.5	5.3
21	---	---	---	---	---	---	---	---	---	6.7	3.5	4.9
22	---	---	---	---	---	---	---	---	---	7.2	4.9	5.9
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	8.5	5.2	6.6
27	---	---	---	---	---	---	---	---	---	8.1	4.7	6.0
28	---	---	---	---	---	---	---	---	---	8.8	4.7	6.4
29	---	---	---	---	---	---	---	---	---	6.6	5.0	5.8
30	---	---	---	---	---	---	---	---	---	7.8	5.6	6.6
31	---	---	---	---	---	---	---	---	---	7.6	5.5	6.6
MONTH	---	---	---	---	---	---	---	---	---	12.4	3.5	6.6

04085746 MULLET RIVER AT OLD WADE HOUSE AT GREENBUSH, WI—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	8.0	5.5	6.5	7.2	5.7	6.6	---	---	---	9.4	7.9	8.5
2	8.7	5.0	6.4	7.5	6.5	6.9	---	---	---	9.2	7.7	8.3
3	9.0	5.0	6.5	7.0	5.7	6.5	---	---	---	9.3	7.6	8.2
4	8.8	5.0	6.4	6.1	5.3	5.6	---	---	---	10.0	7.8	8.6
5	8.1	4.6	6.0	---	---	---	---	---	---	10.2	7.7	8.6
6	8.0	4.1	5.7	---	---	---	---	---	---	9.3	7.6	8.2
7	7.0	3.6	4.9	---	---	---	---	---	---	9.9	7.9	8.8
8	5.9	3.3	4.2	---	---	---	---	---	---	9.9	8.3	9.0
9	5.3	3.3	3.9	---	---	---	---	---	---	9.9	8.2	8.8
10	4.8	3.8	4.5	---	---	---	---	---	---	9.6	8.0	8.7
11	7.1	4.8	6.2	---	---	---	---	---	---	9.7	7.5	8.4
12	7.1	4.9	6.3	---	---	---	9.2	8.3	8.7	9.9	7.5	8.2
13	5.6	4.2	4.8	---	---	---	9.5	8.3	8.8	9.8	7.5	8.2
14	5.3	3.9	4.5	7.5	6.7	7.1	9.6	8.3	8.9	9.1	7.2	7.9
15	5.2	3.7	4.3	7.8	6.9	7.3	9.7	8.3	8.9	8.5	6.6	7.4
16	4.9	3.5	4.1	7.6	6.9	7.2	9.5	8.1	8.7	8.8	6.6	7.6
17	4.3	3.1	3.6	7.8	7.1	7.4	8.9	7.9	8.3	9.3	7.4	8.2
18	4.6	3.3	3.9	8.1	7.2	7.6	9.2	7.7	8.3	9.7	7.8	8.5
19	5.6	3.6	4.5	7.9	6.9	7.5	9.5	7.7	8.6	9.6	7.4	8.2
20	5.7	4.2	4.9	7.7	6.8	7.2	9.8	8.3	8.8	9.4	7.3	8.0
21	4.9	4.2	4.6	7.6	6.7	7.1	10.0	8.3	9.1	9.5	7.4	8.1
22	5.6	4.5	5.0	7.6	6.6	7.0	10.0	7.9	9.0	9.6	7.3	8.2
23	5.6	4.7	5.1	8.3	6.8	7.5	9.7	7.9	8.6	9.6	7.2	8.0
24	6.4	4.8	5.6	8.6	7.3	7.9	9.0	7.6	8.3	9.7	7.1	7.9
25	6.8	5.7	6.2	8.9	7.7	8.2	8.6	7.4	7.8	9.6	7.2	8.1
26	6.8	5.7	6.2	8.9	7.3	8.1	8.8	7.3	7.9	9.9	7.6	8.4
27	7.1	6.0	6.4	8.7	6.9	7.7	8.2	7.1	7.6	10.4	7.7	8.7
28	6.8	5.8	6.2	8.5	6.6	7.4	8.3	7.1	7.7	10.2	7.4	8.6
29	7.1	5.8	6.3	---	---	---	9.4	7.9	8.6	10.9	8.5	9.4
30	7.1	5.5	6.3	---	---	---	9.5	8.3	8.8	10.8	8.8	9.7
31	---	---	---	---	---	---	9.4	8.3	8.7	---	---	---
MONTH	9.0	3.1	5.3	8.9	5.3	7.3	10.0	7.1	8.5	10.9	6.6	8.4
YEAR	15.7	3.1	7.9									

04086000 SHEBOYGAN RIVER AT SHEBOYGAN, WI

LOCATION.--Lat 43°44'30", long 87°45'14", in SE $^1/_4$ NW $^1/_4$ sec.28, T.15 N., R.23 E., Sheboygan County, Hydrologic Unit 04030101, on left bank 0.5 mi upstream from bridge on State Highway 28, near west city limits of Sheboygan, and 3.9 mi upstream from mouth.

DRAINAGE AREA.--418 mi^2.

PERIOD OF RECORD.--June 1916 to September 1924 (published as "near Sheboygan"), October 1950 to current year. Monthly discharge for some periods published in WSP 1307, 1727.

REVISED RECORDS.--WSP 1307: 1917(M), 1919(M), 1921(M), 1923(M). WSP 1727: 1951. WDR WI-79-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 580.49 ft, above NGVD of 1929. June 1916 to June 1924, nonrecording gage 0.4 mi downstream at different datum. November 1950 to June 1951, nonrecording gage near present site at different datum. July 1951 to September 1998, water-stage recorder at site 0.3 mi upstream at different datum.

REMARKS.--Records good except those for estimated daily discharges and Aug. 12 through Sept. 30, which are poor (see page 11). Diurnal fluctuation caused by numerous powerplants above station. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	69	232	e130	e120	e600	836	297	2,680	489	194	137
2	53	93	e140	e140	e120	e800	690	274	1,880	390	200	130
3	56	117	e130	e130	e120	e1,000	585	247	1,500	260	180	121
4	58	1,060	e140	e130	e120	e1,300	540	220	1,310	512	161	117
5	60	1,030	e130	e120	e120	2,850	494	165	1,290	639	158	110
6	60	734	e120	e140	e130	2,730	380	140	1,260	646	160	109
7	58	716	e120	e140	e130	2,300	328	144	1,190	558	150	108
8	55	523	e110	e130	e130	1,990	335	1,990	1,110	468	141	102
9	53	420	e120	e120	e130	1,690	360	2,260	1,060	397	142	98
10	52	395	e200	e120	e130	1,450	313	1,740	1,120	354	152	94
11	51	460	449	e110	e120	1,340	278	1,550	4,080	325	134	88
12	57	519	e310	e110	e120	1,080	213	1,220	6,340	308	121	84
13	53	301	e270	e110	e120	1,010	151	1,410	4,960	284	122	80
14	71	157	e260	e110	e130	975	135	2,360	3,250	234	118	76
15	70	142	e260	e110	e130	807	132	2,210	2,340	212	111	75
16	67	152	e260	e110	e140	751	185	1,670	1,910	196	105	76
17	65	156	e250	e110	e140	632	261	1,300	2,630	291	143	67
18	62	222	e240	e100	e140	496	289	1,120	1,930	379	138	66
19	58	447	e220	e100	e140	435	320	964	1,720	301	136	63
20	61	415	e220	e100	e150	485	338	2,240	1,680	228	127	59
21	59	279	e240	e100	e150	527	593	2,380	1,480	187	120	59
22	58	175	e230	e100	e150	471	636	3,810	1,340	184	118	59
23	61	182	e200	e100	e160	387	528	4,600	1,220	163	113	58
24	64	326	e190	e100	e180	369	430	5,180	1,210	149	114	57
25	68	372	e180	e100	e240	387	414	3,240	1,070	137	133	55
26	64	410	e170	e100	e280	441	434	2,470	1,230	128	134	54
27	63	369	e170	e110	e320	484	392	1,960	1,490	123	146	55
28	64	285	e180	e110	e380	529	378	1,680	1,050	120	189	57
29	66	257	e170	e110	e440	1,170	379	1,580	910	119	175	57
30	71	242	e150	e110	---	1,160	325	1,680	697	170	158	57
31	73	---	e140	e110	---	1,030	---	2,620	---	169	143	---
TOTAL	1,884	11,025	6,201	3,520	4,880	31,676	11,672	54,721	56,937	9,120	4,436	2,428
MEAN	60.8	368	200	114	168	1,022	389	1,765	1,898	294	143	80.9
MAX	73	1,060	449	140	440	2,850	836	5,180	6,340	646	200	137
MIN	51	69	110	100	120	369	132	140	697	119	105	54
CFSM	0.15	0.88	0.48	0.27	0.40	2.44	0.93	4.22	4.54	0.70	0.34	0.19
IN.	0.17	0.98	0.55	0.31	0.43	2.82	1.04	4.87	5.07	0.81	0.39	0.22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 2004, BY WATER YEAR (WY)

MEAN	152	202	163	117	188	674	711	332	254	121	117	138
MAX	741	1,372	505	370	887	2,052	1,994	1,765	1,898	607	1,433	1,143
(WY)	(1987)	(1986)	(1983)	(1960)	(1984)	(1918)	(1993)	(2004)	(2004)	(1993)	(1924)	(1986)
MIN	29.6	31.7	19.7	17.1	20.9	110	141	41.5	25.2	19.8	11.1	20.4
(WY)	(1958)	(1951)	(1959)	(1959)	(1958)	(1968)	(1970)	(1958)	(1958)	(1958)	(1958)	(1958)

04086000 SHEBOYGAN RIVER AT SHEBOYGAN, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1916 - 2004	
ANNUAL TOTAL	59,019		198,500			
ANNUAL MEAN	162		542		264	
HIGHEST ANNUAL MEAN					542	2004
LOWEST ANNUAL MEAN					47.1	1958
HIGHEST DAILY MEAN	1,180	May 12	6,340	Jun 12	7,000	Aug 6, 1924
LOWEST DAILY MEAN	31	Sep 7	51	Oct 11	(a)1.0	Aug 27, 1922
ANNUAL SEVEN-DAY MINIMUM	(b)33	Jan 24	54	Oct 7	(a)5.3	Apr 7, 1958
MAXIMUM PEAK FLOW			6,860	Jun 12	7,820	Aug 6, 1998
MAXIMUM PEAK STAGE			10.40	Jun 12	(c)12.02	Aug 6, 1998
INSTANTANEOUS LOW FLOW			50	(d)Oct 3	(a)1.0	Aug 27, 1922
ANNUAL RUNOFF (CFSM)	0.387		1.30		0.632	
ANNUAL RUNOFF (INCHES)	5.25		17.67		8.59	
10 PERCENT EXCEEDS	316		1,520		619	
50 PERCENT EXCEEDS	84		183		120	
90 PERCENT EXCEEDS	37		66		38	

(a) Result of regulation
(b) Ice affected
(c) Datum then in use
(d) Also occurred Oct. 10, 11, Sept. 25-27
(e) Estimated due to ice effect or missing record

04086149 MILWAUKEE RIVER NEAR KEWASKUM, WI

LOCATION.--Lat 43°31'38", long 88°13'20", in NE ¼ NE ¼ sec. 9, T.12 N., R.19 E., Washington County, Hydrologic Unit 04040003, on right bank 1 mile upstream from Highway 28 bridge.

DRAINAGE AREA.--137.6 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May to November 2004 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 940 ft above NGVD of 1929 from a topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11).

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	e93	1,060	214	79	66
2	---	---	---	---	---	---	---	e93	1,130	188	87	63
3	---	---	---	---	---	---	---	e78	984	165	86	59
4	---	---	---	---	---	---	---	e74	774	197	102	56
5	---	---	---	---	---	---	---	e58	593	184	92	52
6	---	---	---	---	---	---	---	e56	476	172	82	48
7	---	---	---	---	---	---	---	52	382	166	74	44
8	---	---	---	---	---	---	---	79	310	160	70	41
9	---	---	---	---	---	---	---	152	296	155	72	39
10	---	---	---	---	---	---	---	192	837	152	80	38
11	---	---	---	---	---	---	---	233	1,810	145	104	38
12	---	---	---	---	---	---	---	236	2,420	140	130	36
13	---	---	---	---	---	---	---	264	2,250	133	130	34
14	---	---	---	---	---	---	---	316	1,840	127	113	32
15	---	---	---	---	---	---	---	291	1,450	118	96	32
16	---	---	---	---	---	---	---	261	1,100	105	83	30
17	---	---	---	---	---	---	---	224	919	103	108	28
18	---	---	---	---	---	---	---	216	711	98	105	27
19	---	---	---	---	---	---	---	184	565	92	131	26
20	---	---	---	---	---	---	---	382	463	87	117	24
21	---	---	---	---	---	---	---	482	393	83	105	23
22	---	---	---	---	---	---	---	911	337	79	94	22
23	---	---	---	---	---	---	---	1,230	e344	71	86	22
24	---	---	---	---	---	---	---	1,410	352	65	81	21
25	---	---	---	---	---	---	---	1,390	346	61	78	20
26	---	---	---	---	---	---	---	1,230	314	56	76	19
27	---	---	---	---	---	---	---	971	282	54	85	19
28	---	---	---	---	---	---	---	754	298	52	78	18
29	---	---	---	---	---	---	---	582	269	48	73	20
30	---	---	---	---	---	---	---	538	239	72	69	20
31	---	---	---	---	---	---	---	805	---	73	68	---
TOTAL	---	---	---	---	---	---	---	13,837	23,544	3,615	2,834	1,017
MEAN	---	---	---	---	---	---	---	446	785	117	91.4	33.9
MAX	---	---	---	---	---	---	---	1,410	2,420	214	131	66
MIN	---	---	---	---	---	---	---	52	239	48	68	18
CFSM	---	---	---	---	---	---	---	3.23	5.69	0.85	0.66	0.25
IN.	---	---	---	---	---	---	---	3.73	6.35	0.97	0.76	0.27

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2004, BY WATER YEAR (WY)

MEAN	---	---	---	---	---	---	---	446	785	117	91.4	33.9
MAX	---	---	---	---	---	---	---	446	785	117	91.4	33.9
(WY)	---	---	---	---	---	---	---	(2004)	(2004)	(2004)	(2004)	(2004)
MIN	---	---	---	---	---	---	---	446	785	117	91.4	33.9
(WY)	---	---	---	---	---	---	---	(2004)	(2004)	(2004)	(2004)	(2004)

SUMMARY STATISTICS	FOR 2004 WATER YEAR (May - September)	
ANNUAL TOTAL	44,847	
ANNUAL MEAN	293	
HIGHEST DAILY MEAN	2,420	Jun 12
LOWEST DAILY MEAN	18	Sep 28
ANNUAL SEVEN-DAY MINIMUM	20	Sep 24
MAXIMUM PEAK FLOW	2,480	Jun 12
MAXIMUM PEAK STAGE	11.32	Jun 12
INSTANTANEOUS LOW FLOW	18	Sep 26-30
ANNUAL RUNOFF (CFSM)	2.12	
ANNUAL RUNOFF (INCHES)	12.09	
10 PERCENT EXCEEDS	916	
50 PERCENT EXCEEDS	105	
90 PERCENT EXCEEDS	31	

(e) Estimated

04086149 MILWAUKEE RIVER NEAR KEWASKUM, WI--Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	58	---	---	---	---	---	---	---	---	---	---
2	23	71	---	---	---	---	---	---	---	---	---	---
3	22	72	---	---	---	---	---	---	---	---	---	---
4	21	75	---	---	---	---	---	---	---	---	---	---
5	24	75	---	---	---	---	---	---	---	---	---	---
6	24	69	---	---	---	---	---	---	---	---	---	---
7	24	60	---	---	---	---	---	---	---	---	---	---
8	30	55	---	---	---	---	---	---	---	---	---	---
9	32	57	---	---	---	---	---	---	---	---	---	---
10	31	54	---	---	---	---	---	---	---	---	---	---
11	32	55	---	---	---	---	---	---	---	---	---	---
12	31	50	---	---	---	---	---	---	---	---	---	---
13	31	46	---	---	---	---	---	---	---	---	---	---
14	29	44	---	---	---	---	---	---	---	---	---	---
15	29	e43	---	---	---	---	---	---	---	---	---	---
16	29	e42	---	---	---	---	---	---	---	---	---	---
17	30	e44	---	---	---	---	---	---	---	---	---	---
18	32	e45	---	---	---	---	---	---	---	---	---	---
19	33	e48	---	---	---	---	---	---	---	---	---	---
20	33	e65	---	---	---	---	---	---	---	---	---	---
21	33	e68	---	---	---	---	---	---	---	---	---	---
22	34	e55	---	---	---	---	---	---	---	---	---	---
23	48	e53	---	---	---	---	---	---	---	---	---	---
24	65	e50	---	---	---	---	---	---	---	---	---	---
25	61	e49	---	---	---	---	---	---	---	---	---	---
26	61	e46	---	---	---	---	---	---	---	---	---	---
27	59	e52	---	---	---	---	---	---	---	---	---	---
28	57	e76	---	---	---	---	---	---	---	---	---	---
29	58	e71	---	---	---	---	---	---	---	---	---	---
30	62	e60	---	---	---	---	---	---	---	---	---	---
31	59	---	---	---	---	---	---	---	---	---	---	---
TOTAL	1,158	1,708	---	---	---	---	---	---	---	---	---	---
MEAN	37.4	56.9	---	---	---	---	---	---	---	---	---	---
MAX	65	76	---	---	---	---	---	---	---	---	---	---
MIN	21	42	---	---	---	---	---	---	---	---	---	---
CFSM	0.27	0.41	---	---	---	---	---	---	---	---	---	---
IN.	0.31	0.46	---	---	---	---	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2005, BY WATER YEAR (WY)

MEAN	37.4	56.9	---	---	---	---	---	446	785	117	91.4	33.9
MAX	37.4	56.9	---	---	---	---	---	446	785	117	91.4	33.9
(WY)	(2005)	(2005)	---	---	---	---	---	(2004)	(2004)	(2004)	(2004)	(2004)
MIN	37.4	56.9	---	---	---	---	---	446	785	117	91.4	33.9
(WY)	(2005)	(2005)	---	---	---	---	---	(2004)	(2004)	(2004)	(2004)	(2004)

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR (May - November)		FOR 2005 WATER YEAR (October - November)		WATER YEARS 2004 - 2005 (May 2004 - November 2004)	
ANNUAL TOTAL	47,713		2,866			
ANNUAL MEAN	223		47.0		223	
HIGHEST ANNUAL MEAN					293	2004
LOWEST ANNUAL MEAN					47.0	2005
HIGHEST DAILY MEAN	2,420	Jun 12	76	Nov 28	2,420	Jun 12, 2004
LOWEST DAILY MEAN	18	Sep 28	21	Oct 1, 4	18	Sep 28, 2004
ANNUAL SEVEN-DAY MINIMUM	20	Sep 24	23	Oct 1	20	Sep 24, 2004
MAXIMUM PEAK FLOW			(a)		2,480	Jun 12, 2004
MAXIMUM PEAK STAGE			(a)		11.32	Jun 12, 2004
INSTANTANEOUS LOW FLOW			20	Oct 1, 3, 4	18	Sep 26, 2004
ANNUAL RUNOFF (CFSM)	0.000		0.000		0.000	
ANNUAL RUNOFF (INCHES)	0.00		0.00		0.00	
10 PERCENT EXCEEDS	652		71		652	
50 PERCENT EXCEEDS	74		48		74	
90 PERCENT EXCEEDS	28		24		28	

(a) Unknown
(e) Estimated

04086149 MILWAUKEE RIVER ABOVE DAM AT KEWASKUM, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: May 6 to Nov. 15, 2004 (discontinued).
DISSOLVED OXYGEN: May 6 to Nov. 15, 2004 (discontinued).
SPECIFIC CONDUCTANCE: May 6 to Nov. 15, 2004 (discontinued).

INSTRUMENTATION.--Water-quality monitor since May 6, 2004.

REMARKS.--Temperature and specific conductance records good. Dissolved oxygen records fair except for the periods of May 6 to June 9, which are poor; June 9 to July 1, July 7-16, 24-30, and Oct. 8-15, which are unusable.

EXTREMES FOR PERIOD MAY TO NOVEMBER 2004.--
WATER TEMPERATURE: Maximum, 26.5°C, July 20 and 22; minimum, 1.0°C, Nov. 13 and 14.
DISSOLVED OXYGEN: Maximum, 16.2 mg/L, Oct. 17; minimum, 0.8 mg/L, May 17, may have been the result of excessive fouling.
SPECIFIC CONDUCTANCE: Maximum, 759 µS/cm, Oct. 6; minimum, 220 µS/cm, June 10.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	17.0	11.0	14.0
8	---	---	---	---	---	---	---	---	---	17.0	9.5	13.0
9	---	---	---	---	---	---	---	---	---	16.5	12.5	14.5
10	---	---	---	---	---	---	---	---	---	16.0	14.5	15.5
11	---	---	---	---	---	---	---	---	---	16.0	14.0	15.0
12	---	---	---	---	---	---	---	---	---	21.5	15.0	18.0
13	---	---	---	---	---	---	---	---	---	21.0	18.0	19.5
14	---	---	---	---	---	---	---	---	---	19.5	14.5	17.0
15	---	---	---	---	---	---	---	---	---	17.5	12.5	15.0
16	---	---	---	---	---	---	---	---	---	18.5	13.0	15.5
17	---	---	---	---	---	---	---	---	---	20.5	15.0	17.5
18	---	---	---	---	---	---	---	---	---	18.5	16.0	17.5
19	---	---	---	---	---	---	---	---	---	19.5	14.0	16.5
20	---	---	---	---	---	---	---	---	---	21.0	16.5	18.5
21	---	---	---	---	---	---	---	---	---	19.5	10.5	15.5
22	---	---	---	---	---	---	---	---	---	15.5	13.0	14.5
23	---	---	---	---	---	---	---	---	---	16.0	14.0	15.0
24	---	---	---	---	---	---	---	---	---	15.5	14.0	14.5
25	---	---	---	---	---	---	---	---	---	15.0	13.0	14.0
26	---	---	---	---	---	---	---	---	---	17.0	13.5	15.0
27	---	---	---	---	---	---	---	---	---	18.5	14.5	16.0
28	---	---	---	---	---	---	---	---	---	19.0	15.0	17.0
29	---	---	---	---	---	---	---	---	---	17.0	13.5	15.0
30	---	---	---	---	---	---	---	---	---	14.0	13.0	13.5
31	---	---	---	---	---	---	---	---	---	15.5	13.0	14.0
MONTH	---	---	---	---	---	---	---	---	---	21.5	9.5	15.6

04086149 MILWAUKEE RIVER ABOVE DAM AT KEWASKUM, WI—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	16.0	14.0	15.0	24.0	20.0	22.0	25.0	20.0	22.5	22.5	17.5	20.0
2	18.5	15.0	16.5	23.5	19.5	21.5	24.0	21.5	22.5	24.5	19.0	21.5
3	19.5	15.5	17.5	23.0	20.0	21.5	24.5	21.0	22.5	24.0	19.5	22.0
4	20.0	16.0	18.0	22.5	20.5	21.0	23.5	20.5	22.0	24.0	19.5	22.0
5	20.0	17.0	18.5	21.5	19.5	20.5	22.5	18.5	20.5	23.5	20.0	21.5
6	22.0	18.0	19.5	20.0	19.0	19.5	23.0	17.5	20.5	23.0	20.5	21.5
7	23.5	19.5	21.5	19.0	17.0	18.0	21.0	18.5	20.0	22.0	17.5	19.5
8	25.5	21.5	23.5	18.5	16.0	17.5	23.0	18.0	20.5	21.0	16.5	18.5
9	25.0	17.5	22.5	18.5	16.5	18.0	24.0	20.0	21.5	21.5	16.5	18.5
10	20.0	13.5	16.5	21.0	16.5	18.5	21.5	18.0	19.5	22.0	16.0	19.0
11	15.5	14.5	15.0	21.5	18.0	20.0	18.0	16.0	17.0	23.0	18.0	20.5
12	17.0	14.5	15.5	22.5	20.0	21.0	17.0	15.0	16.0	24.5	18.5	21.0
13	19.0	16.5	17.5	24.5	20.0	22.0	17.0	15.0	16.0	23.5	18.5	21.0
14	21.0	18.5	19.5	24.5	20.5	22.5	18.5	14.5	16.5	24.5	19.5	22.0
15	22.5	19.5	21.0	24.5	20.5	22.5	20.0	15.0	17.5	24.0	21.0	22.0
16	23.0	20.0	21.5	23.5	21.0	22.0	19.5	16.0	18.0	22.0	18.0	20.0
17	23.0	21.5	22.0	23.5	20.0	21.5	20.0	17.0	18.5	21.0	15.5	18.0
18	22.5	21.0	22.0	24.5	19.5	21.5	21.5	17.0	19.0	21.5	16.0	18.5
19	21.5	18.5	20.0	24.5	20.0	22.5	20.0	17.0	18.5	21.5	16.5	19.0
20	21.0	18.0	19.5	26.5	21.5	24.0	20.0	16.5	18.0	22.0	16.5	19.0
21	20.0	18.0	19.0	25.5	23.0	24.0	20.0	15.5	17.5	21.5	16.0	18.5
22	20.0	17.0	18.5	26.5	22.5	24.5	20.0	15.5	17.5	21.5	15.0	18.5
23	---	---	---	25.0	20.5	22.5	19.0	18.0	18.5	22.0	16.0	19.0
24	17.5	15.0	16.0	22.5	19.0	21.0	19.5	17.5	18.5	21.5	18.0	19.5
25	18.0	14.0	16.0	23.5	17.5	20.5	21.5	18.5	19.5	19.0	16.0	17.0
26	19.0	15.5	17.0	23.5	17.5	20.5	23.5	19.0	21.0	19.5	13.5	16.5
27	20.0	16.0	18.0	25.0	18.5	21.5	24.0	20.5	22.5	19.0	13.0	16.0
28	21.0	17.0	19.0	25.5	20.0	22.5	22.5	18.0	20.0	17.5	14.0	16.0
29	22.0	17.5	20.0	23.5	20.5	22.0	20.5	16.0	18.0	17.5	11.0	14.0
30	23.5	19.0	21.5	22.0	20.0	21.0	20.0	16.0	18.0	17.0	10.5	13.5
31	---	---	---	24.5	19.0	21.5	21.0	16.0	18.5	---	---	---
MONTH	25.5	13.5	18.9	26.5	16.0	21.3	25.0	14.5	19.2	24.5	10.5	19.1
YEAR	26.5	9.5	19.0									

04086149 MILWAUKEE RIVER ABOVE DAM AT KEWASKUM, WI—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	12.5	5.4	8.4
8	---	---	---	---	---	---	---	---	---	10.2	5.8	7.5
9	---	---	---	---	---	---	---	---	---	7.3	4.9	6.0
10	---	---	---	---	---	---	---	---	---	5.6	4.2	4.9
11	---	---	---	---	---	---	---	---	---	5.5	3.9	4.6
12	---	---	---	---	---	---	---	---	---	5.7	3.5	4.4
13	---	---	---	---	---	---	---	---	---	4.0	2.9	3.3
14	---	---	---	---	---	---	---	---	---	5.6	2.9	4.0
15	---	---	---	---	---	---	---	---	---	6.8	3.9	5.3
16	---	---	---	---	---	---	---	---	---	6.5	4.1	5.2
17	---	---	---	---	---	---	---	---	---	6.5	0.8	3.4
18	---	---	---	---	---	---	---	---	---	6.7	2.8	4.8
19	---	---	---	---	---	---	---	---	---	5.7	2.6	3.9
20	---	---	---	---	---	---	---	---	---	6.8	2.3	4.4
21	---	---	---	---	---	---	---	---	---	6.2	2.5	4.0
22	---	---	---	---	---	---	---	---	---	5.3	3.4	4.5
23	---	---	---	---	---	---	---	---	---	6.1	4.2	5.3
24	---	---	---	---	---	---	---	---	---	6.7	4.9	5.6
25	---	---	---	---	---	---	---	---	---	7.0	5.8	6.3
26	---	---	---	---	---	---	---	---	---	6.7	5.3	6.0
27	---	---	---	---	---	---	---	---	---	7.1	4.9	5.7
28	---	---	---	---	---	---	---	---	---	6.9	4.5	5.4
29	---	---	---	---	---	---	---	---	---	5.1	2.2	3.5
30	---	---	---	---	---	---	---	---	---	3.3	2.0	2.6
31	---	---	---	---	---	---	---	---	---	6.6	2.2	5.0
MONTH	---	---	---	---	---	---	---	---	---	12.5	0.8	5.0
		JUNE			JULY			AUGUST			SEPTEMBER	
1	6.0	4.4	5.1	---	---	---	9.4	5.6	7.1	11.9	7.9	9.4
2	6.5	4.6	5.6	7.2	4.4	5.6	8.4	5.4	6.8	11.7	7.3	9.1
3	7.4	4.2	5.5	5.7	3.5	4.7	8.6	5.4	6.8	11.7	6.7	8.8
4	6.1	3.5	4.8	3.7	2.8	3.3	9.0	5.7	7.2	12.0	6.8	8.9
5	4.5	2.8	3.7	3.2	2.5	2.8	9.4	6.3	7.7	11.7	6.7	8.8
6	4.3	2.8	3.4	3.1	2.6	2.9	9.7	6.6	7.9	10.4	6.4	8.0
7	4.1	2.7	3.3	---	---	---	9.2	6.5	7.7	11.7	7.0	9.0
8	3.6	2.6	3.0	---	---	---	9.8	6.7	8.0	11.9	7.4	9.2
9	---	---	---	---	---	---	9.0	6.3	7.4	11.6	7.5	9.1
10	---	---	---	---	---	---	8.6	6.3	7.4	12.1	7.5	9.2
11	---	---	---	---	---	---	9.5	7.3	8.3	11.8	7.0	8.8
12	---	---	---	---	---	---	9.2	7.8	8.5	11.6	6.6	8.6
13	---	---	---	---	---	---	9.5	7.7	8.5	11.6	6.7	8.7
14	---	---	---	---	---	---	9.9	8.0	8.8	11.3	6.6	8.4
15	---	---	---	---	---	---	10.2	7.9	8.9	10.2	6.3	7.7
16	---	---	---	---	---	---	11.4	7.8	9.2	11.4	6.4	8.6
17	---	---	---	6.6	4.3	5.3	10.7	7.8	9.0	12.4	7.8	9.5
18	---	---	---	6.8	4.4	5.4	11.2	7.8	9.1	12.8	7.5	9.6
19	---	---	---	6.6	4.2	5.3	10.9	7.6	9.1	12.7	7.4	9.4
20	---	---	---	6.9	4.2	5.2	11.6	8.0	9.5	12.8	7.2	9.3
21	---	---	---	6.5	3.7	4.9	11.8	8.2	9.7	12.7	7.2	9.3
22	---	---	---	7.3	4.3	5.7	11.9	8.3	9.7	12.8	7.1	9.3
23	---	---	---	7.8	4.9	6.3	11.3	7.6	9.2	12.8	7.1	9.2
24	---	---	---	---	---	---	11.0	7.8	9.1	12.7	6.2	8.8
25	---	---	---	---	---	---	11.3	7.4	9.0	13.0	6.9	9.2
26	---	---	---	---	---	---	11.3	7.3	8.8	13.6	7.4	9.8
27	---	---	---	---	---	---	10.5	6.9	8.4	13.8	7.4	9.8
28	---	---	---	---	---	---	9.8	6.7	8.1	13.0	7.3	9.6
29	---	---	---	---	---	---	11.6	8.0	9.5	13.8	8.1	10.3
30	---	---	---	---	---	---	11.7	8.1	9.5	13.8	8.2	10.3
31	---	---	---	9.7	5.9	7.5	11.9	8.1	9.7	---	---	---
MONTH	7.4	2.6	4.3	9.7	2.5	5.0	11.9	5.4	8.5	13.8	6.2	9.1
YEAR	13.8	0.8	7.1									

04086149 MILWAUKEE RIVER ABOVE DAM AT KEWASKUM, WI—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	676	627	655
8	---	---	---	---	---	---	---	---	---	656	459	621
9	---	---	---	---	---	---	---	---	---	606	571	591
10	---	---	---	---	---	---	---	---	---	606	555	579
11	---	---	---	---	---	---	---	---	---	561	549	555
12	---	---	---	---	---	---	---	---	---	556	511	550
13	---	---	---	---	---	---	---	---	---	552	464	540
14	---	---	---	---	---	---	---	---	---	545	514	535
15	---	---	---	---	---	---	---	---	---	555	528	547
16	---	---	---	---	---	---	---	---	---	567	544	561
17	---	---	---	---	---	---	---	---	---	584	509	573
18	---	---	---	---	---	---	---	---	---	597	532	570
19	---	---	---	---	---	---	---	---	---	602	587	595
20	---	---	---	---	---	---	---	---	---	594	361	458
21	---	---	---	---	---	---	---	---	---	511	315	446
22	---	---	---	---	---	---	---	---	---	427	359	407
23	---	---	---	---	---	---	---	---	---	419	378	398
24	---	---	---	---	---	---	---	---	---	396	387	391
25	---	---	---	---	---	---	---	---	---	399	394	397
26	---	---	---	---	---	---	---	---	---	413	395	401
27	---	---	---	---	---	---	---	---	---	435	413	423
28	---	---	---	---	---	---	---	---	---	474	435	454
29	---	---	---	---	---	---	---	---	---	509	456	489
30	---	---	---	---	---	---	---	---	---	523	500	510
31	---	---	---	---	---	---	---	---	---	504	443	467
MONTH	---	---	---	---	---	---	---	---	---	676	315	509
	JUNE			JULY			AUGUST			SEPTEMBER		
1	459	444	451	674	656	665	703	659	678	694	673	684
2	459	425	440	673	656	666	665	634	649	697	676	686
3	443	425	432	676	642	666	655	633	647	709	684	698
4	480	442	460	662	652	657	659	633	650	711	685	698
5	517	480	498	665	654	660	668	652	661	711	686	698
6	552	517	535	665	657	662	670	656	663	708	685	697
7	578	552	565	669	662	667	676	666	671	716	687	703
8	593	378	575	671	665	668	684	668	677	718	690	705
9	608	291	552	673	665	670	686	663	674	720	688	706
10	542	220	406	678	666	670	681	666	674	723	693	709
11	452	372	389	677	668	672	670	629	649	723	690	708
12	387	355	365	680	672	676	629	576	601	721	690	706
13	375	355	363	688	676	682	577	561	569	718	690	704
14	399	372	385	686	672	678	586	569	577	716	690	702
15	433	396	413	691	679	685	606	586	597	713	633	688
16	468	432	450	693	680	685	628	606	619	706	675	694
17	509	397	478	702	689	696	626	589	612	731	703	715
18	550	509	530	707	690	700	638	607	626	745	722	734
19	581	535	565	709	693	702	617	575	599	744	720	732
20	607	579	595	713	694	704	633	617	626	744	716	733
21	630	607	619	712	700	708	639	625	632	744	722	734
22	642	629	635	715	697	707	646	633	639	746	722	736
23	---	---	---	717	700	709	653	641	648	745	719	734
24	647	551	635	723	708	715	659	651	656	741	717	732
25	653	645	650	727	703	716	660	648	655	744	722	736
26	659	649	653	725	700	714	670	649	657	753	717	739
27	663	637	657	725	693	710	670	653	658	750	714	736
28	662	651	655	723	694	709	684	666	675	743	713	732
29	667	653	661	724	701	712	687	672	681	749	717	736
30	666	624	656	711	628	688	686	676	682	751	721	738
31	---	---	---	705	684	695	698	681	690	---	---	---
MONTH	667	220	526	727	628	688	703	561	645	753	633	715
YEAR	753	220	622									

04086149 MILWAUKEE RIVER ABOVE DAM AT KEWASKUM, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Chloride, water, fltrd, mg/L (00940)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	E coli, m-TEC MF, water, col/ 100 mL (31633)
JUN													
30...	1200	240	40	27.4	10	1.1	<.015	.538	.081	.102	.124	<2.0	--
AUG													
01...	0945	74	50	33.2	12	--	--	--	--	--	.125	--	--
01...	2245	92	50	32.9	11	--	--	--	--	--	.127	--	--
03...	0045	85	50	32.0	11	--	--	--	--	--	.130	--	--
04...	0245	98	50	30.3	16	--	--	--	--	--	.152	--	--
04...	1545	102	50	30.5	12	--	--	--	--	--	.140	--	--
05...	1745	91	50	30.3	11	--	--	--	--	--	.138	--	--
06...	1945	81	50	30.2	16	--	--	--	--	--	.144	--	--
07...	2145	72	50	30.8	11	--	--	--	--	--	.130	--	--
17...	0045	96	50	28.6	12	--	--	--	--	--	.114	--	--
17...	1530	118	50	29.2	10	--	--	--	--	--	.113	--	--
18...	0430	102	50	29.5	16	--	--	--	--	--	.119	--	--
18...	1730	102	50	29.7	9	--	--	--	--	--	.108	--	--
19...	0630	141	50	27.9	18	--	--	--	--	--	.125	--	--
19...	1930	125	50	27.7	11	--	--	--	--	--	.110	--	--
20...	0830	117	50	28.9	12	--	--	--	--	--	.110	--	--
20...	1421	117	50	28.7	8	--	--	--	--	--	.113	--	--
21...	0315	108	50	28.2	10	--	--	--	--	--	.105	--	--
21...	1615	104	50	28.5	6	--	--	--	--	--	.106	--	--
SEP													
09...	1100	39	40	37.7	5	.90	<.015	1.12	.061	--	.096	<2.0	290
16...	1300	29	50	--	--	--	--	--	--	--	--	<2.0	380

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Fecal coliform, M-FC 0.7u MF col/ 100 mL (31625)	Chlorophyll a wat unf trichr. method, uncorr, ug/L (32210)	Copper, water, unfltrd recoverable, ug/L (01119)	Mercury water fltrd, ng/L (50287)	Zinc, water, unfltrd recoverable, ug/L (01094)	Mercury suspnd sedimnt total, ng/L (62976)	Methylmercury water fltrd, ng/L (50285)	Methylmercury suspnd sedimnt total, ng/L (62977)	Suspended sediment concentration mg/L (80154)
JUN									
30...	--	3.56	1	--	<20	--	--	--	--
AUG									
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--
SEP									
09...	350	2.53	1	1.20	<20	.616	.14	.017	3
16...	490	--	--	--	--	--	--	--	--

04086149 MILWAUKEE RIVER ABOVE DAM AT KEWASKUM, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Chloride, water, fltrd, mg/L (00940)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	E coli, Defined Substr. Tech., water, MPN/ 100 mL (50468)	E coli, m-TEC MF, water, col/ 100 mL (31633)
OCT													
09...	1900	32	50	43.3	3	--	--	--	--	.056	--	--	--
09...	2345	31	50	42.0	3	--	--	--	--	.059	--	--	--
10...	1238	30	50	43.1	<3	--	--	--	--	.058	--	--	--
10...	1900	32	50	43.3	<2	--	--	--	--	.054	--	--	--
11...	0630	31	50	42.9	4	--	--	--	--	.061	--	--	--
11...	1115	32	50	43.2	<2	--	--	--	--	.052	--	--	--
23...	1130	40	50	--	16	--	--	--	--	.080	--	--	--
23...	1845	41	50	39.9	15	--	--	--	--	.085	--	--	--
24...	0115	70	50	43.3	17	--	--	--	--	.103	--	--	--
24...	0745	67	50	41.1	19	--	--	--	--	.100	--	--	--
24...	1210	63	50	40.1	9	.84	.037	2.07	.036	.087	<3.0	--	430
24...	1213	63	50	--	9	--	--	--	--	--	--	--	--
24...	1214	63	40	--	11	--	--	--	--	--	--	--	--
24...	2049	63	50	40.6	10	--	--	--	--	.075	--	--	--
25...	0701	60	50	40.2	11	1.0	.044	1.99	.034	.077	<3.0	--	16
25...	1801	62	50	40.2	3	.96	.029	1.95	.027	.066	<3.0	--	100
26...	2245	60	50	38.3	15	--	--	--	--	.085	--	--	--
28...	0715	57	50	41.2	11	--	--	--	--	.071	--	--	--
28...	1501	57	50	50.2	4	.95	.033	1.64	.036	.070	<2.0	80	--
29...	1145	58	50	39.6	17	--	--	--	--	.082	--	--	--
30...	0130	63	50	40.2	9	--	--	--	--	.076	--	--	--
30...	1430	62	50	40.1	8	--	--	--	--	.075	--	--	--
31...	0230	58	50	40.2	4	--	--	--	--	.065	--	--	--
NOV													
01...	1350	58	50	41.0	<2	--	--	--	--	.063	--	--	--
01...	1920	60	50	40.9	<2	--	--	--	--	.061	--	--	--
02...	0200	67	50	39.6	4	--	--	--	--	.070	--	--	--
02...	0430	67	50	39.9	4	--	--	--	--	.071	--	--	--
02...	0830	70	50	38.9	7	--	--	--	--	.085	--	--	--
02...	1500	74	50	39.3	6	--	--	--	--	.088	--	--	--
03...	0400	72	50	39.0	6	--	--	--	--	.072	--	--	--
03...	1011	72	50	39.5	5	.88	.051	1.63	.039	.072	<2.0	--	90
03...	1030	72	50	40.3	3	--	--	--	--	.087	--	--	--
04...	0600	72	50	39.3	12	--	--	--	--	.105	--	--	--
04...	1431	72	50	39.2	6	.99	.032	1.63	.042	.087	<2.0	--	2,300
04...	2115	77	50	39.5	6	--	--	--	--	.074	--	--	--
05...	1015	74	50	39.8	4	--	--	--	--	.068	--	--	--
06...	1215	69	50	39.7	3	--	--	--	--	.086	--	--	--
07...	0115	63	50	39.5	7	--	--	--	--	.097	--	--	--
08...	0919	54	50	39.8	<5	.90	.021	1.66	.027	.060	<2.0	--	10
08...	1241	54	50	40.6	2	.79	.021	1.67	.032	.080	<2.0	--	<1

04086149 MILWAUKEE RIVER ABOVE DAM AT KEWASKUM, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Fecal coli-form, M-FC 0.7u MF col/ 100 mL (31625)	Chloro-phyll a wat unf trichr. method, uncorr, ug/L (32210)	Copper, water, unfltrd recover-able, ug/L (01119)	Mercury water fltrd, ng/L (50287)	Zinc, water, unfltrd recover-able, ug/L (01094)	Mercury suspnd sedimnt total, ng/L (62976)	Methyl-mercury water fltrd, ng/L (50285)	Methyl-mercury suspnd sedimnt total, ng/L (62977)	Sus-pended sedi-ment concen-tration mg/L (80154)
OCT									
09...	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	770	7.14	2	1.00	<20	1.21	.10	.030	9
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
25...	170	6.04	1	--	<20	--	--	--	10
25...	80	3.33	1	--	<20	--	--	--	<2
26...	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--
28...	110	4.98	1	--	<20	--	--	--	3
29...	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--
NOV									
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--
03...	190	2.27	<1	--	<20	--	--	--	3
03...	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--
04...	3,600	3.76	<1	--	<20	--	--	--	3
04...	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--
08...	50	2.82	<1	--	<20	--	--	--	<2
08...	20	2.18	<1	--	<20	--	--	--	<2

04086149 MILWAUKEE RIVER ABOVE DAM AT KEWASKUM, WI—Continued

WATER-QUALITY RECORDS

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	17.0	12.5	14.5	10.0	8.5	9.0	---	---	---	---	---	---
2	14.5	10.5	12.5	8.5	8.0	8.5	---	---	---	---	---	---
3	14.5	9.0	11.5	10.0	8.0	9.0	---	---	---	---	---	---
4	13.5	9.5	11.5	9.0	6.5	8.5	---	---	---	---	---	---
5	12.0	7.0	9.5	8.0	5.0	6.5	---	---	---	---	---	---
6	15.0	8.5	11.5	9.0	5.5	7.0	---	---	---	---	---	---
7	16.0	11.0	13.5	9.0	5.5	7.5	---	---	---	---	---	---
8	17.0	14.0	15.0	6.5	4.0	5.0	---	---	---	---	---	---
9	16.5	12.0	14.0	7.5	5.0	6.0	---	---	---	---	---	---
10	15.0	10.0	12.5	8.0	5.5	6.5	---	---	---	---	---	---
11	14.5	9.0	11.5	7.5	4.0	6.0	---	---	---	---	---	---
12	14.5	10.0	12.0	4.5	2.0	3.5	---	---	---	---	---	---
13	15.0	10.0	12.5	5.0	1.0	3.0	---	---	---	---	---	---
14	13.0	10.0	11.0	4.5	1.0	3.0	---	---	---	---	---	---
15	10.5	9.0	10.0	---	---	---	---	---	---	---	---	---
16	9.0	6.0	7.5	---	---	---	---	---	---	---	---	---
17	9.5	5.0	7.0	---	---	---	---	---	---	---	---	---
18	8.5	8.0	8.0	---	---	---	---	---	---	---	---	---
19	9.0	7.5	8.5	---	---	---	---	---	---	---	---	---
20	10.0	8.5	9.0	---	---	---	---	---	---	---	---	---
21	12.0	8.0	9.5	---	---	---	---	---	---	---	---	---
22	11.0	9.5	10.5	---	---	---	---	---	---	---	---	---
23	14.0	11.0	12.0	---	---	---	---	---	---	---	---	---
24	13.5	11.0	12.0	---	---	---	---	---	---	---	---	---
25	13.5	9.5	11.5	---	---	---	---	---	---	---	---	---
26	11.5	10.0	10.5	---	---	---	---	---	---	---	---	---
27	10.5	10.0	10.5	---	---	---	---	---	---	---	---	---
28	12.0	9.5	10.5	---	---	---	---	---	---	---	---	---
29	15.5	11.5	13.5	---	---	---	---	---	---	---	---	---
30	15.5	11.0	13.5	---	---	---	---	---	---	---	---	---
31	11.5	9.5	10.5	---	---	---	---	---	---	---	---	---
MONTH	17.0	5.0	11.2	10.0	1.0	6.4	---	---	---	---	---	---

04086149 MILWAUKEE RIVER ABOVE DAM AT KEWASKUM, WI—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	13.0	7.8	9.6	11.2	8.7	9.8	---	---	---	---	---	---
2	13.2	7.8	10.1	11.9	9.4	10.3	---	---	---	---	---	---
3	13.5	9.1	10.8	12.4	9.1	10.4	---	---	---	---	---	---
4	14.1	8.7	10.9	11.4	9.0	10	---	---	---	---	---	---
5	14.5	9.8	11.6	12.4	9.7	10.8	---	---	---	---	---	---
6	14.8	9.2	11.4	11.9	9.0	10.3	---	---	---	---	---	---
7	14.8	8.4	10.7	11.9	8.9	10.1	---	---	---	---	---	---
8	---	---	---	12.8	9.7	11.1	---	---	---	---	---	---
9	---	---	---	12.8	9.9	11.0	---	---	---	---	---	---
10	---	---	---	12.8	9.1	10.6	---	---	---	---	---	---
11	---	---	---	12.9	8.9	10.6	---	---	---	---	---	---
12	---	---	---	13.8	10.3	11.7	---	---	---	---	---	---
13	---	---	---	13.8	10.9	12.0	---	---	---	---	---	---
14	---	---	---	13.9	10.5	11.9	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	14.4	9.3	11.3	---	---	---	---	---	---	---	---	---
17	16.2	10.5	12.6	---	---	---	---	---	---	---	---	---
18	13.7	9.3	11.0	---	---	---	---	---	---	---	---	---
19	14.1	9.3	11.1	---	---	---	---	---	---	---	---	---
20	13.7	8.9	10.6	---	---	---	---	---	---	---	---	---
21	15.5	9.0	11.3	---	---	---	---	---	---	---	---	---
22	13.3	8.3	9.9	---	---	---	---	---	---	---	---	---
23	11.6	8.2	9.0	---	---	---	---	---	---	---	---	---
24	12.6	8.3	9.8	---	---	---	---	---	---	---	---	---
25	13.2	8.7	10.4	---	---	---	---	---	---	---	---	---
26	11.2	8.5	9.6	---	---	---	---	---	---	---	---	---
27	11.0	8.8	9.6	---	---	---	---	---	---	---	---	---
28	12.5	8.4	10.1	---	---	---	---	---	---	---	---	---
29	11.1	7.7	8.9	---	---	---	---	---	---	---	---	---
30	11.8	7.7	9.4	---	---	---	---	---	---	---	---	---
31	12.5	8.7	10.0	---	---	---	---	---	---	---	---	---
MONTH	16.2	7.7	10.4	13.9	8.7	10.8	---	---	---	---	---	---

04086149 MILWAUKEE RIVER ABOVE DAM AT KEWASKUM, WI—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	749	708	735	724	703	717	---	---	---	---	---	---
2	730	704	716	711	702	707	---	---	---	---	---	---
3	745	713	731	718	708	713	---	---	---	---	---	---
4	745	710	731	716	689	704	---	---	---	---	---	---
5	754	726	742	711	701	707	---	---	---	---	---	---
6	759	720	743	711	699	706	---	---	---	---	---	---
7	755	720	740	710	696	705	---	---	---	---	---	---
8	745	667	705	724	703	713	---	---	---	---	---	---
9	744	704	725	731	716	724	---	---	---	---	---	---
10	735	710	719	733	719	728	---	---	---	---	---	---
11	747	713	732	733	720	727	---	---	---	---	---	---
12	743	715	731	741	723	733	---	---	---	---	---	---
13	743	711	730	743	727	737	---	---	---	---	---	---
14	743	730	737	745	730	740	---	---	---	---	---	---
15	746	719	737	---	---	---	---	---	---	---	---	---
16	739	725	732	---	---	---	---	---	---	---	---	---
17	749	725	739	---	---	---	---	---	---	---	---	---
18	753	740	746	---	---	---	---	---	---	---	---	---
19	749	732	742	---	---	---	---	---	---	---	---	---
20	754	739	747	---	---	---	---	---	---	---	---	---
21	755	726	743	---	---	---	---	---	---	---	---	---
22	756	738	747	---	---	---	---	---	---	---	---	---
23	745	690	712	---	---	---	---	---	---	---	---	---
24	730	676	705	---	---	---	---	---	---	---	---	---
25	726	704	718	---	---	---	---	---	---	---	---	---
26	721	716	718	---	---	---	---	---	---	---	---	---
27	721	717	718	---	---	---	---	---	---	---	---	---
28	722	713	719	---	---	---	---	---	---	---	---	---
29	721	708	715	---	---	---	---	---	---	---	---	---
30	716	698	708	---	---	---	---	---	---	---	---	---
31	723	711	717	---	---	---	---	---	---	---	---	---
MONTH	759	667	728	745	689	719	---	---	---	---	---	---

04086200 EAST BRANCH MILWAUKEE RIVER AT NEW FANE, WI

LOCATION.--Lat 45°33'01", long 88°11'18", in NW ¼ SE ¼ sec. 35, T.13 N., R.19 E., Fond du Lac County, Hydrologic Unit 04040003, on right bank 150 ft downstream of the County Trunk Highway S, 0.4 mi southwest of New Fane, and 6.0 mi upstream from mouth.

DRAINAGE AREA.--54.1 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1968 to September 1981, May 2004 to November 2004 (discontinued).

REVISED RECORDS.--WDR WI-71-1(M). WDR WI-77-1: Drainage area.

GAGE.--Water-stage recorder. Temporary nonrecording gage 0.4 mi upstream at different datum Jan. 21, 1972 to Aug. 2, 1973. Elevation of gage is 935 ft (revised) above NGVD of 1929 from a topographic map. Prior to Jan. 21, 1972, water-stage recorder at site 200 ft upstream at same datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	e42	189	64	26	31
2	---	---	---	---	---	---	---	e42	193	59	31	30
3	---	---	---	---	---	---	---	e35	188	55	37	29
4	---	---	---	---	---	---	---	e35	172	59	41	28
5	---	---	---	---	---	---	---	e33	155	61	37	25
6	---	---	---	---	---	---	---	e31	141	61	33	23
7	---	---	---	---	---	---	---	e33	128	60	32	22
8	---	---	---	---	---	---	---	e36	118	57	35	23
9	---	---	---	---	---	---	---	e51	109	55	37	20
10	---	---	---	---	---	---	---	e68	144	53	40	16
11	---	---	---	---	---	---	---	e87	242	51	45	16
12	---	---	---	---	---	---	---	e88	332	50	47	15
13	---	---	---	---	---	---	---	e110	360	---	45	15
14	---	---	---	---	---	---	---	e134	358	47	40	15
15	---	---	---	---	---	---	---	e142	326	44	37	15
16	---	---	---	---	---	---	---	e136	270	41	34	15
17	---	---	---	---	---	---	---	e114	241	41	---	15
18	---	---	---	---	---	---	---	e109	199	41	e38	15
19	---	---	---	---	---	---	---	e104	163	40	e41	15
20	---	---	---	---	---	---	---	127	138	38	44	15
21	---	---	---	---	---	---	---	153	121	35	38	15
22	---	---	---	---	---	---	---	180	106	33	35	15
23	---	---	---	---	---	---	---	250	96	30	33	16
24	---	---	---	---	---	---	---	297	97	27	31	16
25	---	---	---	---	---	---	---	309	96	25	32	15
26	---	---	---	---	---	---	---	305	91	24	31	15
27	---	---	---	---	---	---	---	273	84	25	32	15
28	---	---	---	---	---	---	---	232	80	25	33	14
29	---	---	---	---	---	---	---	196	75	25	33	15
30	---	---	---	---	---	---	---	175	71	25	32	15
31	---	---	---	---	---	---	---	178	---	25	31	---
TOTAL	---	---	---	---	---	---	---	4,105	5,083	1,276	1,081	549
MEAN	---	---	---	---	---	---	---	132	169	42.5	36.0	18.3
MAX	---	---	---	---	---	---	---	309	360	64	47	31
MIN	---	---	---	---	---	---	---	31	71	24	26	14
CFSM	---	---	---	---	---	---	---	2.45	3.13	0.79	0.67	0.34
IN.	---	---	---	---	---	---	---	2.82	3.50	0.88	0.74	0.38

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2004, BY WATER YEAR (WY)

MEAN	21.2	23.0	23.5	19.6	20.8	72.4	79.6	48.8	39.4	19.9	19.3	23.9
MAX	76.0	38.5	38.4	42.4	44.1	138	151	132	169	48.6	60.5	75.9
(WY)	(1982)	(1973)	(1978)	(1975)	(1981)	(1975)	(1979)	(2004)	(2004)	(1978)	(1979)	(1981)
MIN	5.76	6.88	5.90	4.51	5.29	19.1	20.1	9.64	8.23	3.97	2.87	2.64
(WY)	(1977)	(1977)	(1977)	(1977)	(1977)	(1970)	(1970)	(1977)	(1977)	(1970)	(1970)	(1971)

04086200 EAST BRANCH MILWAUKEE RIVER AT NEW FANE, WI—Continued

SUMMARY STATISTICS	FOR 2004 WATER YEAR (May - September)		WATER YEARS 1968 - 2004	
ANNUAL TOTAL	12,094			
ANNUAL MEAN	80.1		34.2	
HIGHEST ANNUAL MEAN			80.1	2004
LOWEST ANNUAL MEAN			12.2	1970
HIGHEST DAILY MEAN	360	Jun 13	646	Mar 24, 1975
LOWEST DAILY MEAN	14	Sep 28	0.76	Sep 16, 1971
ANNUAL SEVEN-DAY MINIMUM	15	Sep 12	1.3	Sep 14, 1971
MAXIMUM PEAK FLOW	404	Jun 13	(a)743	Mar 24, 1975
MAXIMUM PEAK STAGE	6.47	Jun 13	6.47	Jun 13, 2004
INSTANTANEOUS LOW FLOW	14	(b)Sep 13		
ANNUAL RUNOFF (CFSM)	1.48		0.632	
ANNUAL RUNOFF (INCHES)	8.32		8.58	
10 PERCENT EXCEEDS	195		76	
50 PERCENT EXCEEDS	41		20	
90 PERCENT EXCEEDS	15		6.8	

(a) Gage height 5.44 ft (datum then in use)
(b) Also occurred Sept. 14, 15, 18-20, 26-30
(e) Estimated

04086200 EAST BRANCH MILWAUKEE RIVER AT NEW FANE, WI--Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	29	---	---	---	---	---	---	---	---	---	---
2	15	39	---	---	---	---	---	---	---	---	---	---
3	15	51	---	---	---	---	---	---	---	---	---	---
4	15	67	---	---	---	---	---	---	---	---	---	---
5	15	71	---	---	---	---	---	---	---	---	---	---
6	15	63	---	---	---	---	---	---	---	---	---	---
7	15	52	---	---	---	---	---	---	---	---	---	---
8	16	44	---	---	---	---	---	---	---	---	---	---
9	19	40	---	---	---	---	---	---	---	---	---	---
10	17	36	---	---	---	---	---	---	---	---	---	---
11	17	30	---	---	---	---	---	---	---	---	---	---
12	17	19	---	---	---	---	---	---	---	---	---	---
13	16	16	---	---	---	---	---	---	---	---	---	---
14	16	16	---	---	---	---	---	---	---	---	---	---
15	16	e17	---	---	---	---	---	---	---	---	---	---
16	16	e17	---	---	---	---	---	---	---	---	---	---
17	16	e18	---	---	---	---	---	---	---	---	---	---
18	16	e18	---	---	---	---	---	---	---	---	---	---
19	16	e19	---	---	---	---	---	---	---	---	---	---
20	16	e22	---	---	---	---	---	---	---	---	---	---
21	17	e23	---	---	---	---	---	---	---	---	---	---
22	17	e21	---	---	---	---	---	---	---	---	---	---
23	23	e20	---	---	---	---	---	---	---	---	---	---
24	33	e19	---	---	---	---	---	---	---	---	---	---
25	30	e19	---	---	---	---	---	---	---	---	---	---
26	29	e18	---	---	---	---	---	---	---	---	---	---
27	30	e20	---	---	---	---	---	---	---	---	---	---
28	28	e25	---	---	---	---	---	---	---	---	---	---
29	30	e25	---	---	---	---	---	---	---	---	---	---
30	33	e24	---	---	---	---	---	---	---	---	---	---
31	31	---	---	---	---	---	---	---	---	---	---	---
TOTAL	620	898	---	---	---	---	---	---	---	---	---	---
MEAN	20.0	29.9	---	---	---	---	---	---	---	---	---	---
MAX	33	71	---	---	---	---	---	---	---	---	---	---
MIN	15	16	---	---	---	---	---	---	---	---	---	---
CFSM	0.37	0.55	---	---	---	---	---	---	---	---	---	---
IN.	0.43	0.62	---	---	---	---	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2005, BY WATER YEAR (WY)

MEAN	21.1	23.5	23.5	19.6	20.8	72.4	79.6	48.8	39.4	20.3	19.4	24.0
MAX	76.0	38.5	38.4	42.4	44.1	138	151	132	170	48.6	60.5	75.9
(WY)	(1982)	(1973)	(1978)	(1975)	(1981)	(1975)	(1979)	(2004)	(2004)	(1978)	(1979)	(1981)
MIN	5.76	6.88	5.90	4.51	5.29	19.1	20.1	9.64	8.23	3.97	2.87	2.64
(WY)	(1977)	(1977)	(1977)	(1977)	(1977)	(1970)	(1970)	(1977)	(1977)	(1970)	(1970)	(1971)

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR (May - November)		FOR 2005 WATER YEAR (October - November)		WATER YEARS 1968 - 2005	
ANNUAL TOTAL	13,934		1,520			
ANNUAL MEAN	65.1		24.9		34.1	
HIGHEST ANNUAL MEAN					81.1	2004
LOWEST ANNUAL MEAN					12.2	1970
HIGHEST DAILY MEAN	360	Jun 13	71	Nov 5	646	Mar 24, 1975
LOWEST DAILY MEAN	14	Sep 28	15	Oct 1-7	0.76	Sep 16, 1971
ANNUAL SEVEN-DAY MINIMUM	15	Sep 26	15	Oct 1	1.3	Sep 14, 1971
MAXIMUM PEAK FLOW			74	Nov 5	(a)743	Mar 24, 1975
MAXIMUM PEAK STAGE			4.54	Nov 5	6.47	Jun 13, 2004
INSTANTANEOUS LOW FLOW			(b)14	Oct 1		
ANNUAL RUNOFF (CFSM)	1.20		0.461		0.631	
ANNUAL RUNOFF (INCHES)	9.58		1.05		8.57	
10 PERCENT EXCEEDS	174		43		76	
50 PERCENT EXCEEDS	35		19		20	
90 PERCENT EXCEEDS	16		15		7.0	

(a) Gage height 5.44 ft (datum then in use)
(b) Also occurred Oct. 2-6
(e) Estimated

04086200 EAST BRANCH MILWAUKEE RIVER AT NEW FANE, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: May 19 to Nov. 15, 2004 (discontinued).
DISSOLVED OXYGEN: May 19 to Nov. 15, 2004 (discontinued).
SPECIFIC CONDUCTANCE: May 19 to Nov. 15, 2004 (discontinued).

INSTRUMENTATION.--Water-quality monitor since May 19, 2004.

REMARKS.--Temperature records good except for period of partial record July 29 to July 27, which is fair. Dissolved oxygen records good except for the periods of May 19 to June 22, Sept. 13-17, and Oct. 7-15, which are unusable; June 22 to July 1, and Oct. 28 to Nov. 8, which are poor; and June 29 to July 27, which are fair. Specific conductance records are good except for the period of partial record June 29 to July 27, which is fair.

EXTREMES FOR PERIOD MAY TO NOVEMBER 2004.--
WATER TEMPERATURE: Maximum, 25.5°C, July 22; minimum, 1.5°C, Nov. 13 and 14.
DISSOLVED OXYGEN: Maximum, 20.0 mg/L, Nov. 11, 12, and 13, which was the maximum value that the recorder was set up to receive, actual value was probably higher; minimum, 5.4 mg/L, June 29.
SPECIFIC CONDUCTANCE: Maximum, 572 µS/cm, Oct. 22; minimum, 443 µS/cm, June 23, 24, 25, and 28.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	23.0	20.5	21.5	23.5	19.5	21.5	21.0	18.0	19.0
2	---	---	---	22.5	20.0	21.5	22.5	21.0	22.0	22.5	19.0	20.5
3	---	---	---	---	---	---	23.0	21.0	21.5	23.0	19.5	21.0
4	---	---	---	22.0	21.0	21.5	22.5	20.0	21.0	23.0	19.5	21.0
5	---	---	---	21.0	19.5	20.5	21.0	18.5	19.5	23.0	20.5	21.5
6	---	---	---	19.5	19.0	19.0	21.0	17.0	19.0	23.0	20.0	21.5
7	---	---	---	19.0	17.0	18.0	19.5	18.0	19.0	21.5	18.5	19.5
8	---	---	---	18.0	16.0	17.0	21.0	18.5	19.5	20.0	17.0	18.5
9	---	---	---	18.5	16.5	17.5	22.5	20.0	21.0	20.5	17.0	18.0
10	---	---	---	20.0	17.0	18.5	20.5	18.0	19.5	21.0	16.0	18.5
11	---	---	---	21.0	18.0	20.0	18.0	15.5	17.0	22.0	18.0	19.5
12	---	---	---	22.0	20.5	21.0	16.5	15.0	15.5	23.0	18.0	20.0
13	---	---	---	---	---	---	16.5	15.0	15.5	22.5	18.5	20.5
14	---	---	---	23.5	20.5	22.0	16.5	14.0	15.5	23.0	19.5	21.0
15	---	---	---	23.5	20.0	21.5	18.0	14.5	16.0	23.5	20.5	21.5
16	---	---	---	23.0	21.0	21.5	18.0	15.5	17.0	21.5	18.0	19.5
17	---	---	---	23.0	20.0	21.0	---	---	---	20.0	16.0	17.5
18	---	---	---	---	---	---	---	---	---	20.0	16.0	17.5
19	---	---	---	---	---	---	---	---	---	20.5	17.0	18.5
20	---	---	---	---	---	---	18.5	16.0	17.0	21.0	17.0	18.5
21	---	---	---	---	---	---	18.0	15.0	16.5	20.5	16.0	18.0
22	---	---	---	---	---	---	18.5	15.0	16.5	20.5	15.5	18.0
23	---	---	---	23.5	20.5	22.0	18.5	17.5	18.0	21.0	16.5	18.5
24	17.5	15.0	16.0	22.0	19.0	20.5	18.5	17.5	18.0	21.0	18.0	19.0
25	17.5	14.0	15.5	22.0	17.5	19.5	20.5	18.5	19.0	19.0	16.0	17.5
26	18.0	15.5	17.0	22.5	17.5	20.0	22.0	19.5	20.5	18.5	14.0	16.0
27	19.0	16.0	17.5	---	---	---	23.0	20.5	21.5	18.5	13.0	15.5
28	20.0	17.0	18.5	24.0	19.5	21.5	21.5	18.0	20.0	17.0	13.5	15.5
29	21.0	18.0	19.5	23.5	20.5	21.5	19.5	16.5	17.5	16.5	11.5	13.5
30	22.5	19.5	21.0	21.5	20.0	20.5	18.5	16.0	17.0	16.0	10.5	13.0
31	---	---	---	23.5	19.5	21.0	20.0	16.5	18.0	---	---	---
MONTH	22.5	14.0	17.9	24.0	16.0	20.4	23.5	14.0	18.6	23.5	10.5	18.6
YEAR	24.0	10.5	19.0									

04086200 EAST BRANCH MILWAUKEE RIVER AT NEW FANE, WI—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	7.9	6.8	7.2	8.5	7.1	7.7	9.0	7.7	8.2
2	---	---	---	7.6	6.6	7.1	8.1	7.1	7.5	8.8	7.8	8.2
3	---	---	---	---	---	---	8.3	7.2	7.6	8.9	7.6	8.2
4	---	---	---	7.1	6.3	6.6	8.5	7.2	7.7	8.9	7.5	8.1
5	---	---	---	7.6	6.3	6.9	8.7	7.5	8.0	8.7	7.1	7.9
6	---	---	---	7.5	6.8	7.1	8.8	7.8	8.3	8.4	7.0	7.6
7	---	---	---	7.6	6.8	7.2	8.8	7.7	8.1	8.8	7.1	7.8
8	---	---	---	8.2	7.1	7.7	8.5	7.2	7.8	8.4	7.2	7.7
9	---	---	---	8.2	7.4	7.7	7.9	6.9	7.3	8.6	7.4	7.8
10	---	---	---	8.1	7.2	7.6	7.9	6.8	7.3	8.5	7.1	7.8
11	---	---	---	8.1	6.8	7.5	8.5	7.3	7.9	8.3	6.7	7.4
12	---	---	---	7.5	6.5	6.9	8.8	8.0	8.3	7.8	6.4	7.0
13	---	---	---	---	---	---	9.3	8.0	8.6	---	---	---
14	---	---	---	7.3	6.2	6.6	9.2	8.4	8.7	---	---	---
15	---	---	---	7.6	6.4	6.9	9.4	8.4	8.9	---	---	---
16	---	---	---	8.1	6.4	7.1	9.9	8.4	9.0	---	---	---
17	---	---	---	8.2	7.0	7.5	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	9.6	8.1	8.8
19	---	---	---	---	---	---	---	---	---	9.3	7.9	8.5
20	---	---	---	---	---	---	9.7	8.5	8.9	9.2	7.9	8.4
21	---	---	---	---	---	---	9.8	8.5	9.1	9.6	8.2	8.7
22	---	---	---	---	---	---	9.9	8.3	9.1	9.9	8.2	8.9
23	---	---	---	8.3	6.8	7.4	9.4	8.1	8.7	9.8	8.4	9.0
24	7.8	7.0	7.3	8.5	7.3	7.8	9.4	8.3	8.8	9.9	8.4	8.9
25	7.9	7.3	7.6	8.5	7.2	7.7	9.3	8.0	8.5	10.2	8.6	9.2
26	7.8	7.2	7.4	9.0	7.3	8.0	9.0	7.6	8.2	10.9	8.9	9.8
27	8.1	7.1	7.6	---	---	---	8.6	7.3	7.8	11.0	8.7	9.8
28	7.7	6.9	7.2	8.4	6.9	7.6	8.6	7.3	7.8	10.7	8.9	9.7
29	7.9	6.8	7.2	8.3	6.7	7.3	9.1	8.0	8.5	11.8	9.5	10.5
30	8.0	6.8	7.3	7.9	6.7	7.2	9.4	8.3	8.7	12.2	9.4	10.7
31	---	---	---	8.3	7.1	7.5	9.1	8.0	8.6	---	---	---
MONTH	8.1	6.8	7.4	9.0	6.2	7.3	9.9	6.8	8.3	12.2	6.4	8.6
YEAR	12.2	6.2	8.0									

04086200 EAST BRANCH MILWAUKEE RIVER AT NEW FANE, WI—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	469	462	465	499	485	494	522	518	520
2	---	---	---	469	464	466	490	477	482	523	515	518
3	---	---	---	---	---	---	493	481	487	520	514	517
4	---	---	---	469	455	460	492	484	488	521	516	519
5	---	---	---	470	459	465	494	487	490	524	517	521
6	---	---	---	471	468	469	498	493	495	528	518	523
7	---	---	---	473	470	471	499	495	497	534	526	529
8	---	---	---	474	471	472	498	493	496	540	531	535
9	---	---	---	474	471	473	498	487	493	544	536	539
10	---	---	---	476	473	474	495	488	491	547	540	543
11	---	---	---	478	474	476	496	493	495	550	544	547
12	---	---	---	482	477	480	495	490	492	555	544	549
13	---	---	---	---	---	---	492	488	490	559	540	553
14	---	---	---	489	485	487	491	488	490	557	545	552
15	---	---	---	494	489	492	491	488	490	568	535	550
16	---	---	---	504	494	499	504	490	496	554	545	550
17	---	---	---	502	494	498	---	---	---	556	544	549
18	---	---	---	---	---	---	---	---	---	557	547	553
19	---	---	---	---	---	---	---	---	---	558	546	553
20	---	---	---	---	---	---	489	476	482	555	543	549
21	---	---	---	---	---	---	497	488	492	550	536	543
22	---	---	---	---	---	---	503	496	498	542	531	537
23	---	---	---	500	496	498	507	501	504	539	530	535
24	456	443	447	502	497	500	507	499	505	536	527	532
25	451	443	447	505	501	503	510	501	505	543	532	536
26	452	449	450	509	504	506	508	503	505	551	541	545
27	455	444	450	---	---	---	510	499	504	554	545	550
28	449	443	445	516	510	513	508	502	505	556	546	551
29	458	448	453	518	512	515	512	508	511	558	549	554
30	462	457	460	516	503	511	518	511	514	559	551	555
31	---	---	---	511	491	499	521	517	519	---	---	---
MONTH	462	443	450	518	455	487	521	476	497	568	514	540
YEAR	568	443	505									

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Chloride, water, fltrd, mg/L (00940)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	E coli, m-TEC MF, water, col/ 100 mL (31633)
JUN													
30...	1115	69	40	16.5	7	.94	<.015	.100	.031	.052	.061	<2.0	--
AUG													
01...	1850	26	50	15.7	16	--	--	--	--	--	.057	--	--
02...	0650	29	50	15.5	12	--	--	--	--	--	.065	--	--
02...	1850	33	50	15.5	14	--	--	--	--	--	.071	--	--
03...	0650	35	50	16.3	12	--	--	--	--	--	.073	--	--
03...	1850	40	50	16.6	14	--	--	--	--	--	.077	--	--
04...	0650	41	50	16.7	11	--	--	--	--	--	.073	--	--
05...	0650	37	50	17.4	12	--	--	--	--	--	.064	--	--
06...	1850	31	50	17.6	10	--	--	--	--	--	.051	--	--
12...	1310	47	50	18.2	9	--	--	--	--	--	.037	--	--
21...	0932	39	50	18.1	11	--	--	--	--	--	.073	--	--
21...	1040	39	50	18.2	6	--	--	--	--	--	.036	--	--
21...	1240	39	50	18.4	8	--	--	--	--	--	.034	--	--
23...	0415	34	50	18.3	14	--	--	--	--	--	.043	--	--
SEP													
09...	0945	23	40	19.5	6	.83	<.015	.118	.012	--	.034	<2.0	90
16...	1240	15	50	--	--	--	--	--	--	--	--	<2.0	110

04086200 EAST BRANCH MILWAUKEE RIVER AT NEW FANE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Fecal coli-form, M-FC 0.7u MF col/ 100 mL (31625)	Chloro-phyll a wat unf trichr. method, uncorr, ug/L (32210)	Copper, water, unfltrd recover -able, ug/L (01119)	Zinc, water, unfltrd recover -able, ug/L (01094)	Mercury suspnd sedimnt total, ng/L (62976)	Methyl-mercury water fltrd, ng/L (50285)	Methyl-mercury suspnd sedimnt total, ng/L (62977)	Sus-pended sedi-ment concen-tration mg/L (80154)
JUN								
30...	--	2.83	<1	<20	--	--	--	--
AUG								
01...	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
SEP								
09...	90	1.37	2	<20	.784	.26	.036	4
16...	90	--	--	--	--	--	--	--

04086200 EAST BRANCH MILWAUKEE RIVER AT NEW FANE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Chloride, water, fltrd, mg/L (00940)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	E coli, Defined Substr. Tech., water, MPN/ 100 mL (50468)	E coli, m-TEC MF, water, col/ 100 mL (31633)
OCT													
08...	1510	16	50	19.7	5	--	--	--	--	.023	--	--	--
08...	1906	18	50	19.6	7	--	--	--	--	.031	--	--	--
08...	2310	19	50	19.6	10	--	--	--	--	.030	--	--	--
09...	0310	19	50	19.5	10	--	--	--	--	.030	--	--	--
09...	0710	19	50	19.5	9	--	--	--	--	.030	--	--	--
09...	1910	19	50	20.0	8	--	--	--	--	.029	--	--	--
10...	0710	16	50	20.2	5	--	--	--	--	.025	--	--	--
10...	1510	18	50	20.2	<3	--	--	--	--	.023	--	--	--
11...	0310	16	50	20.5	5	--	--	--	--	.030	--	--	--
11...	1540	17	50	20.5	3	--	--	--	--	.025	--	--	--
12...	0445	16	50	20.5	7	--	--	--	--	.027	--	--	--
12...	0905	16	50	20.4	3	--	--	--	--	.032	--	--	--
12...	0941	16	50	--	3	--	--	--	--	--	--	--	--
12...	0942	16	40	--	3	--	--	--	--	--	--	--	--
24...	0340	34	50	19.1	14	--	--	--	--	.039	--	--	--
24...	1140	34	50	20.1	4	--	--	--	--	.028	--	--	--
24...	1315	34	50	--	6	--	--	--	--	--	--	--	--
24...	1316	34	40	--	5	--	--	--	--	--	--	--	--
24...	1335	34	50	20.5	4	.85	.057	.187	.005	.028	<3.0	--	10
24...	2034	31	50	20.2	13	--	--	--	--	.041	--	--	--
25...	0703	30	50	20.1	9	.84	.058	.186	.006	.033	<3.0	--	50
25...	1701	30	50	20.3	4	.84	.032	.175	.005	.025	<3.0	--	99
27...	0440	30	50	21.1	7	--	--	--	--	.027	--	--	--
28...	1421	28	50	21.4	5	.68	.042	.219	.007	.029	<2.0	12	--
29...	1910	31	50	20.3	8	--	--	--	--	.031	--	--	--
30...	0710	31	50	20.5	11	--	--	--	--	.038	--	--	--
30...	1910	33	50	20.2	9	--	--	--	--	.037	--	--	--
31...	0610	31	50	20.6	8	--	--	--	--	.039	--	--	--
31...	1815	30	50	20.5	7	--	--	--	--	.026	--	--	--
NOV													
01...	1330	29	50	20.2	4	--	--	--	--	.036	--	--	--
01...	1935	30	50	20.3	7	--	--	--	--	.031	--	--	--
02...	0135	34	50	20.0	6	--	--	--	--	.033	--	--	--
02...	0735	39	50	19.8	8	--	--	--	--	.033	--	--	--
02...	1335	41	50	19.9	6	--	--	--	--	.043	--	--	--
02...	1935	42	50	19.9	9	--	--	--	--	.033	--	--	--
03...	0745	48	50	20.0	7	--	--	--	--	.032	--	--	--
03...	0946	49	50	20.6	9	.96	.074	.220	.008	.035	<2.0	--	30
04...	1416	69	50	21.3	17	.99	.093	.200	.011	.045	<2.0	--	30
04...	1420	68	50	21.6	15	--	--	--	--	.049	--	--	--
05...	0220	72	50	21.6	11	--	--	--	--	.037	--	--	--
05...	1420	71	50	22.1	8	--	--	--	--	.036	--	--	--
06...	1420	63	50	22.3	6	--	--	--	--	.035	--	--	--
07...	1420	51	50	21.8	5	--	--	--	--	.029	--	--	--
08...	0220	46	50	21.7	9	--	--	--	--	.033	--	--	--
08...	0937	43	50	22.5	5	.74	.056	.239	.009	.030	<2.0	--	<1
08...	1306	45	50	22.1	4	.85	.050	.242	.008	.028	<2.0	--	10

04086200 EAST BRANCH MILWAUKEE RIVER AT NEW FANE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Fecal coli-form, M-FC 0.7u MF col/ 100 mL (31625)	Chloro-phyll a wat unf trichr. method, uncorr, ug/L (32210)	Copper, water, unfltrd recover-able, ug/L (01119)	Zinc, water, unfltrd recover-able, ug/L (01094)	Sus-pended sedi-ment concen-tration mg/L (80154)
OCT					
08...	--	--	--	--	--
08...	--	--	--	--	--
08...	--	--	--	--	--
09...	--	--	--	--	--
09...	--	--	--	--	--
09...	--	--	--	--	--
10...	--	--	--	--	--
10...	--	--	--	--	--
11...	--	--	--	--	--
11...	--	--	--	--	--
12...	--	--	--	--	--
12...	--	--	--	--	--
12...	--	--	--	--	--
12...	--	--	--	--	--
24...	--	--	--	--	--
24...	--	--	--	--	--
24...	--	--	--	--	--
24...	--	--	--	--	--
24...	80	2.55	<1	<20	4
24...	--	--	--	--	--
25...	40	2.67	<1	<20	7
25...	30	1.59	1	<20	<2
27...	--	--	--	--	--
28...	10	2.72	<1	<20	2
29...	--	--	--	--	--
30...	--	--	--	--	--
30...	--	--	--	--	--
31...	--	--	--	--	--
31...	--	--	--	--	--
NOV					
01...	--	--	--	--	--
01...	--	--	--	--	--
02...	--	--	--	--	--
02...	--	--	--	--	--
02...	--	--	--	--	--
02...	--	--	--	--	--
03...	--	--	--	--	--
03...	40	2.38	<1	<20	8
04...	30	5.26	<1	<20	17
04...	--	--	--	--	--
05...	--	--	--	--	--
05...	--	--	--	--	--
06...	--	--	--	--	--
07...	--	--	--	--	--
08...	--	--	--	--	--
08...	20	2.74	<1	<20	<2
08...	100	2.17	4	<20	3

04086200 EAST BRANCH MILWAUKEE RIVER AT NEW FANE, WI—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	16.5	12.5	14.5	9.5	8.5	9.5	---	---	---	---	---	---
2	14.0	11.0	12.5	9.0	8.5	8.5	---	---	---	---	---	---
3	14.0	9.5	11.5	10.0	8.5	9.0	---	---	---	---	---	---
4	13.0	9.5	11.0	9.5	8.0	9.0	---	---	---	---	---	---
5	12.0	7.5	9.5	8.0	6.5	7.5	---	---	---	---	---	---
6	14.5	9.0	11.5	8.5	6.5	8.0	---	---	---	---	---	---
7	15.0	11.0	13.0	9.0	6.5	8.0	---	---	---	---	---	---
8	16.0	14.0	15.0	6.5	5.0	6.0	---	---	---	---	---	---
9	16.0	12.5	14.0	7.5	6.0	6.5	---	---	---	---	---	---
10	14.5	10.5	12.0	8.0	6.5	7.0	---	---	---	---	---	---
11	14.0	9.0	11.5	7.5	4.0	6.0	---	---	---	---	---	---
12	14.5	10.0	12.0	5.0	2.0	3.5	---	---	---	---	---	---
13	15.0	10.5	12.5	5.0	1.5	3.0	---	---	---	---	---	---
14	12.5	11.0	12.0	5.0	1.5	3.0	---	---	---	---	---	---
15	11.0	9.5	10.5	---	---	---	---	---	---	---	---	---
16	9.5	7.5	8.5	---	---	---	---	---	---	---	---	---
17	9.5	6.0	7.5	---	---	---	---	---	---	---	---	---
18	9.5	8.0	8.5	---	---	---	---	---	---	---	---	---
19	9.5	8.5	9.0	---	---	---	---	---	---	---	---	---
20	10.0	8.5	9.5	---	---	---	---	---	---	---	---	---
21	11.5	8.0	9.5	---	---	---	---	---	---	---	---	---
22	11.5	10.0	10.5	---	---	---	---	---	---	---	---	---
23	13.0	11.0	12.0	---	---	---	---	---	---	---	---	---
24	12.5	10.5	11.5	---	---	---	---	---	---	---	---	---
25	12.5	9.5	11.0	---	---	---	---	---	---	---	---	---
26	11.0	10.0	10.5	---	---	---	---	---	---	---	---	---
27	10.5	9.5	10.0	---	---	---	---	---	---	---	---	---
28	11.5	9.5	10.5	---	---	---	---	---	---	---	---	---
29	14.0	11.0	13.0	---	---	---	---	---	---	---	---	---
30	14.5	11.0	13.0	---	---	---	---	---	---	---	---	---
31	11.5	9.5	10.5	---	---	---	---	---	---	---	---	---
MONTH	16.5	6.0	11.2	10.0	1.5	6.8	---	---	---	---	---	---

04086200 EAST BRANCH MILWAUKEE RIVER AT NEW FANE, WI—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	10.9	7.1	9.1	13.5	12.3	12.8	---	---	---	---	---	---
2	11.6	7.2	10.1	14.2	12.8	13.3	---	---	---	---	---	---
3	11.4	6.1	9.3	14.1	12.1	13.1	---	---	---	---	---	---
4	10.1	5.8	8.3	13.3	11.9	12.6	---	---	---	---	---	---
5	12.3	10.1	11.0	14.9	13.3	13.9	---	---	---	---	---	---
6	11.8	6.8	9.9	14.5	12.7	13.6	---	---	---	---	---	---
7	---	---	---	14.7	12.3	13.5	---	---	---	---	---	---
8	---	---	---	17.0	14.4	15.8	---	---	---	---	---	---
9	---	---	---	16.7	14.7	15.6	---	---	---	---	---	---
10	---	---	---	16.4	14.1	15.1	---	---	---	---	---	---
11	---	---	---	17.1	14.6	15.9	---	---	---	---	---	---
12	---	---	---	20.0	17.1	18.6	---	---	---	---	---	---
13	---	---	---	20.0	17.7	19.0	---	---	---	---	---	---
14	---	---	---	20.0	16.6	18.7	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	14.7	12.7	13.8	---	---	---	---	---	---	---	---	---
17	16.2	14.1	14.9	---	---	---	---	---	---	---	---	---
18	15.2	13.5	14.2	---	---	---	---	---	---	---	---	---
19	15.3	13.5	14.1	---	---	---	---	---	---	---	---	---
20	15.0	13.3	13.9	---	---	---	---	---	---	---	---	---
21	15.4	12.9	14.0	---	---	---	---	---	---	---	---	---
22	14.3	12.0	13.0	---	---	---	---	---	---	---	---	---
23	12.8	11.2	11.8	---	---	---	---	---	---	---	---	---
24	13.1	11.3	12.1	---	---	---	---	---	---	---	---	---
25	13.9	12.3	13.0	---	---	---	---	---	---	---	---	---
26	13.6	12.6	12.9	---	---	---	---	---	---	---	---	---
27	13.5	12.4	12.8	---	---	---	---	---	---	---	---	---
28	14.0	11.6	12.7	---	---	---	---	---	---	---	---	---
29	12.1	9.6	11.0	---	---	---	---	---	---	---	---	---
30	11.9	9.5	10.6	---	---	---	---	---	---	---	---	---
31	13.8	11.3	12.4	---	---	---	---	---	---	---	---	---
MONTH	16.2	5.8	12.0	20.0	11.9	15.1	---	---	---	---	---	---

04086200 EAST BRANCH MILWAUKEE RIVER AT NEW FANE, WI—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	559	548	554	546	539	542	---	---	---	---	---	---
2	557	546	550	542	535	537	---	---	---	---	---	---
3	561	552	556	538	531	535	---	---	---	---	---	---
4	563	559	561	532	525	529	---	---	---	---	---	---
5	565	554	561	529	525	527	---	---	---	---	---	---
6	558	550	554	530	525	528	---	---	---	---	---	---
7	559	552	555	537	527	531	---	---	---	---	---	---
8	557	543	551	535	523	529	---	---	---	---	---	---
9	549	538	542	529	523	526	---	---	---	---	---	---
10	552	549	551	525	518	522	---	---	---	---	---	---
11	552	548	550	529	518	522	---	---	---	---	---	---
12	552	548	550	543	525	532	---	---	---	---	---	---
13	551	548	550	545	537	542	---	---	---	---	---	---
14	552	549	550	542	531	537	---	---	---	---	---	---
15	558	550	552	---	---	---	---	---	---	---	---	---
16	560	551	555	---	---	---	---	---	---	---	---	---
17	566	556	560	---	---	---	---	---	---	---	---	---
18	566	558	563	---	---	---	---	---	---	---	---	---
19	567	558	563	---	---	---	---	---	---	---	---	---
20	569	559	564	---	---	---	---	---	---	---	---	---
21	571	560	567	---	---	---	---	---	---	---	---	---
22	572	561	568	---	---	---	---	---	---	---	---	---
23	570	556	562	---	---	---	---	---	---	---	---	---
24	561	551	556	---	---	---	---	---	---	---	---	---
25	560	553	556	---	---	---	---	---	---	---	---	---
26	555	548	551	---	---	---	---	---	---	---	---	---
27	553	546	550	---	---	---	---	---	---	---	---	---
28	554	547	551	---	---	---	---	---	---	---	---	---
29	554	545	548	---	---	---	---	---	---	---	---	---
30	550	541	545	---	---	---	---	---	---	---	---	---
31	547	542	545	---	---	---	---	---	---	---	---	---
MONTH	572	538	555	546	518	531	---	---	---	---	---	---

04086265 MILWAUKEE RIVER AT CTH M NEAR NEWBURG, WI

LOCATION.--Lat 42°25'30", long 88°04'51", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 14, T.11 N., R.20 E., Washington County, Hydrologic Unit 04040003, in Goede Park on left downstream bank of Highway M bridge.

DRAINAGE AREA.--259.8 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May to November 2004.

GAGE.--Water-stage recorder. Elevation of gage is 850 ft above NGVD of 1929 from a topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11).

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	e193	1,150	364	166	130
2	---	---	---	---	---	---	---	e187	1,350	329	173	129
3	---	---	---	---	---	---	---	e163	1,390	305	177	124
4	---	---	---	---	---	---	---	e159	1,300	417	201	117
5	---	---	---	---	---	---	---	e141	1,080	370	193	110
6	---	---	---	---	---	---	---	e131	872	328	174	105
7	---	---	---	---	---	---	---	129	713	302	162	99
8	---	---	---	---	---	---	---	175	597	276	153	92
9	---	---	---	---	---	---	---	250	533	266	166	91
10	---	---	---	---	---	---	---	315	543	270	160	90
11	---	---	---	---	---	---	---	383	1,350	259	163	89
12	---	---	---	---	---	---	---	390	2,680	275	187	85
13	---	---	---	---	---	---	---	474	3,190	246	209	81
14	---	---	---	---	---	---	---	611	3,110	229	203	76
15	---	---	---	---	---	---	---	616	2,670	215	189	73
16	---	---	---	---	---	---	---	554	2,150	207	173	72
17	---	---	---	---	---	---	---	480	1,800	204	173	74
18	---	---	---	---	---	---	---	485	1,420	196	185	75
19	---	---	---	---	---	---	---	457	1,130	194	197	72
20	---	---	---	---	---	---	---	564	881	191	204	71
21	---	---	---	---	---	---	---	808	719	186	189	68
22	---	---	---	---	---	---	---	1,250	614	182	173	68
23	---	---	---	---	---	---	---	1,630	545	170	165	69
24	---	---	---	---	---	---	---	1,860	e520	157	156	69
25	---	---	---	---	---	---	---	1,980	e510	156	149	68
26	---	---	---	---	---	---	---	1,910	484	152	147	65
27	---	---	---	---	---	---	---	1,710	452	143	171	66
28	---	---	---	---	---	---	---	1,410	451	136	151	66
29	---	---	---	---	---	---	---	1,130	430	129	147	61
30	---	---	---	---	---	---	---	972	398	130	137	62
31	---	---	---	---	---	---	---	1,080	---	163	136	---
TOTAL	---	---	---	---	---	---	---	22,597	35,032	7,147	5,329	2,517
MEAN	---	---	---	---	---	---	---	729	1,168	231	172	83.9
MAX	---	---	---	---	---	---	---	1,980	3,190	417	209	130
MIN	---	---	---	---	---	---	---	129	398	129	136	61
CFSM	---	---	---	---	---	---	---	2.80	4.49	0.89	0.66	0.32
IN.	---	---	---	---	---	---	---	3.23	5.01	1.02	0.76	0.36

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2004, BY WATER YEAR (WY)

MEAN	---	---	---	---	---	---	---	729	1,168	231	172	83.9
MAX	---	---	---	---	---	---	---	729	1,168	231	172	83.9
(WY)	---	---	---	---	---	---	---	(2004)	(2004)	(2004)	(2004)	(2004)
MIN	---	---	---	---	---	---	---	729	1,168	231	172	83.9
(WY)	---	---	---	---	---	---	---	(2004)	(2004)	(2004)	(2004)	(2004)

SUMMARY STATISTICS	FOR 2004 WATER YEAR (May - September)	
ANNUAL TOTAL	72,622	
ANNUAL MEAN	475	
HIGHEST DAILY MEAN	3,190	Jun 13
LOWEST DAILY MEAN	61	Sep 29
ANNUAL SEVEN-DAY MINIMUM	65	Sep 24
MAXIMUM PEAK FLOW	3,280	Jun 13
MAXIMUM PEAK STAGE	7.58	Jun 13
INSTANTANEOUS LOW FLOW	57	Sep 29, 30
ANNUAL RUNOFF (CFSM)	1.83	
ANNUAL RUNOFF (INCHES)	10.39	
10 PERCENT EXCEEDS	1,350	
50 PERCENT EXCEEDS	194	
90 PERCENT EXCEEDS	74	

(e) Estimated

04086265 MILWAUKEE RIVER AT CTH M NEAR NEWBURG, WI--Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	104	---	---	---	---	---	---	---	---	---	---
2	71	119	---	---	---	---	---	---	---	---	---	---
3	63	118	---	---	---	---	---	---	---	---	---	---
4	64	120	---	---	---	---	---	---	---	---	---	---
5	60	123	---	---	---	---	---	---	---	---	---	---
6	63	123	---	---	---	---	---	---	---	---	---	---
7	65	119	---	---	---	---	---	---	---	---	---	---
8	88	106	---	---	---	---	---	---	---	---	---	---
9	84	98	---	---	---	---	---	---	---	---	---	---
10	83	90	---	---	---	---	---	---	---	---	---	---
11	82	88	---	---	---	---	---	---	---	---	---	---
12	78	79	---	---	---	---	---	---	---	---	---	---
13	80	68	---	---	---	---	---	---	---	---	---	---
14	77	63	---	---	---	---	---	---	---	---	---	---
15	73	e63	---	---	---	---	---	---	---	---	---	---
16	71	e63	---	---	---	---	---	---	---	---	---	---
17	69	e68	---	---	---	---	---	---	---	---	---	---
18	71	e73	---	---	---	---	---	---	---	---	---	---
19	73	e83	---	---	---	---	---	---	---	---	---	---
20	73	e98	---	---	---	---	---	---	---	---	---	---
21	73	e112	---	---	---	---	---	---	---	---	---	---
22	73	e114	---	---	---	---	---	---	---	---	---	---
23	95	e106	---	---	---	---	---	---	---	---	---	---
24	107	e100	---	---	---	---	---	---	---	---	---	---
25	115	e99	---	---	---	---	---	---	---	---	---	---
26	111	e94	---	---	---	---	---	---	---	---	---	---
27	110	e106	---	---	---	---	---	---	---	---	---	---
28	105	e140	---	---	---	---	---	---	---	---	---	---
29	106	e153	---	---	---	---	---	---	---	---	---	---
30	120	e147	---	---	---	---	---	---	---	---	---	---
31	108	---	---	---	---	---	---	---	---	---	---	---
TOTAL	2,573	3,037	---	---	---	---	---	---	---	---	---	---
MEAN	83.0	101	---	---	---	---	---	---	---	---	---	---
MAX	120	153	---	---	---	---	---	---	---	---	---	---
MIN	60	63	---	---	---	---	---	---	---	---	---	---
CFSM	0.32	0.39	---	---	---	---	---	---	---	---	---	---
IN.	0.37	0.43	---	---	---	---	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2005, BY WATER YEAR (WY)

MEAN	83.0	101	---	---	---	---	---	729	1,168	231	172	83.9
MAX	83.0	101	---	---	---	---	---	729	1,168	231	172	83.9
(WY)	(2005)	(2005)	---	---	---	---	---	(2004)	(2004)	(2004)	(2004)	(2004)
MIN	83.0	101	---	---	---	---	---	729	1,168	231	172	83.9
(WY)	(2005)	(2005)	---	---	---	---	---	(2004)	(2004)	(2004)	(2004)	(2004)

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR (May - November)		FOR 2005 WATER YEAR (October - November)		WATER YEARS 2004 - 2005 (May 2004 - November 2004)	
ANNUAL TOTAL	78,242		5,610			
ANNUAL MEAN	366		92.0		366	
HIGHEST ANNUAL MEAN					475	2004
LOWEST ANNUAL MEAN					92.0	2005
HIGHEST DAILY MEAN	3,190	Jun 13	(e)153	Nov 29	3,190	Jun 13, 2004
LOWEST DAILY MEAN	60	Oct 5	60	Oct 5	60	Oct 5, 2004
ANNUAL SEVEN-DAY MINIMUM	63	Sep 29	64	Oct 1	63	Sep 29, 2004
MAXIMUM PEAK FLOW			(a)	Nov 29	3,280	Jun 13, 2004
MAXIMUM PEAK STAGE			(a)	Nov 29	7.58	Jun 13, 2004
INSTANTANEOUS LOW FLOW			55	Oct 5	55	Oct 5, 2004
ANNUAL RUNOFF (CFSM)	0.000		0.000		0.000	
ANNUAL RUNOFF (INCHES)	0.00		0.00		0.00	
10 PERCENT EXCEEDS	1,100		120		1,100	
50 PERCENT EXCEEDS	156		88		156	
90 PERCENT EXCEEDS	69		63		69	

(a) Unknown
(e) Estimated

04086265 MILWAUKEE RIVER AT COUNTY TRUNK HIGHWAY M NEAR NEWBURG, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: July 16 to Nov. 15, 2004 (discontinued).
DISSOLVED OXYGEN: July 16 to Nov. 15, 2004 (discontinued).
SPECIFIC CONDUCTANCE: July 16 to Nov. 15, 2004 (discontinued).

INSTRUMENTATION.--Water-quality monitor since July 16, 2004.

REMARKS.--Temperature records good. Dissolved oxygen records good except for the periods of July 26 to aug. 3 and Oct. 31 to Nov. 8, which are poor; July 16-20, which are unusable. Specific conductance records good except for the period July 16-30, which are poor due to uncertainty resulting from excessive sensor drift.

EXTREMES FOR PERIOD MAY TO NOVEMBER 2004.--
WATER TEMPERATURE: Maximum, 26.5°C, July 20 and 22; minimum, 2.5°C, Nov. 13 and 14.
DISSOLVED OXYGEN: Maximum, 16.7 mg/L, Nov. 14; minimum, 5.5 mg/L, May 17, July 30 and Sept. 16.
SPECIFIC CONDUCTANCE: Maximum, 878 µS/cm, Sept. 24; minimum, 597 µS/cm, Aug. 27.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	24.5	21.0	23.0	22.5	18.5	20.5
2	---	---	---	---	---	---	25.0	22.0	23.5	24.0	19.5	22.0
3	---	---	---	---	---	---	25.5	22.5	24.0	24.0	20.5	22.5
4	---	---	---	---	---	---	24.5	22.0	23.5	24.5	21.0	23.0
5	---	---	---	---	---	---	23.0	20.0	22.0	24.0	21.0	22.5
6	---	---	---	---	---	---	23.5	19.0	21.0	23.5	21.5	22.5
7	---	---	---	---	---	---	22.5	19.5	21.0	21.5	19.0	20.5
8	---	---	---	---	---	---	23.0	19.5	21.0	21.0	18.0	19.5
9	---	---	---	---	---	---	23.0	20.5	22.0	20.5	17.5	19.5
10	---	---	---	---	---	---	22.5	19.5	20.5	21.0	17.5	19.5
11	---	---	---	---	---	---	19.5	17.5	18.0	22.0	19.0	20.5
12	---	---	---	---	---	---	18.0	16.0	17.0	23.0	19.5	21.5
13	---	---	---	---	---	---	17.5	16.0	17.0	23.0	20.0	21.5
14	---	---	---	---	---	---	19.0	15.5	17.0	23.5	21.0	22.0
15	---	---	---	---	---	---	19.5	16.0	18.0	24.0	22.0	23.0
16	---	---	---	---	---	---	20.0	16.5	18.5	23.0	20.0	21.0
17	---	---	---	24.0	21.0	22.5	20.5	18.0	19.0	20.5	17.5	19.0
18	---	---	---	24.0	20.5	22.0	21.5	18.0	20.0	20.0	17.5	19.0
19	---	---	---	25.0	21.0	23.0	21.0	18.5	20.0	20.0	18.0	19.5
20	---	---	---	26.5	22.0	24.5	21.0	18.0	19.5	20.0	18.0	19.5
21	---	---	---	25.5	23.5	24.5	20.5	17.5	19.0	19.5	17.0	19.0
22	---	---	---	26.5	23.5	25.0	20.5	17.0	19.0	20.0	17.0	19.0
23	---	---	---	25.0	22.0	23.5	20.5	18.5	19.5	20.5	18.0	19.5
24	---	---	---	23.5	20.0	22.0	19.5	18.5	19.0	21.0	19.0	20.0
25	---	---	---	23.5	19.0	21.5	21.0	19.0	20.0	19.0	17.5	18.0
26	---	---	---	23.0	18.5	21.0	23.5	19.5	21.5	18.0	15.0	17.0
27	---	---	---	24.0	19.0	21.5	24.5	21.5	23.0	18.0	15.0	17.0
28	---	---	---	24.5	20.5	22.5	24.0	19.5	21.5	18.0	16.0	16.5
29	---	---	---	24.0	21.0	22.5	20.5	17.5	19.5	16.0	13.5	15.0
30	---	---	---	23.5	21.5	22.0	20.0	17.5	18.5	15.5	13.0	14.5
31	---	---	---	24.5	20.5	22.5	21.5	17.5	19.5	---	---	---
MONTH	---	---	---	26.5	18.5	22.7	25.5	15.5	20.2	24.5	13.0	19.8
YEAR	26.5	13.0	20.5									

04086265 MILWAUKEE RIVER AT COUNTY TRUNK HIGHWAY M NEAR NEWBURG, WI—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	8.0	5.7	6.8	10.1	7.0	8.5
2	---	---	---	---	---	---	7.7	5.7	6.7	10.6	6.8	8.7
3	---	---	---	---	---	---	8.6	6.1	7.2	10.4	6.7	8.6
4	---	---	---	---	---	---	8.2	5.9	7.1	10.7	6.5	8.5
5	---	---	---	---	---	---	8.6	6.5	7.5	10.4	6.4	8.4
6	---	---	---	---	---	---	8.9	6.9	7.9	9.8	6.3	7.9
7	---	---	---	---	---	---	8.3	6.7	7.5	10.9	6.7	8.8
8	---	---	---	---	---	---	8.7	6.8	7.7	10.9	6.9	8.9
9	---	---	---	---	---	---	8.1	6.5	7.1	11.5	7.1	9.3
10	---	---	---	---	---	---	8.1	6.3	7.2	11.7	7.0	9.3
11	---	---	---	---	---	---	8.9	6.9	7.9	11.3	6.5	8.9
12	---	---	---	---	---	---	9.1	7.7	8.4	11.5	6.0	8.8
13	---	---	---	---	---	---	9.0	7.9	8.5	11.3	5.9	8.8
14	---	---	---	---	---	---	9.3	7.9	8.5	11.5	5.6	8.6
15	---	---	---	---	---	---	9.3	7.9	8.5	11.2	5.6	8.1
16	---	---	---	---	---	---	9.5	7.6	8.6	11.0	5.5	8.4
17	---	---	---	---	---	---	9.1	7.6	8.3	12.4	6.2	9.5
18	---	---	---	---	---	---	9.5	7.3	8.3	13.2	6.8	10.1
19	---	---	---	---	---	---	9.5	7.0	8.3	13.1	6.7	10.0
20	---	---	---	---	---	---	9.8	7.4	8.5	12.8	6.6	9.8
21	---	---	---	8.3	6.0	7.0	10.2	7.5	8.9	13.2	6.8	9.9
22	---	---	---	8.2	5.9	7.2	10.6	7.8	9.0	13.1	6.7	9.8
23	---	---	---	8.7	6.1	7.5	9.3	7.2	8.3	13.4	6.4	9.7
24	---	---	---	8.6	6.3	7.6	8.9	7.3	8.1	13.4	6.2	9.5
25	---	---	---	8.8	6.4	7.7	9.7	7.2	8.3	12.8	6.9	9.6
26	---	---	---	8.7	6.4	7.6	9.8	7.0	8.3	14.0	7.4	10.4
27	---	---	---	9.0	6.3	7.7	9.1	6.7	7.9	14.1	7.3	10.4
28	---	---	---	8.4	6.0	7.3	8.2	6.2	7.3	13.5	7.3	10.1
29	---	---	---	7.8	5.7	6.9	10.0	7.1	8.5	14.2	8.0	10.8
30	---	---	---	7.5	5.5	6.6	9.9	7.4	8.6	14.1	8.1	10.7
31	---	---	---	8.8	5.8	7.3	10.4	7.4	8.9	---	---	---
MONTH	---	---	---	9.0	5.5	7.3	10.6	5.7	8.0	14.2	5.5	9.3
YEAR	14.2	5.5	8.4									

04086265 MILWAUKEE RIVER AT COUNTY TRUNK HIGHWAY M NEAR NEWBURG, WI—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	767	660	728	748	708	733
2	---	---	---	---	---	---	764	726	745	762	727	749
3	---	---	---	---	---	---	760	728	746	765	727	750
4	---	---	---	---	---	---	748	650	710	763	724	746
5	---	---	---	---	---	---	723	688	710	771	729	752
6	---	---	---	---	---	---	730	692	711	772	740	756
7	---	---	---	---	---	---	728	695	712	784	739	767
8	---	---	---	---	---	---	736	699	715	779	740	765
9	---	---	---	---	---	---	736	653	707	788	747	770
10	---	---	---	---	---	---	726	696	711	796	753	779
11	---	---	---	---	---	---	725	694	711	803	753	779
12	---	---	---	---	---	---	717	686	700	799	761	784
13	---	---	---	---	---	---	696	656	673	812	775	798
14	---	---	---	---	---	---	668	631	645	832	778	806
15	---	---	---	---	---	---	655	626	637	838	794	819
16	---	---	---	---	---	---	685	641	657	860	801	835
17	---	---	---	653	621	639	692	616	666	851	799	830
18	---	---	---	657	617	634	684	651	669	843	792	823
19	---	---	---	659	624	645	679	645	664	845	789	817
20	---	---	---	690	639	662	673	645	662	849	803	831
21	---	---	---	703	665	684	683	636	657	860	808	840
22	---	---	---	725	683	703	685	652	665	864	815	845
23	---	---	---	733	699	719	693	658	678	869	820	852
24	---	---	---	744	710	726	713	658	691	878	819	855
25	---	---	---	744	707	724	731	696	713	867	810	843
26	---	---	---	745	709	726	741	707	727	866	800	833
27	---	---	---	754	721	739	742	597	699	861	803	834
28	---	---	---	767	741	756	721	693	710	867	804	842
29	---	---	---	792	763	776	718	671	696	856	795	832
30	---	---	---	806	767	789	726	690	711	853	794	830
31	---	---	---	791	741	762	742	700	721	---	---	---
MONTH	---	---	---	806	617	712	767	597	695	878	708	803
YEAR	878	597	741									

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Chloride, water, fltrd, mg/L (00940)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	E coli, m-TEC MF, water, col/ 100 mL (31633)
JUL													
01...	1210	362	40	40.9	19	1.1	.031	.713	.076	.092	.136	<2.0	90
31...	1815	171	50	58.9	9	--	--	--	--	--	.105	--	--
AUG													
01...	1850	177	50	56.3	9	--	--	--	--	--	.115	--	--
03...	1830	179	50	59.4	6	--	--	--	--	--	.122	--	--
04...	1830	205	50	56.9	9	--	--	--	--	--	.132	--	--
05...	1830	194	50	54.8	11	--	--	--	--	--	.129	--	--
06...	1830	177	50	54.8	8	--	--	--	--	--	.129	--	--
07...	0630	160	50	57.4	11	--	--	--	--	--	.135	--	--
08...	0630	150	50	57.1	18	--	--	--	--	--	.128	--	--
12...	0845	179	50	54.8	14	--	--	--	--	--	.113	--	--
13...	2030	211	50	52.2	18	--	--	--	--	--	.135	--	--
19...	2000	211	50	52.7	14	--	--	--	--	--	.100	--	--
20...	0800	202	50	50.5	16	--	--	--	--	--	.104	--	--
20...	1417	202	50	44.9	11	--	--	--	--	--	.090	--	--
SEP													
09...	1345	91	40	72.9	4	.92	<.015	1.43	.039	--	.074	<2.0	40
16...	1200	72	50	--	--	--	--	--	--	--	--	<2.0	50

04086265 MILWAUKEE RIVER AT COUNTY TRUNK HIGHWAY M NEAR NEWBURG, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Fecal coli-form, M-FC 0.7u MF col/ 100 mL (31625)	Chloro-phyll a wat unf trichr. method, uncorr, ug/L (32210)	Copper, water, unfltrd recover -able, ug/L (01119)	Mercury water fltrd, ng/L (50287)	Zinc, water, unfltrd recover -able, ug/L (01094)	Mercury suspnd sedimnt total, ng/L (62976)	Methyl-mercury water fltrd, ng/L (50285)	Methyl-mercury suspnd sedimnt total, ng/L (62977)	Sus-pended sedi-ment concen-tration mg/L (80154)
JUL									
01...	70	5.06	2	--	<20	--	--	--	--
31...	--	--	--	--	--	--	--	--	--
AUG									
01...	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
SEP									
09...	60	5.91	2	1.41	<20	1.07	.14	.015	<2
16...	80	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instan-taneous dis-charge, cfs (00061)	Sam-pling method, code (82398)	Chlor-ide, water, fltrd, mg/L (00940)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, unfltrd mg/L (00665)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	E coli, Defined Substr. Tech., water, MPN/ 100 mL (50468)	E coli, m-TEC MF, water, col/ 100 mL (31633)
OCT													
08...	1445	106	50	87.8	4	--	--	--	--	.059	--	--	--
08...	1909	95	50	75.4	15	--	--	--	--	.106	--	--	--
09...	0115	86	50	84.3	13	--	--	--	--	.077	--	--	--
09...	0715	80	50	88.4	12	--	--	--	--	.073	--	--	--
09...	1430	84	50	81.4	5	--	--	--	--	.061	--	--	--
09...	2030	88	50	78.7	5	--	--	--	--	.060	--	--	--
10...	0230	84	50	88.5	8	--	--	--	--	.062	--	--	--
10...	1545	84	50	76.6	4	--	--	--	--	.049	--	--	--
10...	2145	86	50	80.1	5	--	--	--	--	.054	--	--	--
12...	1316	74	50	--	2	--	--	--	--	--	--	--	--
12...	1317	74	40	--	2	--	--	--	--	--	--	--	--
23...	1221	102	50	83.0	3	--	--	--	--	.044	--	--	--
24...	0030	102	50	68.3	11	--	--	--	--	.065	--	--	--
24...	1400	111	50	72.5	5	--	--	--	--	.058	--	--	--
24...	1432	111	40	--	5	--	--	--	--	--	--	--	--
24...	1433	111	50	--	5	--	--	--	--	--	--	--	--
24...	1440	111	50	69.6	5	.78	.034	1.70	.018	.056	<3.0	--	200
24...	2055	122	50	70.1	8	--	--	--	--	.060	--	--	--
25...	0656	113	50	70.9	6	.84	.045	1.79	.020	.056	<3.0	--	10
25...	1631	118	50	64.4	3	.72	.036	1.65	.021	.052	<3.0	--	20
26...	1500	113	50	73.1	11	--	--	--	--	.074	--	--	--
28...	1240	104	50	--	13	.82	.053	1.66	.026	.073	<3.0	51	--
NOV													
01...	1715	106	50	63.3	5	--	--	--	--	.062	--	--	--
01...	1925	113	50	67.4	5	--	--	--	--	.092	--	--	--
02...	0130	115	50	66.2	9	--	--	--	--	.093	--	--	--
02...	0730	120	50	66.4	6	--	--	--	--	.081	--	--	--
02...	1330	122	50	58.6	5	--	--	--	--	.084	--	--	--
02...	1930	120	50	67.3	8	--	--	--	--	.077	--	--	--
03...	0130	118	50	65.9	9	--	--	--	--	.069	--	--	--
03...	0657	115	50	67.5	8	--	--	--	--	.065	--	--	--
03...	1106	118	50	--	8	.71	.048	1.60	.037	.078	<2.0	--	190
03...	1115	118	50	64.2	5	--	--	--	--	.064	--	--	--
04...	0515	115	50	65.2	10	--	--	--	--	.072	--	--	--
04...	1331	122	50	59.2	10	1.1	.049	1.59	.032	.076	<2.0	--	210
04...	1945	125	50	58.6	10	--	--	--	--	.072	--	--	--
05...	0745	120	50	62.9	9	--	--	--	--	.084	--	--	--
06...	0145	125	50	56.7	5	--	--	--	--	.057	--	--	--
07...	0145	122	50	56.1	4	--	--	--	--	.060	--	--	--
08...	0535	108	50	60.1	9	.84	.039	1.42	.032	.070	<2.0	--	30
08...	1401	106	50	57.4	3	.85	.026	1.33	.022	.050	<2.0	--	10

04086265 MILWAUKEE RIVER AT COUNTY TRUNK HIGHWAY M NEAR NEWBURG, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Fecal coli-form, M-FC 0.7u MF col/ 100 mL (31625)	Chloro-phyll a wat unf trichr. method, uncorr, ug/L (32210)	Copper, water, unfltrd recover-able, ug/L (01119)	Zinc, water, unfltrd recover-able, ug/L (01094)	Sus-pended sedi-ment concen-tration mg/L (80154)
OCT					
08...	--	--	--	--	--
08...	--	--	--	--	--
09...	--	--	--	--	--
09...	--	--	--	--	--
09...	--	--	--	--	--
09...	--	--	--	--	--
10...	--	--	--	--	--
10...	--	--	--	--	--
10...	--	--	--	--	--
12...	--	--	--	--	--
12...	--	--	--	--	--
23...	--	--	--	--	--
24...	--	--	--	--	--
24...	--	--	--	--	--
24...	--	--	--	--	--
24...	--	--	--	--	--
24...	240	6.38	2	<20	3
24...	--	--	--	--	--
25...	90	3.79	2	<20	4
25...	70	4.33	1	<20	<2
26...	--	--	--	--	--
28...	100	10.7	1	<20	10
NOV					
01...	--	--	--	--	--
01...	--	--	--	--	--
02...	--	--	--	--	--
02...	--	--	--	--	--
02...	--	--	--	--	--
02...	--	--	--	--	--
03...	--	--	--	--	--
03...	--	--	--	--	--
03...	230	4.81	1	<20	6
03...	--	--	--	--	--
04...	--	--	--	--	--
04...	330	4.60	1	<20	7
04...	--	--	--	--	--
05...	--	--	--	--	--
06...	--	--	--	--	--
07...	--	--	--	--	--
08...	60	3.40	1	<20	6
08...	10	2.14	<1	<20	3

04086265 MILWAUKEE RIVER AT COUNTY TRUNK HIGHWAY M NEAR NEWBURG, WI—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	16.5	14.5	15.5	11.0	9.5	10.0	---	---	---	---	---	---
2	15.5	12.5	13.5	9.5	9.0	9.0	---	---	---	---	---	---
3	13.5	11.0	12.5	9.5	8.5	9.0	---	---	---	---	---	---
4	13.5	11.0	12.0	9.5	8.0	9.0	---	---	---	---	---	---
5	11.5	9.0	10.5	8.0	6.5	7.0	---	---	---	---	---	---
6	13.5	10.0	12.0	8.5	6.0	7.5	---	---	---	---	---	---
7	14.5	12.5	13.5	8.5	6.5	7.5	---	---	---	---	---	---
8	16.0	14.5	15.0	6.5	5.0	6.0	---	---	---	---	---	---
9	15.5	13.0	14.5	7.0	5.5	6.0	---	---	---	---	---	---
10	14.5	11.5	13.0	8.0	5.5	7.0	---	---	---	---	---	---
11	13.5	11.0	12.5	7.5	5.5	6.5	---	---	---	---	---	---
12	14.0	11.5	12.5	5.5	3.5	4.5	---	---	---	---	---	---
13	14.0	11.5	13.0	4.5	2.5	4.0	---	---	---	---	---	---
14	14.0	11.5	12.5	4.5	2.5	3.5	---	---	---	---	---	---
15	11.5	10.0	10.5	---	---	---	---	---	---	---	---	---
16	10.0	7.5	9.0	---	---	---	---	---	---	---	---	---
17	9.0	6.5	8.0	---	---	---	---	---	---	---	---	---
18	9.0	8.5	8.5	---	---	---	---	---	---	---	---	---
19	9.5	8.5	9.0	---	---	---	---	---	---	---	---	---
20	9.5	9.0	9.5	---	---	---	---	---	---	---	---	---
21	11.0	8.5	9.5	---	---	---	---	---	---	---	---	---
22	11.0	10.0	10.5	---	---	---	---	---	---	---	---	---
23	13.0	11.0	12.0	---	---	---	---	---	---	---	---	---
24	13.0	11.5	12.5	---	---	---	---	---	---	---	---	---
25	13.0	10.5	12.0	---	---	---	---	---	---	---	---	---
26	13.0	11.0	11.5	---	---	---	---	---	---	---	---	---
27	11.0	10.5	11.0	---	---	---	---	---	---	---	---	---
28	11.5	10.0	11.0	---	---	---	---	---	---	---	---	---
29	15.0	11.5	13.5	---	---	---	---	---	---	---	---	---
30	15.0	12.5	13.5	---	---	---	---	---	---	---	---	---
31	12.5	11.0	11.5	---	---	---	---	---	---	---	---	---
MONTH	16.5	6.5	11.8	11.0	2.5	6.9	---	---	---	---	---	---

04086265 MILWAUKEE RIVER AT COUNTY TRUNK HIGHWAY M NEAR NEWBURG, WI—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	14.2	7.9	10.2	10.9	9.5	10.3	---	---	---	---	---	---
2	13.0	7.9	10.3	11.7	10.0	10.8	---	---	---	---	---	---
3	14.6	8.8	11.4	12.4	10.6	11.5	---	---	---	---	---	---
4	14.4	8.6	11.5	12.1	10.6	11.4	---	---	---	---	---	---
5	14.8	10.0	12.3	13.5	11.4	12.5	---	---	---	---	---	---
6	15.1	9.5	12.1	13.3	12.0	12.7	---	---	---	---	---	---
7	14.3	8.7	11.5	13.5	11.5	12.5	---	---	---	---	---	---
8	11.6	8.0	9.1	14.8	12.3	13.6	---	---	---	---	---	---
9	12.3	7.5	9.9	14.8	12.5	13.7	---	---	---	---	---	---
10	13.3	8.3	11.0	14.4	12.3	13.4	---	---	---	---	---	---
11	13.3	8.6	11.3	15.0	11.6	13.3	---	---	---	---	---	---
12	13.3	8.7	11.3	16.2	13.3	14.7	---	---	---	---	---	---
13	13.2	8.4	11.1	16.3	14.1	15.2	---	---	---	---	---	---
14	12.5	8.1	9.7	16.7	14.4	15.6	---	---	---	---	---	---
15	12.2	8.4	10.4	---	---	---	---	---	---	---	---	---
16	12.8	9.2	11.4	---	---	---	---	---	---	---	---	---
17	14.8	10.2	12.7	---	---	---	---	---	---	---	---	---
18	14.1	9.6	11.5	---	---	---	---	---	---	---	---	---
19	12.2	9.4	11.1	---	---	---	---	---	---	---	---	---
20	11.9	9.2	10.7	---	---	---	---	---	---	---	---	---
21	13.5	9.4	11.8	---	---	---	---	---	---	---	---	---
22	13.0	8.7	10.1	---	---	---	---	---	---	---	---	---
23	10.1	8.0	8.6	---	---	---	---	---	---	---	---	---
24	10.0	7.2	8.6	---	---	---	---	---	---	---	---	---
25	11.5	7.8	9.8	---	---	---	---	---	---	---	---	---
26	10.4	8.4	9.5	---	---	---	---	---	---	---	---	---
27	10.1	8.8	9.4	---	---	---	---	---	---	---	---	---
28	10.9	9.2	10.1	---	---	---	---	---	---	---	---	---
29	10.1	8.6	9.4	---	---	---	---	---	---	---	---	---
30	9.5	7.8	8.6	---	---	---	---	---	---	---	---	---
31	11.1	8.7	9.9	---	---	---	---	---	---	---	---	---
MONTH	15.1	7.2	10.5	16.7	9.5	12.9	---	---	---	---	---	---

04086265 MILWAUKEE RIVER AT COUNTY TRUNK HIGHWAY M NEAR NEWBURG, WI—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	863	791	841	743	710	728	---	---	---	---	---	---
2	859	688	786	725	675	698	---	---	---	---	---	---
3	837	779	810	723	704	714	---	---	---	---	---	---
4	835	790	818	725	700	713	---	---	---	---	---	---
5	851	794	832	709	690	702	---	---	---	---	---	---
6	852	807	836	712	686	698	---	---	---	---	---	---
7	860	819	844	712	682	696	---	---	---	---	---	---
8	863	697	807	704	680	695	---	---	---	---	---	---
9	793	704	766	700	668	686	---	---	---	---	---	---
10	793	755	779	703	672	689	---	---	---	---	---	---
11	806	758	787	703	671	689	---	---	---	---	---	---
12	811	766	793	716	677	698	---	---	---	---	---	---
13	818	777	799	718	683	700	---	---	---	---	---	---
14	826	796	810	727	694	710	---	---	---	---	---	---
15	836	788	819	---	---	---	---	---	---	---	---	---
16	840	791	820	---	---	---	---	---	---	---	---	---
17	835	771	810	---	---	---	---	---	---	---	---	---
18	834	787	814	---	---	---	---	---	---	---	---	---
19	833	777	814	---	---	---	---	---	---	---	---	---
20	837	800	822	---	---	---	---	---	---	---	---	---
21	837	790	819	---	---	---	---	---	---	---	---	---
22	831	787	814	---	---	---	---	---	---	---	---	---
23	827	686	775	---	---	---	---	---	---	---	---	---
24	769	721	746	---	---	---	---	---	---	---	---	---
25	791	746	767	---	---	---	---	---	---	---	---	---
26	788	747	769	---	---	---	---	---	---	---	---	---
27	761	721	748	---	---	---	---	---	---	---	---	---
28	757	724	743	---	---	---	---	---	---	---	---	---
29	757	723	747	---	---	---	---	---	---	---	---	---
30	758	651	714	---	---	---	---	---	---	---	---	---
31	740	707	719	---	---	---	---	---	---	---	---	---
MONTH	863	651	793	743	668	701	---	---	---	---	---	---

04086340 NORTH BRANCH MILWAUKEE RIVER NEAR FILLMORE, WI

LOCATION.--Lat 43°28'58", long 88°03'39", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.25, T.12 N., R.20 E., Washington County, Hydrologic Unit 04040003, on right bank on the upstream side of Highway M bridge.

DRAINAGE AREA.--148 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1968 to September 1981, May 2004 to November 2004 (discontinued).
REVISED RECORDS.--WDR WI: 1971(M); WDR WI-77-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 795 ft (revised) above NGVD of 1929 from a topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	e108	529	162	85	e34
2	---	---	---	---	---	---	---	e105	502	136	98	e34
3	---	---	---	---	---	---	---	e92	464	122	104	e33
4	---	---	---	---	---	---	---	e89	400	159	108	e33
5	---	---	---	---	---	---	---	e78	330	204	100	e33
6	---	---	---	---	---	---	---	e75	274	246	89	e33
7	---	---	---	---	---	---	---	e83	224	272	81	e31
8	---	---	---	---	---	---	---	e103	181	261	76	e31
9	---	---	---	---	---	---	---	e151	172	238	75	e32
10	---	---	---	---	---	---	---	e193	290	215	75	e33
11	---	---	---	---	---	---	---	e216	936	190	76	32
12	---	---	---	---	---	---	---	e221	1,820	177	76	32
13	---	---	---	---	---	---	---	e246	1,810	159	71	31
14	---	---	---	---	---	---	---	353	1,400	144	e64	32
15	---	---	---	---	---	---	---	403	1,010	137	e57	32
16	---	---	---	---	---	---	---	396	752	128	e55	34
17	---	---	---	---	---	---	---	368	632	125	65	29
18	---	---	---	---	---	---	---	338	511	128	76	29
19	---	---	---	---	---	---	---	300	437	139	83	29
20	---	---	---	---	---	---	---	348	387	145	79	29
21	---	---	---	---	---	---	---	560	343	139	70	28
22	---	---	---	---	---	---	---	978	308	129	62	27
23	---	---	---	---	---	---	---	1,260	272	113	56	28
24	---	---	---	---	---	---	---	1,280	260	100	53	29
25	---	---	---	---	---	---	---	1,060	263	90	57	28
26	---	---	---	---	---	---	---	837	256	e76	61	27
27	---	---	---	---	---	---	---	651	238	e74	70	27
28	---	---	---	---	---	---	---	503	226	e72	70	26
29	---	---	---	---	---	---	---	406	209	e69	64	e27
30	---	---	---	---	---	---	---	369	186	e67	59	e28
31	---	---	---	---	---	---	---	500	---	79	54	---
TOTAL	---	---	---	---	---	---	---	12,670	15,622	4,495	2,269	911
MEAN	---	---	---	---	---	---	---	409	521	145	73.2	30.4
MAX	---	---	---	---	---	---	---	1,280	1,820	272	108	34
MIN	---	---	---	---	---	---	---	75	172	67	53	26
CFSM	---	---	---	---	---	---	---	2.76	3.52	0.98	0.49	0.21
IN.	---	---	---	---	---	---	---	3.18	3.93	1.13	0.57	0.23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2004, BY WATER YEAR (WY)

MEAN	66.8	73.6	74.8	54.8	64.4	232	218	132	112	58.6	58.3	74.3
MAX	278	120	140	132	136	409	372	409	521	145	180	188
(WY)	(1982)	(1973)	(1974)	(1973)	(1976)	(1979)	(1979)	(2004)	(2004)	(2004)	(1979)	(1980)
MIN	22.5	31.8	19.8	15.6	18.3	78.0	65.4	26.9	29.6	13.1	8.36	15.7
(WY)	(1972)	(1977)	(1977)	(1977)	(1977)	(1980)	(1970)	(1977)	(1977)	(1970)	(1970)	(1969)

SUMMARY STATISTICS	FOR 2004 WATER YEAR		WATER YEARS 1968 - 2004	
ANNUAL TOTAL	35,967			
ANNUAL MEAN	235		101	
HIGHEST ANNUAL MEAN			278	1982
LOWEST ANNUAL MEAN			39.5	1970
HIGHEST DAILY MEAN	1,820	Jun 12	2,630	Mar 23, 1975
LOWEST DAILY MEAN	26	Sep 28	3.2	Aug 17, 1970
ANNUAL SEVEN-DAY MINIMUM	27	Sep 22	4.8	Aug 16, 1970
MAXIMUM PEAK FLOW	2,030	Jun 12	(a)3,100	Mar 22, 1975
MAXIMUM PEAK STAGE	11.87	Jun 12	11.87	Jun 12, 2004
ANNUAL RUNOFF (CFSM)	1.59		0.683	
ANNUAL RUNOFF (INCHES)	9.04		9.28	
10 PERCENT EXCEEDS	522		230	
50 PERCENT EXCEEDS	108		58	
90 PERCENT EXCEEDS	31		22	

(a) Gage height 8.21 ft (datum then in use)
(e) Estimated

04086340 NORTH BRANCH MILWAUKEE RIVER NEAR FILLMORE, WI--Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e27	64	---	---	---	---	---	---	---	---	---	---
2	e26	71	---	---	---	---	---	---	---	---	---	---
3	29	74	---	---	---	---	---	---	---	---	---	---
4	28	74	---	---	---	---	---	---	---	---	---	---
5	e26	72	---	---	---	---	---	---	---	---	---	---
6	27	70	---	---	---	---	---	---	---	---	---	---
7	29	67	---	---	---	---	---	---	---	---	---	---
8	39	57	---	---	---	---	---	---	---	---	---	---
9	50	50	---	---	---	---	---	---	---	---	---	---
10	45	48	---	---	---	---	---	---	---	---	---	---
11	40	47	---	---	---	---	---	---	---	---	---	---
12	38	42	---	---	---	---	---	---	---	---	---	---
13	38	39	---	---	---	---	---	---	---	---	---	---
14	39	37	---	---	---	---	---	---	---	---	---	---
15	37	e38	---	---	---	---	---	---	---	---	---	---
16	35	e35	---	---	---	---	---	---	---	---	---	---
17	35	e37	---	---	---	---	---	---	---	---	---	---
18	37	e39	---	---	---	---	---	---	---	---	---	---
19	38	e43	---	---	---	---	---	---	---	---	---	---
20	41	e62	---	---	---	---	---	---	---	---	---	---
21	42	e62	---	---	---	---	---	---	---	---	---	---
22	44	e51	---	---	---	---	---	---	---	---	---	---
23	53	e49	---	---	---	---	---	---	---	---	---	---
24	65	e46	---	---	---	---	---	---	---	---	---	---
25	60	e45	---	---	---	---	---	---	---	---	---	---
26	57	e42	---	---	---	---	---	---	---	---	---	---
27	55	e51	---	---	---	---	---	---	---	---	---	---
28	54	e69	---	---	---	---	---	---	---	---	---	---
29	62	e65	---	---	---	---	---	---	---	---	---	---
30	71	e59	---	---	---	---	---	---	---	---	---	---
31	68	---	---	---	---	---	---	---	---	---	---	---
TOTAL	1,335	1,605	---	---	---	---	---	---	---	---	---	---
MEAN	43.1	53.5	---	---	---	---	---	---	---	---	---	---
MAX	71	74	---	---	---	---	---	---	---	---	---	---
MIN	26	35	---	---	---	---	---	---	---	---	---	---
CFSM	0.29	0.36	---	---	---	---	---	---	---	---	---	---
IN.	0.34	0.40	---	---	---	---	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2005, BY WATER YEAR (WY)

MEAN	65.1	72.1	74.8	54.8	64.4	232	218	132	112	58.6	58.3	74.3
MAX	278	120	140	132	136	409	372	413	521	145	180	188
(WY)	(1982)	(1973)	(1974)	(1973)	(1976)	(1979)	(1979)	(2004)	(2004)	(2004)	(1979)	(1980)
MIN	22.5	31.8	19.8	15.6	18.3	78.0	65.4	26.9	29.6	13.1	8.36	15.7
(WY)	(1972)	(1977)	(1977)	(1977)	(1977)	(1980)	(1970)	(1977)	(1977)	(1970)	(1970)	(1969)

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR (May - November)		FOR 2005 WATER YEAR (October - November)		WATER YEARS 1968 - 2005	
ANNUAL TOTAL	39,030		2,940			
ANNUAL MEAN	182		48.2		100	
HIGHEST ANNUAL MEAN					278	1982
LOWEST ANNUAL MEAN					39.5	1970
HIGHEST DAILY MEAN	1,820	Jun 12	74	Nov 3, 4	2,630	Mar 23, 1975
LOWEST DAILY MEAN	26	Sep 28	26	Oct 2, 5	3.2	Aug 17, 1970
ANNUAL SEVEN-DAY MINIMUM	27	Sep 26	27	Oct 1	4.8	Aug 16, 1970
MAXIMUM PEAK FLOW			75	Nov 3	(a)3,100	Mar 22, 1975
MAXIMUM PEAK STAGE			6.15	Nov 3	11.87	Jun 12, 2004
ANNUAL RUNOFF (CFSM)	1.23		0.326		0.679	
ANNUAL RUNOFF (INCHES)	9.81		0.74		9.22	
10 PERCENT EXCEEDS	422		70		230	
50 PERCENT EXCEEDS	72		45		57	
90 PERCENT EXCEEDS	30		29		22	

(a) Gage height 8.21 ft (datum then in use)
(e) Estimated

04086340 NORTH BRANCH MILWAUKEE RIVER NEAR FILLMORE, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: May 13 to Nov. 15, 2004 (discontinued).
DISSOLVED OXYGEN: May 13 to Nov. 15, 2004 (discontinued).
SPECIFIC CONDUCTANCE: May 13 to Nov. 15, 2004 (discontinued).

INSTRUMENTATION.--Water-quality monitor since May 13, 2004.

REMARKS.--Temperature and specific conductance records good. Dissolved oxygen records fair due to numerous corrections, except for the period Nov. 8-15, which is poor.

EXTREMES FOR PERIOD MAY TO NOVEMBER 2004.--
WATER TEMPERATURE: Maximum, 25.0°C, July 22; minimum, 1.5°C, Nov. 13 and 14.
DISSOLVED OXYGEN: Maximum, 15.0 mg/L, Nov. 14; minimum, 3.0 mg/L, July 7.
SPECIFIC CONDUCTANCE: Maximum, 803 µS/cm, Nov. 10 and 11; minimum, 621 µS/cm, July 6 and 7.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	19.0	14.5	16.5
15	---	---	---	---	---	---	---	---	---	16.5	12.5	14.5
16	---	---	---	---	---	---	---	---	---	17.0	12.5	15.0
17	---	---	---	---	---	---	---	---	---	19.5	15.0	17.0
18	---	---	---	---	---	---	---	---	---	19.0	16.5	17.5
19	---	---	---	---	---	---	---	---	---	17.5	14.0	16.0
20	---	---	---	---	---	---	---	---	---	21.0	16.5	18.0
21	---	---	---	---	---	---	---	---	---	19.5	15.5	17.0
22	---	---	---	---	---	---	---	---	---	15.5	14.5	15.0
23	---	---	---	---	---	---	---	---	---	15.5	14.0	15.0
24	---	---	---	---	---	---	---	---	---	15.0	13.5	14.5
25	---	---	---	---	---	---	---	---	---	15.0	12.5	14.0
26	---	---	---	---	---	---	---	---	---	17.5	13.0	15.0
27	---	---	---	---	---	---	---	---	---	17.5	14.0	15.5
28	---	---	---	---	---	---	---	---	---	18.0	14.5	16.0
29	---	---	---	---	---	---	---	---	---	16.0	13.5	14.0
30	---	---	---	---	---	---	---	---	---	13.5	12.5	13.0
31	---	---	---	---	---	---	---	---	---	15.5	13.0	14.0
MONTH	---	---	---	---	---	---	---	---	---	21.0	12.5	15.4

04086340 NORTH BRANCH MILWAUKEE RIVER NEAR FILLMORE, WI—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	16.5	14.0	15.5	22.5	20.0	21.5	23.5	20.0	21.5	21.0	17.5	19.0
2	18.5	15.0	16.5	22.0	19.5	20.5	23.0	21.5	22.5	22.5	18.5	20.5
3	19.0	15.0	17.0	21.5	19.5	20.5	23.0	21.0	22.0	22.5	19.5	21.0
4	18.5	15.5	17.0	21.0	19.5	20.5	22.5	20.5	21.5	23.0	20.0	21.5
5	18.5	16.0	17.5	20.5	19.5	20.0	21.0	19.0	20.0	22.5	20.0	21.5
6	20.0	17.0	18.5	19.5	18.5	19.0	21.0	17.5	19.5	22.0	21.0	21.5
7	22.5	19.0	20.5	19.0	17.5	18.0	20.5	18.5	19.5	21.0	18.0	19.5
8	24.5	21.5	23.0	17.5	16.0	17.0	22.0	18.5	20.0	19.5	17.0	18.0
9	24.5	22.0	23.5	17.5	16.5	17.0	22.5	20.0	21.0	20.0	16.5	18.0
10	22.0	15.0	17.5	20.0	16.5	18.0	21.5	18.5	20.0	20.0	16.0	18.0
11	15.0	14.0	14.5	20.5	18.0	19.5	18.5	16.5	17.5	21.0	17.5	19.5
12	16.0	13.5	14.5	22.5	20.0	21.0	17.0	15.0	16.0	22.5	18.5	20.5
13	18.5	15.5	17.0	23.0	21.0	22.0	17.0	15.5	16.0	22.0	18.5	20.5
14	20.5	17.5	18.5	22.5	20.5	21.5	18.0	14.5	16.0	22.5	19.5	21.0
15	22.0	18.5	20.0	22.5	20.0	21.5	19.0	15.0	17.0	23.0	21.0	22.0
16	23.0	19.0	20.5	22.0	20.5	21.5	19.0	15.5	17.5	22.0	19.0	20.0
17	22.5	20.5	21.0	22.0	20.0	21.0	20.0	17.0	18.5	19.5	16.0	18.0
18	21.5	20.0	20.5	21.5	19.5	20.5	21.0	17.0	19.0	19.0	15.5	17.5
19	20.0	17.5	19.0	22.5	19.5	21.0	19.5	17.5	18.5	19.0	16.0	17.5
20	19.5	17.0	18.5	24.0	21.0	22.5	19.5	16.5	18.0	19.0	16.0	17.5
21	19.0	18.0	18.0	24.0	23.0	23.5	19.0	16.0	17.5	19.0	15.0	17.0
22	18.5	16.5	17.5	25.0	23.0	24.0	20.0	15.5	17.5	18.5	15.0	17.0
23	18.0	17.0	17.5	23.5	21.0	22.0	19.5	18.5	18.5	19.5	15.5	17.5
24	17.0	15.0	15.5	21.0	19.0	20.0	19.0	17.5	18.5	19.0	17.5	18.5
25	16.5	13.5	15.0	21.0	18.0	19.5	20.5	18.5	19.5	18.5	16.5	17.0
26	17.5	15.0	16.5	21.5	17.5	19.5	23.0	19.5	21.0	17.0	14.0	15.5
27	18.5	16.0	17.0	22.0	18.5	20.0	24.0	21.5	22.5	17.0	13.5	15.5
28	19.0	16.5	18.0	23.0	19.5	21.0	23.0	18.5	21.0	16.5	14.0	15.5
29	20.5	17.5	19.0	22.5	20.0	21.5	19.5	16.5	18.0	15.0	12.0	13.5
30	22.0	19.0	20.5	21.5	20.5	21.0	18.5	16.0	17.0	14.0	11.0	12.5
31	---	---	---	23.0	19.5	21.5	20.0	16.0	18.0	---	---	---
MONTH	24.5	13.5	18.2	25.0	16.0	20.6	24.0	14.5	19.0	23.0	11.0	18.4
YEAR	25.0	11.0	18.6									

04086340 NORTH BRANCH MILWAUKEE RIVER NEAR FILLMORE, WI—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	7.1	6.1	6.5	7.9	6.8	7.3
2	---	---	---	4.5	3.5	3.9	6.9	5.9	6.3	8.5	6.7	7.5
3	---	---	---	4.3	3.7	4.0	6.6	5.7	6.2	8.5	6.7	7.5
4	---	---	---	4.1	3.6	3.8	6.7	5.3	6.1	8.5	6.6	7.4
5	---	---	---	4.2	3.4	3.6	6.4	5.7	6.1	8.5	6.5	7.4
6	---	---	---	4.1	3.3	3.7	6.8	5.9	6.4	8.2	6.3	7.1
7	---	---	---	3.8	3.0	3.4	6.7	6.1	6.4	9.0	6.6	7.8
8	---	---	---	4.3	3.4	3.8	7.0	6.1	6.5	9.1	7.2	8.2
9	---	---	---	4.4	3.8	4.1	6.7	6.0	6.3	9.8	7.4	8.6
10	---	---	---	4.5	3.9	4.1	7.4	5.9	6.7	9.9	7.4	8.6
11	---	---	---	4.3	3.9	4.1	8.3	6.8	7.6	9.5	7.2	8.4
12	---	---	---	4.2	3.4	3.9	8.9	7.8	8.3	9.3	6.9	8.1
13	---	---	---	3.9	3.1	3.5	8.8	8.0	8.4	9.3	6.8	8.1
14	---	---	---	4.1	3.3	3.7	9.0	8.2	8.6	9.2	6.5	7.9
15	---	---	---	4.3	3.6	4.0	9.1	8.2	8.6	8.9	6.3	7.4
16	---	---	---	4.4	3.7	4.0	---	---	---	8.8	6.3	7.6
17	---	---	---	4.8	4.0	4.3	---	---	---	10.3	7.3	8.8
18	---	---	---	4.7	4.2	4.4	---	---	---	10.7	7.5	9.2
19	---	---	---	4.7	3.9	4.3	---	---	---	10.8	7.6	9.2
20	---	---	---	4.5	3.7	4.1	---	---	---	10.8	7.4	9.2
21	---	---	---	4.1	3.4	3.7	---	---	---	10.9	7.6	9.3
22	---	---	---	4.1	3.2	3.5	---	---	---	10.6	7.6	9.3
23	---	---	---	4.7	3.8	4.1	---	---	---	10.3	7.5	9.0
24	---	---	---	5.3	4.3	4.8	7.4	6.6	7.0	9.6	6.6	8.4
25	---	---	---	5.9	5.0	5.5	7.7	6.5	7.0	9.8	6.6	8.4
26	---	---	---	6.3	5.5	5.8	7.5	6.3	6.8	10.3	7.2	8.9
27	---	---	---	6.2	5.2	5.8	7.0	6.0	6.4	10.5	7.5	9.3
28	---	---	---	6.3	5.3	5.8	6.8	5.7	6.2	10.5	7.2	8.8
29	---	---	---	6.4	5.2	5.7	8.1	6.5	7.2	11.1	7.8	9.5
30	---	---	---	6.1	5.0	5.5	8.1	7.2	7.6	11.0	8.4	10.0
31	---	---	---	6.9	5.8	6.3	8.2	7.2	7.7	---	---	---
MONTH	---	---	---	6.9	3.0	4.4	9.1	5.3	7.0	11.1	6.3	8.4
YEAR	11.1	3.0	6.6									

04086340 NORTH BRANCH MILWAUKEE RIVER NEAR FILLMORE, WI—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	753	721	737	791	775	783
2	---	---	---	733	712	722	723	712	717	787	779	782
3	---	---	---	740	726	733	731	716	726	780	772	774
4	---	---	---	731	679	697	730	721	725	774	765	769
5	---	---	---	679	637	655	754	730	744	774	768	772
6	---	---	---	637	621	628	763	754	759	774	758	765
7	---	---	---	632	621	625	765	758	762	763	753	758
8	---	---	---	653	632	644	769	759	763	766	752	758
9	---	---	---	671	651	663	762	748	756	772	755	763
10	---	---	---	685	671	679	759	752	756	767	755	762
11	---	---	---	697	684	692	754	742	748	771	759	766
12	---	---	---	702	690	697	747	740	743	774	757	767
13	---	---	---	727	702	718	751	737	747	773	760	767
14	---	---	---	722	704	711	760	749	754	771	758	766
15	---	---	---	713	705	709	762	751	758	767	741	756
16	---	---	---	722	712	719	767	757	764	762	749	755
17	---	---	---	726	712	718	764	733	744	769	751	761
18	---	---	---	727	678	711	748	713	738	785	752	772
19	---	---	---	678	633	648	725	711	715	768	753	762
20	---	---	---	655	633	641	739	725	736	763	753	760
21	---	---	---	676	655	666	743	737	740	765	755	760
22	---	---	---	705	676	688	738	733	735	771	755	765
23	---	---	---	722	705	714	743	733	737	788	760	779
24	---	---	---	732	720	728	750	743	746	799	772	786
25	---	---	---	747	732	740	756	747	752	794	772	784
26	---	---	---	753	743	749	761	747	755	789	764	780
27	---	---	---	760	749	756	761	741	748	781	760	773
28	---	---	---	772	760	765	763	749	757	776	760	770
29	---	---	---	771	760	765	761	751	757	783	762	776
30	---	---	---	765	747	757	771	760	766	788	766	780
31	---	---	---	752	746	749	776	763	769	---	---	---
MONTH	---	---	---	772	621	703	776	711	747	799	741	769
YEAR	799	621	740									

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Chloride, water, fltrd, mg/L (00940)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	E coli, m-TEC MF, water, col/ 100 mL (31633)
JUN													
30...	1410	185	40	34.9	12	1.2	.018	1.40	.112	.127	.163	<2.0	--
AUG													
02...	0045	92	50	39.5	--	--	--	--	--	--	.128	--	--
02...	1245	100	50	38.8	--	--	--	--	--	--	.116	--	--
03...	0045	103	50	38.0	--	--	--	--	--	--	.142	--	--
03...	1145	103	50	36.6	--	--	--	--	--	--	.151	--	--
04...	0045	106	50	37.2	--	--	--	--	--	--	.152	--	--
04...	1145	108	50	36.1	--	--	--	--	--	--	.150	--	--
05...	0045	107	50	37.3	--	--	--	--	--	--	.173	--	--
05...	1146	101	50	38.5	--	--	--	--	--	--	.404	--	--
17...	2315	72	50	42.7	16	--	--	--	--	--	.096	--	--
18...	1115	75	50	42.4	15	--	--	--	--	--	.101	--	--
18...	2315	80	50	40.7	14	--	--	--	--	--	.093	--	--
19...	1115	80	50	41.2	19	--	--	--	--	--	.108	--	--
19...	2315	84	50	42.0	20	--	--	--	--	--	.110	--	--
20...	1115	79	50	43.4	17	--	--	--	--	--	.113	--	--
20...	2315	75	50	43.2	13	--	--	--	--	--	.098	--	--
21...	1115	70	50	42.9	15	--	--	--	--	--	.114	--	--
SEP													
09...	1230	44	40	47.8	10	.78	<.015	3.11	.045	--	.085	<2.0	390
16...	1215	35	50	--	--	--	--	--	--	--	--	<2.0	350

04086340 NORTH BRANCH MILWAUKEE RIVER NEAR FILLMORE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Fecal coli-form, M-FC 0.7u MF col/ 100 mL (31625)	Chloro-phyll a wat unf trichr. method, uncorr, ug/L (32210)	Copper, water, unfltrd recover-able, ug/L (01119)	Mercury water fltrd, ng/L (50287)	Zinc, water, unfltrd recover-able, ug/L (01094)	Mercury suspnd sedimnt total, ng/L (62976)	Methyl-mercury water fltrd, ng/L (50285)	Methyl-mercury suspnd sedimnt total, ng/L (62977)	Sus-pended sedi-ment concen-tration mg/L (80154)
JUN									
30...	--	2.95	2	--	<20	--	--	--	--
AUG									
02...	--	--	--	--	--	--	--	--	17
02...	--	--	--	--	--	--	--	--	15
03...	--	--	--	--	--	--	--	--	9
03...	--	--	--	--	--	--	--	--	13
04...	--	--	--	--	--	--	--	--	11
04...	--	--	--	--	--	--	--	--	12
05...	--	--	--	--	--	--	--	--	16
05...	--	--	--	--	--	--	--	--	16
17...	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--
SEP									
09...	280	8.41	2	.70	<20	.777	.10	.017	7
16...	620	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instan-taneous dis-charge, cfs (00061)	Sam-pling method, code (82398)	Chlor-ide, water, fltrd, mg/L (00940)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, unfltrd mg/L (00665)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	E coli, Defined Substr. Tech., water, MPN/ 100 mL (50468)	E coli, m-TEC MF, water, col/ 100 mL (31633)
OCT													
08...	1345	40	50	49.4	4	--	--	--	--	.053	--	--	--
08...	1918	48	50	48.6	8	--	--	--	--	.065	--	--	--
09...	0730	48	50	50.8	11	--	--	--	--	.082	--	--	--
09...	1930	51	50	51.0	6	--	--	--	--	.064	--	--	--
10...	0730	44	50	51.2	5	--	--	--	--	.065	--	--	--
10...	1900	46	50	50.3	<2	--	--	--	--	.054	--	--	--
11...	0100	42	50	49.5	3	--	--	--	--	.056	--	--	--
11...	0700	39	50	50.1	5	--	--	--	--	.056	--	--	--
11...	1300	40	50	48.4	<3	--	--	--	--	.068	--	--	--
11...	1900	40	50	46.4	6	--	--	--	--	.070	--	--	--
12...	0100	38	50	47.6	4	--	--	--	--	.060	--	--	--
12...	1221	37	50	--	2	--	--	--	--	--	--	--	--
12...	1222	37	40	--	<2	--	--	--	--	--	--	--	--
22...	0445	43	50	45.2	6	--	--	--	--	.057	--	--	--
24...	0030	67	50	45.6	7	--	--	--	--	.067	--	--	--
24...	1410	64	50	--	2	--	--	--	--	--	--	--	--
24...	1411	64	40	--	5	--	--	--	--	--	--	--	--
24...	1413	64	50	46.6	3	.79	.048	2.83	.032	.067	<3.0	--	260
24...	2057	63	50	46.5	4	--	--	--	--	.067	--	--	--
25...	0657	57	50	47.8	4	.74	.042	2.69	.033	.064	<3.0	--	20
25...	1617	61	50	47.9	<3	.69	.037	2.71	.031	.061	<3.0	--	20
25...	1630	62	50	48.0	<2	--	--	--	--	.058	--	--	--
28...	1402	54	50	45.6	5	.67	.042	2.46	.044	.075	<2.0	75	--
29...	1315	63	50	44.4	4	--	--	--	--	.081	--	--	--
30...	0015	69	50	43.8	11	--	--	--	--	.077	--	--	--
31...	0015	70	50	47.0	8	--	--	--	--	.083	--	--	--
31...	1215	67	50	46.6	4	--	--	--	--	.093	--	--	--
NOV													
01...	0015	65	50	46.9	5	--	--	--	--	.075	--	--	--
01...	1250	64	50	45.8	2	--	--	--	--	.075	--	--	--
01...	1927	65	50	45.2	4	--	--	--	--	.075	--	--	--
02...	0130	67	50	44.8	3	--	--	--	--	.075	--	--	--
02...	0730	70	50	44.7	5	--	--	--	--	.077	--	--	--
03...	1046	73	50	46.5	4	.84	.064	2.28	.051	.089	<2.0	--	390
04...	1316	75	50	45.2	5	.79	.050	2.30	.040	.082	<2.0	--	290
04...	1330	75	50	45.2	4	--	--	--	--	.106	--	--	--
04...	1930	75	50	45.2	5	--	--	--	--	.101	--	--	--
08...	0930	56	50	46.2	3	--	--	--	--	.071	--	--	--
08...	1341	57	50	46.5	3	.90	.041	2.44	.033	.064	<2.0	--	30

04086340 NORTH BRANCH MILWAUKEE RIVER NEAR FILLMORE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Fecal coli-form, M-FC 0.7u MF col/ 100 mL (31625)	Chloro-phyll a wat unf trichr. method, uncorr, ug/L (32210)	Copper, water, unfltrd recover-able, ug/L (01119)	Zinc, water, unfltrd recover-able, ug/L (01094)	Sus-pended sedi-ment concen-tration mg/L (80154)
OCT					
08...	--	--	--	--	--
08...	--	--	--	--	--
09...	--	--	--	--	--
09...	--	--	--	--	--
10...	--	--	--	--	--
10...	--	--	--	--	--
11...	--	--	--	--	--
11...	--	--	--	--	--
11...	--	--	--	--	--
11...	--	--	--	--	--
12...	--	--	--	--	--
12...	--	--	--	--	--
12...	--	--	--	--	--
22...	--	--	--	--	--
24...	--	--	--	--	--
24...	--	--	--	--	--
24...	--	--	--	--	--
24...	280	2.75	2	<20	3
24...	--	--	--	--	--
25...	40	1.76	2	<20	3
25...	30	1.93	1	<20	<2
25...	--	--	--	--	--
28...	80	4.02	<1	<20	2
29...	--	--	--	--	--
30...	--	--	--	--	--
31...	--	--	--	--	--
31...	--	--	--	--	--
NOV					
01...	--	--	--	--	--
01...	--	--	--	--	--
01...	--	--	--	--	--
02...	--	--	--	--	--
02...	--	--	--	--	--
03...	480	2.03	1	<20	4
04...	250	2.54	<1	<20	5
04...	--	--	--	--	--
04...	--	--	--	--	--
08...	--	--	--	--	--
08...	50	1.36	1	<20	2

04086340 NORTH BRANCH MILWAUKEE RIVER NEAR FILLMORE, WI—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	15.0	12.0	13.5	10.5	9.0	9.5	---	---	---	---	---	---
2	14.5	11.0	12.5	9.0	8.5	8.5	---	---	---	---	---	---
3	12.5	9.5	11.0	9.0	8.0	8.5	---	---	---	---	---	---
4	12.5	10.0	11.0	9.0	7.5	8.5	---	---	---	---	---	---
5	10.5	7.5	9.0	7.5	6.0	6.5	---	---	---	---	---	---
6	13.0	8.5	10.5	8.0	6.0	7.0	---	---	---	---	---	---
7	14.0	11.0	12.5	8.0	6.5	7.5	---	---	---	---	---	---
8	15.5	13.5	14.5	6.5	5.0	5.5	---	---	---	---	---	---
9	15.0	12.5	14.0	6.5	5.0	5.5	---	---	---	---	---	---
10	13.5	11.0	12.0	7.5	5.5	6.5	---	---	---	---	---	---
11	12.5	10.0	11.5	7.0	4.5	6.0	---	---	---	---	---	---
12	12.5	10.0	11.5	4.5	3.0	3.5	---	---	---	---	---	---
13	13.5	10.5	12.0	3.5	1.5	3.0	---	---	---	---	---	---
14	13.0	11.0	11.5	3.5	1.5	2.5	---	---	---	---	---	---
15	11.0	9.5	10.0	---	---	---	---	---	---	---	---	---
16	9.5	7.0	8.0	---	---	---	---	---	---	---	---	---
17	8.0	5.5	7.0	---	---	---	---	---	---	---	---	---
18	8.0	7.5	8.0	---	---	---	---	---	---	---	---	---
19	8.5	8.0	8.0	---	---	---	---	---	---	---	---	---
20	9.5	8.5	9.0	---	---	---	---	---	---	---	---	---
21	10.5	8.0	9.0	---	---	---	---	---	---	---	---	---
22	10.5	9.5	10.0	---	---	---	---	---	---	---	---	---
23	12.5	10.5	11.5	---	---	---	---	---	---	---	---	---
24	12.5	11.5	12.0	---	---	---	---	---	---	---	---	---
25	12.5	10.0	11.0	---	---	---	---	---	---	---	---	---
26	11.5	10.5	10.5	---	---	---	---	---	---	---	---	---
27	10.5	10.0	10.5	---	---	---	---	---	---	---	---	---
28	11.0	10.0	10.5	---	---	---	---	---	---	---	---	---
29	14.5	11.0	12.5	---	---	---	---	---	---	---	---	---
30	14.5	12.0	13.5	---	---	---	---	---	---	---	---	---
31	12.0	10.5	11.0	---	---	---	---	---	---	---	---	---
MONTH	15.5	5.5	10.9	10.5	1.5	6.3	---	---	---	---	---	---

04086340 NORTH BRANCH MILWAUKEE RIVER NEAR FILLMORE, WI—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	10.9	8.1	9.4	8.5	7.1	7.8	---	---	---	---	---	---
2	10.7	7.6	9.1	9.1	7.8	8.5	---	---	---	---	---	---
3	11.4	8.7	10.1	9.4	8.1	8.7	---	---	---	---	---	---
4	11.6	8.4	10.1	9.1	8.0	8.5	---	---	---	---	---	---
5	11.6	9.5	10.7	10.6	8.6	9.6	---	---	---	---	---	---
6	10.8	8.3	9.7	10.5	9.2	9.8	---	---	---	---	---	---
7	9.8	7.9	9.0	10.0	8.6	9.3	---	---	---	---	---	---
8	9.6	6.7	7.3	11.6	9.1	10.5	---	---	---	---	---	---
9	9.2	6.2	7.4	12.0	10.3	11.2	---	---	---	---	---	---
10	10.5	7.4	8.8	11.9	10.2	11.0	---	---	---	---	---	---
11	10.3	8.0	9.2	11.8	9.6	10.9	---	---	---	---	---	---
12	10.2	7.9	9.0	13.8	11.4	12.8	---	---	---	---	---	---
13	9.6	7.5	8.6	14.5	13.1	13.8	---	---	---	---	---	---
14	8.9	6.7	7.6	15.0	13.4	14.2	---	---	---	---	---	---
15	10.2	6.9	8.3	---	---	---	---	---	---	---	---	---
16	11.3	8.1	9.9	---	---	---	---	---	---	---	---	---
17	12.7	9.7	11.3	---	---	---	---	---	---	---	---	---
18	12.0	9.3	10.5	---	---	---	---	---	---	---	---	---
19	10.5	8.8	9.7	---	---	---	---	---	---	---	---	---
20	10.0	8.3	9.2	---	---	---	---	---	---	---	---	---
21	10.8	8.3	9.7	---	---	---	---	---	---	---	---	---
22	10.0	7.7	8.7	---	---	---	---	---	---	---	---	---
23	8.0	6.9	7.4	---	---	---	---	---	---	---	---	---
24	7.6	6.5	7.0	---	---	---	---	---	---	---	---	---
25	8.9	6.7	7.8	---	---	---	---	---	---	---	---	---
26	8.2	6.9	7.6	---	---	---	---	---	---	---	---	---
27	7.5	6.8	7.2	---	---	---	---	---	---	---	---	---
28	8.3	6.6	7.5	---	---	---	---	---	---	---	---	---
29	7.6	6.1	6.9	---	---	---	---	---	---	---	---	---
30	6.9	5.5	6.3	---	---	---	---	---	---	---	---	---
31	8.2	6.6	7.3	---	---	---	---	---	---	---	---	---
MONTH	12.7	5.5	8.7	15.0	7.1	10.5	---	---	---	---	---	---

04086340 NORTH BRANCH MILWAUKEE RIVER NEAR FILLMORE, WI—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	784	758	777	793	775	784	---	---	---	---	---	---
2	762	754	759	779	770	774	---	---	---	---	---	---
3	787	755	774	790	779	786	---	---	---	---	---	---
4	790	769	783	790	775	781	---	---	---	---	---	---
5	785	768	779	790	781	784	---	---	---	---	---	---
6	791	767	781	792	790	791	---	---	---	---	---	---
7	799	789	796	795	792	793	---	---	---	---	---	---
8	789	771	780	794	789	793	---	---	---	---	---	---
9	798	771	786	800	794	798	---	---	---	---	---	---
10	801	781	793	803	799	802	---	---	---	---	---	---
11	794	767	785	803	794	799	---	---	---	---	---	---
12	786	768	779	795	790	793	---	---	---	---	---	---
13	796	783	792	797	794	796	---	---	---	---	---	---
14	798	790	795	800	796	798	---	---	---	---	---	---
15	795	781	790	---	---	---	---	---	---	---	---	---
16	786	779	784	---	---	---	---	---	---	---	---	---
17	791	781	787	---	---	---	---	---	---	---	---	---
18	794	783	790	---	---	---	---	---	---	---	---	---
19	787	781	784	---	---	---	---	---	---	---	---	---
20	784	781	783	---	---	---	---	---	---	---	---	---
21	784	778	782	---	---	---	---	---	---	---	---	---
22	788	778	785	---	---	---	---	---	---	---	---	---
23	786	774	779	---	---	---	---	---	---	---	---	---
24	789	773	780	---	---	---	---	---	---	---	---	---
25	795	785	791	---	---	---	---	---	---	---	---	---
26	789	784	787	---	---	---	---	---	---	---	---	---
27	790	783	788	---	---	---	---	---	---	---	---	---
28	789	787	788	---	---	---	---	---	---	---	---	---
29	789	782	786	---	---	---	---	---	---	---	---	---
30	788	776	782	---	---	---	---	---	---	---	---	---
31	795	785	789	---	---	---	---	---	---	---	---	---
MONTH	801	754	784	803	770	791	---	---	---	---	---	---

04086360 MILWAUKEE RIVER AT WAUBEKA, WI

LOCATION.--Lat 43°28'22", long 87°59'23", in SW ¼ SE ¼ sec. 28, T.12 N., R.21 E., Ozaukee County, Hydrologic Unit 04040003, on right bank 300 ft downstream from Highway I bridge and 2.4 mi downstream from North Branch Milwaukee River.

DRAINAGE AREA.--432 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1968 to September 1981, October 1993 to September 1994, May 2004 to November 2004 (discontinued).

REVISED RECORDS.--WDR WI-77-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 770 ft above NGVD of 1929 from a topographic map. Prior to Aug. 1, 1968, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor (see page 11).

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	e340	1,940	592	245	198
2	---	---	---	---	---	---	---	e328	2,080	524	261	190
3	---	---	---	---	---	---	---	e284	2,070	469	274	183
4	---	---	---	---	---	---	---	e271	1,950	678	298	176
5	---	---	---	---	---	---	---	e239	1,680	663	295	169
6	---	---	---	---	---	---	---	e227	1,370	650	262	162
7	---	---	---	---	---	---	---	e246	1,100	657	236	155
8	---	---	---	---	---	---	---	e315	901	633	223	e162
9	---	---	---	---	---	---	---	e486	805	574	224	e151
10	---	---	---	---	---	---	---	e618	e877	557	225	e150
11	---	---	---	---	---	---	---	e776	e2,220	512	229	e148
12	---	---	---	---	---	---	---	e802	4,520	500	251	e145
13	---	---	---	---	---	---	---	e1,010	5,140	456	279	e141
14	---	---	---	---	---	---	---	e1,310	e4,900	415	280	e135
15	---	---	---	---	---	---	---	e1,370	4,250	392	260	e130
16	---	---	---	---	---	---	---	e1,210	3,420	369	235	e123
17	---	---	---	---	---	---	---	e1,010	2,980	356	230	e125
18	---	---	---	---	---	---	---	e978	2,340	346	257	e126
19	---	---	---	---	---	---	---	e915	1,890	344	275	e120
20	---	---	---	---	---	---	---	1,070	e1,540	345	287	e119
21	---	---	---	---	---	---	---	1,600	1,260	329	269	e114
22	---	---	---	---	---	---	---	2,600	1,070	321	246	e111
23	---	---	---	---	---	---	---	3,320	936	285	228	e113
24	---	---	---	---	---	---	---	3,470	911	260	223	e111
25	---	---	---	---	---	---	---	3,310	874	247	214	e109
26	---	---	---	---	---	---	---	3,050	845	227	209	e108
27	---	---	---	---	---	---	---	2,710	786	214	223	e111
28	---	---	---	---	---	---	---	2,280	761	202	232	e107
29	---	---	---	---	---	---	---	1,840	722	191	231	e105
30	---	---	---	---	---	---	---	1,620	661	186	217	e102
31	---	---	---	---	---	---	---	1,990	---	219	207	---
TOTAL	---	---	---	---	---	---	---	41,595	56,799	12,713	7,625	4,099
MEAN	---	---	---	---	---	---	---	1,342	1,893	410	246	137
MAX	---	---	---	---	---	---	---	3,470	5,140	678	298	198
MIN	---	---	---	---	---	---	---	227	661	186	207	102
CFSM	---	---	---	---	---	---	---	3.11	4.38	0.95	0.57	0.32
IN.	---	---	---	---	---	---	---	3.58	4.89	1.09	0.66	0.35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2004, BY WATER YEAR (WY)

MEAN	187	203	204	155	199	726	668	421	351	175	163	215
MAX	514	395	351	459	420	1,364	1,329	1,342	1,893	410	476	596
(WY)	(1973)	(1973)	(1974)	(1973)	(1981)	(1975)	(1979)	(2004)	(2004)	(2004)	(1979)	(1972)
MIN	62.9	73.6	50.1	40.5	52.7	187	177	77.0	78.0	44.2	27.9	42.8
(WY)	(1977)	(1977)	(1977)	(1977)	(1977)	(1968)	(1970)	(1977)	(1994)	(1970)	(1970)	(1971)

SUMMARY STATISTICS	FOR 2004 WATER YEAR (May - September)		WATER YEARS 1968 - 2004	
ANNUAL TOTAL	122,831			
ANNUAL MEAN	803		306	
HIGHEST ANNUAL MEAN			803	2004
LOWEST ANNUAL MEAN			110	1970
HIGHEST DAILY MEAN	5,140	Jun 13	6,740	Mar 23, 1975
LOWEST DAILY MEAN	(e)102	Sep 30	20	Aug 18, 1970
ANNUAL SEVEN-DAY MINIMUM	(e)108	Sep 24	22	Aug 16, 1970
MAXIMUM PEAK FLOW	5,180	Jun 13	6,990	Mar 23, 1975
MAXIMUM PEAK STAGE	10.61	Jun 13	11.35	Mar 23, 1975
INSTANTANEOUS LOW FLOW	(e)		19	Aug 18, 1970
ANNUAL RUNOFF (CFSM)	1.86		0.709	
ANNUAL RUNOFF (INCHES)	10.58		9.63	
10 PERCENT EXCEEDS	2,160		700	
50 PERCENT EXCEEDS	321		170	
90 PERCENT EXCEEDS	128		65	

(e) Estimated

04086360 MILWAUKEE RIVER AT WAUBEKA, WI--Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e102	202	---	---	---	---	---	---	---	---	---	---
2	e109	229	---	---	---	---	---	---	---	---	---	---
3	e111	237	---	---	---	---	---	---	---	---	---	---
4	e103	238	---	---	---	---	---	---	---	---	---	---
5	e90	247	---	---	---	---	---	---	---	---	---	---
6	e86	247	---	---	---	---	---	---	---	---	---	---
7	e83	240	---	---	---	---	---	---	---	---	---	---
8	e98	231	---	---	---	---	---	---	---	---	---	---
9	e121	215	---	---	---	---	---	---	---	---	---	---
10	e138	197	---	---	---	---	---	---	---	---	---	---
11	e128	192	---	---	---	---	---	---	---	---	---	---
12	e124	184	---	---	---	---	---	---	---	---	---	---
13	e120	173	---	---	---	---	---	---	---	---	---	---
14	e117	161	---	---	---	---	---	---	---	---	---	---
15	e115	e163	---	---	---	---	---	---	---	---	---	---
16	e115	e158	---	---	---	---	---	---	---	---	---	---
17	e116	e164	---	---	---	---	---	---	---	---	---	---
18	e118	e164	---	---	---	---	---	---	---	---	---	---
19	132	e176	---	---	---	---	---	---	---	---	---	---
20	134	e233	---	---	---	---	---	---	---	---	---	---
21	136	e232	---	---	---	---	---	---	---	---	---	---
22	137	e200	---	---	---	---	---	---	---	---	---	---
23	151	e190	---	---	---	---	---	---	---	---	---	---
24	182	e179	---	---	---	---	---	---	---	---	---	---
25	195	e176	---	---	---	---	---	---	---	---	---	---
26	194	e166	---	---	---	---	---	---	---	---	---	---
27	193	e188	---	---	---	---	---	---	---	---	---	---
28	189	e259	---	---	---	---	---	---	---	---	---	---
29	189	e244	---	---	---	---	---	---	---	---	---	---
30	200	e214	---	---	---	---	---	---	---	---	---	---
31	201	---	---	---	---	---	---	---	---	---	---	---
TOTAL	4,227	6,099	---	---	---	---	---	---	---	---	---	---
MEAN	136	203	---	---	---	---	---	---	---	---	---	---
MAX	201	259	---	---	---	---	---	---	---	---	---	---
MIN	83	158	---	---	---	---	---	---	---	---	---	---
CFSM	0.32	0.47	---	---	---	---	---	---	---	---	---	---
IN.	0.36	0.53	---	---	---	---	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2005, BY WATER YEAR (WY)

MEAN	184	203	204	155	199	726	668	421	351	175	163	215
MAX	514	395	351	459	420	1,364	1,329	1,345	1,893	410	476	596
(WY)	(1973)	(1973)	(1974)	(1973)	(1981)	(1975)	(1979)	(2004)	(2004)	(2004)	(1979)	(1972)
MIN	62.9	73.6	50.1	40.5	52.7	187	177	77.0	78.0	44.2	27.9	42.8
(WY)	(1977)	(1977)	(1977)	(1977)	(1977)	(1968)	(1970)	(1977)	(1994)	(1970)	(1970)	(1971)

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR (May - November)		FOR 2005 WATER YEAR (October - November)		WATER YEARS 1968 - 2005	
ANNUAL TOTAL	133,267		10,326			
ANNUAL MEAN	623		169		305	
HIGHEST ANNUAL MEAN					804	2004
LOWEST ANNUAL MEAN					110	1970
HIGHEST DAILY MEAN	5,140	Jun 13	(e)259	Nov 28	6,740	Mar 23, 1975
LOWEST DAILY MEAN	83	Oct 7	(e)83	Oct 7	20	Aug 18, 1970
ANNUAL SEVEN-DAY MINIMUM	97	Oct 2	(e)97	Oct 2	22	Aug 16, 1970
MAXIMUM PEAK FLOW			(a)		6,990	Mar 23, 1975
MAXIMUM PEAK STAGE			(a)		11.35	Mar 23, 1975
INSTANTANEOUS LOW FLOW					19	Aug 18, 1970
ANNUAL RUNOFF (CFSM)	1.44		0.392		0.705	
ANNUAL RUNOFF (INCHES)	11.48		0.89		9.58	
10 PERCENT EXCEEDS	1,860		238		697	
50 PERCENT EXCEEDS	236		176		170	
90 PERCENT EXCEEDS	116		104		65	

(a) Unknown
(e) Estimated

04086360 MILWAUKEE RIVER AT WAUBEKA, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: July 22 to Nov. 15, 2004 (discontinued).
DISSOLVED OXYGEN: July 22 to Nov. 15, 2004 (discontinued).
SPECIFIC CONDUCTANCE: July 22 to Nov. 15, 2004 (discontinued).

INSTRUMENTATION.--Water-quality monitor since July 22, 2004.

REMARKS.--Temperature records good. Dissolved oxygen records fair due to uncertainty introduced by numerous corrections, except for the following periods: Aug. 20-23, 27-31, Sept. 6-12, Oct. 12-15, and 24-25, which are rated poor; portions of July 24-30, Sept. 1-2 and 13-17 which are unusable due to exceeding maximum allowable limits. Specific conductance records fair July 22 to Sept. and good Sept. 18 to Nov. 15.

EXTREMES FOR PERIOD MAY TO NOVEMBER 2004.--
WATER TEMPERATURE: Maximum, 26.0°C, July 22; minimum, 1.5°C, Nov. 14.
DISSOLVED OXYGEN: Maximum, 20.9 mg/L, Nov. 14; minimum, 0.7 mg/L, July 12 and 13.
SPECIFIC CONDUCTANCE: Maximum, 831 µS/cm, Sept. 30; minimum, 606 µS/cm, July 5.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	---	---	---	22.5	18.5	20.0
2	---	---	---	---	---	---	---	---	---	24.0	19.0	21.5
3	---	---	---	---	---	---	---	---	---	24.0	20.0	22.0
4	---	---	---	---	---	---	---	---	---	24.0	21.0	22.5
5	---	---	---	---	---	---	23.0	19.5	21.5	24.5	20.5	22.0
6	---	---	---	---	---	---	23.0	18.5	21.0	22.5	17.0	21.0
7	---	---	---	---	---	---	21.5	19.5	20.5	22.5	14.5	17.5
8	---	---	---	---	---	---	23.5	19.5	21.0	23.0	14.5	16.5
9	---	---	---	---	---	---	24.0	21.0	22.0	21.0	13.0	17.5
10	---	---	---	---	---	---	22.0	19.0	20.5	21.5	16.5	19.0
11	---	---	---	---	---	---	19.0	17.0	18.0	23.0	18.0	20.5
12	---	---	---	---	---	---	18.0	16.0	17.0	24.0	19.0	21.0
13	---	---	---	---	---	---	17.5	16.0	17.0	23.5	19.0	21.0
14	---	---	---	---	---	---	19.5	15.0	17.0	24.5	20.0	22.0
15	---	---	---	---	---	---	20.0	15.5	18.0	25.0	21.0	22.5
16	---	---	---	---	---	---	20.0	16.5	18.5	22.0	19.0	20.5
17	---	---	---	---	---	---	21.5	18.0	19.5	21.0	16.0	18.5
18	---	---	---	---	---	---	22.0	18.0	20.0	21.0	16.5	18.5
19	---	---	---	---	---	---	21.0	18.0	19.5	21.0	16.5	18.5
20	---	---	---	---	---	---	21.5	18.0	19.5	21.5	16.5	19.0
21	---	---	---	---	---	---	20.5	17.0	19.0	21.5	15.5	18.0
22	---	---	---	---	---	---	21.5	17.0	19.0	21.0	13.5	17.0
23	---	---	---	24.5	21.5	23.0	20.5	18.5	19.5	21.5	14.5	18.0
24	---	---	---	22.5	20.0	21.5	20.0	18.5	19.0	21.0	17.5	19.0
25	---	---	---	23.0	18.5	21.0	22.0	19.0	20.0	19.5	16.0	17.5
26	---	---	---	23.0	18.0	20.5	24.0	19.5	21.5	19.0	13.5	16.0
27	---	---	---	24.0	19.0	21.5	25.0	21.5	23.5	18.5	13.0	16.0
28	---	---	---	24.5	20.0	22.5	24.0	19.0	21.0	17.5	13.5	15.0
29	---	---	---	24.5	21.0	22.5	20.5	17.0	18.5	18.0	9.5	13.0
30	---	---	---	22.5	21.5	22.0	20.0	16.5	18.0	16.5	8.5	12.5
31	---	---	---	---	---	---	21.0	17.0	19.0	---	---	---
MONTH	---	---	---	24.5	18.0	21.8	25.0	15.0	19.6	25.0	8.5	18.8
YEAR	25.0	8.5	19.5									

04086360 MILWAUKEE RIVER AT WAUBEKA, WI—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	12.9	6.6	9.2
4	---	---	---	---	---	---	---	---	---	12.7	6.5	9.0
5	---	---	---	---	---	---	9.7	6.7	8.1	12.7	6.4	8.8
6	---	---	---	---	---	---	9.9	7.5	8.5	11.9	6.3	8.2
7	---	---	---	---	---	---	9.6	7.2	8.3	10.7	7.4	8.8
8	---	---	---	---	---	---	9.9	7.3	8.3	10.4	8.3	9.2
9	---	---	---	---	---	---	9.4	7.0	8.0	13.4	8.3	10.3
10	---	---	---	---	---	---	9.7	7.0	8.2	13.4	7.6	9.9
11	---	---	---	---	---	---	10.3	7.7	9.0	13.4	7.2	9.7
12	---	---	---	---	---	---	10.4	8.3	9.3	---	---	---
13	---	---	---	---	---	---	10.2	7.9	9.2	---	---	---
14	---	---	---	---	---	---	10.8	8.5	9.4	---	---	---
15	---	---	---	---	---	---	10.6	8.2	9.2	---	---	---
16	---	---	---	---	---	---	11.1	7.8	9.2	---	---	---
17	---	---	---	---	---	---	11.2	7.7	9.1	---	---	---
18	---	---	---	---	---	---	10.9	7.6	8.9	15.6	6.8	10.2
19	---	---	---	---	---	---	11.1	7.3	8.9	15.7	6.7	10.2
20	---	---	---	---	---	---	10.3	7.4	8.6	15.7	6.4	10
21	---	---	---	---	---	---	10.7	7.3	8.8	16.0	6.8	10.3
22	---	---	---	---	---	---	11.1	7.5	9.0	16.5	7.5	10.8
23	---	---	---	8.3	5.1	6.6	11.3	7.4	9.1	16.0	7.1	10.3
24	---	---	---	---	---	---	10.5	7.3	8.5	16.8	5.8	10.1
25	---	---	---	---	---	---	11.6	7.2	9.0	16.4	6.4	10.4
26	---	---	---	---	---	---	11.8	7.3	8.9	16.4	7.2	10.8
27	---	---	---	---	---	---	11.6	6.8	8.7	17.1	7.4	11.2
28	---	---	---	---	---	---	11.0	6.9	8.3	17.0	7.2	11.0
29	---	---	---	---	---	---	12.3	7.9	9.8	18.3	8.3	12.1
30	---	---	---	---	---	---	12.2	8.2	9.8	17.5	9.6	12.4
31	---	---	---	---	---	---	12.9	7.9	10.1	---	---	---
MONTH	---	---	---	8.3	5.1	6.6	12.9	6.7	8.9	18.3	5.8	10.1
YEAR	18.3	5.1	9.4									

04086360 MILWAUKEE RIVER AT WAUBEKA, WI—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	731	701	711	---	---	---
6	---	---	---	---	---	---	722	699	711	---	---	---
7	---	---	---	---	---	---	724	707	715	---	---	---
8	---	---	---	---	---	---	723	699	714	---	---	---
9	---	---	---	---	---	---	722	692	707	---	---	---
10	---	---	---	---	---	---	718	688	706	755	695	739
11	---	---	---	---	---	---	718	706	711	764	730	745
12	---	---	---	---	---	---	718	704	713	764	730	745
13	---	---	---	---	---	---	714	695	703	759	711	737
14	---	---	---	---	---	---	695	677	684	753	726	740
15	---	---	---	---	---	---	677	656	665	764	741	749
16	---	---	---	---	---	---	679	652	663	768	741	754
17	---	---	---	---	---	---	687	659	671	783	739	763
18	---	---	---	---	---	---	691	657	677	781	752	767
19	---	---	---	---	---	---	687	664	677	776	748	762
20	---	---	---	---	---	---	687	669	679	767	740	755
21	---	---	---	---	---	---	683	668	676	787	742	758
22	---	---	---	---	---	---	691	658	672	801	743	782
23	---	---	---	720	706	713	696	669	681	802	753	776
24	---	---	---	719	709	714	701	631	690	783	759	775
25	---	---	---	724	714	718	720	692	703	786	753	775
26	---	---	---	730	722	726	734	706	718	787	759	775
27	---	---	---	743	730	737	734	707	722	780	740	766
28	---	---	---	758	742	751	---	---	---	805	746	766
29	---	---	---	767	752	761	---	---	---	824	738	783
30	---	---	---	776	761	771	---	---	---	831	755	790
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	776	706	736	734	631	694	831	695	762
YEAR	831	631	728									

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Chloride, water, fltrd, mg/L (00940)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	E coli, m-TEC MF, water, col/ 100 mL (31633)
JUL													
01...	1320	580	40	40.8	16	1.2	<.015	1.00	.079	.101	.134	<2.0	90
31...	1900	234	50	60.4	11	--	--	--	--	--	.120	--	--
AUG													
01...	1900	242	50	52.5	9	--	--	--	--	--	.118	--	--
02...	1900	265	50	51.7	18	--	--	--	--	--	.136	--	--
03...	1900	271	50	53.2	18	--	--	--	--	--	.207	--	--
04...	1900	307	50	52.5	17	--	--	--	--	--	.145	--	--
06...	0700	268	50	51.2	21	--	--	--	--	--	.156	--	--
07...	0700	239	50	51.2	23	--	--	--	--	--	.151	--	--
08...	0700	227	50	52.2	21	--	--	--	--	--	.148	--	--
21...	0830	273	50	46.9	11	--	--	--	--	--	.092	--	--
21...	0900	271	50	46.6	8	--	--	--	--	--	.085	--	--
21...	1015	271	50	46.2	7	--	--	--	--	--	.085	--	--
SEP													
09...	1445	142	40	65.0	4	.79	<.015	1.68	.028	--	.055	<2.0	80
16...	1130	125	50	--	--	--	--	--	--	--	--	<2.0	140

04086360 MILWAUKEE RIVER AT WAUBEKA, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Fecal coli-form, M-FC 0.7u MF col/ 100 mL (31625)	Chloro-phyll a wat unf trichr. method, uncorr, ug/L (32210)	Copper, water, unfltrd recover-able, ug/L (01119)	Mercury water fltrd, ng/L (50287)	Zinc, water, unfltrd recover-able, ug/L (01094)	Mercury suspnd sedimnt total, ng/L (62976)	Methyl-mercury water fltrd, ng/L (50285)	Methyl-mercury suspnd sedimnt total, ng/L (62977)	Sus-pended sedi-ment concen-tration mg/L (80154)
JUL									
01...	40	8.65	2	--	<20	--	--	--	--
31...	--	--	--	--	--	--	--	--	--
AUG									
01...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--
SEP									
09...	20	7.34	2	1.13	<20	.423	.10	<.010	<2
16...	180	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instan-taneous dis-charge, cfs (00061)	Sam-pling method, code (82398)	Chlor-ide, water, fltrd, mg/L (00940)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, unfltrd mg/L (00665)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	E coli, Defined Substr. Tech., water, MPN/ 100 mL (50468)	E coli, m-TEC MF, water, col/ 100 mL (31633)
OCT													
12...	1346	124	50	76.9	25	--	--	--	--	.050	--	--	--
12...	1347	124	40	72.1	<2	--	--	--	--	.030	--	--	--
23...	0630	146	50	72.8	3	--	--	--	--	.035	--	--	--
23...	1745	152	50	72.1	<2	--	--	--	--	.032	--	--	--
24...	0545	192	50	76.4	6	--	--	--	--	.048	--	--	--
24...	1145	181	50	75.6	7	--	--	--	--	.050	--	--	--
24...	1530	175	50	71.0	<2	.59	.029	2.08	.013	.040	<3.0	--	20
24...	1531	175	40	--	<2	--	--	--	--	--	--	--	--
24...	1532	175	50	--	<2	--	--	--	--	--	--	--	--
24...	2033	177	50	63.2	6	--	--	--	--	.044	--	--	--
25...	0315	194	50	68.8	7	--	--	--	--	.048	--	--	--
25...	0703	199	50	71.3	8	.92	.051	1.98	.015	.053	<3.0	--	20
25...	1541	196	50	66.0	<2	.73	.023	1.77	.016	.042	<3.0	--	<10
28...	1316	190	50	61.7	9	.83	.044	1.80	.022	.057	<2.0	62	--
NOV													
01...	1430	205	50	58.1	<2	--	--	--	--	.072	--	--	--
01...	1445	203	50	57.8	<2	--	--	--	--	.058	--	--	--
01...	2045	205	50	60.8	2	--	--	--	--	.059	--	--	--
02...	0245	215	50	62.2	3	--	--	--	--	.065	--	--	--
02...	0845	229	50	60.6	<2	--	--	--	--	.059	--	--	--
02...	1445	232	50	59.5	2	--	--	--	--	.075	--	--	--
02...	2045	242	50	62.6	4	--	--	--	--	.083	--	--	--
03...	0245	239	50	62.0	5	--	--	--	--	.095	--	--	--
03...	0845	237	50	59.3	2	--	--	--	--	.066	--	--	--
03...	1141	237	50	58.5	3	.91	.034	1.55	.038	.074	<2.0	--	200
03...	1615	237	50	60.2	2	--	--	--	--	.061	--	--	--
04...	0415	237	50	62.0	11	--	--	--	--	.071	--	--	--
04...	1301	237	50	59.1	6	.99	.033	1.68	.033	.064	<2.0	--	70
05...	0100	242	50	61.3	4	--	--	--	--	.061	--	--	--
05...	1300	247	50	60.3	4	--	--	--	--	.062	--	--	--
06...	1300	247	50	60.4	4	--	--	--	--	.058	--	--	--
07...	1300	239	50	59.0	7	--	--	--	--	.061	--	--	--

04086360 MILWAUKEE RIVER AT WAUBEKA, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Fecal coli-form, M-FC 0.7u MF col/ 100 mL (31625)	Chloro-phyll a wat unf trichr. method, uncorr, ug/L (32210)	Copper, water, unfltrd recover-able, ug/L (01119)	Zinc, water, unfltrd recover-able, ug/L (01094)	Sus-pended sedi-ment concen-tration mg/L (80154)
OCT					
12...	--	--	--	--	--
12...	--	--	--	--	--
23...	--	--	--	--	--
23...	--	--	--	--	--
24...	--	--	--	--	--
24...	--	--	--	--	--
24...	50	4.54	1	<20	<2
24...	--	--	--	--	--
24...	--	--	--	--	--
24...	--	--	--	--	--
25...	--	--	--	--	--
25...	40	7.00	2	<20	7
25...	20	3.44	1	<20	<2
28...	120	8.32	2	<20	8
NOV					
01...	--	--	--	--	--
01...	--	--	--	--	--
01...	--	--	--	--	--
02...	--	--	--	--	--
02...	--	--	--	--	--
02...	--	--	--	--	--
02...	--	--	--	--	--
03...	--	--	--	--	--
03...	--	--	--	--	--
03...	120	4.54	1	<20	3
03...	--	--	--	--	--
04...	--	--	--	--	--
04...	100	4.16	1	<20	5
05...	--	--	--	--	--
05...	--	--	--	--	--
06...	--	--	--	--	--
07...	--	--	--	--	--

04086360 MILWAUKEE RIVER AT WAUBEKA, WI—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	17.1	11.4	14.0	10.5	9.0	9.6	---	---	---	---	---	---
2	14.2	8.5	11.1	9.2	8.5	8.8	---	---	---	---	---	---
3	14.1	9.3	11.6	9.9	8.3	9.0	---	---	---	---	---	---
4	13.0	9.2	11.1	9.4	7.1	8.6	---	---	---	---	---	---
5	12.4	7.0	9.4	7.8	5.7	6.8	---	---	---	---	---	---
6	15.8	8.5	11.5	8.4	5.9	7.2	---	---	---	---	---	---
7	15.7	10.5	12.9	8.3	6.1	7.5	---	---	---	---	---	---
8	16.6	14.0	15.0	6.4	4.6	5.6	---	---	---	---	---	---
9	15.6	12.3	13.8	6.9	5.2	6.0	---	---	---	---	---	---
10	14.4	10.5	12.3	7.7	5.7	6.7	---	---	---	---	---	---
11	13.6	9.4	11.4	7.4	4.5	5.9	---	---	---	---	---	---
12	13.9	10.0	11.7	4.6	2.6	3.7	---	---	---	---	---	---
13	14.1	10.4	12.2	4.0	1.9	3.0	---	---	---	---	---	---
14	12.6	10.7	11.5	3.9	1.3	2.7	---	---	---	---	---	---
15	10.8	9.3	10.2	---	---	---	---	---	---	---	---	---
16	9.3	6.6	8.2	---	---	---	---	---	---	---	---	---
17	9.1	5.3	7.2	---	---	---	---	---	---	---	---	---
18	8.9	7.9	8.4	---	---	---	---	---	---	---	---	---
19	9.3	8.0	8.6	---	---	---	---	---	---	---	---	---
20	10.1	8.6	9.3	---	---	---	---	---	---	---	---	---
21	11.3	8.0	9.4	---	---	---	---	---	---	---	---	---
22	10.8	9.9	10.4	---	---	---	---	---	---	---	---	---
23	13.4	10.7	11.8	---	---	---	---	---	---	---	---	---
24	13.1	11.3	12.0	---	---	---	---	---	---	---	---	---
25	13.0	9.8	11.5	---	---	---	---	---	---	---	---	---
26	11.7	10.6	11.0	---	---	---	---	---	---	---	---	---
27	11.3	10.2	10.7	---	---	---	---	---	---	---	---	---
28	11.2	10.0	10.7	---	---	---	---	---	---	---	---	---
29	15.1	11.2	13.2	---	---	---	---	---	---	---	---	---
30	15.1	11.7	13.5	---	---	---	---	---	---	---	---	---
31	11.7	10.5	11.1	---	---	---	---	---	---	---	---	---
MONTH	17.1	5.3	11.2	10.5	1.3	6.5	---	---	---	---	---	---

04086360 MILWAUKEE RIVER AT WAUBEKA, WI—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	17.6	8.3	11.5	12.9	9.8	11.0	---	---	---	---	---	---
2	19.4	8.5	12.6	14.8	10.5	12.1	---	---	---	---	---	---
3	17.8	9.3	12.5	15.4	10.9	12.5	---	---	---	---	---	---
4	18.3	8.9	12.8	14.6	10.8	12.3	---	---	---	---	---	---
5	18.5	10.5	13.6	16.6	12.0	13.7	---	---	---	---	---	---
6	17.5	9.8	12.8	16.0	12.0	13.6	---	---	---	---	---	---
7	17.8	8.8	11.9	15.7	11.5	13.2	---	---	---	---	---	---
8	13.3	7.3	9.2	18.0	12.8	14.8	---	---	---	---	---	---
9	13.8	7.2	9.7	17.6	13.3	14.8	---	---	---	---	---	---
10	14.8	8.1	10.7	17.9	12.4	14.5	---	---	---	---	---	---
11	16.2	8.8	11.5	17.8	12.1	14.5	---	---	---	---	---	---
12	15.8	8.7	11.4	19.7	14.2	16.6	---	---	---	---	---	---
13	16.3	8.3	11.3	20.3	15.5	17.3	---	---	---	---	---	---
14	12.7	7.9	9.8	20.9	15.9	17.6	---	---	---	---	---	---
15	15.1	8.6	11.2	---	---	---	---	---	---	---	---	---
16	16.8	9.7	12.7	---	---	---	---	---	---	---	---	---
17	19.0	11.6	14.5	---	---	---	---	---	---	---	---	---
18	16.6	10.6	13.0	---	---	---	---	---	---	---	---	---
19	17.2	10.5	13.2	---	---	---	---	---	---	---	---	---
20	17.0	10.1	12.6	---	---	---	---	---	---	---	---	---
21	19.5	10.6	14.0	---	---	---	---	---	---	---	---	---
22	14.2	9.7	11.7	---	---	---	---	---	---	---	---	---
23	15.4	9.2	11.0	---	---	---	---	---	---	---	---	---
24	14.9	8.9	11.0	---	---	---	---	---	---	---	---	---
25	15.5	9.5	11.7	---	---	---	---	---	---	---	---	---
26	14.0	9.2	11.1	---	---	---	---	---	---	---	---	---
27	13.1	9.4	10.8	---	---	---	---	---	---	---	---	---
28	14.0	9.8	11.3	---	---	---	---	---	---	---	---	---
29	13.8	8.4	10.4	---	---	---	---	---	---	---	---	---
30	12.7	7.5	9.6	---	---	---	---	---	---	---	---	---
31	14.0	9.2	10.9	---	---	---	---	---	---	---	---	---
MONTH	19.5	7.2	11.7	20.9	9.8	14.2	---	---	---	---	---	---

04086360 MILWAUKEE RIVER AT WAUBEKA, WI—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	807	756	780	745	721	733	---	---	---	---	---	---
2	819	751	786	745	728	737	---	---	---	---	---	---
3	786	748	773	741	712	728	---	---	---	---	---	---
4	776	740	757	746	727	738	---	---	---	---	---	---
5	778	747	768	744	727	736	---	---	---	---	---	---
6	792	751	777	738	724	732	---	---	---	---	---	---
7	802	768	786	735	719	729	---	---	---	---	---	---
8	790	760	772	734	711	723	---	---	---	---	---	---
9	807	749	789	735	718	728	---	---	---	---	---	---
10	753	726	742	737	719	731	---	---	---	---	---	---
11	763	741	750	742	724	735	---	---	---	---	---	---
12	763	732	748	746	725	738	---	---	---	---	---	---
13	769	742	757	749	729	740	---	---	---	---	---	---
14	780	757	772	751	736	743	---	---	---	---	---	---
15	785	772	777	---	---	---	---	---	---	---	---	---
16	785	767	775	---	---	---	---	---	---	---	---	---
17	784	764	772	---	---	---	---	---	---	---	---	---
18	785	764	773	---	---	---	---	---	---	---	---	---
19	782	766	773	---	---	---	---	---	---	---	---	---
20	792	768	780	---	---	---	---	---	---	---	---	---
21	788	762	773	---	---	---	---	---	---	---	---	---
22	790	765	781	---	---	---	---	---	---	---	---	---
23	782	761	771	---	---	---	---	---	---	---	---	---
24	790	721	762	---	---	---	---	---	---	---	---	---
25	753	721	737	---	---	---	---	---	---	---	---	---
26	768	748	760	---	---	---	---	---	---	---	---	---
27	771	752	763	---	---	---	---	---	---	---	---	---
28	762	741	755	---	---	---	---	---	---	---	---	---
29	764	740	755	---	---	---	---	---	---	---	---	---
30	765	731	750	---	---	---	---	---	---	---	---	---
31	750	686	722	---	---	---	---	---	---	---	---	---
MONTH	819	686	766	751	711	734	---	---	---	---	---	---

04086500 CEDAR CREEK NEAR CEDARBURG, WI

LOCATION.--Lat 43°19'23", long 87°58'43", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.14, T.10 N., R.21 E., Ozaukee County, Hydrologic Unit 04040003, on left bank 40 ft upstream from bridge on State Highway 60, 1.9 mi north of Cedarburg, and 6.6 mi upstream from mouth.

DRAINAGE AREA.--120 mi^2.

PERIOD OF RECORD.--August 1930 to September 1970, July 1973 to September 1981, August 1983 to September 1987, October 1990 to current year.

REVISED RECORDS.--WSP 1307: 1932-34(M), 1937(M), 1939(M), 1945(M), 1948-49(M). WDR WI-77-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 795.33 ft above NGVD of 1929 (levels by Corps of Engineers). Nonrecording gage and crest-stage gage August 1930 to September 1970 at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.9	12	42	e27	e16	e130	241	93	642	100	29	32
2	9.4	20	41	e27	e16	e300	188	87	570	90	32	31
3	9.7	56	46	e27	e16	e420	157	78	441	85	31	30
4	11	156	44	e25	e16	e380	135	71	336	227	35	29
5	11	227	36	e25	e16	492	117	64	264	290	40	28
6	9.9	208	36	e25	e16	625	106	61	212	257	38	27
7	10	142	34	e25	e16	597	99	58	172	213	44	26
8	10	88	34	e24	e16	459	92	84	141	176	e57	26
9	9.8	62	35	e24	e16	354	85	209	131	148	e40	26
10	9.7	52	86	e24	e17	274	78	230	171	127	34	24
11	9.8	49	e170	e24	e17	217	73	324	400	111	34	23
12	11	49	e130	e25	e17	162	70	329	664	105	33	22
13	11	47	e150	e25	e17	141	67	477	734	104	32	21
14	14	43	e100	e25	e17	129	66	621	622	93	32	21
15	15	41	e80	e24	e17	122	61	727	472	84	31	20
16	16	40	e60	e24	e17	110	58	597	357	82	30	19
17	14	39	e44	e22	e18	105	62	439	352	94	30	19
18	13	49	e38	e20	e19	102	97	355	377	87	33	19
19	12	83	e37	e19	e19	100	114	314	334	77	31	18
20	12	75	e36	e19	e20	136	95	396	263	60	29	17
21	12	60	e34	e20	e20	152	281	803	206	55	27	17
22	12	52	e32	e20	e21	124	351	1,410	176	54	27	17
23	12	52	e30	e20	e24	108	302	1,970	152	49	27	16
24	12	66	e29	e19	e27	104	220	2,120	165	45	52	16
25	15	58	e29	e19	e28	116	201	1,450	186	43	47	15
26	18	52	e29	e18	e30	170	208	955	169	40	37	16
27	13	49	e28	e18	e34	218	176	671	142	37	37	16
28	12	48	e27	e18	e49	214	147	484	141	34	43	16
29	13	45	e27	e17	e70	318	121	361	133	32	40	16
30	12	43	e27	e17	---	347	98	336	e113	30	39	16
31	12	---	e27	e16	---	300	---	532	---	30	35	---
TOTAL	371.2	2,063	1,598	682	642	7,526	4,166	16,706	9,238	3,059	1,106	639
MEAN	12.0	68.8	51.5	22.0	22.1	243	139	539	308	98.7	35.7	21.3
MAX	18	227	170	27	70	625	351	2,120	734	290	57	32
MIN	9.4	12	27	16	16	100	58	58	113	30	27	15
CFSM	0.10	0.57	0.43	0.18	0.18	2.02	1.16	4.49	2.57	0.82	0.30	0.18
IN.	0.12	0.64	0.50	0.21	0.20	2.33	1.29	5.18	2.86	0.95	0.34	0.20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2004, BY WATER YEAR (WY)

MEAN	44.2	58.1	50.3	49.3	67.3	191	165	96.2	81.2	44.7	25.7	45.1
MAX	306	376	268	273	253	575	586	539	454	298	106	485
(WY)	(1955)	(1986)	(1992)	(1975)	(1984)	(1976)	(1993)	(2004)	(1996)	(1952)	(1960)	(1986)
MIN	5.65	6.66	4.92	3.74	5.32	19.9	38.9	14.0	3.34	1.40	1.45	2.48
(WY)	(1935)	(1938)	(1964)	(1940)	(1959)	(1940)	(1958)	(1958)	(1934)	(1936)	(1934)	(1932)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1930 - 2004	
ANNUAL TOTAL	15,841.9		47,796.2			
ANNUAL MEAN	43.4		131		76.0	
HIGHEST ANNUAL MEAN					168	1986
LOWEST ANNUAL MEAN					(a)13.5	1934
HIGHEST DAILY MEAN	589	May 12	2,120	May 24	3,320	Mar 20, 1952
LOWEST DAILY MEAN	7.3	Sep 7	9.4	Oct 2	0.20	Aug 9, 1936
ANNUAL SEVEN-DAY MINIMUM	(b)7.4	Jan 23	10	Oct 5	0.24	Aug 6, 1936
MAXIMUM PEAK FLOW			2,250	May 24	3,600	Mar 30, 1960
MAXIMUM PEAK STAGE			10.55	May 24	(c)12.25	Mar 30, 1960
INSTANTANEOUS LOW FLOW			8.9	Oct 3	0.20	Aug 9, 1936
ANNUAL RUNOFF (CFSM)	0.362		1.09		0.634	
ANNUAL RUNOFF (INCHES)	4.91		14.82		8.61	
10 PERCENT EXCEEDS	84		348		170	
50 PERCENT EXCEEDS	19		44		34	
90 PERCENT EXCEEDS	8.6		16		7.5	

(a) Published erroneously at 7.16, 1930, in 1999-2001
(b) Ice affected
(c) From graph based on gage readings, backwater from ice
(e) Estimated due to ice effect or missing record

04086500 CEDAR CREEK NEAR CEDARBURG, WI—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	15.5	12.5	14.5	10.0	9.0	9.5	---	---	---	---	---	---
2	14.5	11.0	12.5	9.0	8.5	8.5	---	---	---	---	---	---
3	13.0	9.5	11.5	10.0	8.0	9.0	---	---	---	---	---	---
4	12.5	10.0	11.5	9.5	7.0	8.5	---	---	---	---	---	---
5	11.0	7.5	9.5	7.5	5.5	6.5	---	---	---	---	---	---
6	13.5	9.0	11.0	8.5	5.5	7.0	---	---	---	---	---	---
7	15.0	11.5	13.0	9.0	6.0	7.5	---	---	---	---	---	---
8	16.5	14.0	15.0	6.0	4.5	5.5	---	---	---	---	---	---
9	15.5	12.5	14.0	7.0	5.0	6.0	---	---	---	---	---	---
10	14.0	11.0	12.5	8.0	5.5	7.0	---	---	---	---	---	---
11	12.5	9.5	11.0	7.5	5.0	6.5	---	---	---	---	---	---
12	13.0	10.0	11.5	5.0	3.0	4.0	---	---	---	---	---	---
13	13.5	10.5	12.0	4.0	2.0	3.0	---	---	---	---	---	---
14	12.5	11.0	11.5	3.5	1.0	2.5	---	---	---	---	---	---
15	11.0	9.0	10.0	---	---	---	---	---	---	---	---	---
16	9.0	7.0	8.0	---	---	---	---	---	---	---	---	---
17	8.5	5.5	7.0	---	---	---	---	---	---	---	---	---
18	9.0	8.0	8.5	---	---	---	---	---	---	---	---	---
19	9.0	8.0	8.5	---	---	---	---	---	---	---	---	---
20	10.0	9.0	9.5	---	---	---	---	---	---	---	---	---
21	11.0	8.0	9.5	---	---	---	---	---	---	---	---	---
22	11.0	10.0	10.5	---	---	---	---	---	---	---	---	---
23	13.0	11.0	12.0	---	---	---	---	---	---	---	---	---
24	13.0	11.5	12.0	---	---	---	---	---	---	---	---	---
25	13.0	10.0	11.5	---	---	---	---	---	---	---	---	---
26	12.0	10.5	11.0	---	---	---	---	---	---	---	---	---
27	11.0	10.0	11.0	---	---	---	---	---	---	---	---	---
28	11.0	10.0	10.5	---	---	---	---	---	---	---	---	---
29	16.0	11.0	13.5	---	---	---	---	---	---	---	---	---
30	16.0	11.5	14.0	---	---	---	---	---	---	---	---	---
31	11.5	10.0	11.0	---	---	---	---	---	---	---	---	---
MONTH	16.5	5.5	11.3	10.0	1.0	6.5	---	---	---	---	---	---

04086500 CEDAR CREEK NEAR CEDARBURG, WI—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	15.5	7.9	10.7	11.7	8.4	9.9	---	---	---	---	---	---
2	14.9	7.7	10.6	14.1	9.2	11.3	---	---	---	---	---	---
3	15.7	9.2	11.7	15.1	9.8	11.8	---	---	---	---	---	---
4	15.3	8.6	11.4	14.5	9.4	11.5	---	---	---	---	---	---
5	16.1	10.0	12.4	16.7	10.6	13.1	---	---	---	---	---	---
6	15.6	9.6	11.9	16.3	10.9	12.9	---	---	---	---	---	---
7	15.4	8.1	11.0	16.3	9.8	12.6	---	---	---	---	---	---
8	13.1	6.7	9.3	18.6	11.3	14.3	---	---	---	---	---	---
9	13.8	7.4	9.9	17.9	11.6	14.2	---	---	---	---	---	---
10	14.6	8.2	10.8	18.3	11.2	13.9	---	---	---	---	---	---
11	16.1	9.0	11.9	18.3	10.2	13.9	---	---	---	---	---	---
12	15.8	9.3	12.1	19.9	12.4	15.6	---	---	---	---	---	---
13	16.0	8.7	11.8	20.2	13.9	16.5	---	---	---	---	---	---
14	12.6	8.4	10.5	20.5	14.6	16.9	---	---	---	---	---	---
15	14.1	8.8	11.2	---	---	---	---	---	---	---	---	---
16	14.9	9.6	12.1	---	---	---	---	---	---	---	---	---
17	17.0	11.1	13.6	---	---	---	---	---	---	---	---	---
18	14.0	9.9	11.9	---	---	---	---	---	---	---	---	---
19	13.4	9.5	11.4	---	---	---	---	---	---	---	---	---
20	13.3	8.9	10.8	---	---	---	---	---	---	---	---	---
21	16.0	9.4	12.3	---	---	---	---	---	---	---	---	---
22	11.5	8.5	10	---	---	---	---	---	---	---	---	---
23	11.0	7.3	8.8	---	---	---	---	---	---	---	---	---
24	12.0	7.0	8.9	---	---	---	---	---	---	---	---	---
25	14.3	7.7	10.2	---	---	---	---	---	---	---	---	---
26	11.8	7.8	9.5	---	---	---	---	---	---	---	---	---
27	11.2	7.9	9.3	---	---	---	---	---	---	---	---	---
28	12.3	8.3	10	---	---	---	---	---	---	---	---	---
29	13.2	7.3	9.4	---	---	---	---	---	---	---	---	---
30	11.8	5.5	8.3	---	---	---	---	---	---	---	---	---
31	14.2	7.7	10.3	---	---	---	---	---	---	---	---	---
MONTH	17.0	5.5	10.8	20.5	8.4	13.5	---	---	---	---	---	---

04086500 CEDAR CREEK NEAR CEDARBURG, WI—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	809	766	794	---	---	---	---	---	---
2	---	---	---	768	746	755	---	---	---	---	---	---
3	---	---	---	765	740	750	---	---	---	---	---	---
4	---	---	---	774	750	764	---	---	---	---	---	---
5	---	---	---	780	758	769	---	---	---	---	---	---
6	---	---	---	784	757	767	---	---	---	---	---	---
7	---	---	---	767	750	758	---	---	---	---	---	---
8	---	---	---	761	743	751	---	---	---	---	---	---
9	874	856	863	760	741	749	---	---	---	---	---	---
10	863	815	843	755	738	747	---	---	---	---	---	---
11	831	807	820	754	735	745	---	---	---	---	---	---
12	857	785	829	759	745	751	---	---	---	---	---	---
13	836	754	800	757	744	749	---	---	---	---	---	---
14	819	756	794	757	745	752	---	---	---	---	---	---
15	875	819	853	---	---	---	---	---	---	---	---	---
16	881	871	877	---	---	---	---	---	---	---	---	---
17	881	869	875	---	---	---	---	---	---	---	---	---
18	882	867	874	---	---	---	---	---	---	---	---	---
19	882	867	873	---	---	---	---	---	---	---	---	---
20	891	867	878	---	---	---	---	---	---	---	---	---
21	874	856	865	---	---	---	---	---	---	---	---	---
22	881	859	874	---	---	---	---	---	---	---	---	---
23	876	842	853	---	---	---	---	---	---	---	---	---
24	854	842	850	---	---	---	---	---	---	---	---	---
25	842	795	810	---	---	---	---	---	---	---	---	---
26	849	816	835	---	---	---	---	---	---	---	---	---
27	851	834	841	---	---	---	---	---	---	---	---	---
28	842	828	837	---	---	---	---	---	---	---	---	---
29	835	824	830	---	---	---	---	---	---	---	---	---
30	829	814	822	---	---	---	---	---	---	---	---	---
31	820	807	815	---	---	---	---	---	---	---	---	---
MONTH	891	754	844	809	735	757	---	---	---	---	---	---

04086500 CEDAR CREEK NEAR CEDARBURG, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: July 16 to Nov. 15, 2004 (discontinued).
DISSOLVED OXYGEN: July 16 to Nov. 15, 2004 (discontinued).
SPECIFIC CONDUCTANCE: July 16 to Nov. 15, 2004 (discontinued).

INSTRUMENTATION.--Water-quality monitor since July 16, 2004.

REMARKS.--Temperature records good except for July 16 to Aug. 19, which are fair due to missing unit values. Dissolved oxygen records good except for the periods of July 16 to Aug. 2 and Aug. 6-19, which are fair due to missing data; Aug. 16-23, which are poor; and Aug. 3-5, which are unusable. Specific conductance records good except for the periods to July 16 to Aug. 19, which are fair due to missing data; and Sept. 27 to Oct. 8, which are unusable.

EXTREMES FOR PERIOD MAY TO NOVEMBER 2004.--
WATER TEMPERATURE: Maximum, 26.1°C, July 20 and 22; minimum, 1.0°C, Nov. 14.
DISSOLVED OXYGEN: Maximum, 20.5 mg/L, Nov. 14; minimum, 5.6 mg/L, Sept. 15.
SPECIFIC CONDUCTANCE: Maximum, 891 µS/cm, Oct. 20; minimum, 593 µS/cm, Aug. 25.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	24.5	21.0	23.0	21.5	18.0	19.5
2	---	---	---	---	---	---	25.0	22.0	23.5	23.5	19.0	21.0
3	---	---	---	---	---	---	25.5	22.0	23.5	22.5	20.0	21.5
4	---	---	---	---	---	---	25.0	22.0	23.0	24.0	20.5	22.0
5	---	---	---	---	---	---	23.5	19.5	21.5	23.5	21.0	22.0
6	---	---	---	---	---	---	23.0	18.0	20.5	23.0	21.0	22.0
7	---	---	---	---	---	---	22.0	19.5	20.5	21.5	18.0	20.0
8	---	---	---	---	---	---	23.0	19.5	21.0	20.0	17.5	19.0
9	---	---	---	---	---	---	24.5	20.5	22.0	21.0	17.0	18.5
10	---	---	---	---	---	---	22.5	19.0	20.5	21.0	16.5	18.5
11	---	---	---	---	---	---	19.0	16.5	17.5	22.0	18.0	20.0
12	---	---	---	---	---	---	17.0	15.5	16.5	23.5	19.5	21.0
13	---	---	---	---	---	---	17.5	15.5	16.5	23.0	19.5	21.0
14	---	---	---	---	---	---	19.5	15.0	17.0	24.0	20.5	22.0
15	---	---	---	---	---	---	20.0	15.5	17.5	24.5	21.5	22.5
16	---	---	---	---	---	---	20.0	16.5	18.5	22.0	19.0	20.5
17	---	---	---	23.5	20.0	21.5	20.5	18.0	19.5	20.0	16.5	18.5
18	---	---	---	24.0	20.0	22.0	22.0	18.0	20.0	20.5	16.5	18.0
19	---	---	---	24.5	20.5	22.5	21.5	17.5	19.5	20.5	17.0	18.5
20	---	---	---	26.0	22.0	24.0	21.0	17.5	19.0	21.0	17.5	18.5
21	---	---	---	25.0	23.0	24.0	20.5	16.5	18.5	20.5	16.5	18.5
22	---	---	---	26.0	23.0	24.5	20.5	16.5	18.5	20.5	16.0	18.0
23	---	---	---	24.0	20.5	22.5	20.5	19.0	19.5	21.0	17.0	18.5
24	---	---	---	22.0	19.5	21.0	19.5	18.5	19.0	20.5	18.0	19.0
25	---	---	---	22.5	18.0	20.5	21.0	19.0	19.5	18.0	16.0	17.0
26	---	---	---	22.0	18.0	20.0	23.5	19.5	21.5	18.0	14.0	16.0
27	---	---	---	23.5	18.5	21.0	24.5	22.0	23.5	17.5	14.0	16.0
28	---	---	---	23.5	20.0	22.0	24.0	19.0	21.5	17.0	14.5	15.5
29	---	---	---	23.5	21.0	22.5	20.0	16.5	18.5	16.0	12.5	14.0
30	---	---	---	23.0	21.5	22.0	19.0	17.0	18.0	15.0	11.0	13.0
31	---	---	---	24.5	20.5	22.5	20.5	17.0	18.5	---	---	---
MONTH	---	---	---	26.0	18.0	22.2	25.5	15.0	19.9	24.5	11.0	19.0
YEAR	26.0	11.0	20.0									

04086500 CEDAR CREEK NEAR CEDARBURG, WI—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	9.5	6.1	7.5	11.5	7.7	9.1
2	---	---	---	---	---	---	9.0	6.0	7.4	11.0	7.4	8.7
3	---	---	---	---	---	---	---	---	---	10.5	6.6	8.2
4	---	---	---	---	---	---	---	---	---	11.4	6.6	8.6
5	---	---	---	---	---	---	---	---	---	11.1	6.4	8.4
6	---	---	---	---	---	---	10.6	6.9	8.4	10.3	6.2	7.9
7	---	---	---	---	---	---	10.6	6.8	8.6	11.4	6.8	8.6
8	---	---	---	---	---	---	10.7	7.1	8.7	11.7	7.2	9.0
9	---	---	---	---	---	---	9.8	6.9	8.1	12.0	7.4	9.2
10	---	---	---	---	---	---	9.6	6.7	8.1	12.3	7.4	9.2
11	---	---	---	---	---	---	10.4	7.6	8.9	12.8	7.0	9.2
12	---	---	---	---	---	---	10.4	8.5	9.5	12.3	6.5	8.6
13	---	---	---	---	---	---	10.7	8.6	9.5	12.8	6.4	8.8
14	---	---	---	---	---	---	10.3	8.5	9.3	12.6	6.1	8.7
15	---	---	---	---	---	---	10.7	8.2	9.2	11.7	5.6	8.0
16	---	---	---	---	---	---	10.9	7.8	9.1	12.2	5.7	8.2
17	---	---	---	9.8	6.8	8.2	10.6	7.5	9.0	13.5	6.9	9.4
18	---	---	---	10.2	7.0	8.5	11.4	8.0	9.2	14.4	7.4	10.1
19	---	---	---	10.0	6.8	8.3	10.8	8.0	8.9	14.3	7.3	10.0
20	---	---	---	9.9	6.3	7.9	10.4	7.6	8.8	14.2	7.2	9.8
21	---	---	---	9.0	6.1	7.5	10.8	7.7	8.9	14.5	7.5	10.1
22	---	---	---	10.1	6.7	8.2	12.0	8.1	9.5	14.7	7.6	10.3
23	---	---	---	10.7	6.8	8.6	9.0	7.0	8.1	14.7	7.6	10.1
24	---	---	---	11.2	7.5	9.2	8.6	6.6	7.5	14.5	6.3	9.6
25	---	---	---	11.2	7.8	9.2	9.5	7.0	8.0	13.7	6.7	9.6
26	---	---	---	11.0	7.6	9.1	9.9	6.9	8.0	14.4	7.6	10.1
27	---	---	---	10.8	7.3	8.8	9.4	6.1	7.6	15.1	7.6	10.5
28	---	---	---	10.5	6.9	8.5	8.8	6.2	7.4	14.5	7.3	10.0
29	---	---	---	10.2	6.5	8.1	10.7	7.4	8.8	15.0	7.9	10.7
30	---	---	---	8.7	6.2	7.3	10.8	7.8	9.0	15.2	8.4	11.0
31	---	---	---	9.8	6.1	7.6	11.3	7.9	9.2	---	---	---
MONTH	---	---	---	11.2	6.1	8.3	12.0	6.0	8.6	15.2	5.6	9.3
YEAR	15.2	5.6	8.8									

04086500 CEDAR CREEK NEAR CEDARBURG, WI—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	792	763	775	779	760	769
2	---	---	---	---	---	---	777	753	772	791	760	777
3	---	---	---	---	---	---	759	740	752	792	778	784
4	---	---	---	---	---	---	750	738	745	791	779	784
5	---	---	---	---	---	---	767	744	753	793	782	788
6	---	---	---	---	---	---	778	748	768	784	778	781
7	---	---	---	---	---	---	785	773	777	779	764	774
8	---	---	---	---	---	---	798	785	790	785	766	777
9	---	---	---	---	---	---	799	777	786	795	780	787
10	---	---	---	---	---	---	791	771	780	800	778	789
11	---	---	---	---	---	---	790	779	783	804	764	785
12	---	---	---	---	---	---	781	767	773	799	766	786
13	---	---	---	---	---	---	783	766	780	808	745	782
14	---	---	---	---	---	---	788	780	784	800	705	760
15	---	---	---	---	---	---	791	775	783	783	702	745
16	---	---	---	---	---	---	791	765	778	787	734	767
17	---	---	---	757	712	735	778	753	764	833	776	813
18	---	---	---	757	729	738	784	765	774	843	817	829
19	---	---	---	748	733	742	796	774	786	836	809	824
20	---	---	---	751	730	741	800	786	793	857	825	838
21	---	---	---	755	740	747	802	787	794	848	826	835
22	---	---	---	767	744	752	803	781	794	845	825	835
23	---	---	---	757	744	752	808	789	798	846	809	829
24	---	---	---	765	741	754	809	656	782	837	641	792
25	---	---	---	758	742	753	697	593	638	791	751	771
26	---	---	---	755	744	747	743	697	726	811	765	788
27	---	---	---	759	744	753	750	723	744	---	---	---
28	---	---	---	760	753	758	770	711	750	---	---	---
29	---	---	---	768	756	762	748	711	737	---	---	---
30	---	---	---	790	768	774	759	734	746	---	---	---
31	---	---	---	792	782	786	771	739	763	---	---	---
MONTH	---	---	---	792	712	753	809	593	767	857	641	792
YEAR	857	593	773									

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Chloride, water, fltrd, mg/L (00940)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	E coli, Defined Substr. Tech., water, MPN/ 100 mL (50468)
JUL													
01...	1530	97	40	51.9	6	1.1	.023	1.97	.036	.052	.070	<2.0	--
AUG													
05...	2115	40	50	66.4	6	--	--	--	--	--	.069	--	--
06...	2115	37	50	70.0	5	--	--	--	--	--	.062	--	--
07...	2115	48	50	68.9	4	--	--	--	--	--	.059	--	--
08...	1945	57	50	70.7	4	--	--	--	--	--	.058	--	--
09...	0230	40	50	71.1	7	--	--	--	--	--	.063	--	--
09...	0545	40	50	70.4	7	--	--	--	--	--	.063	--	--
09...	0700	40	50	69.1	5	--	--	--	--	--	.064	--	--
09...	0845	40	50	68.6	4	--	--	--	--	--	.061	--	--
20...	1339	29	50	74.1	3	--	--	--	--	--	.046	--	--
20...	1719	29	50	74.4	3	--	--	--	--	--	.043	--	--
21...	0527	28	50	74.0	4	--	--	--	--	--	.046	--	--
24...	0630	33	50	72.8	<3	--	--	--	--	--	.044	--	--
24...	0915	55	50	70.9	4	--	--	--	--	--	.047	--	--
24...	1529	68	50	71.9	5	--	--	--	--	--	.054	--	--
25...	0530	50	50	70.8	5	--	--	--	--	--	.058	--	--
25...	1200	46	50	57.6	11	.72	.061	1.50	.039	.052	.088	--	980
25...	1645	43	50	58.5	5	.85	.177	1.44	.036	.056	.086	--	130
26...	0345	40	50	62.2	5	.81	.044	1.44	.040	.056	.080	--	44
26...	2330	34	50	65.7	3	--	--	--	--	--	.079	--	--
27...	1000	36	50	66.4	<3	.50	.042	1.63	.051	.066	.085	--	110
27...	1007	36	50	--	<3	--	--	--	--	--	--	--	--
27...	1011	36	40	--	<3	--	--	--	--	--	--	--	--
SEP													
09...	1615	25	40	71.8	2	.48	<.015	1.54	.032	--	.050	<6.0	--
16...	1050	20	50	--	--	--	--	--	--	--	--	<2.0	--

04086500 CEDAR CREEK NEAR CEDARBURG, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, M-FC 0.7u MF col/ 100 mL (31625)	Chloro-phyll a wat unf trichr. method, uncorr, ug/L (32210)	Copper, water, unfltrd recover -able, ug/L (01119)	Mercury water fltrd, ng/L (50287)	Zinc, water, unfltrd recover -able, ug/L (01094)	Mercury suspnd sedimnt total, ng/L (62976)	Methyl-mercury water fltrd, ng/L (50285)	Methyl-mercury suspnd sedimnt total, ng/L (62977)	Sus-pended sedi-ment concen-tration mg/L (80154)
JUL										
01...	120	80	3.60	2	--	<20	--	--	--	--
AUG										
05...	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--
25...	--	1,500	4.61	2	--	<20	--	--	--	10
25...	--	160	5.34	2	--	30	--	--	--	7
26...	--	140	3.28	2	--	<20	--	--	--	5
26...	--	--	--	--	--	--	--	--	--	--
27...	--	120	2.34	3	--	<20	--	--	--	<2
27...	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--
SEP										
09...	120	180	.950	2	.92	<20	.020	.07	<.010	<2
16...	40	140	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instan-taneous dis-charge, cfs (00061)	Sam-pling method, code (82398)	Chlor-ide, water, fltrd, mg/L (00940)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, unfltrd mg/L (00665)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, M-FC 0.7u MF col/ 100 mL (31625)
OCT													
08...	1922	19	50	83.7	<2	--	--	--	--	.021	--	--	--
09...	1045	26	50	84.7	<2	--	--	--	--	.023	--	--	--
09...	1645	25	50	84.2	<2	--	--	--	--	.024	--	--	--
09...	2245	24	50	81.4	<2	--	--	--	--	.022	--	--	--
10...	0445	23	50	82.0	<2	--	--	--	--	.026	--	--	--
10...	1045	22	50	80.6	<2	--	--	--	--	.022	--	--	--
10...	1831	22	50	78.6	<2	--	--	--	--	.023	--	--	--
24...	1620	38	50	--	<2	--	--	--	--	--	--	--	--
24...	1621	38	40	--	<2	--	--	--	--	--	--	--	--
24...	1625	36	50	80.3	<2	.49	.021	1.97	.009	.033	<3.0	10	30
24...	1645	36	50	80.6	<2	--	--	--	--	.029	--	--	--
24...	2030	34	50	80.3	<2	--	--	--	--	.030	--	--	--
25...	0230	33	50	75.6	<2	--	--	--	--	.029	--	--	--
25...	0649	32	50	71.9	<2	.49	.016	1.70	.011	.030	<3.0	10	20
25...	1505	31	50	73.5	<3	.52	<.015	1.54	.011	.033	<3.0	36	10
NOV													
01...	1515	36	50	72.5	<2	--	--	--	--	.035	--	--	--
01...	1530	36	50	73.3	<2	--	--	--	--	.036	--	--	--
01...	1859	38	50	71.5	<2	--	--	--	--	.036	--	--	--
02...	0100	39	50	67.6	<2	--	--	--	--	.036	--	--	--
02...	0700	41	50	65.7	<2	--	--	--	--	.049	--	--	--
02...	1300	49	50	67.4	<2	--	--	--	--	.037	--	--	--
02...	1900	50	50	66.4	<2	--	--	--	--	.040	--	--	--
03...	0100	52	50	65.0	<2	--	--	--	--	.041	--	--	--
03...	0656	51	50	68.4	<2	--	--	--	--	.042	--	--	--
03...	1226	49	50	67.0	<2	.81	<.015	1.70	.022	.045	<2.0	70	100
03...	1245	49	50	65.9	<2	--	--	--	--	.050	--	--	--
04...	0045	43	50	66.8	<2	--	--	--	--	.056	--	--	--
04...	1151	43	50	71.8	<2	.67	<.015	1.59	.030	.057	<2.0	60	150
04...	1800	42	50	--	<2	--	--	--	--	.040	--	--	--
05...	0600	43	50	73.2	<2	--	--	--	--	.037	--	--	--
07...	1200	40	50	69.8	<2	--	--	--	--	.059	--	--	--
08...	0917	39	50	70.1	<2	.60	<.015	1.43	.025	.050	<2.0	20	30
08...	1541	36	50	70.3	<2	.52	<.015	1.37	.012	.030	<2.0	<1	30

04086500 CEDAR CREEK NEAR CEDARBURG, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Chloro-phyll a wat unf trichr. method, uncorr, ug/L (32210)	Copper, water, unfltrd recover-able, ug/L (01119)	Zinc, water, unfltrd recover-able, ug/L (01094)	Sus-pended sedi-ment concen-tration mg/L (80154)
OCT				
08...	--	--	--	--
09...	--	--	--	--
09...	--	--	--	--
09...	--	--	--	--
10...	--	--	--	--
10...	--	--	--	--
10...	--	--	--	--
24...	--	--	--	--
24...	--	--	--	--
24...	3.68	3	<20	<2
24...	--	--	--	--
24...	--	--	--	--
25...	--	--	--	--
25...	2.21	3	<20	<2
25...	2.74	2	<20	19
NOV				
01...	--	--	--	--
01...	--	--	--	--
01...	--	--	--	--
02...	--	--	--	--
02...	--	--	--	--
02...	--	--	--	--
02...	--	--	--	--
03...	--	--	--	--
03...	--	--	--	--
03...	2.03	2	<20	<2
03...	--	--	--	--
04...	--	--	--	--
04...	2.56	2	<20	<2
04...	--	--	--	--
05...	--	--	--	--
07...	--	--	--	--
08...	1.90	3	<20	<2
08...	2.22	1	<20	<2

04086600 MILWAUKEE RIVER NEAR CEDARBURG, WI

LOCATION.--Lat 43°16'49", long 87°56'34", in NW ¼ NW ¼ sec.6, T.9 N., R.22 E., Ozaukee County, Hydrologic Unit 04040003, on right bank 60 ft downstream from Pioneer Road bridge, 2.6 mi southeast of Cedarburg, 1.0 mi west of I-43, and 26.25 mi upstream from mouth.

DRAINAGE AREA.--607 mi^2.

PERIOD OF RECORD.--November 1981 to current year.

GAGE.--Water-stage recorder. Datum of gage is 653.56 ft above NGVD of 1929 (Southeastern Wisconsin Regional Planning Commission bench mark).

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	81	300	e230	e120	948	1,060	465	2,790	712	283	255
2	52	151	246	e230	e120	1,580	957	425	2,660	633	298	252
3	53	291	238	e220	e120	1,620	854	381	2,530	578	311	245
4	56	664	284	e210	e120	1,490	751	353	2,320	1,080	334	231
5	57	1,030	298	e210	e120	2,150	659	316	2,010	1,090	336	220
6	61	973	252	e210	e120	2,530	592	291	1,640	993	312	218
7	64	867	228	e200	e120	2,290	544	268	1,320	922	280	207
8	63	807	246	e200	e120	2,050	499	348	1,090	852	256	197
9	64	739	250	e190	e120	1,800	448	716	935	772	253	189
10	64	636	376	e190	e120	1,610	412	925	1,070	744	256	188
11	61	552	691	e190	e120	1,390	381	1,170	2,620	685	250	188
12	64	502	526	e200	e120	1,130	357	1,180	4,430	650	258	187
13	58	435	945	e210	e120	924	338	1,630	5,300	618	287	182
14	84	402	1,160	e200	e120	864	319	2,200	5,290	546	302	172
15	81	363	724	e190	e120	771	298	2,280	4,900	507	287	164
16	100	336	454	e190	e120	672	296	1,990	4,100	516	267	156
17	95	306	397	e180	e130	609	318	1,630	3,590	473	265	161
18	92	401	356	e150	e140	562	444	1,500	3,000	454	274	152
19	83	421	347	e140	e140	517	540	1,340	2,410	427	309	155
20	81	414	e340	e150	e150	563	536	1,650	1,950	422	319	152
21	77	371	e310	e150	e150	627	1,030	2,530	1,580	406	310	148
22	73	338	e290	e150	e160	615	1,230	4,020	1,330	383	298	144
23	73	337	261	e150	e190	584	1,100	5,170	1,160	356	286	145
24	83	367	e250	e140	e220	568	942	5,490	1,140	328	297	146
25	92	393	e250	e140	e240	587	914	4,860	1,090	333	307	139
26	90	385	e250	e130	e250	707	897	4,240	1,040	290	287	141
27	92	390	e240	e130	e300	802	799	3,660	968	269	304	143
28	77	383	e230	e130	e340	866	711	3,050	927	252	311	135
29	79	351	e230	e120	e600	1,180	620	2,470	888	235	298	133
30	83	326	e260	e120	---	1,230	516	2,230	803	223	287	129
31	86	---	e250	e120	---	1,150	---	2,800	---	229	265	---
TOTAL	2,285	14,012	11,479	5,370	4,930	34,986	19,362	61,578	66,881	16,978	8,987	5,274
MEAN	73.7	467	370	173	170	1,129	645	1,986	2,229	548	290	176
MAX	100	1,030	1,160	230	600	2,530	1,230	5,490	5,300	1,090	336	255
MIN	47	81	228	120	120	517	296	268	803	223	250	129
CFSM	0.12	0.77	0.61	0.29	0.28	1.86	1.06	3.27	3.67	0.90	0.48	0.29
IN.	0.14	0.86	0.70	0.33	0.30	2.14	1.19	3.77	4.10	1.04	0.55	0.32

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2004, BY WATER YEAR (WY)

MEAN	286	431	351	245	416	878	913	577	564	272	216	284
MAX	1,157	1,565	757	406	997	1,793	2,501	1,986	2,229	767	349	1,593
(WY)	(1987)	(1986)	(1983)	(1985)	(1984)	(1986)	(1993)	(2004)	(2004)	(1993)	(1987)	(1986)
MIN	73.7	121	120	81.6	89.4	270	328	219	89.5	69.7	69.5	73.5
(WY)	(2004)	(2003)	(1990)	(2003)	(2003)	(2003)	(2003)	(1988)	(1988)	(1988)	(1988)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1982 - 2004	
ANNUAL TOTAL	89,124		252,122			
ANNUAL MEAN	244		689		453	
HIGHEST ANNUAL MEAN					720	1986
LOWEST ANNUAL MEAN					203	2003
HIGHEST DAILY MEAN	1,740	May 12	5,490	May 24	5,490	May 24, 2004
LOWEST DAILY MEAN	32	Sep 5	47	Oct 1	32	Sep 5, 2003
ANNUAL SEVEN-DAY MINIMUM	36	Sep 3	56	Oct 1	36	Sep 3, 2003
MAXIMUM PEAK FLOW			5,720	May 23	5,720	May 23, 2004
MAXIMUM PEAK STAGE			13.11	May 23	13.11	May 23, 2004
INSTANTANEOUS LOW FLOW			47	Oct 1	28	Sep 5, 2003
ANNUAL RUNOFF (CFSM)	0.402		1.13		0.746	
ANNUAL RUNOFF (INCHES)	5.46		15.45		10.13	
10 PERCENT EXCEEDS	492		1,630		980	
50 PERCENT EXCEEDS	130		318		279	
90 PERCENT EXCEEDS	53		120		117	

(e) Estimated due to ice effect or missing record

040869416 LINCOLN CREEK AT SHERMAN BOULEVARD AT MILWAUKEE, WI

LOCATION.--Lat 43°05'51", long 87°58'01", in SW ¼ SE ¼ NE ¼ sec.2, T79 N., R.21 E., Milwaukee County, Hydrologic Unit 04040003, on left bank at the corner of Sherman Boulevard and Congress Street.

DRAINAGE AREA.--9.56 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 2003 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 635 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated days, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	1.5	1.2	e1.9	e4.0	18	8.7	5.8	17	4.6	3.0	2.9
2	1.6	77	1.5	2.9	e4.7	10	5.8	3.5	11	4.8	2.8	2.0
3	6.7	77	1.9	2.6	e4.1	6.9	6.2	3.4	9.0	109	21	2.0
4	1.8	72	1.7	e2.1	e3.6	35	4.1	3.4	7.7	167	18	1.8
5	1.4	9.5	2.1	e1.8	e4.0	126	4.3	3.6	6.8	10	2.9	1.5
6	1.1	3.7	1.9	e1.6	e4.7	14	5.6	3.6	5.9	8.6	2.4	2.0
7	1.4	2.4	1.5	e1.8	e4.0	13	4.3	8.8	5.3	22	2.0	1.3
8	1.8	1.9	1.3	e2.1	e3.4	8.1	4.4	44	6.4	6.0	1.6	1.6
9	1.9	1.4	28	e2.1	e4.4	6.5	3.7	21	5.1	5.6	3.9	1.6
10	1.6	1.4	92	e2.1	e4.0	5.5	3.2	223	64	4.7	2.2	1.6
11	1.7	2.5	e8.3	e2.9	e5.0	5.1	3.4	51	71	92	2.1	1.4
12	4.8	1.6	e4.4	e3.4	e5.0	e4.5	3.3	16	30	57	2.9	1.2
13	2.1	1.4	3.0	e3.1	e4.7	3.9	3.2	174	9.2	20	2.4	1.3
14	25	1.5	3.1	e2.5	e4.7	9.8	3.3	225	14	8.0	2.1	1.5
15	3.2	1.5	2.7	e2.1	e3.3	4.1	3.2	40	7.7	6.5	1.5	5.9
16	1.7	1.4	6.5	e2.5	e3.3	3.7	3.2	18	6.0	10	1.6	3.9
17	1.5	1.5	2.9	e3.6	e4.2	7.6	27	33	17	6.2	16	2.1
18	1.3	61	2.4	e2.9	e7.9	9.3	8.1	55	6.1	4.7	2.5	1.5
19	1.0	5.9	e2.4	e2.4	e14	6.3	4.2	13	4.7	4.6	1.9	1.2
20	1.1	3.4	e2.6	e2.6	e19	e5.0	95	51	4.2	4.8	2.0	1.3
21	2.3	2.7	2.7	e3.4	e15	3.8	46	199	23	5.9	1.9	1.8
22	1.6	4.3	2.0	e2.6	e13	3.5	9.0	249	6.7	4.8	2.0	1.7
23	1.7	9.2	2.1	e2.9	e14	3.6	6.7	142	6.2	4.0	1.6	1.8
24	34	3.1	e2.4	e3.1	10	4.8	8.9	40	22	3.6	16	1.5
25	11	2.4	e2.0	e3.5	9.5	4.4	23	23	6.6	2.9	19	1.4
26	1.9	2.3	e2.0	e3.9	8.7	56	6.9	15	5.0	2.7	2.6	1.4
27	1.5	2.0	1.6	e3.4	8.1	7.5	5.1	13	13	2.6	40	1.5
28	3.3	1.4	14	e2.9	7.7	74	4.5	9.5	11	2.4	29	1.6
29	1.9	1.3	3.3	e2.5	8.2	26	4.2	15	5.0	2.5	8.9	1.6
30	2.2	1.3	2.4	e2.9	---	18	4.4	96	4.7	2.4	2.9	1.5
31	1.5	---	2.0	e3.3	---	8.9	---	40	---	2.2	2.4	---
TOTAL	127.3	359.5	207.9	83.4	206.2	512.8	322.9	1,837.6	411.3	592.1	221.1	55.4
MEAN	4.11	12.0	6.71	2.69	7.11	16.5	10.8	59.3	13.7	19.1	7.13	1.85
MAX	34	77	92	3.9	19	126	95	249	71	167	40	5.9
MIN	1.0	1.3	1.2	1.6	3.3	3.5	3.2	3.4	4.2	2.2	1.5	1.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2004, BY WATER YEAR (WY)

MEAN	4.11	12.0	6.71	2.69	7.11	16.5	10.8	59.3	10.4	12.5	5.59	3.43
MAX	4.11	12.0	6.71	2.69	7.11	16.5	10.8	59.3	13.7	19.1	7.13	5.02
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2003)
MIN	4.11	12.0	6.71	2.69	7.11	16.5	10.8	59.3	7.08	5.85	4.04	1.85
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2003)	(2003)	(2003)	(2004)

SUMMARY STATISTICS	FOR 2004 WATER YEAR		WATER YEARS 2003 - 2004	
ANNUAL TOTAL	4,937.5			
ANNUAL MEAN	13.5		13.5	
HIGHEST ANNUAL MEAN			13.5	2004
LOWEST ANNUAL MEAN			13.5	2004
HIGHEST DAILY MEAN	249	May 22	249	May 22, 2004
LOWEST DAILY MEAN	1.0	Oct 19	1.0	Oct 19, 2003
ANNUAL SEVEN-DAY MINIMUM	1.4	Sep 7	1.4	Sep 7, 2004
MAXIMUM PEAK FLOW	(a)1,900	Jul 4	(a)1,900	Jul 4, 2004
MAXIMUM PEAK STAGE	12.28	Jul 4	12.28	Jul 4, 2004
INSTANTANEOUS LOW FLOW	0.89	(b)Oct 20	0.89	(b)Oct 20, 2003
10 PERCENT EXCEEDS	28		28	
50 PERCENT EXCEEDS	3.9		3.9	
90 PERCENT EXCEEDS	1.5		1.5	

(a) From rating curve extended above 500 ft^3/s
(b) Also occurred Dec. 1, 2003
(e) Estimated

040869416 LINCOLN CREEK AT SHERMAN BOULEVARD AT MILWAUKEE, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 2003 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: June 2003 to current year.
SPECIFIC CONDUCTANCE: June 2003 to current year.

INSTRUMENTATION.--Continuous water temperature recorder and specific conductance recorder since June 2003. Sensor located near midstream.

REMARKS.--Records represent water temperature at sensor within 0.5°C.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum, 30.5°C, Aug. 16 and 26, 2003; minimum, 0.0°C, many days during winter, 2004 water year.
SPECIFIC CONDUCTANCE: Maximum, 21,600 µS/cm, Feb. 6, 2004; minimum, 61 µS/cm, July 3 and 4, 2004.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 28.5°C, July 20, Aug.1 and 3; minimum, 0.0°C, many days during winter.
SPECIFIC CONDUCTANCE: Maximum, 21,600 µS/cm, Feb. 6; minimum, 61 µS/cm, July 3 and 4.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	13.5	8.5	10.5	11.0	9.5	10.0	3.5	0.5	1.5	2.0	0.0	1.0
2	14.0	7.0	10.0	11.0	9.5	10.0	3.0	0.0	1.0	4.5	1.0	2.5
3	12.5	8.5	10.0	10.0	8.5	9.5	4.0	0.5	1.5	4.5	1.0	3.0
4	14.0	9.0	11.0	14.0	8.5	10.5	4.0	1.0	2.5	1.0	0.0	0.5
5	15.0	8.0	11.0	11.5	7.5	9.5	5.0	2.0	3.0	0.5	0.0	0.0
6	15.5	7.5	11.0	9.0	5.5	7.0	4.0	1.5	2.5	0.0	0.0	0.0
7	18.0	9.5	13.0	7.0	2.5	4.5	4.5	2.0	3.0	0.0	0.0	0.0
8	19.5	12.5	15.5	5.0	1.5	2.5	5.0	3.0	4.0	0.0	0.0	0.0
9	18.0	14.0	15.5	5.5	1.0	3.0	7.0	4.5	5.0	0.0	0.0	0.0
10	20.0	13.0	16.0	5.5	2.0	3.5	6.0	3.5	5.5	0.0	0.0	0.0
11	18.5	14.0	16.0	8.5	5.5	7.0	3.5	0.0	2.0	0.0	0.0	0.0
12	18.5	13.5	15.5	10.0	4.5	7.0	1.0	0.0	0.0	0.5	0.0	0.0
13	17.5	11.5	14.0	5.5	2.0	3.5	1.0	0.0	0.5	1.0	0.0	0.0
14	15.0	12.0	14.0	6.5	1.5	4.0	2.0	0.5	1.0	0.0	0.0	0.0
15	15.0	10.0	12.0	6.0	5.0	5.5	2.0	1.0	1.5	0.0	0.0	0.0
16	12.5	9.5	11.0	7.5	6.0	6.5	3.5	1.0	2.5	0.0	0.0	0.0
17	12.5	8.0	10.0	9.0	6.0	7.5	1.5	0.5	1.0	0.0	0.0	0.0
18	15.5	9.0	12.0	11.0	8.5	10.0	1.0	0.0	0.0	0.0	0.0	0.0
19	15.5	9.5	12.0	9.5	7.0	8.0	1.0	0.0	0.5	0.0	0.0	0.0
20	17.5	10.0	13.5	10.0	6.0	8.0	0.5	0.0	0.0	0.0	0.0	0.0
21	15.0	11.5	13.0	8.5	6.5	7.5	2.0	0.0	1.0	0.0	0.0	0.0
22	12.5	9.5	11.0	8.5	6.0	6.5	3.0	1.5	2.0	0.0	0.0	0.0
23	11.0	8.5	10.0	11.0	7.5	9.0	2.0	0.5	1.0	0.0	0.0	0.0
24	12.5	7.5	10.0	7.5	1.0	3.5	0.5	0.0	0.0	0.0	0.0	0.0
25	14.0	10.5	12.0	4.0	1.0	2.5	1.0	0.0	0.0	0.0	0.0	0.0
26	10.5	7.5	9.0	5.0	2.0	3.5	1.5	0.0	0.5	0.0	0.0	0.0
27	11.5	7.0	9.0	6.5	4.5	5.0	2.0	0.0	1.0	0.0	0.0	0.0
28	10.5	8.0	8.5	4.5	1.5	3.0	5.5	1.0	4.0	0.0	0.0	0.0
29	10.0	7.0	8.5	2.5	0.5	1.5	4.5	2.0	3.5	0.0	0.0	0.0
30	13.0	8.5	10.5	6.0	2.0	3.5	3.0	0.5	1.5	0.0	0.0	0.0
31	14.5	11.0	12.5	---	---	---	2.5	0.0	1.5	0.0	0.0	0.0
MONTH	20.0	7.0	11.9	14.0	0.5	6.1	7.0	0.0	1.8	4.5	0.0	0.2

040869416 LINCOLN CREEK AT SHERMAN BOULEVARD AT MILWAUKEE, WI—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	0.0	0.0	0.0	6.5	4.5	5.0	11.5	4.5	8.0	11.5	9.5	10.5
2	0.0	0.0	0.0	6.0	4.5	5.0	12.5	5.0	8.5	15.5	8.0	11.5
3	0.0	0.0	0.0	5.5	4.0	4.5	9.5	5.5	7.5	16.0	8.0	11.5
4	0.0	0.0	0.0	5.5	3.5	4.5	9.5	4.0	6.5	17.5	9.5	13.5
5	0.0	0.0	0.0	5.5	3.5	4.0	10.5	4.0	7.0	16.5	10.5	13.0
6	0.0	0.0	0.0	5.5	4.0	4.5	13.5	6.5	9.0	16.0	11.0	13.5
7	0.0	0.0	0.0	5.0	3.0	4.0	13.0	6.5	10.0	17.0	10.5	13.0
8	0.0	0.0	0.0	6.0	2.0	4.0	10.5	7.5	9.0	17.0	10.0	12.5
9	0.0	0.0	0.0	6.0	2.0	3.5	13.5	7.0	9.5	17.5	11.5	14.0
10	0.0	0.0	0.0	8.0	1.5	4.5	12.5	7.5	9.0	19.0	13.0	15.5
11	0.0	0.0	0.0	5.5	0.0	3.0	12.0	6.0	8.5	15.5	13.5	14.0
12	0.0	0.0	0.0	3.5	0.0	1.5	10.5	5.0	7.5	21.5	12.5	16.5
13	0.0	0.0	0.0	4.0	0.0	2.0	12.5	4.5	8.5	22.0	16.0	18.0
14	0.0	0.0	0.0	5.0	2.0	3.5	15.0	6.0	10.0	17.0	12.5	14.0
15	0.0	0.0	0.0	4.0	1.0	2.5	15.5	7.5	11.5	17.0	12.0	14.0
16	0.0	0.0	0.0	5.0	1.0	2.5	19.0	11.0	14.5	18.5	11.0	14.5
17	0.0	0.0	0.0	3.5	1.5	2.5	18.5	12.0	15.0	21.0	12.5	16.5
18	0.0	0.0	0.0	3.5	2.0	2.5	20.0	11.5	15.5	18.0	13.5	15.5
19	0.0	0.0	0.0	7.5	2.0	4.5	16.5	12.5	15.0	19.0	11.5	15.0
20	0.5	0.0	0.0	10.5	4.5	6.5	13.0	9.5	11.0	22.0	15.0	17.5
21	1.5	0.0	0.0	5.0	2.0	3.5	13.5	10.0	11.5	17.0	11.0	14.0
22	3.0	0.0	1.0	7.5	0.5	3.5	11.5	8.5	10.0	15.0	13.0	14.0
23	3.0	1.0	2.0	10.0	2.5	6.0	15.0	7.0	11.0	16.0	11.5	14.0
24	3.0	1.0	2.0	11.0	5.5	8.0	12.5	8.0	10.5	14.5	12.5	13.5
25	5.0	0.5	2.5	12.5	8.5	10.5	12.5	9.0	10.0	18.0	12.0	14.5
26	5.5	1.0	3.0	12.0	7.5	10.5	14.0	8.0	11.0	19.0	12.5	15.0
27	5.5	0.5	3.0	10.0	7.5	8.5	14.5	7.0	10.5	20.0	12.5	16.0
28	6.0	1.0	3.5	14.5	8.5	11.0	18.5	9.0	13.5	---	---	---
29	7.5	2.5	5.0	14.0	9.0	11.0	18.0	13.0	15.5	---	---	---
30	---	---	---	9.0	6.5	8.0	14.5	10.0	11.5	---	---	---
31	---	---	---	9.5	5.5	7.0	---	---	---	---	---	---
MONTH	7.5	0.0	0.8	14.5	0.0	5.2	20.0	4.0	10.5	22.0	8.0	14.3
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	27.0	20.0	23.0	28.5	20.5	24.0	25.0	19.0	21.5
2	---	---	---	26.5	19.5	22.5	27.5	22.0	24.5	27.5	19.5	23.0
3	---	---	---	24.5	20.0	21.5	28.5	22.0	24.5	25.5	20.5	22.5
4	---	---	---	22.0	20.0	21.0	26.0	20.5	23.0	26.0	20.5	22.5
5	---	---	---	22.5	18.5	20.0	25.5	18.0	21.5	25.5	20.5	23.0
6	---	---	---	24.5	18.0	21.0	26.0	18.0	22.0	24.0	20.0	22.0
7	---	---	---	21.0	18.0	19.5	23.0	19.0	21.0	25.5	17.5	21.0
8	---	---	---	21.0	16.0	18.5	26.5	19.5	22.5	24.0	17.5	20.5
9	---	---	---	21.5	16.5	19.0	26.5	20.0	23.0	24.5	17.0	20.5
10	---	---	---	26.0	17.5	21.5	21.5	18.0	20.0	25.0	17.0	20.5
11	---	---	---	26.0	19.0	22.0	18.5	16.0	17.0	26.5	18.5	22.0
12	---	---	---	24.5	21.0	22.5	19.0	15.0	17.0	27.0	19.0	22.5
13	---	---	---	27.0	19.5	22.5	21.0	16.0	18.0	26.5	19.0	22.5
14	---	---	---	25.5	19.5	22.5	24.5	15.0	19.5	27.5	20.0	23.5
15	---	---	---	26.0	19.5	22.5	25.0	16.0	20.0	27.0	21.5	23.0
16	---	---	---	27.0	20.0	22.5	23.5	16.5	20.0	24.0	18.5	21.0
17	---	---	---	26.5	19.5	22.5	23.0	18.5	20.5	23.5	16.5	19.5
18	---	---	---	27.0	19.5	23.0	25.0	18.0	21.5	24.0	17.5	20.0
19	---	---	---	26.5	20.5	23.5	25.0	17.5	21.0	24.5	17.5	20.0
20	---	---	---	28.5	22.0	24.5	24.5	17.5	20.0	24.5	17.0	20.0
21	---	---	---	25.0	23.0	24.0	24.5	16.5	20.0	24.0	16.5	19.5
22	---	---	---	27.5	22.0	24.0	24.0	16.5	20.5	24.0	16.0	19.5
23	---	---	---	26.0	20.0	22.5	23.5	19.5	21.0	24.5	17.5	20.5
24	17.5	14.5	16.0	23.5	19.0	21.0	22.0	19.5	20.5	23.0	18.0	20.0
25	22.5	13.0	18.0	25.5	18.0	21.0	23.0	20.0	21.5	20.0	16.0	18.0
26	22.0	15.5	19.0	25.5	18.0	21.0	25.0	19.0	22.0	22.0	14.0	17.5
27	23.5	16.0	19.5	27.5	18.5	22.5	25.5	21.5	23.5	22.0	14.0	17.5
28	25.0	16.5	20.5	27.0	20.0	23.0	23.0	17.5	20.0	20.5	14.5	17.0
29	25.5	17.5	21.5	26.5	20.5	23.0	23.5	16.5	19.5	20.0	12.5	16.0
30	27.0	19.0	22.5	24.0	21.5	22.5	23.0	16.5	19.5	19.5	12.0	15.5
31	---	---	---	28.0	20.0	23.5	25.0	17.5	21.0	---	---	---
MONTH	27.0	13.0	19.6	28.5	16.0	22.0	28.5	15.0	21.0	27.5	12.0	20.4
YEAR	28.5	0.0	10.6									

040869416 LINCOLN CREEK AT SHERMAN BOULEVARD AT MILWAUKEE, WI—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	1,020	817	975	919	583	893	1,360	1,280	1,340	1,520	1,240	1,370
2	1,010	938	984	583	110	242	1,390	1,300	1,370	1,620	1,360	1,480
3	1,010	319	743	472	114	267	1,360	1,300	1,340	1,710	1,570	1,640
4	708	562	644	389	120	266	1,300	1,140	1,190	2,010	1,500	1,590
5	782	708	746	852	335	666	1,250	1,100	1,200	5,010	1,720	3,540
6	969	782	887	1,060	852	961	1,150	1,040	1,100	7,020	5,010	6,410
7	1,090	965	1,030	1,180	1,060	1,120	1,200	986	1,050	6,520	4,290	5,500
8	1,100	999	1,070	1,220	1,170	1,190	1,230	1,150	1,190	4,290	2,910	3,470
9	999	890	953	1,300	1,200	1,260	1,980	171	1,110	7,300	2,760	4,260
10	1,140	900	986	1,380	1,300	1,350	1,230	168	484	8,100	4,890	6,760
11	970	610	939	1,420	1,150	1,280	1,050	946	985	7,500	6,130	6,710
12	786	451	650	1,170	1,130	1,150	1,180	1,050	1,130	7,910	5,780	7,420
13	800	661	741	1,200	1,120	1,170	1,280	1,180	1,220	5,780	4,610	5,240
14	808	223	369	1,190	1,140	1,170	5,260	1,280	2,730	5,390	3,960	4,400
15	670	429	557	1,190	1,160	1,170	5,330	3,360	4,420	5,740	4,170	5,120
16	821	670	760	1,170	1,140	1,160	3,360	2,100	2,660	5,120	4,460	4,700
17	884	796	842	1,140	1,080	1,130	2,640	2,150	2,310	15,300	4,480	8,530
18	972	884	927	1,080	175	291	2,960	2,520	2,800	15,200	10,100	14,100
19	1,000	616	968	893	506	729	2,520	2,090	2,250	10,100	7,850	8,830
20	1,050	912	1,010	1,010	880	928	2,100	1,870	1,970	8,640	5,080	6,330
21	1,120	804	972	1,080	1,010	1,040	1,880	1,020	1,730	5,080	2,210	3,550
22	978	848	941	1,110	714	1,070	1,610	1,020	1,470	3,230	2,740	2,930
23	964	840	918	763	510	604	1,620	1,550	1,590	3,050	2,550	2,800
24	912	123	702	880	662	769	1,580	1,500	1,540	5,430	2,400	3,300
25	634	211	471	1,010	880	946	1,660	1,560	1,600	7,260	3,850	5,920
26	755	634	700	1,060	1,010	1,040	1,580	1,400	1,490	6,960	4,860	5,540
27	870	755	803	1,150	1,050	1,110	1,630	1,400	1,460	8,230	4,800	6,240
28	933	731	837	1,190	1,100	1,160	6,520	1,150	1,940	9,200	6,450	7,320
29	826	726	744	1,250	1,160	1,200	1,820	1,600	1,720	6,600	4,280	5,540
30	838	663	737	1,350	1,250	1,290	1,620	1,550	1,580	4,320	3,170	3,790
31	904	830	858	---	---	---	1,570	1,440	1,520	3,170	2,680	2,860
MONTH	1,140	123	821	1,420	110	954	6,520	168	1,660	15,300	1,240	5,070
		FEBRUARY			MARCH			APRIL			MAY	
1	2,780	2,190	2,540	3,110	1,890	2,420	1,780	1,230	1,480	1,730	1,250	1,400
2	3,900	2,200	2,770	2,810	2,070	2,590	1,970	1,660	1,820	1,820	1,600	1,740
3	21,500	3,640	12,600	3,020	2,800	2,910	1,970	1,630	1,740	1,890	1,720	1,830
4	20,600	11,400	14,900	3,020	403	2,590	1,940	1,720	1,820	1,860	1,780	1,820
5	11,400	5,800	7,910	1,830	343	1,200	2,060	1,700	1,890	1,870	1,700	1,800
6	21,600	4,750	10,800	2,320	1,830	2,130	1,930	1,270	1,700	1,870	1,520	1,740
7	20,500	15,700	17,400	2,440	1,790	2,080	1,810	1,290	1,620	1,740	628	1,540
8	18,000	12,000	15,600	2,430	1,970	2,320	1,850	1,350	1,670	943	110	744
9	12,000	5,700	9,710	2,520	2,420	2,470	1,890	1,570	1,760	1,110	201	745
10	6,320	5,550	6,030	2,590	2,490	2,520	1,830	1,780	1,800	1,300	113	822
11	5,630	3,640	4,940	2,580	2,380	2,460	1,900	1,600	1,800	1,020	442	757
12	4,190	3,060	3,650	2,610	2,380	2,480	1,860	1,600	1,740	1,240	1,020	1,130
13	4,490	3,710	4,120	2,460	2,410	2,440	1,770	1,220	1,720	1,170	153	500
14	4,010	3,700	3,900	2,420	1,060	1,570	1,760	1,680	1,710	910	194	630
15	3,760	3,480	3,660	2,270	2,050	2,190	1,740	1,630	1,690	1,420	910	1,180
16	3,530	3,070	3,400	2,330	2,220	2,290	1,690	1,560	1,640	1,630	1,420	1,520
17	3,130	2,780	3,000	7,460	2,300	4,150	1,580	305	911	1,700	249	1,580
18	3,550	2,500	2,880	6,160	2,940	4,180	1,310	896	1,070	1,320	302	885
19	4,610	3,360	3,880	3,820	2,430	3,030	1,400	1,270	1,320	1,560	1,320	1,440
20	6,660	3,740	4,400	3,120	2,260	2,530	1,420	151	1,060	1,600	337	895
21	12,900	4,700	7,540	2,660	2,560	2,640	1,150	235	845	1,210	95	613
22	6,180	4,060	5,510	2,640	2,450	2,540	1,400	1,150	1,300	990	148	594
23	4,100	2,870	3,510	2,460	2,320	2,390	1,510	1,400	1,460	1,100	210	740
24	4,110	3,360	3,840	2,580	2,030	2,180	1,540	770	1,470	1,340	961	1,160
25	4,040	2,620	3,480	2,210	980	2,150	1,120	454	823	1,460	1,170	1,330
26	3,370	2,600	3,030	1,490	307	1,010	1,480	988	1,260	1,600	1,460	1,500
27	3,080	2,610	2,850	2,040	1,400	1,900	1,720	1,430	1,560	1,640	1,390	1,530
28	3,070	2,490	2,830	2,060	250	1,330	1,760	1,600	1,700	---	---	---
29	2,910	2,480	2,710	1,530	745	1,330	1,760	1,620	1,710	---	---	---
30	---	---	---	1,600	999	1,230	1,780	1,180	1,750	---	---	---
31	---	---	---	1,790	1,410	1,660	---	---	---	---	---	---
MONTH	21,600	2,190	5,980	7,460	250	2,290	2,060	151	1,530	1,890	95	1,190

040869416 LINCOLN CREEK AT SHERMAN BOULEVARD AT MILWAUKEE, WI—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	1,460	1,300	1,400	1,510	1,410	1,480	1,220	914	1,100
2	---	---	---	1,500	1,320	1,420	1,480	1,370	1,440	1,120	907	1,030
3	---	---	---	1,470	61	1,120	1,460	159	1,260	1,150	969	1,080
4	---	---	---	849	61	509	861	241	644	1,210	1,020	1,130
5	---	---	---	1,180	849	1,040	1,120	861	973	1,170	1,050	1,120
6	---	---	---	1,300	938	1,110	1,190	1,020	1,130	1,240	1,150	1,190
7	---	---	---	1,230	308	817	1,240	1,180	1,210	1,220	1,070	1,130
8	---	---	---	1,260	1,060	1,180	1,300	1,230	1,260	1,260	1,140	1,220
9	---	---	---	1,350	1,230	1,300	1,360	371	1,180	1,250	1,140	1,210
10	---	---	---	1,380	1,010	1,330	1,390	1,270	1,320	1,220	1,070	1,170
11	---	---	---	1,430	80	1,230	1,310	1,250	1,270	1,180	1,100	1,150
12	---	---	---	963	242	630	1,320	1,080	1,230	1,210	1,100	1,170
13	---	---	---	1,090	257	903	1,230	1,060	1,120	1,230	1,160	1,200
14	---	---	---	1,230	652	996	1,260	1,110	1,200	1,260	1,130	1,200
15	---	---	---	1,310	1,100	1,260	1,250	1,160	1,220	1,260	417	1,110
16	---	---	---	1,370	790	1,200	1,340	1,160	1,280	838	481	717
17	---	---	---	1,180	850	1,030	1,300	259	687	1,030	838	917
18	---	---	---	1,340	1,050	1,230	1,080	867	958	1,080	1,020	1,060
19	---	---	---	1,400	1,030	1,300	1,140	1,070	1,100	1,160	1,080	1,120
20	---	---	---	1,470	930	1,310	1,210	1,110	1,160	1,180	1,110	1,150
21	---	---	---	1,390	1,170	1,320	1,250	1,140	1,230	1,210	784	1,140
22	---	---	---	1,230	727	1,090	1,250	1,020	1,150	1,180	798	1,110
23	---	---	---	1,380	1,060	1,240	1,220	1,010	1,110	1,120	958	1,070
24	1,320	309	923	1,300	1,120	1,220	1,300	164	892	1,060	971	1,030
25	1,260	829	1,020	1,410	941	1,270	826	232	617	1,080	1,030	1,060
26	1,320	1,160	1,260	1,520	1,240	1,430	1,030	646	868	1,070	1,000	1,040
27	1,410	489	1,200	1,540	1,270	1,420	1,040	159	616	1,100	882	1,070
28	1,110	513	847	1,480	1,210	1,360	896	238	608	1,080	1,030	1,050
29	1,210	1,050	1,150	1,520	1,360	1,470	878	364	642	1,040	983	1,020
30	1,380	845	1,240	1,540	1,470	1,510	1,070	798	935	1,020	928	1,000
31	---	---	---	1,510	1,340	1,450	1,180	1,070	1,120	---	---	---
MONTH	1,410	309	1,090	1,540	61	1,200	1,510	159	1,060	1,260	417	1,090
YEAR	21,600	61	2,050									

04087000 MILWAUKEE RIVER AT MILWAUKEE, WI
(NATIONAL WATER-QUALITY ASSESSMENT PROGRAM STATION)

LOCATION.--Lat 43°06'00", long 87°54'32", in NE ¼ NE ¼, sec.5, T.7 N., R.22 E., Milwaukee County, Hydrologic Unit 04040003, on left bank near northeast limits of Milwaukee in Estabrook Park, 2,000 ft downstream from Port Washington Road bridge and 6.6 mi upstream from mouth.

DRAINAGE AREA.--696 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1914 to current year. Published as "near Milwaukee" prior to 1936.

REVISED RECORDS.--WSP 564: 1918(M). WSP 924: 1940. WSP 1207: 1936(M). WSP 1337: 1915-17(M), 1918, 1919-21(M), 1922, 1923(M), 1924, 1925-33(M). WDR WI-79-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 607.23 ft above NGVD of 1929 (levels by U. S. Army Corps of Engineers). Prior to Apr. 6, 1929, nonrecording gage near present site at different datum. Apr. 6, 1929, to Jan. 8, 1934, nonrecording gage at bridge 0.5 mi upstream at different datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor (see page 11). Occasional regulation caused by recreation dam approximately 1,200 ft upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	72	301	e200	e110	636	1,220	565	3,340	776	293	272
2	68	e148	281	e200	e110	892	1,080	523	e3,170	e729	326	261
3	84	e317	222	e190	e110	1,200	951	e464	2,920	754	358	252
4	81	e688	251	e180	e110	1,670	837	e430	2,700	e1,180	436	241
5	77	e1,040	280	e180	e110	2,990	735	e407	2,410	e1,200	374	228
6	78	930	258	e180	e110	3,140	661	398	2,010	e1,100	367	215
7	81	784	243	e170	e110	2,810	616	e356	e1,630	e1,020	336	210
8	77	708	235	e170	e110	2,490	571	e447	1,330	972	313	204
9	78	653	267	e170	e110	2,130	531	782	e1,280	e846	308	195
10	82	592	678	e160	e110	1,850	494	1,800	1,440	774	297	187
11	79	528	621	e160	e110	e1,600	467	1,810	e3,240	e729	296	182
12	85	462	531	e170	e110	1,330	443	e2,070	e4,810	e712	301	176
13	71	418	367	e180	e110	1,050	421	2,660	5,520	704	319	169
14	162	e388	430	e170	e110	944	405	3,690	6,160	625	340	163
15	104	343	519	e160	e110	865	390	3,280	5,900	569	338	164
16	90	314	475	e160	e110	759	369	2,610	5,070	e582	321	172
17	104	289	387	e150	e110	687	461	e2,030	4,250	573	349	148
18	98	507	334	e130	e120	654	457	e1,820	e3,610	518	e365	149
19	99	390	295	e120	e120	615	546	1,720	3,020	487	e392	142
20	e96	408	252	e130	e130	610	740	2,130	e2,510	473	e401	141
21	91	390	e240	e130	e130	665	1,350	e3,310	e2,010	459	e389	137
22	88	368	e230	e130	e140	673	1,460	5,460	1,610	447	e370	135
23	87	378	e220	e130	e170	649	1,300	6,130	1,350	416	e336	131
24	95	341	e210	e120	e200	631	1,090	7,050	e1,300	380	e338	124
25	e96	371	e210	e120	e210	625	1,070	6,280	e1,240	e380	e339	121
26	127	379	e210	e110	e230	919	1,020	5,190	1,150	328	301	119
27	84	377	e210	e110	e260	882	914	4,390	1,070	315	e337	119
28	75	365	e220	e110	e300	1,110	785	e3,680	1,020	298	365	121
29	67	352	e230	e110	475	1,520	697	e3,020	948	279	364	117
30	65	330	e220	e110	---	1,510	623	2,790	862	269	309	117
31	63	---	e210	e110	---	1,350	---	3,200	---	259	292	---
TOTAL	2,702	13,630	9,637	4,620	4,355	39,456	22,704	80,492	78,880	19,153	10,570	5,112
MEAN	87.2	454	311	149	150	1,273	757	2,597	2,629	618	341	170
MAX	162	1,040	678	200	475	3,140	1,460	7,050	6,160	1,200	436	272
MIN	63	72	210	110	110	610	369	356	862	259	292	117
CFSM	0.13	0.65	0.45	0.21	0.22	1.83	1.09	3.73	3.78	0.89	0.49	0.24
IN.	0.14	0.73	0.52	0.25	0.23	2.11	1.21	4.30	4.22	1.02	0.56	0.27

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2004, BY WATER YEAR (WY)

MEAN	276	349	298	252	391	1,032	967	541	436	233	211	266
MAX	1,316	1,956	981	864	2,200	3,545	3,024	2,597	2,629	1,200	2,936	2,304
(WY)	(1987)	(1986)	(1929)	(1916)	(1938)	(1929)	(1993)	(2004)	(2004)	(1952)	(1924)	(1938)
MIN	52.8	62.4	40.7	45.8	47.4	181	237	86.4	56.3	25.0	19.4	27.4
(WY)	(1947)	(1950)	(1964)	(1959)	(1959)	(1940)	(1958)	(1958)	(1934)	(1936)	(1934)	(1932)

04087000 MILWAUKEE RIVER AT MILWAUKEE, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1914 - 2004	
ANNUAL TOTAL	97,811		291,311			
ANNUAL MEAN	268		796		437	
HIGHEST ANNUAL MEAN					874	1986
LOWEST ANNUAL MEAN					112	1958
HIGHEST DAILY MEAN	1,870	May 12	7,050	May 24	14,800	Mar 20, 1918
LOWEST DAILY MEAN	49	Sep 7	63	Oct 31	(a)0.00	Sep 8, 1943
ANNUAL SEVEN-DAY MINIMUM	54	Sep 1	77	Oct 1	8.3	Aug 3, 1936
MAXIMUM PEAK FLOW			7,220	May 24	16,500	Jun 21, 1997
MAXIMUM PEAK STAGE			6.93	May 24	10.00	Jun 21, 1997
INSTANTANEOUS LOW FLOW			63	Oct 31	(a)0.00	Sep 8, 1943
ANNUAL RUNOFF (CFSM)	0.385		1.14		0.628	
ANNUAL RUNOFF (INCHES)	5.23		15.57		8.53	
10 PERCENT EXCEEDS	508		2,090		986	
50 PERCENT EXCEEDS	170		365		230	
90 PERCENT EXCEEDS	72		110		73	

(a) Result of regulation
(e) Estimated due to ice effect or missing record

04087000 MILWAUKEE RIVER AT MILWAUKEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)
OCT													
07...	1250	88	10	750	12.2	116	8.4	908	12.5	--	--	--	--
15...	1442	101	30	--	7.9	--	8.4	853	14.0	--	--	--	--
NOV													
04...	1220	688	10	743	11.4	100	7.8	630	8.6	--	--	--	--
DEC													
01...	1330	301	10	748	16.9	122	8.2	802	1.3	--	--	--	--
JAN													
06...	1105	180	40	758	18.8	129	8.1	1,160	-.2	--	--	--	--
FEB													
03...	1110	110	40	750	14.4	100	7.8	1,440	-.3	--	--	--	--
17...	1350	110	70	763	14.0	95	7.6	1,050	-.2	87.9	45.2	4.06	73.3
MAR													
06...	1050	3,140	10	739	15.1	109	7.5	522	.9	47.5	22.8	4.38	31.0
APR													
07...	1145	612	10	750	12.4	112	8.1	747	9.8	--	--	--	--
MAY													
03...	1235	473	10	757	10.3	95	8.2	799	11.4	--	--	--	--
11...	1515	1,720	40	741	8.6	88	8.1	635	15.2	52.2	26.3	2.73	31.7
JUN													
01...	1220	3,110	10	741	9.3	95	7.6	501	15.2	--	--	--	--
JUL													
08...	1105	975	10	751	7.7	84	7.9	668	18.9	--	--	--	--
27...	1100	316	40	745	8.5	101	8.1	784	22.6	78.1	40.0	2.57	35.2
AUG													
05...	1015	371	10	--	--	--	--	--	--	72.6	40.1	2.66	37.1
12...	1105	300	10	754	7.6	83	7.9	801	18.9	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)
OCT													
07...	--	231	254	13	133	--	--	45.0	--	--	<.04	.21	<.008
15...	--	--	--	--	--	--	--	--	--	.74	<.013	.410	--
NOV													
04...	--	160	193	<1	82.5	--	--	31.1	--	--	.17	.10	.022
DEC													
01...	--	238	283	4	71.1	--	--	68.4	--	--	E.02	1.65	E.006
JAN													
06...	--	268	319	4	178	--	--	64.4	--	--	.04	2.15	.009
FEB													
03...	--	312	373	3	257	--	--	52.1	--	--	.20	3.55	.022
17...	--	309	--	--	124	.2	12.1	52.5	603	--	.15	3.28	.014
MAR													
06...	149	142	171	1	60.5	<.2	7.87	33.4	325	--	.13	2.54	.064
APR													
07...	--	244	289	4	71.0	--	--	42.2	--	--	<.04	1.43	E.005
MAY													
03...	--	263	310	5	75.5	--	--	41.1	--	--	<.04	.78	E.006
11...	202	--	--	--	59.2	<.2	4.84	28.1	372	--	.04	1.17	.020
JUN													
01...	--	221	266	2	32.7	--	--	15.7	--	--	E.03	.56	.047
JUL													
08...	--	266	314	5	45.5	--	--	17.3	--	--	E.02	1.15	.008
27...	312	298	--	--	69.5	<.2	13.7	23.2	472	--	<.04	1.17	E.007
AUG													
05...	290	281	--	--	71.9	<.2	13.1	26.0	460	--	E.02	1.43	.010
12...	--	--	--	--	71.4	--	--	25.2	--	--	<.04	1.33	E.007

04087000 MILWAUKEE RIVER AT MILWAUKEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, wat unf by anal ysis, mg/L (62855)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	COD, low level, water, unfltrd mg/L (00335)	Chlorophyll a wat unf trichr. method, uncorr, ug/L (32210)	Iron, water, fltrd, ug/L (01046)
OCT													
07...	.25	.006	--	.074	.89	1.6	<.1	1.6	5.8	--	--	--	--
15...	--	--	.045	.109	--	--	--	--	--	--	--	--	--
NOV													
04...	.20	.025	--	.096	1.42	1.6	<.1	1.6	6.0	--	--	--	--
DEC													
01...	.09	.030	--	.067	2.39	1.1	<.1	1.1	9.8	--	--	--	--
JAN													
06...	.05	.027	--	.057	2.66	.6	<.1	.6	7.9	--	--	--	--
FEB													
03...	.05	.072	--	--	--	.4	<.1	.4	4.8	--	--	--	--
17...	.05	.069	--	.094	3.66	.4	<.1	.4	4.6	<2.0	19	1.48	24
MAR													
06...	.35	.062	--	.33	3.82	3.7	<.1	3.7	8.1	10.6	66	12.4	59
APR													
07...	.17	.024	--	.086	2.22	2.0	<.1	2.0	10.6	--	--	--	--
MAY													
03...	.17	.009	--	.046	1.64	1.3	<.1	1.3	9.9	--	--	--	--
11...	.16	.039	--	.158	2.16	1.2	<.1	1.2	8.7	2.4	34	29.8	31
JUN													
01...	.27	.039	--	.140	1.72	2.7	<.1	2.7	11.5	--	--	--	--
JUL													
08...	.11	.093	--	.161	2.15	1.3	<.1	1.2	14.1	--	--	--	--
27...	.16	.113	--	.044	1.89	1.6	<.1	1.6	10.1	2.0	47	7.98	17
AUG													
05...	.13	.103	--	.162	2.03	1.2	<.1	1.2	--	<2.0	17	5.87	12
12...	.11	.102	--	.156	1.98	1.3	<.1	1.3	8.7	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Manganese, water, fltrd, ug/L (01056)	Mercury water fltrd, ng/L (50287)	1,4-Dichlorobenzene water, fltrd, ug/L (34572)	1-Methylnaphthalene, water, fltrd, ug/L (62054)	1-Naphthol, water, fltrd 0.7u GF ug/L (49295)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	2,6-Dimethylnaphthalene, water, fltrd, ug/L (62055)	2Chloro-2,6'-'diethyl acetanilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl-6-methylaniline water, fltrd, ug/L (61620)	2-Methylnaphthalene, water, fltrd, ug/L (62056)	3,4-Dichloroaniline water fltrd, ug/L (61625)	3-beta-Coprostanol, water, fltrd, ug/L (62057)
OCT													
07...	--	--	--	--	--	<.006	--	--	E.015	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
01...	--	--	--	--	--	<.006	--	--	E.006	--	--	--	--
JAN													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
03...	--	--	--	--	--	<.006	--	--	E.017	--	--	--	--
17...	6.4	--	<.5	<.5	--	--	<.5	--	--	--	<.5	--	M
MAR													
06...	7.5	--	<.5	M	--	--	M	--	--	--	M	--	<2
APR													
07...	--	--	--	--	--	<.006	--	--	E.015	--	--	--	--
MAY													
03...	--	--	--	--	--	<.006	--	--	E.021	--	--	--	--
11...	4.0	--	E.1	M	<.09	<.006	<.5	<.005	E.046	<.004	M	<.004	<2
JUN													
01...	--	--	--	--	--	<.006	--	--	E.042	--	--	--	--
JUL													
08...	--	--	--	--	--	<.006	--	--	E.046	--	--	--	--
27...	6.9	.70	<.5	<.5	--	--	<.5	--	--	--	<.5	--	<2
AUG													
05...	5.7	.87	<.5	<.5	<.09	<.006	<.5	<.005	E.021	<.004	<.5	.007	<2
12...	--	--	--	--	--	<.006	--	--	E.019	--	--	--	--

04087000 MILWAUKEE RIVER AT MILWAUKEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	3-Methyl-1H-indole, water, fltrd, ug/L (62058)	3-tert-Butyl-4-hydroxyanisole wat flt ug/L (62059)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	4-Cumylphenol, water, fltrd, ug/L (62060)	4-Octylphenol, water, fltrd, ug/L (62061)	4-Nonylphenol, water, fltrd, ug/L (62085)	4-tert-Octylphenol, water, fltrd, ug/L (62062)	5-Methyl-1H-benzotriazole, wat flt ug/L (62063)	9,10-Anthraquinone water, fltrd, ug/L (62066)	Acetochlor, water, fltrd, ug/L (49260)	Acetophenone water, fltrd, ug/L (62064)	AHTN, water, fltrd, ug/L (62065)	Alachlor, water, fltrd, ug/L (46342)
OCT													
07...	--	--	--	--	--	--	--	--	--	<.006	--	--	<.004
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
01...	--	--	--	--	--	--	--	--	--	.009	--	--	<.005
JAN													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
03...	--	--	--	--	--	--	--	--	--	<.006	--	--	<.005
17...	<1	<5	--	<1	<1	<5	<1	<2	<.5	--	<.5	E.1	--
MAR													
06...	M	<5	--	<1	<1	M	<1	<2	E.1	--	E.1	E.1	--
APR													
07...	--	--	--	--	--	--	--	--	--	<.006	--	--	<.005
MAY													
03...	--	--	--	--	--	--	--	--	--	.012	--	--	<.005
11...	<1	<5	<.006	<1	<1	<5	<1	<2	E.1	.049	<.5	E.1	<.005
JUN													
01...	--	--	--	--	--	--	--	--	--	.046	--	--	<.005
JUL													
08...	--	--	--	--	--	--	--	--	--	.050	--	--	<.005
27...	<1	<5	--	<1	<1	<5	<1	<2	<.5	--	<.5	<.5	--
AUG													
05...	<1	<5	E.004	<1	<1	<5	<1	<2	<.5	<.006	<.5	<.5	<.005
12...	--	--	--	--	--	--	--	--	--	<.006	--	--	<.005

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	alpha-HCH, water, fltrd, ug/L (34253)	alpha-HCH-d6, surrog, Sch2003 wat flt percent recovry (99995)	alpha-HCH-d6, surrog, wat flt 0.7u GF percent recovry (91065)	Anthracene, water, fltrd, ug/L (34221)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl oxon, water, fltrd, ug/L (61635)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Benzo[a]pyrene, water, fltrd, ug/L (34248)	Benzophenone water, fltrd, ug/L (62067)	beta-Sitosterol, water, fltrd, ug/L (62068)	beta-Stigmastanol, water, fltrd, ug/L (62086)	Bisphenol A, water, fltrd, ug/L (62069)
OCT													
07...	<.005	--	106	--	.017	--	<.050	<.010	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
01...	<.005	--	83.4	--	.014	--	<.050	<.010	--	--	--	--	--
JAN													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
03...	<.005	--	107	--	.017	--	<.050	<.010	--	--	--	--	--
17...	--	--	--	M	--	--	--	--	<.5	<.5	<2	<2	<1
MAR													
06...	--	--	--	<.5	--	--	--	--	<.5	E.1	<2	<2	<1
APR													
07...	<.005	--	98.1	--	.018	--	<.050	<.010	--	--	--	--	--
MAY													
03...	<.005	--	95.3	--	.053	--	<.050	<.010	--	--	--	--	--
11...	--	87.2	--	<.5	.137	<.02	<.050	E.004	<.5	<.5	<2	<2	M
JUN													
01...	<.005	--	93.2	--	.312	--	<.050	<.010	--	--	--	--	--
JUL													
08...	<.005	--	92.5	--	.516	--	<.050	<.010	--	--	--	--	--
27...	--	--	--	<.5	--	--	--	--	<.5	<.5	<20	<20	<1
AUG													
05...	--	75.7	--	<.5	.037	<.07	<.050	<.010	<.5	<.5	<2	<2	<1
12...	<.005	--	90.2	--	.046	--	<.050	<.010	--	--	--	--	--

04087000 MILWAUKEE RIVER AT MILWAUKEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Bisphenol A-d3 sur Sch 2033 & 8033, wat flt pct rcv (99583)	Bromacil, water, fltrd, ug/L (04029)	Butylate, water, fltrd, ug/L (04028)	Caffeine, water, fltrd, ug/L (50305)	Caffeine-13C sur Sch 2033 & 8033, wat flt pct rcv (99584)	Camphor water, fltrd, ug/L (62070)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbazole, water, fltrd, ug/L (62071)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chlorpyrifos oxon, water, fltrd, ug/L (61636)	Chlorpyrifos water, fltrd, ug/L (38933)	Cholesterol, water, fltrd, ug/L (62072)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)
OCT													
07...	--	--	<.002	--	--	--	<.041	--	<.020	--	<.005	--	<.006
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
01...	--	--	<.004	--	--	--	<.041	--	<.020	--	<.005	--	<.006
JAN													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
03...	--	--	<.004	--	--	--	<.041	--	<.020	--	<.005	--	<.006
17...	59.1	<.5	--	E.1	105	<.5	<1	<.5	--	--	<.5	E1	--
MAR													
06...	15.0	<.5	--	M	90.9	M	<1	M	--	--	<.5	M	--
APR													
07...	--	--	<.004	--	--	--	<.041	--	<.020	--	<.005	--	<.006
MAY													
03...	--	--	<.004	--	--	--	<.041	--	<.020	--	<.005	--	<.006
11...	126	<.5	--	E.1	117	M	E.010	M	--	<.06	<.005	<2	<.006
JUN													
01...	--	--	<.004	--	--	--	E.027	--	<.020	--	<.005	--	<.006
JUL													
08...	--	--	<.004	--	--	--	<.041	--	<.020	--	<.005	--	<.006
27...	130	<.5	--	<.5	104	<.5	<1	<.5	--	--	<.5	<20	--
AUG													
05...	103	<.5	--	<.5	94.6	<.5	<.041	<.5	--	<.06	<.005	<2	<.006
12...	--	--	<.004	--	--	--	<.041	--	<.020	--	<.005	--	<.006

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Cotinine, water, fltrd, ug/L (62005)	Cyanazine, water, fltrd, ug/L (04041)	Cyfluthrin, water, fltrd, ug/L (61585)	Cypermethrin water, fltrd, ug/L (61586)	DCPA, water fltrd 0.7u GF ug/L (82682)	DecaFbiphenl sur Sch 2033 & 8033, wat flt pct rcv (99585)	DEET, water, fltrd, ug/L (62082)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon oxon, water, fltrd, ug/L (61638)	Diazinon, water, fltrd, ug/L (39572)	Diazinon-d10 surrog, Sch2003 wat flt percent recovry (99994)	Diazinon-d10 surrog. wat flt 0.7u GF percent recovry (91063)	Dicrotophos, water fltrd, ug/L (38454)
OCT													
07...	--	<.018	--	--	<.003	--	--	<.004	--	.005	--	113	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
01...	--	<.018	--	--	<.003	--	--	<.012	--	<.005	--	115	--
JAN													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
03...	--	<.018	--	--	<.003	--	--	<.012	--	<.005	--	115	--
17...	<1.00	--	--	--	--	54.5	E.1	--	--	<.5	--	--	--
MAR													
06...	<1.00	--	--	--	--	77.3	M	--	--	<.5	--	--	--
APR													
07...	--	<.018	--	--	<.003	--	--	<.012	--	<.005	--	118	--
MAY													
03...	--	<.018	--	--	<.003	--	--	<.012	--	<.005	--	100	--
11...	<1.00	--	<.008	<.009	<.003	82.6	M	<.012	<.01	E.005	97.8	--	<.08
JUN													
01...	--	<.018	--	--	<.003	--	--	<.012	--	.006	--	112	--
JUL													
08...	--	<.018	--	--	<.003	--	--	<.012	--	<.005	--	106	--
27...	<1.00	--	--	--	--	51.6	E.1	--	--	<.5	--	--	--
AUG													
05...	<1.00	--	<.008	<.009	<.003	68.1	<.5	<.012	<.01	<.005	85.3	--	<.08
12...	--	<.018	--	--	<.003	--	--	<.012	--	<.005	--	111	--

04087000 MILWAUKEE RIVER AT MILWAUKEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Dieldrin, water, fltrd, ug/L (39381)	Diethoxynonylphenol, water, fltrd, ug/L (62083)	Diethoxyoctylphenol, water, fltrd ug/L (61705)	Dimethoate, water, fltrd 0.7u GF ug/L (82662)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	D-Limonene, water, fltrd, ug/L (62073)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfluralin, water, fltrd 0.7u GF ug/L (82663)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Ethoxyoctylphenol, water, fltrd ug/L (61706)	Fenamiphos sulfone water, fltrd, ug/L (61645)
OCT													
07...	<.005	--	--	--	<.02	--	<.002	<.009	--	--	<.005	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
01...	<.009	--	--	--	<.02	--	<.004	<.009	--	--	<.005	--	--
JAN													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
03...	<.009	--	--	--	<.02	--	<.004	<.009	--	--	<.005	--	--
17...	--	E2	<1	--	--	<.5	--	--	--	--	--	<1	--
MAR													
06...	--	<5	<1	--	--	<.5	--	--	--	--	--	<1	--
APR													
07...	<.009	--	--	--	<.02	--	<.004	<.009	--	--	<.005	--	--
MAY													
03...	<.009	--	--	--	<.02	--	<.004	<.009	--	--	<.005	--	--
11...	<.009	<5	<1	<.006	--	<.5	--	--	<.03	<.004	--	<1	<.008
JUN													
01...	<.009	--	--	--	<.02	--	<.004	<.009	--	--	<.005	--	--
JUL													
08...	<.009	--	--	--	<.02	--	<.004	<.009	--	--	<.005	--	--
27...	--	<5	<1	--	--	<.5	--	--	--	--	--	<1	--
AUG													
05...	<.009	<5	<1	<.006	--	<.5	--	--	<.0020	<.004	--	<1	<.049
12...	<.009	--	--	--	<.02	--	<.004	<.009	--	--	<.005	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Fenamiphos sulfoxide, water, fltrd, ug/L (61646)	Fenamiphos, water, fltrd, ug/L (61591)	Desulfinylfipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Fluoranthene water, fltrd, ug/L (34377)	Fluoranthene-d10, sur Sch 20/8033 wat flt pct rcv (99586)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	HHCB, water, fltrd, ug/L (62075)	Hexazinone, water, fltrd, ug/L (04025)	Indole, water, fltrd, ug/L (62076)
OCT													
07...	--	--	<.009	<.005	<.005	<.007	--	--	--	<.003	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
01...	--	--	<.029	<.013	<.024	<.016	--	--	--	<.003	--	--	--
JAN													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
03...	--	--	<.029	<.013	<.024	<.016	--	--	--	<.003	--	--	--
17...	--	--	--	--	--	--	M	105	--	--	E.1	--	<.5
MAR													
06...	--	--	--	--	--	--	M	105	--	--	E.1	--	<.5
APR													
07...	--	--	<.029	<.013	<.024	<.016	--	--	--	<.003	--	--	--
MAY													
03...	--	--	<.029	<.013	<.024	<.016	--	--	--	<.003	--	--	--
11...	<.03	<.03	<.029	<.013	<.024	<.016	M	113	<.002	<.003	<.5	<.013	<.5
JUN													
01...	--	--	<.029	<.013	<.024	<.016	--	--	--	<.003	--	--	--
JUL													
08...	--	--	<.029	<.013	<.024	<.016	--	--	--	<.003	--	--	--
27...	--	--	--	--	--	--	M	127	--	--	<.5	--	<.5
AUG													
05...	<.04	<.03	<.029	<.013	<.024	<.016	<.5	99.6	<.003	<.003	<.5	<.013	<.5
12...	--	--	<.029	<.013	<.024	<.016	--	--	--	<.003	--	--	--

04087000 MILWAUKEE RIVER AT MILWAUKEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Iprodione, water, fltrd, ug/L (61593)	Isoborneol, water, fltrd, ug/L (62077)	Isofenphos, water, fltrd, ug/L (61594)	Isophorone water, fltrd, ug/L (34409)	Isopropylbenzene water, fltrd, ug/L (62078)	Isoquinoline, water, fltrd, ug/L (62079)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Malaoxon, water, fltrd, ug/L (61652)	Malathion, water, fltrd, ug/L (39532)	Menthol water, fltrd, ug/L (62080)	Metalaxyl, water, fltrd, ug/L (50359)	Metalaxyl, water, fltrd, ug/L (61596)
OCT													
07...	--	--	--	--	--	--	<.004	<.035	--	<.027	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
01...	--	--	--	--	--	--	<.004	<.035	--	<.027	--	--	--
JAN													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
03...	--	--	--	--	--	--	<.004	<.035	--	<.027	--	--	--
17...	--	<.5	--	<.5	<.5	<.5	--	--	--	--	<.5	<.5	--
MAR													
06...	--	<.5	--	M	<.5	<.5	--	--	--	--	M	<.5	--
APR													
07...	--	--	--	--	--	--	<.004	<.035	--	<.027	--	--	--
MAY													
03...	--	--	--	--	--	--	<.004	<.035	--	<.027	--	--	--
11...	<1	<.5	<.003	<.5	<.5	<.5	--	--	<.008	<.027	<.5	<.5	<.005
JUN													
01...	--	--	--	--	--	--	<.004	<.035	--	<.027	--	--	--
JUL													
08...	--	--	--	--	--	--	<.004	<.035	--	<.027	--	--	--
27...	--	<.5	--	M	<.5	<.5	--	--	--	--	<.5	<.5	--
AUG													
05...	<.387	<.5	<.003	<.5	<.5	<.5	--	--	<.030	<.027	<.5	<.5	<.005
12...	--	--	--	--	--	--	<.004	<.035	--	<.027	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Methiathion water, fltrd, ug/L (61598)	Methyl paraoxon, water, fltrd, ug/L (61664)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Methyl salicylate, water, fltrd, ug/L (62081)	Methylmercury water fltrd, ng/L (50285)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Molinate, water, fltrd 0.7u GF ug/L (82671)	Myclobutanil water, fltrd, ug/L (61599)	Naphthalene, water, fltrd, ug/L (34443)	Napropamide, water, fltrd 0.7u GF ug/L (82684)	p,p'-DDE, water, fltrd, ug/L (34653)	Parathion, water, fltrd, ug/L (39542)
OCT													
07...	--	--	<.006	--	--	E.006	<.006	<.002	--	--	<.007	<.003	<.010
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
01...	--	--	<.015	--	--	E.009	<.006	<.003	--	--	<.007	<.003	<.010
JAN													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
03...	--	--	<.015	--	--	<.013	<.006	<.003	--	--	<.007	<.003	<.010
17...	--	--	--	<.5	--	<.5	--	--	--	E.1	--	--	--
MAR													
06...	--	--	--	<.5	--	E.1	--	--	--	M	--	--	--
APR													
07...	--	--	<.015	--	--	E.009	<.006	<.003	--	--	<.007	<.003	<.010
MAY													
03...	--	--	<.015	--	--	.016	<.006	<.003	--	--	<.007	<.003	<.010
11...	<.006	<.03	<.015	<.5	--	.037	<.006	--	<.008	M	--	--	--
JUN													
01...	--	--	<.015	--	--	.206	<.006	<.003	--	--	<.007	<.003	<.010
JUL													
08...	--	--	<.015	--	--	.096	.006	<.003	--	--	<.007	<.003	<.010
27...	--	--	--	<.5	.08	M	--	--	--	<.5	--	--	--
AUG													
05...	<.006	<.03	<.015	<.5	.07	.014	<.006	--	<.008	<.5	--	--	--
12...	--	--	<.015	--	--	E.011	<.006	<.003	--	--	<.007	<.003	<.010

04087000 MILWAUKEE RIVER AT MILWAUKEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	p-Cresol, water, fltrd, ug/L (62084)	Pebulate, water, fltrd 0.7u GF ug/L (82669)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Pentachlorophenol, water, fltrd, ug/L (34459)	Phenanthrene, water, fltrd, ug/L (34462)	Phenol, water, fltrd, ug/L (34466)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)
OCT													
07...	--	<.004	<.022	--	--	--	--	<.011	--	--	E.01	--	<.004
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
01...	--	<.004	<.022	--	--	--	--	<.011	--	--	.01	--	<.004
JAN													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
03...	--	<.004	<.022	--	--	--	--	<.011	--	--	.01	--	<.004
17...	<1	--	--	<2	M	.7	--	--	--	--	<.5	--	--
MAR													
06...	M	--	--	M	M	E.3	--	--	--	--	<.5	--	--
APR													
07...	--	<.004	<.022	--	--	--	--	<.011	--	--	<.01	--	<.004
MAY													
03...	--	<.004	<.022	--	--	--	--	<.011	--	--	<.01	--	<.004
11...	<1	--	<.022	<2	M	.5	<.10	<.011	<.06	<.008	.01	<.005	<.004
JUN													
01...	--	<.004	<.022	--	--	--	--	<.011	--	--	.01	--	<.004
JUL													
08...	--	<.004	<.022	--	--	--	--	<.011	--	--	.01	--	<.004
27...	<1	--	--	<2	<.5	1.0	--	--	--	--	<.5	--	--
AUG													
05...	<1	--	<.022	<2	<.5	<.5	<.10	<.011	--	--	.02	<.005	<.004
12...	--	<.004	<.022	--	--	--	--	<.011	--	--	.01	--	<.004

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Pyrene, water, fltrd, ug/L (34470)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Terbufos oxon sulfone water, fltrd, ug/L (61674)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Terbuthylazine, water, fltrd, ug/L (04022)	Tetrachloroethene, water, fltrd, ug/L (34476)	Thiobencarb water fltrd 0.7u GF ug/L (82681)	Triallate, water, fltrd 0.7u GF ug/L (82678)
OCT													
07...	<.010	<.011	<.02	--	.009	<.02	<.034	--	<.02	--	--	<.005	<.002
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
01...	<.025	<.011	<.02	--	.010	<.02	<.034	--	<.02	--	--	<.010	<.002
JAN													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
03...	<.025	<.011	<.02	--	.007	<.02	<.034	--	<.02	--	--	<.010	<.002
17...	--	--	--	M	--	--	--	--	--	--	<.5	--	--
MAR													
06...	--	--	--	M	--	--	--	--	--	--	M	--	--
APR													
07...	<.025	<.011	<.02	--	.030	<.02	<.034	--	<.02	--	--	<.010	<.002
MAY													
03...	<.025	<.011	<.02	--	.011	<.02	<.034	--	<.02	--	--	<.010	<.002
11...	--	--	--	M	.044	<.02	--	<.07	<.02	<.01	<.5	--	--
JUN													
01...	<.025	<.011	<.02	--	.051	<.02	<.034	--	<.02	--	--	<.010	<.002
JUL													
08...	<.025	<.011	<.02	--	.047	<.02	<.034	--	<.02	--	--	<.010	<.002
27...	--	--	--	M	--	--	--	--	--	--	<.5	--	--
AUG													
05...	--	--	--	<.5	.013	<.02	--	<.07	<.02	<.01	<.5	--	--
12...	<.025	<.011	<.02	--	.013	<.02	<.034	--	<.02	--	--	<.010	<.002

04087000 MILWAUKEE RIVER AT MILWAUKEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Tri-bromo-methane water, fltrd, ug/L (34288)	Tri-butyl phos-phate, water, fltrd, ug/L (62089)	Triclo-san, water, fltrd, ug/L (62090)	Tri-ethyl citrate water, fltrd, ug/L (62091)	Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661)	Tri-phenyl phos-phate, water, fltrd, ug/L (62092)	Tris(2-butoxy-ethyl) phos-phate, wat flt ug/L (62093)	Tris(2-chloro-ethyl) phos-phate, wat flt ug/L (62087)	Tris(di chloro-i-Pr) phos-phate, wat flt ug/L (62088)	Di-chlor-vos, water fltrd, ug/L (38775)	Methyl-mercury suspnd sedimnt total, ng/L (62977)	Sus-pended sedi-ment concen-tration mg/L (80154)
OCT												
07...	--	--	--	--	<.009	--	--	--	--	--	--	72
15...	--	--	--	--	--	--	--	--	--	--	--	14
NOV												
04...	--	--	--	--	--	--	--	--	--	--	--	47
DEC												
01...	--	--	--	--	<.009	--	--	--	--	--	--	59
JAN												
06...	--	--	--	--	--	--	--	--	--	--	--	96
FEB												
03...	--	--	--	--	<.009	--	--	--	--	--	--	115
17...	<.5	<.5	<1	E.1	--	M	E.1	E.1	E.1	<1.00	--	2
MAR												
06...	<.5	E.1	<1	<.5	--	M	E.2	E.1	E.1	<1.00	--	124
APR												
07...	--	--	--	--	<.009	--	--	--	--	--	--	89
MAY												
03...	--	--	--	--	<.009	--	--	--	--	--	--	72
11...	<.5	<.5	<1	<.5	E.005	E.1	<.5	<.5	<.5	<.01	--	39
JUN												
01...	--	--	--	--	<.009	--	--	--	--	--	--	86
JUL												
08...	--	--	--	--	<.009	--	--	--	--	--	--	81
27...	<.5	<.5	<1	<.5	--	<.5	<.5	M	<.5	--	--	17
AUG												
05...	<.5	<.5	<1	<.5	<.009	<.5	<.5	<.5	<.5	<.01	.035	13
12...	--	--	--	--	<.009	--	--	--	--	--	--	83

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instan-taneous dis-charge, cfs (00061)	Sam-pling method, code (82398)	Chlor-ide, water, fltrd, mg/L (00940)	Phos-phorus, water, unfltrd mg/L (00665)	Sus-pended sedi-ment concen-tration mg/L (80154)
JUN						
01...	1315	3,350	50	--	.190	49
02...	0115	3,200	50	--	.157	34
02...	1500	3,030	50	--	.148	29
03...	0900	2,920	50	--	.144	28
04...	0300	2,630	50	32.2	.140	30
11...	2000	3,260	50	39.2	.147	21
12...	1145	4,550	50	27.8	.276	81
13...	1115	5,540	50	21.8	.219	60
14...	2015	6,230	50	20.0	.175	45
15...	2015	5,680	50	20.0	.177	35
16...	1231	5,050	50	20.0	.154	29
17...	0815	4,140	50	23.6	.194	29
18...	2015	3,470	50	27.8	.204	30
19...	2015	2,830	50	30.8	.205	26
23...	1315	1,330	50	41.3	.171	16
JUL						
06...	1125	1,220	10	47.5	.159	23
06...	1215	1,220	50	45.7	.204	32
13...	1215	699	50	55.0	.137	15
AUG						
17...	1235	338	50	75.3	.145	25
24...	2145	332	50	51.3	.217	132
24...	2315	332	50	53.7	.265	181
24...	2330	332	50	72.5	.200	32
SEP						
16...	1005	173	50	88.7	.104	15

04087030 MENOMONEE RIVER AT MENOMONEE FALLS, WI

LOCATION.--Lat 43°10'22", long 88°06'14", in SE $^1/_4$ NE $^1/_4$ sec.10, T.8 N., R.20 E., Waukesha County, Hydrologic Unit 04040003, on right bank, 150 ft upstream from Pilgrim Road (County Trunk Highway YY) bridge in Menomonee Falls, at mile 21.1.

DRAINAGE AREA.--34.7 mi^2.

PERIOD OF RECORD.--November 1974 to September 1977, July 1979 to current year.

REVISED RECORDS.--WDR WI-77-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 755.51 ft above NGVD of 1929 (Wisconsin Department of Transportation benchmark). Prior to Aug. 20, 1996, water-stage recorder at present site at datum 2.01 ft lower.

REMARKS.--Records fair except those for estimated daily discharges, which are poor (see page 11). Occasional regulation caused by dam in Menomonee Falls, about 1.0 mi upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	2.7	12	15	e9.0	e59	82	31	214	19	7.0	4.9
2	1.6	31	11	16	e10	e80	62	28	184	16	6.9	4.4
3	2.3	54	11	17	e9.0	86	50	24	130	27	9.3	4.2
4	2.2	118	11	16	e8.0	85	42	22	79	84	11	4.2
5	2.2	99	11	e15	e8.0	195	37	20	52	84	7.8	3.8
6	2.1	57	10	e14	e8.0	210	35	18	43	78	6.3	3.5
7	1.9	34	9.9	e13	e8.0	184	33	18	37	64	5.6	3.7
8	1.8	23	10	e12	e8.0	147	32	24	32	47	5.1	3.1
9	1.7	17	16	e12	e8.0	108	29	41	36	37	5.6	3.0
10	1.7	15	e50	11	e8.0	76	26	127	63	32	5.2	3.6
11	1.9	16	e59	10	e8.0	60	25	186	137	27	5.4	3.3
12	2.9	15	e52	11	e8.0	46	23	173	180	24	5.3	3.1
13	2.2	13	e57	11	e8.0	39	22	276	180	20	4.9	3.0
14	5.1	12	43	10	e8.0	40	21	374	154	16	5.1	2.9
15	3.5	11	23	e10	e8.0	37	19	370	113	13	5.2	3.1
16	2.8	11	e22	e9.8	e8.0	34	19	286	72	12	4.8	3.2
17	2.8	11	e21	e9.4	e8.0	34	37	190	80	16	5.7	3.0
18	2.6	33	e19	e9.0	e8.2	35	41	144	94	15	5.0	2.9
19	2.4	30	e17	e9.0	e8.8	36	35	108	81	12	4.9	2.9
20	2.6	22	e15	e9.0	e9.6	45	50	125	61	9.4	4.3	3.3
21	2.2	18	e16	e9.0	e9.9	43	151	237	49	10	3.8	3.1
22	2.0	17	e14	e9.0	e11	37	148	510	44	9.6	3.6	2.7
23	2.1	23	e14	e9.0	e12	34	114	710	38	8.3	3.7	2.6
24	9.8	22	14	e8.4	e15	36	82	748	41	7.4	4.2	2.7
25	6.0	18	e14	e8.3	e15	37	79	556	43	6.8	4.3	3.0
26	4.1	15	e13	e8.2	e16	93	66	352	39	6.7	4.6	3.4
27	3.3	15	12	e8.0	e19	88	51	215	36	6.7	36	3.4
28	3.0	15	21	e8.0	e23	96	42	120	37	6.8	12	3.3
29	2.9	14	21	e8.0	e40	143	36	77	31	6.7	12	3.4
30	2.9	13	19	e8.0	---	131	32	112	23	6.8	7.2	3.4
31	2.6	---	17	e8.0	---	105	---	191	---	6.6	5.6	---
TOTAL	88.9	794.7	654.9	331.1	327.5	2,479	1,521	6,413	2,403	734.8	217.4	100.1
MEAN	2.87	26.5	21.1	10.7	11.3	80.0	50.7	207	80.1	23.7	7.01	3.34
MAX	9.8	118	59	17	40	210	151	748	214	84	36	4.9
MIN	1.6	2.7	9.9	8.0	8.0	34	19	18	23	6.6	3.6	2.6
CFSM	0.08	0.76	0.61	0.31	0.33	2.30	1.46	5.96	2.31	0.68	0.20	0.10
IN.	0.10	0.85	0.70	0.35	0.35	2.66	1.63	6.88	2.58	0.79	0.23	0.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2004, BY WATER YEAR (WY)

MEAN	18.9	26.7	22.6	17.3	32.6	57.4	63.4	41.1	34.5	18.8	14.0	18.1
MAX	94.3	137	70.4	72.8	95.9	124	193	207	142	86.1	34.9	151
(WY)	(1982)	(1986)	(1985)	(1988)	(2001)	(1976)	(1993)	(2004)	(1997)	(1994)	(1986)	(1986)
MIN	2.87	3.38	3.00	2.29	1.66	12.8	20.8	3.80	3.33	1.55	1.47	1.86
(WY)	(2004)	(1977)	(1977)	(1977)	(2003)	(2003)	(2003)	(1977)	(1988)	(1988)	(1988)	(1976)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1975 - 2004	
ANNUAL TOTAL	5,946.0		16,065.4			
ANNUAL MEAN	16.3		43.9		30.3	
HIGHEST ANNUAL MEAN					53.4	1986
LOWEST ANNUAL MEAN					7.32	1979
HIGHEST DAILY MEAN	202	May 12	748	May 24	(e)960	Jun 21, 1997
LOWEST DAILY MEAN	(a)1.1	(b)Jan 20-25	1.6	Oct 2	0.63	Aug 17, 1988
ANNUAL SEVEN-DAY MINIMUM	(a)1.1	Feb 9	1.9	Oct 5	0.82	Aug 11, 1988
MAXIMUM PEAK FLOW			1,090	May 23	(c)1,500	Jun 21, 1997
MAXIMUM PEAK STAGE			7.56	May 23	(d)8.31	Jun 21, 1997
ANNUAL RUNOFF (CFSM)	0.469		1.26		0.872	
ANNUAL RUNOFF (INCHES)	6.37		17.22		11.85	
10 PERCENT EXCEEDS	40		113		66	
50 PERCENT EXCEEDS	6.3		15		14	
90 PERCENT EXCEEDS	1.4		3.1		4.1	

(a) Ice affected, except for Sept. 11
(b) Also occurred Feb. 9-16 and Sept. 11
(c) From rating curve extended above 717 ft^3/s
(d) From floodmarks
(e) Estimated due to ice effect or missing record

04087030 MENOMONEE RIVER AT MENOMONEE FALLS, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 2003 to September 2004.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January to September 2004 (discontinued).

INSTRUMENTATION.--Continuous specific conductance recorder from January to April 2004. Sensor located near the left edge of water.

REMARKS.--Records for specific conductance were faulty Feb. 19 to Mar. 17, and June 10, 12-14, 19-29.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,010 µS/cm, Feb. 7, 2004; minimum, 143 µS/cm, Aug. 27, 2004.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 2,010 µS/cm, Feb. 7; minimum, 143 µS/cm, Aug. 27.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	1,070	---	825	945	560	888	878	884
2	---	---	---	---	1,060	---	874	943	593	898	896	905
3	---	---	---	---	1,270	---	916	946	652	809	848	912
4	---	---	---	---	1,300	---	940	953	724	577	710	922
5	---	---	---	---	1,100	---	951	959	782	598	848	927
6	---	---	---	---	1,270	---	972	970	815	620	888	927
7	---	---	---	---	1,620	---	982	960	839	680	880	934
8	---	---	---	---	1,470	---	996	926	865	747	888	942
9	---	---	---	---	1,200	---	1,010	899	814	801	874	945
10	---	---	---	---	1,140	---	998	708	---	845	901	959
11	---	---	---	---	1,130	---	996	609	639	856	925	945
12	---	---	---	---	1,100	---	998	641	---	852	931	936
13	---	---	---	---	1,110	---	994	516	---	878	909	933
14	---	---	---	---	1,110	---	998	491	---	888	928	931
15	---	---	---	---	1,100	---	999	513	680	894	919	944
16	---	---	---	---	1,110	---	1,000	556	752	904	920	939
17	---	---	---	---	1,100	---	916	625	718	915	871	917
18	---	---	---	---	1,100	1,310	993	688	681	914	861	895
19	---	---	---	---	---	1,230	1,040	749	---	915	893	892
20	---	---	---	---	---	1,260	908	667	---	922	893	889
21	---	---	---	---	---	1,110	679	509	---	915	891	895
22	---	---	---	1,120	---	1,080	709	433	---	907	890	898
23	---	---	---	1,120	---	1,080	717	404	---	890	901	898
24	---	---	---	1,150	---	1,110	756	401	---	896	972	900
25	---	---	---	1,160	---	1,090	814	430	---	906	884	924
26	---	---	---	1,120	---	920	867	498	---	909	895	941
27	---	---	---	1,170	---	925	878	592	---	911	550	942
28	---	---	---	1,170	---	859	894	681	---	910	754	936
29	---	---	---	1,090	---	796	913	750	---	912	730	943
30	---	---	---	1,070	---	788	928	654	870	910	847	931
31	---	---	---	1,080	---	788	---	539	---	912	879	---
MEAN	---	---	---	---	---	---	915	682	---	851	866	923
MAX	---	---	---	--	--	--	1,040	970	--	922	972	959
MIN	---	---	---	--	--	--	679	401	--	577	550	884

04087070 LITTLE MENOMONEE RIVER AT MILWAUKEE, WI

LOCATION.--Lat 43°07'25", long 88°02'37", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.27, T.8 N., R.21 E., Milwaukee County, Hydrologic Unit 04040003, on right bank about 250 ft downstream from bridge on U.S. Highway 41.

DRAINAGE AREA.--19.7 mi^2.

PERIOD OF RECORD.--November 1974 to September 1977, April to September 2004.

GAGE.--Water-stage recorder. Datum of gage is 700 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good (see page 11).

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	28	11	108	7.9	4.4	1.6
2	---	---	---	---	---	---	24	9.1	85	6.8	3.7	1.3
3	---	---	---	---	---	---	21	8.0	57	29	3.8	1.3
4	---	---	---	---	---	---	15	8.4	38	197	15	1.4
5	---	---	---	---	---	---	15	7.4	27	81	3.9	1.2
6	---	---	---	---	---	---	17	6.5	23	57	3.2	1.3
7	---	---	---	---	---	---	16	6.8	24	48	2.4	1.1
8	---	---	---	---	---	---	13	18	20	35	2.3	1.1
9	---	---	---	---	---	---	12	28	18	29	2.6	0.91
10	---	---	---	---	---	---	11	113	33	23	2.4	0.93
11	---	---	---	---	---	---	9.2	164	102	25	2.2	0.82
12	---	---	---	---	---	---	8.5	99	123	56	2.1	0.70
13	---	---	---	---	---	---	8.7	185	124	20	2.1	0.73
14	---	---	---	---	---	---	8.6	320	97	14	1.9	1.2
15	---	---	---	---	---	---	8.3	229	66	10	1.5	2.7
16	---	---	---	---	---	---	7.9	143	42	10	1.4	5.9
17	---	---	---	---	---	---	21	89	52	10	6.2	1.3
18	---	---	---	---	---	---	18	108	45	8.3	2.0	0.61
19	---	---	---	---	---	---	11	67	36	7.8	1.6	0.36
20	---	---	---	---	---	---	27	92	27	7.2	1.6	0.30
21	---	---	---	---	---	---	107	238	27	7.5	1.3	0.37
22	---	---	---	---	---	---	61	449	24	6.5	1.1	0.28
23	---	---	---	---	---	---	34	378	19	5.6	1.1	0.24
24	---	---	---	---	---	---	22	360	24	5.1	2.2	0.08
25	---	---	---	---	---	---	34	226	22	4.6	2.8	0.26
26	---	---	---	---	---	---	26	148	18	4.4	1.4	0.18
27	---	---	---	---	---	---	21	106	14	4.1	22	0.13
28	---	---	---	---	---	---	16	68	19	4.0	10	0.25
29	---	---	---	---	---	---	13	47	12	3.7	13	0.21
30	---	---	---	---	---	---	11	90	9.1	3.8	2.7	0.14
31	---	---	---	---	---	---	---	116	---	3.6	2.0	---
TOTAL	---	---	---	---	---	---	645.2	3,938.2	1,335.1	734.9	125.9	28.90
MEAN	---	---	---	---	---	---	21.5	127	44.5	23.7	4.06	0.96
MAX	---	---	---	---	---	---	107	449	124	197	22	5.9
MIN	---	---	---	---	---	---	7.9	6.5	9.1	3.6	1.1	0.08
CFSM	---	---	---	---	---	---	1.09	6.45	2.26	1.20	0.21	0.05
IN.	---	---	---	---	---	---	1.22	7.44	2.52	1.39	0.24	0.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2004, BY WATER YEAR (WY)

MEAN	5.36	7.30	10.4	7.22	15.7	51.5	27.0	39.7	19.5	9.86	7.28	3.25
MAX	11.2	12.8	23.9	19.4	39.0	76.5	37.2	127	44.5	23.7	15.9	6.13
(WY)	(1978)	(1978)	(1978)	(1975)	(1976)	(1976)	(1975)	(2004)	(2004)	(2004)	(1975)	(1977)
MIN	2.04	0.82	0.25	0.00	2.37	17.9	13.7	1.73	5.16	2.44	1.30	0.96
(WY)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1976)	(1976)	(1976)	(2004)

SUMMARY STATISTICS	FOR 2004 WATER YEAR (April - September)		WATER YEARS 1975 - 2004	
ANNUAL TOTAL	6,808.20			
ANNUAL MEAN	37.2		16.8	
HIGHEST ANNUAL MEAN			37.2	2004
LOWEST ANNUAL MEAN			5.92	1977
HIGHEST DAILY MEAN	449	May 22	449	May 22, 2004
LOWEST DAILY MEAN	0.08	Sep 24	(a)0.00	Dec 31, 1976
ANNUAL SEVEN-DAY MINIMUM	0.18	Sep 24	0.00	Dec 31, 1976
MAXIMUM PEAK FLOW	581	May 22	(b)581	May 22, 2004
MAXIMUM PEAK STAGE	9.30	May 22	(c)10.35	Mar 4, 1976
ANNUAL RUNOFF (CFSM)	1.89		0.854	
ANNUAL RUNOFF (INCHES)	12.86		11.61	
10 PERCENT EXCEEDS	108		41	
50 PERCENT EXCEEDS	11		4.5	
90 PERCENT EXCEEDS	1.00		0.55	

(a) Also occurred Jan. 1 - Feb. 8, 1977
(b) Gage height, 9.30 ft
(c) Discharge, 467 ft^3/s, datum then in use

04087088 UNDERWOOD CREEK AT WAUWATOSA, WI

LOCATION.--Lat 43°03'17", long 88°02'46", in SW $^1/_4$ NW $^1/_4$ sec.20, T.7 N., R.21 E., Milwaukee County, Hydrologic Unit 04040003, at U.S. Highway 45, on right bank, just downstream of the Chicago, Milwaukee, St. Paul and Pacific Railroad bridge, on Milwaukee County Park Commission property, at Wauwatosa, and 0.8 mi upstream from mouth.

DRAINAGE AREA.--18.2 mi^2.

PERIOD OF RECORD.--November 1974 to November 1979, July 1980 to current year. Unpublished daily discharge records from November 1974 to February 1975 in District files.

REVISED RECORDS.--WDR WI-77-1: Drainage area. WRD WI-85-1: 1984. WRD WI-94-1: 1993(M). WRD WI-98-1: 1978(M, date).

GAGE.--Water-stage recorder, crest-stage gage, and steel plate weir. Datum of gage is 683.78 ft above NGVD of 1929 (Southeastern Wisconsin Regional Planning Commission bench mark). Prior to Sept. 10, 1993, the orifice was located 10 ft downstream from Chicago, Milwaukee, St. Paul and Pacific Railroad bridge. The orifice was moved to 30 ft upstream from Chicago, Milwaukee, St. Paul and Pacific Railroad bridge on Sept. 10, 1993, and is at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	2.5	2.4	2.8	e2.1	21	14	9.2	29	6.1	4.4	3.9
2	2.9	58	2.5	3.4	e2.2	16	12	7.3	20	5.8	4.3	3.6
3	6.2	50	2.5	3.2	e2.2	10	10	6.9	16	73	72	3.4
4	2.6	83	2.3	e2.1	e2.2	30	8.7	6.5	13	189	36	3.2
5	2.4	23	2.4	e2.6	e2.2	135	7.8	6.2	12	22	11	3.1
6	2.3	8.7	2.2	e2.5	e2.2	35	8.1	6.5	11	18	7.4	2.9
7	2.3	5.6	2.1	e2.4	e2.2	23	7.0	6.0	10	34	6.4	2.8
8	2.2	4.3	2.1	e2.4	e2.2	17	6.6	15	9.0	13	5.5	2.9
9	2.3	3.7	21	e2.3	e2.2	13	6.2	26	8.9	11	14	2.9
10	2.2	3.5	87	e2.3	e2.2	11	5.9	41	52	9.3	4.9	2.9
11	2.6	3.4	20	e2.2	e2.2	10	5.6	35	71	34	4.4	2.9
12	5.0	3.2	9.2	e2.2	e2.2	8.6	5.3	17	34	22	4.1	2.9
13	2.3	3.3	8.5	e2.2	e2.2	7.6	5.6	125	20	11	3.9	2.7
14	18	3.2	6.1	e2.2	e2.2	15	5.4	228	97	8.5	3.8	3.0
15	3.8	2.9	4.7	e2.2	e2.7	7.7	5.0	91	28	7.4	3.5	4.3
16	2.5	2.9	7.0	e2.1	e3.8	7.0	4.8	42	26	7.0	3.5	5.4
17	2.3	3.0	4.6	e2.1	e5.0	9.5	21	32	49	6.6	4.0	3.3
18	2.3	43	3.8	e2.1	4.9	11	7.0	62	22	6.3	3.7	2.8
19	2.3	8.2	3.2	e2.1	6.0	8.7	5.5	28	15	6.2	4.1	2.8
20	2.2	5.3	3.5	e2.1	9.0	7.6	77	36	12	5.8	3.5	2.9
21	2.4	4.2	3.6	e2.2	6.1	6.4	71	123	39	12	3.3	2.4
22	2.3	5.3	3.3	e2.2	5.0	5.8	22	335	18	6.0	3.2	2.4
23	2.2	9.1	3.1	e2.2	11	5.6	14	214	14	5.1	3.2	2.4
24	22	4.6	2.8	e2.2	7.5	7.2	13	73	25	4.8	12	2.6
25	9.5	3.4	2.4	e2.2	7.2	6.3	25	43	13	4.6	21	2.4
26	3.1	3.1	2.7	e2.1	7.5	57	13	31	9.2	4.6	4.2	2.3
27	2.5	3.0	2.5	e2.1	7.5	16	10	24	11	4.8	21	2.3
28	2.6	2.8	13	e2.1	8.0	71	9.2	18	16	4.8	26	2.2
29	2.4	2.6	4.4	e2.1	9.8	49	8.2	20	7.7	4.7	9.8	2.2
30	2.8	2.7	3.5	e2.1	---	28	7.7	84	6.5	4.9	5.4	2.3
31	2.0	---	3.2	e2.1	---	18	---	49	---	4.7	4.4	---
TOTAL	125.3	361.5	241.6	71.1	131.7	674.0	421.6	1,840.6	714.3	557.0	317.9	88.1
MEAN	4.04	12.1	7.79	2.29	4.54	21.7	14.1	59.4	23.8	18.0	10.3	2.94
MAX	22	83	87	3.4	11	135	77	335	97	189	72	5.4
MIN	2.0	2.5	2.1	2.1	2.1	5.6	4.8	6.0	6.5	4.6	3.2	2.2
CFSM	0.22	0.66	0.43	0.13	0.25	1.19	0.77	3.26	1.31	0.99	0.56	0.16
IN.	0.26	0.74	0.49	0.15	0.27	1.38	0.86	3.76	1.46	1.14	0.65	0.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2004, BY WATER YEAR (WY)

MEAN	8.82	10.9	10.0	8.40	13.6	22.4	26.7	19.2	17.5	13.1	16.1	12.6
MAX	26.9	42.1	27.2	39.1	37.9	73.4	73.6	59.4	68.8	37.5	98.1	56.0
(WY)	(1987)	(1986)	(1983)	(1988)	(2001)	(1979)	(1993)	(2004)	(1997)	(1999)	(1998)	(1986)
MIN	2.43	1.81	1.57	0.03	1.83	6.74	6.24	2.28	4.80	3.29	3.49	2.94
(WY)	(1976)	(1977)	(1977)	(1977)	(1977)	(1981)	(1977)	(1977)	(1976)	(1976)	(1976)	(2004)

04087088 UNDERWOOD CREEK AT WAUWATOSA, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1975 - 2004	
ANNUAL TOTAL	2,959.7		5,544.7			
ANNUAL MEAN	8.11		15.1		15.0	
HIGHEST ANNUAL MEAN					23.2	1993
LOWEST ANNUAL MEAN					4.21	1977
HIGHEST DAILY MEAN	98	May 9	335	May 22	1,420	Aug 6, 1998
LOWEST DAILY MEAN	2.0	Oct 31	2.0	Oct 31	0.00	(a)
ANNUAL SEVEN-DAY MINIMUM	(b)2.2	Jan 18	(b)2.1	Jan 26	0.00	Jan 11, 1977
MAXIMUM PEAK FLOW			2,630	Jul 4	(c)7,500	Aug 6, 1998
MAXIMUM PEAK STAGE			8.73	Jul 4	13.10	Aug 6, 1998
ANNUAL RUNOFF (CFSM)	0.446		0.832		0.823	
ANNUAL RUNOFF (INCHES)	6.05		11.33		11.18	
10 PERCENT EXCEEDS	18		34		31	
50 PERCENT EXCEEDS	3.8		5.4		7.0	
90 PERCENT EXCEEDS	2.3		2.2		3.1	

(a) No flow on all or part of many days during 1977 winter period
(b) Ice affected
(c) From rating curve extended above 96 ft^3/s based on slope-area measurement of peak flow
(e) Estimated due to ice effect or missing record

04087119 HONEY CREEK AT WAUWATOSA, WI

LOCATION.--Lat 43°02'38", long 88°00'10", in NW ¼ NW ¼ sec.27, T.7 N., R.21 E., Milwaukee County, Hydrologic Unit 04040003, on right bank in Honey Creek Parkway, 150 ft west of intersection of Honey Creek Parkway and 72nd Street, at Wauwatosa, and 260 ft upstream from Menomonee River.

DRAINAGE AREA.--10.3 mi^2.

PERIOD OF RECORD.--December 1974 to December 1979, July 1980 through April 14, 1981, April to September 2004.

GAGE.--Water-stage recorder. Datum of gage is 635 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good, except those periods of discharge over 500 ft^3/s, which are fair, and estimated daily discharges, which are poor (see page 11).

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	e10	4.7	21	3.3	1.9	1.7
2	---	---	---	---	---	---	e8.7	2.3	7.1	3.4	2.0	1.5
3	---	---	---	---	---	---	e7.6	2.0	5.6	85	191	1.4
4	---	---	---	---	---	---	e5.6	2.0	5.0	234	48	1.3
5	---	---	---	---	---	---	e4.9	1.9	4.4	9.3	4.4	2.0
6	---	---	---	---	---	---	e4.9	2.0	4.1	6.5	2.3	1.4
7	---	---	---	---	---	---	e3.7	2.1	4.0	57	1.8	1.4
8	---	---	---	---	---	---	2.8	15	3.9	5.7	1.6	1.3
9	---	---	---	---	---	---	2.6	32	9.0	4.6	19	1.3
10	---	---	---	---	---	---	2.4	51	75	3.5	1.7	1.3
11	---	---	---	---	---	---	2.1	7.7	51	30	1.6	1.3
12	---	---	---	---	---	---	2.0	3.7	19	8.7	1.5	1.2
13	---	---	---	---	---	---	2.0	98	8.3	3.3	1.5	1.3
14	---	---	---	---	---	---	2.2	189	131	2.8	1.4	1.3
15	---	---	---	---	---	---	2.0	23	15	2.6	1.3	6.2
16	---	---	---	---	---	---	2.3	8.9	42	2.5	1.4	6.3
17	---	---	---	---	---	---	20	17	35	2.2	1.7	1.5
18	---	---	---	---	---	---	3.2	63	9.2	2.2	1.5	1.4
19	---	---	---	---	---	---	2.1	9.0	5.9	2.4	2.0	1.3
20	---	---	---	---	---	---	112	11	4.8	2.4	1.5	1.9
21	---	---	---	---	---	---	29	116	46	20	1.2	1.3
22	---	---	---	---	---	---	5.3	268	8.9	3.4	1.2	1.3
23	---	---	---	---	---	---	3.6	201	7.2	2.6	1.3	1.5
24	---	---	---	---	---	---	5.6	24	22	2.5	67	1.3
25	---	---	---	---	---	---	20	13	6.2	1.9	69	1.2
26	---	---	---	---	---	---	4.2	8.3	4.7	1.8	2.3	1.1
27	---	---	---	---	---	---	3.0	6.7	6.4	1.8	30	1.2
28	---	---	---	---	---	---	3.5	5.5	13	1.8	37	1.2
29	---	---	---	---	---	---	3.1	9.6	4.0	1.8	7.1	1.2
30	---	---	---	---	---	---	2.7	83	3.4	1.8	2.4	1.6
31	---	---	---	---	---	---	---	23	---	1.7	1.9	---
TOTAL	---	---	---	---	---	---	283.1	1,303.4	582.1	512.5	509.5	51.2
MEAN	---	---	---	---	---	---	9.44	42.0	19.4	16.5	16.4	1.71
MAX	---	---	---	---	---	---	112	268	131	234	191	6.3
MIN	---	---	---	---	---	---	2.0	1.9	3.4	1.7	1.2	1.1

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2004, BY WATER YEAR (WY)

MEAN	4.43	5.12	5.24	2.11	7.62	20.1	16.3	14.7	10.4	9.66	11.2	7.42
MAX	6.32	7.92	8.91	6.83	16.4	45.0	32.7	42.0	19.4	16.5	17.6	20.6
(WY)	(1978)	(1976)	(1978)	(1975)	(1976)	(1979)	(1981)	(2004)	(2004)	(2004)	(1980)	(1978)
MIN	2.61	1.26	0.89	0.10	1.17	2.59	5.75	2.17	4.45	3.71	5.21	1.71
(WY)	(1976)	(1977)	(1977)	(1977)	(1978)	(1981)	(1977)	(1977)	(1976)	(1975)	(1976)	(2004)

SUMMARY STATISTICS	FOR 2004 WATER YEAR (April - September)		WATER YEARS 1975 - 2004	
ANNUAL TOTAL	3,241.8			
ANNUAL MEAN	17.7		9.51	
HIGHEST ANNUAL MEAN			17.7	2004
LOWEST ANNUAL MEAN			6.26	1977
HIGHEST DAILY MEAN	268	May 22	304	Mar 4, 1976
LOWEST DAILY MEAN	1.1	Sep 26	0.02	Jan 16-19, 1977
ANNUAL SEVEN-DAY MINIMUM	1.2	Sep 23	0.02	Jan 15, 1977
MAXIMUM PEAK FLOW	2,640	Jul 4	(a)2,640	Jul 4, 2004
MAXIMUM PEAK STAGE	15.08	Jul 4	(b)15.84	Sep 9, 1980
10 PERCENT EXCEEDS	50		22	
50 PERCENT EXCEEDS	3.5		2.5	
90 PERCENT EXCEEDS	1.3		1.1	

(a) Gage height, 15.08 ft
(b) Discharge, 1,240 ft^3/s, datum then in use
(e) Estimated due to ice effect or missing record

04087120 MENOMONEE RIVER AT WAUWATOSA, WI

LOCATION.--Lat 43°02'44", long 87°59'59", in NE ¼ NW ¼ sec.27, T.7 N., R.21 E., Milwaukee County, Hydrologic Unit 04040003, on left bank near upstream side of 70th Street bridge in Wauwatosa, 800 ft downstream from Honey Creek, and at mile 6.2.

DRAINAGE AREA.--123 mi^2.

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 628.86 ft above NGVD of 1929. Prior to Nov. 1, 1974, nonrecording gage at present site and datum then in use. Prior to June 21, 1997 at 0320, datum was 2.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	15	28	35	e14	237	208	91	547	53	22	23
2	7.3	363	26	37	e14	275	161	75	418	47	24	21
3	22	414	25	e39	e14	226	128	67	304	211	261	20
4	16	674	25	e30	e14	267	104	63	208	1,270	185	19
5	10	365	25	e26	e14	1,100	90	59	145	352	42	18
6	9.0	181	24	e24	e14	629	88	56	115	261	30	16
7	8.7	98	23	e21	e14	471	81	56	98	303	25	15
8	6.2	63	23	e21	e14	353	74	116	87	158	22	16
9	7.8	46	102	e20	e14	259	67	253	92	123	50	15
10	8.6	39	620	e20	e14	187	62	504	298	104	23	14
11	7.7	40	306	e21	e13	152	58	1,000	600	168	20	15
12	20	36	145	e22	e13	113	54	481	535	199	20	14
13	12	32	97	e21	e13	97	52	1,190	455	88	20	14
14	101	29	78	e21	e13	132	50	1,730	569	69	19	15
15	29	28	61	e20	e13	93	48	1,160	321	54	18	26
16	14	27	75	e20	e13	82	47	714	249	47	18	34
17	11	26	59	e20	e14	92	159	507	339	46	33	17
18	9.9	298	48	e19	e16	101	100	641	246	41	23	14
19	9.4	105	44	e19	e19	96	81	362	194	39	21	13
20	9.1	65	33	e17	e40	101	343	426	150	37	19	13
21	8.8	49	41	e16	e50	99	655	974	237	63	17	12
22	9.2	45	38	e15	e45	84	381	2,400	141	39	15	12
23	9.0	76	36	e15	e80	73	272	1,980	110	33	15	13
24	101	55	32	e15	e77	78	202	1,530	169	30	89	12
25	103	43	28	e15	e70	77	276	1,110	123	27	123	11
26	26	37	31	e15	e80	439	189	779	97	25	22	11
27	17	35	30	e15	90	233	146	533	91	24	160	11
28	17	33	89	e14	100	437	119	332	129	24	139	11
29	15	31	53	e14	129	576	98	243	77	23	88	11
30	18	29	45	e14	---	390	86	540	63	23	36	11
31	14	---	41	e14	---	283	---	649	---	23	28	---
TOTAL	663.9	3,377	2,331	635	1,028	7,832	4,479	20,621	7,207	4,004	1,627	467
MEAN	21.4	113	75.2	20.5	35.4	253	149	665	240	129	52.5	15.6
MAX	103	674	620	39	129	1,100	655	2,400	600	1,270	261	34
MIN	6.2	15	23	14	13	73	47	56	63	23	15	11
CFSM	0.17	0.92	0.61	0.17	0.29	2.05	1.21	5.41	1.95	1.05	0.43	0.13
IN.	0.20	1.02	0.70	0.19	0.31	2.37	1.35	6.24	2.18	1.21	0.49	0.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2004, BY WATER YEAR (WY)

MEAN	63.4	78.4	74.6	56.7	97.1	197	204	131	117	78.6	76.3	81.1
MAX	232	422	222	191	277	582	715	665	566	257	278	562
(WY)	(1982)	(1986)	(1988)	(1974)	(2001)	(1979)	(1993)	(2004)	(1997)	(1964)	(1998)	(1986)
MIN	7.15	11.9	4.65	4.45	4.18	17.5	28.7	17.1	12.6	10.6	10.5	6.50
(WY)	(1964)	(1963)	(1964)	(1963)	(1963)	(1968)	(1963)	(1977)	(1962)	(1963)	(1962)	(1963)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1962 - 2004	
ANNUAL TOTAL	22,667.5		54,271.9			
ANNUAL MEAN	62.1		148		104	
HIGHEST ANNUAL MEAN					195	1986
LOWEST ANNUAL MEAN					24.0	1963
HIGHEST DAILY MEAN	783	May 9	2,400	May 22	7,520	Jun 21, 1997
LOWEST DAILY MEAN	5.5	Sep 5	6.2	Oct 8	(a)2.8	Jan 18, 1964
ANNUAL SEVEN-DAY MINIMUM	5.7	Sep 1	8.3	Oct 5	(a)3.1	Feb 22, 1963
MAXIMUM PEAK FLOW			5,080	Jul 4	(b)13,500	(c)Apr 21, 1973
MAXIMUM PEAK STAGE			11.80	Jul 4	(d)18.63	Jun 21, 1997
ANNUAL RUNOFF (CFSM)	0.505		1.21		0.849	
ANNUAL RUNOFF (INCHES)	6.86		16.41		11.54	
10 PERCENT EXCEEDS	139		397		236	
50 PERCENT EXCEEDS	28		46		44	
90 PERCENT EXCEEDS	7.2		14		14	

(a) Ice affected
(b) From rating curve extended above 6,000 ft^3/s on basis of slope-area measurement of peak flow, gage height, 13.92 ft, datum then in use
(c) Also occurred June 21, 1997, discharge determined from rating curve extended above 9,430 ft^3/s on basis of slope-area measurement of peak flow
(d) High-water mark on gage-house door was 18.87 ft
(e) Estimated due to ice effect or missing record

040871473 WILSON PARK CREEK AT GMIA INFALL AT MILWAUKEE, WI

LOCATION.--Lat 42°56'42", long 87°53'10", in SW $^1/_4$ SW $^1/_4$ sec.27, T.6 N., R.22 E., Milwaukee County, Hydrologic Unit 04040003, 150 ft northwest of Grange Avenue gate on General Mitchell International Airport property, at Milwaukee.

DRAINAGE AREA.--0.89 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1996 to May 1997, November 1997 to current year.

REVISED RECORDS.--WDR WI-98-1: 1997 (M, February monthly).

GAGE.--Water-stage recorder. Elevation of gage is 665 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor (see page 11).

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.02	0.04	0.05	e0.00	2.6	0.44	0.15	0.61	0.12	e0.05	0.06
2	0.00	5.0	0.02	0.29	e0.00	1.2	0.38	0.07	0.32	0.10	e0.05	0.06
3	0.17	4.8	0.03	0.16	e0.00	0.63	0.33	0.06	0.29	5.0	e2.8	0.06
4	0.03	1.8	0.03	0.05	0.00	2.6	0.24	0.06	0.20	7.0	7.6	0.05
5	0.00	0.38	0.05	e0.04	0.00	e10	0.21	0.06	0.16	0.42	0.19	0.05
6	0.00	0.10	0.03	e0.04	0.00	e1.6	0.30	0.05	0.12	0.32	0.11	0.05
7	0.01	0.07	0.03	e0.03	0.00	e0.80	0.20	0.03	0.12	2.1	0.09	0.04
8	0.00	0.03	0.04	e0.03	0.00	e0.50	0.16	0.32	0.12	0.29	0.08	0.03
9	0.00	0.03	1.9	e0.02	0.00	e0.40	0.15	2.7	0.13	0.34	0.07	0.03
10	0.00	0.04	7.9	e0.02	0.00	e0.30	0.12	0.83	5.3	0.24	0.06	0.03
11	0.00	0.06	0.51	e0.04	0.00	e0.26	0.11	0.21	4.7	1.8	0.07	0.03
12	0.09	0.04	0.20	e0.06	0.00	e0.24	0.09	0.20	2.8	3.7	0.07	0.03
13	0.00	0.02	0.13	e0.07	0.00	e0.20	0.09	7.0	0.64	0.30	0.06	0.04
14	2.0	0.03	0.16	e0.06	0.00	e0.60	0.09	19	5.3	0.26	0.06	0.03
15	0.07	0.03	0.14	0.06	0.00	e0.24	0.09	4.7	0.70	0.23	0.06	0.26
16	0.03	0.03	0.62	0.06	0.00	e0.20	0.09	0.54	0.49	1.2	0.06	0.41
17	0.00	0.06	0.13	0.07	0.00	e0.34	0.90	0.53	1.1	0.25	0.21	0.03
18	0.00	6.2	0.10	0.07	0.00	e0.50	0.12	3.1	0.42	0.17	0.13	0.03
19	0.00	0.30	0.08	0.03	0.00	e0.30	0.09	0.44	0.25	0.19	0.14	0.03
20	0.00	0.13	0.06	0.03	e0.01	e0.26	3.1	0.32	0.19	0.21	0.06	0.03
21	0.00	0.07	0.10	0.04	e0.20	e0.24	1.2	4.6	3.5	1.2	0.06	0.03
22	0.00	0.20	0.10	0.03	0.98	e0.20	0.20	12	0.41	0.18	0.06	0.02
23	0.00	1.0	0.08	e0.02	1.7	e0.18	0.16	20	1.8	0.11	0.06	0.00
24	1.9	0.12	0.05	e0.02	0.63	0.27	0.45	1.3	0.74	e0.09	1.4	0.01
25	0.62	0.06	0.03	e0.01	0.53	0.17	1.3	0.89	0.25	e0.08	1.5	0.00
26	0.02	0.06	0.03	e0.01	0.74	4.8	0.24	0.48	0.20	e0.08	0.09	0.00
27	0.00	0.06	0.05	e0.00	0.72	0.47	0.14	0.37	0.26	e0.07	0.68	0.01
28	0.05	0.04	0.79	e0.00	0.67	6.1	0.17	0.24	0.65	e0.07	2.7	0.00
29	0.01	0.04	0.11	e0.00	0.92	2.7	0.10	0.64	0.13	e0.06	0.51	0.00
30	0.05	0.04	0.06	e0.00	---	1.1	0.09	4.4	0.12	e0.06	0.12	0.01
31	0.01	---	0.06	e0.00	---	0.58	---	0.84	---	e0.05	0.07	---
TOTAL	5.06	20.86	13.66	1.41	7.10	40.58	11.35	86.13	32.02	26.29	19.27	1.46
MEAN	0.16	0.70	0.44	0.05	0.24	1.31	0.38	2.78	1.07	0.85	0.62	0.05
MAX	2.0	6.2	7.9	0.29	1.7	10	3.1	20	5.3	7.0	7.6	0.41
MIN	0.00	0.02	0.02	0.00	0.00	0.17	0.09	0.03	0.12	0.05	0.05	0.00
CFSM	0.18	0.78	0.50	0.05	0.28	1.47	0.43	3.12	1.20	0.95	0.70	0.05
IN.	0.21	0.87	0.57	0.06	0.30	1.70	0.47	3.60	1.34	1.10	0.81	0.06

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

MEAN	0.41	0.36	0.23	0.34	0.86	0.75	1.27	1.54	1.10	0.77	0.74	0.63
MAX	1.41	0.72	0.50	1.08	2.47	1.48	2.56	3.09	1.88	2.06	1.43	1.91
(WY)	(2002)	(1999)	(2002)	(1999)	(2001)	(1998)	(1999)	(2000)	(1999)	(2000)	(2000)	(2000)
MIN	0.16	0.09	0.08	0.02	0.05	0.27	0.37	0.63	0.24	0.17	0.03	0.05
(WY)	(2004)	(2000)	(2001)	(2003)	(2003)	(2003)	(2003)	(1998)	(2003)	(1998)	(2003)	(2004)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1997 - 2004
ANNUAL TOTAL	116.39	265.19	
ANNUAL MEAN	0.32	0.72	0.76
HIGHEST ANNUAL MEAN			1.04 2000
LOWEST ANNUAL MEAN			0.24 2003
HIGHEST DAILY MEAN	7.9 Dec 10	20 May 23	32 Jul 3, 2000
LOWEST DAILY MEAN	0.00 many days	0.00 many days	0.00 many days
ANNUAL SEVEN-DAY MINIMUM	0.00 many periods	0.00 many periods	0.00 many periods
MAXIMUM PEAK FLOW		30 May 14	34 Jul 2-3, 2000
MAXIMUM PEAK STAGE		14.79 May 14	16.97 Jul 3, 2000
INSTANTANEOUS LOW FLOW		0.00 many days	0.00 many days
ANNUAL RUNOFF (CFSM)	0.358	0.814	0.855
ANNUAL RUNOFF (INCHES)	4.86	11.08	11.62
10 PERCENT EXCEEDS	0.74	1.8	1.5
50 PERCENT EXCEEDS	0.03	0.10	0.20
90 PERCENT EXCEEDS	0.00	0.00	0.00

(e) Estimated due to ice effect or missing record

040871473 WILSON PARK CREEK AT GMIA INFALL AT MILWAUKEE, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1996 to May 1997, November 1997 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: November 1996 to May 1997, November 1997 to current year.

INSTRUMENTATION.--Stage-activated water-quality sampler since November 1996. Continuous water-temperature recorder since November 1996.

REMARKS.--Chemical analyses are by the Wisconsin State Laboratory of Hygiene. Samples are point samples unless otherwise indicated. Records represent water temperature at sensor within 0.5°C.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum observed, 31.5°C, July 4, 2003; minimum observed, 0.0°C, many days during winter.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum observed, 25.5°C, Aug. 3; minimum observed, 0.0°C, many days during winter.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	11.5	7.5	9.0	11.0	9.0	9.5	3.0	1.5	2.0	1.5	0.5	1.0
2	12.0	6.0	8.5	9.5	9.0	9.5	3.0	1.0	2.0	3.5	1.0	2.0
3	10.5	7.0	8.5	9.5	8.0	9.0	2.5	1.5	2.0	3.5	0.5	2.0
4	13.0	8.0	10.0	13.0	8.5	10.5	3.0	1.5	2.5	1.0	0.5	0.5
5	13.0	7.5	10.0	11.5	7.0	8.5	4.0	2.0	2.5	1.0	0.0	0.5
6	13.0	7.0	10.0	8.0	4.5	6.5	3.0	2.0	2.5	0.5	0.0	0.5
7	16.5	9.0	12.5	6.0	3.0	4.0	3.0	1.5	2.5	0.0	0.0	0.0
8	18.0	12.5	15.0	4.5	2.5	3.5	4.0	2.5	3.0	0.0	0.0	0.0
9	17.0	13.5	15.0	4.5	2.5	3.5	5.5	3.5	4.5	0.0	0.0	0.0
10	18.0	12.5	15.0	4.0	2.5	3.5	5.5	2.5	4.5	0.0	0.0	0.0
11	18.0	13.0	15.5	8.0	4.0	6.0	3.0	1.0	1.5	0.0	0.0	0.0
12	17.5	12.5	14.5	9.5	4.0	6.5	1.5	0.5	1.0	0.5	0.0	0.0
13	15.5	10.5	13.0	4.5	2.0	3.5	1.0	0.5	1.0	0.5	0.0	0.0
14	14.0	11.0	12.5	5.0	2.5	4.0	1.0	0.5	0.5	0.0	0.0	0.0
15	14.0	9.0	11.5	5.5	4.5	5.0	1.0	0.5	0.5	0.0	0.0	0.0
16	12.0	8.0	10.0	6.5	5.0	6.0	1.0	0.0	0.5	0.0	0.0	0.0
17	11.5	7.0	9.0	8.5	5.5	7.0	1.0	0.0	0.5	0.0	0.0	0.0
18	13.5	8.0	10.5	10.5	8.0	9.5	1.0	0.0	0.5	0.0	0.0	0.0
19	13.5	9.5	11.5	9.0	6.5	7.5	0.5	0.0	0.0	0.0	0.0	0.0
20	16.5	10.0	13.0	9.0	5.0	7.0	0.0	0.0	0.0	0.0	0.0	0.0
21	14.0	11.5	12.5	7.5	5.5	6.5	0.0	0.0	0.0	0.0	0.0	0.0
22	11.5	8.5	10.0	7.0	5.5	6.0	0.5	0.0	0.0	0.0	0.0	0.0
23	10.0	8.5	9.5	10.5	7.0	8.5	0.5	0.0	0.0	0.0	0.0	0.0
24	11.0	6.5	8.5	7.0	2.0	3.5	0.5	0.0	0.0	0.0	0.0	0.0
25	12.5	9.5	11.0	3.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
26	9.5	7.0	8.0	3.5	2.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0
27	10.0	6.0	8.0	4.5	3.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0
28	9.5	6.5	7.5	3.5	1.0	2.0	0.5	0.0	0.0	0.0	0.0	0.0
29	9.0	6.0	7.5	2.0	1.0	1.5	1.0	0.0	0.5	0.0	0.0	0.0
30	12.0	7.5	10.0	4.0	1.5	2.5	2.0	0.0	1.0	0.0	0.0	0.0
31	14.5	11.0	12.5	---	---	---	2.5	0.5	1.5	0.0	0.0	0.0
MONTH	18.0	6.0	11.0	13.0	1.0	5.6	5.5	0.0	1.2	3.5	0.0	0.2

040871473 WILSON PARK CREEK AT GMIA INFALL AT MILWAUKEE, WI—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	0.0	0.0	0.0	2.0	0.0	0.5	9.0	4.0	6.0	10.0	8.5	9.0
2	0.0	0.0	0.0	2.5	0.5	1.5	9.0	4.0	6.5	12.0	7.0	9.5
3	0.0	0.0	0.0	2.5	0.5	1.5	7.5	4.5	6.0	12.5	7.5	9.5
4	0.0	0.0	0.0	3.0	1.0	2.0	8.0	3.5	5.5	14.5	8.5	11.0
5	0.0	0.0	0.0	4.5	2.0	3.0	8.5	4.0	6.0	13.0	10.0	11.5
6	0.0	0.0	0.0	3.5	2.0	2.5	10.5	5.0	7.5	14.0	10.0	12.0
7	0.0	0.0	0.0	3.0	1.0	2.5	12.0	6.5	9.0	13.0	10.0	11.5
8	0.0	0.0	0.0	3.5	0.5	2.0	10.5	7.5	9.0	13.5	9.5	11.5
9	0.0	0.0	0.0	4.0	1.0	2.5	11.0	6.5	8.5	15.5	11.0	13.0
10	0.0	0.0	0.0	5.0	1.0	3.0	10.5	6.5	8.5	16.5	13.0	15.0
11	0.0	0.0	0.0	4.0	1.0	2.5	10.0	5.5	7.5	15.5	13.0	14.5
12	0.0	0.0	0.0	2.0	0.5	1.0	8.0	4.5	6.0	20.0	13.5	16.5
13	0.0	0.0	0.0	1.5	0.5	1.0	9.5	3.5	6.5	19.5	17.0	18.0
14	0.0	0.0	0.0	2.5	0.5	1.5	12.0	5.0	8.5	18.0	13.0	14.5
15	0.0	0.0	0.0	2.5	1.0	1.5	13.0	7.0	10.0	15.5	11.5	13.5
16	0.0	0.0	0.0	3.5	1.0	2.0	17.0	10.0	13.0	15.5	11.5	13.5
17	0.0	0.0	0.0	3.0	1.5	2.0	16.5	11.5	14.0	18.0	13.0	15.0
18	0.0	0.0	0.0	2.0	1.5	1.5	17.5	11.5	14.0	17.5	13.5	15.0
19	0.0	0.0	0.0	4.5	1.5	3.0	17.0	13.0	15.0	16.0	12.0	14.0
20	0.0	0.0	0.0	8.0	4.0	5.5	13.0	10.0	11.5	19.5	14.5	16.5
21	0.0	0.0	0.0	4.5	2.0	3.0	13.5	10.5	12.0	18.0	12.5	14.5
22	0.0	0.0	0.0	5.0	2.5	3.5	11.0	8.0	9.5	15.5	13.0	14.0
23	0.0	0.0	0.0	6.5	2.5	4.0	13.0	7.0	9.5	16.0	11.5	13.5
24	0.0	0.0	0.0	8.0	4.5	6.0	11.5	8.0	9.5	15.5	13.0	14.0
25	0.0	0.0	0.0	11.5	7.5	9.5	11.5	8.0	9.5	16.0	12.0	14.0
26	0.0	0.0	0.0	12.0	8.5	11.0	12.0	8.0	10.0	16.0	13.0	14.5
27	0.0	0.0	0.0	8.5	6.5	8.0	11.5	6.5	9.0	17.0	13.0	15.0
28	0.0	0.0	0.0	12.0	7.5	10.0	15.0	8.5	11.5	16.5	13.0	14.5
29	0.0	0.0	0.0	12.0	7.5	10.0	16.0	12.5	14.0	15.0	12.5	13.0
30	---	---	---	9.5	6.0	8.0	15.0	9.0	11.0	13.5	12.0	12.5
31	---	---	---	7.0	4.5	5.5	---	---	---	16.0	13.0	14.5
MONTH	0.0	0.0	0.0	12.0	0.0	3.9	17.5	3.5	9.5	20.0	7.0	13.5
		JUNE			JULY			AUGUST			SEPTEMBER	
1	16.0	13.5	15.0	22.5	17.5	19.5	24.5	19.0	21.5	20.5	17.5	19.0
2	17.0	14.0	15.5	22.5	17.0	19.5	24.0	20.0	22.0	22.0	18.5	20.0
3	16.5	13.5	15.0	21.0	17.5	19.0	25.5	20.5	22.5	21.0	19.0	20.0
4	17.5	13.0	15.0	21.0	19.5	20.5	22.5	21.0	21.5	22.0	19.0	20.5
5	17.5	14.0	15.5	20.0	17.5	18.5	21.0	19.0	20.0	22.0	20.0	21.0
6	19.5	15.0	17.0	21.5	17.0	19.0	20.0	18.0	19.0	21.5	20.5	21.0
7	21.5	17.0	19.0	19.5	17.5	18.5	20.0	18.0	19.0	20.5	18.5	19.5
8	23.0	19.0	21.0	18.5	16.0	17.5	20.5	18.5	19.0	19.5	18.0	18.5
9	22.0	19.0	21.0	18.5	15.5	17.0	21.0	19.0	20.0	19.5	17.5	18.5
10	19.5	16.0	17.0	22.0	16.5	18.5	21.0	18.5	19.0	19.5	17.5	18.5
11	16.0	15.5	15.5	21.5	17.0	19.0	18.5	16.5	17.5	20.0	18.0	19.0
12	18.0	15.0	16.0	22.0	20.0	21.0	16.5	15.5	16.0	20.5	18.5	19.5
13	19.5	16.0	17.5	23.0	19.5	21.0	17.5	16.0	16.5	21.0	19.0	20.0
14	21.0	17.5	19.0	21.0	18.5	20.0	18.5	16.0	17.0	21.5	19.5	20.5
15	20.0	17.5	18.5	22.0	18.0	20.0	18.5	16.0	17.5	21.5	20.0	21.0
16	20.0	17.0	18.5	22.0	18.5	20.0	19.0	17.0	18.0	21.0	19.5	20.0
17	19.5	17.5	18.5	22.0	18.5	20.0	19.5	17.5	18.5	20.0	17.5	18.5
18	19.0	17.0	18.0	23.0	18.0	20.0	20.0	17.5	19.0	19.0	17.5	18.5
19	19.0	15.5	17.0	22.5	18.5	20.5	19.5	17.5	18.5	19.0	17.5	18.5
20	19.5	14.5	17.0	24.5	19.5	21.5	19.0	17.0	18.0	19.0	17.5	18.5
21	17.0	16.0	16.5	23.0	20.5	22.0	18.5	16.5	17.5	18.5	17.0	18.0
22	20.0	15.0	17.0	24.0	21.0	22.5	19.0	16.5	18.0	19.0	17.0	18.0
23	18.0	15.5	16.5	22.0	18.5	20.5	19.0	18.5	19.0	19.0	17.5	18.5
24	16.0	14.0	15.0	20.0	17.5	18.5	20.5	18.5	19.0	19.0	18.0	18.5
25	19.0	13.0	16.0	21.5	17.0	19.0	21.0	20.0	20.0	18.5	16.5	17.0
26	18.5	14.5	16.5	22.0	16.5	19.0	22.0	19.5	20.5	16.5	15.0	16.0
27	20.0	14.5	17.0	23.0	17.0	19.5	23.0	21.0	22.0	17.0	15.0	16.0
28	20.0	16.5	18.0	23.5	17.5	20.5	22.5	17.5	20.0	17.0	15.0	15.5
29	21.5	15.5	18.0	23.5	18.5	21.0	19.5	16.5	17.5	15.0	14.0	14.5
30	22.5	17.0	19.5	22.5	19.5	21.0	18.5	16.5	17.5	14.5	13.0	14.0
31	---	---	---	25.0	19.0	21.5	20.0	17.0	18.5	---	---	---
MONTH	23.0	13.0	17.2	25.0	15.5	19.9	25.5	15.5	19.0	22.0	13.0	18.6
YEAR	25.5	0.0	10.0									

040871473 WILSON PARK CREEK AT GMIA INFALL AT MILWAUKEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DISCRETE SAMPLES

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	pH, water, unfltrd lab, std units (00403)	Specif. conduct-ance, wat unf lab, uS/cm 25 degC (90095)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (00417)	Chloride, water, fltrd, mg/L (00940)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	COD, low level, water, unfltrd mg/L (00335)	1,2-Propane-diol, water, unfltrd mg/L (91080)	1,2-Ethane-diol, water, unfltrd mg/L (91075)
MAR 23...	1700	.21	10	7.8	1,660	267	330	.92	.139	<60.0	56	<18.0	<18.0
SEP 22...	1812	.01	10	8.4	971	243	141	.45	<.015	<2.0	27	<18.0	<18.0

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
COMPOSITE SAMPLES

Date	End date	Time	End time	Sampling method, code (82398)	pH, water, unfltrd lab, std units (00403)	Specif. conduct-ance, wat unf lab, uS/cm 25 degC (90095)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (00417)	Chloride, water, fltrd, mg/L (00940)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	COD, low level, water, unfltrd mg/L (00335)	1,2-Propane-diol, water, unfltrd mg/L (91080)
JAN 04-05	20040105	1700	0335	50	8.2	1,250	245	199	.30	<.015	>44.1	110	25.0
JAN 17-17	20040117	0920	1505	50	8.1	2,120	255	498	.93	.140	<2.0	15	<18.0

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	1,2-Ethane-diol, water, unfltrd mg/L (91075)	Runoff volume, thousands of cubic feet (99904)
JAN 04-05	<18.0	1.7
JAN 17-17	<18.0	1.6

040871475 WILSON PARK CREEK AT GMIA OUTFALL #7 AT MILWAUKEE, WI

LOCATION.--Lat 42°57'24", long 87°54'25", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.28, T.6 N., R.22 E., Milwaukee County, Hydrologic Unit 04040003, 200 ft upstream of Howell Avenue culverts on General Mitchell International Airport property, at Milwaukee.

DRAINAGE AREA.--2.25 mi^2.

PERIOD OF RECORD.--November 1996 to May 1997, October 1997 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: November 1996 to May 1997, October 1997 to current year.
DISSOLVED OXYGEN: October 1997 to November 1998 (discontinued).

INSTRUMENTATION.--Stage-activated water-quality sampler since November 1996. Continuous water-temperature recorder since November 1996.

REMARKS.--Chemical analyses are by the Wisconsin State Laboratory of Hygiene. Samples are point samples unless otherwise indicated. Records represent water temperature at sensor within 0.5°C.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum observed, 27.5°C, Aug. 9, 2001; minimum observed, 0.0°C, many days during winter.
DISSOLVED OXYGEN: Maximum observed, 14.1 mg/L, Feb. 27, 1998; minimum observed, 0.0 mg/L, June 27 and July 7, 1998.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum observed, 24.0°C, July 21; minimum observed, 0.0°C, Feb. 20, 23.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	14.5	12.5	13.5	12.0	10.0	11.5	---	---	---	7.0	5.0	5.5
2	13.0	12.0	12.5	11.5	9.5	10.5	---	---	---	6.5	5.0	5.5
3	14.5	12.5	13.5	11.5	1.0	10.0	---	---	---	7.0	5.0	5.5
4	14.0	13.5	13.5	14.5	9.0	11.5	---	---	---	7.0	5.0	5.5
5	13.5	13.0	13.5	13.0	11.0	11.5	8.0	7.0	7.5	7.0	4.5	5.5
6	13.5	13.0	13.5	11.0	11.0	11.0	7.5	6.5	7.0	5.5	3.5	4.5
7	14.0	13.5	13.5	11.0	9.5	10.5	7.5	7.0	7.5	5.5	4.0	5.0
8	14.0	13.5	14.0	10.0	8.5	9.0	7.5	7.5	7.5	5.5	4.0	4.5
9	14.0	14.0	14.0	10.0	9.0	9.5	7.5	5.5	7.0	5.5	4.0	4.5
10	14.0	14.0	14.0	10.0	9.5	10.0	6.0	5.5	6.0	5.5	4.5	5.0
11	14.5	14.0	14.0	10.5	10.0	10.5	7.0	5.5	6.0	6.0	5.0	5.0
12	15.5	14.5	15.0	10.5	8.5	10.0	7.0	5.5	6.0	6.0	5.0	5.0
13	15.0	14.5	14.5	8.5	7.0	7.5	6.5	6.0	6.0	6.0	4.5	5.0
14	14.5	13.5	14.0	9.0	7.5	8.5	7.0	6.0	6.5	5.0	4.0	5.0
15	14.0	13.5	14.0	9.5	9.0	9.0	7.0	6.5	6.5	5.0	4.0	4.5
16	14.0	13.0	13.5	---	---	---	7.0	4.0	5.0	5.0	4.5	4.5
17	13.5	12.5	13.0	---	---	---	6.5	5.0	5.5	5.0	4.5	4.5
18	13.5	13.0	13.0	---	---	---	7.0	5.0	5.5	5.0	3.5	4.5
19	13.5	13.0	13.5	---	---	---	5.0	4.0	4.5	4.0	2.5	3.5
20	13.5	13.5	13.5	---	---	---	5.0	4.0	4.5	3.5	3.0	3.0
21	13.5	13.5	13.5	---	---	---	5.5	5.0	5.5	3.5	3.0	3.0
22	13.5	12.5	13.0	10.0	9.5	9.5	5.5	5.5	5.5	3.0	2.0	2.5
23	13.0	12.5	12.5	11.0	9.5	10.5	6.0	5.0	5.0	2.5	2.0	2.0
24	13.0	11.5	12.5	10.5	8.5	9.5	6.5	4.5	5.0	2.5	2.0	2.5
25	13.0	12.0	12.5	9.5	8.5	9.0	6.0	4.5	5.0	3.0	2.5	2.5
26	12.5	12.0	12.0	9.0	9.0	9.0	6.0	5.0	5.5	3.0	2.5	2.5
27	12.0	11.5	11.5	9.0	9.0	9.0	6.0	5.0	5.5	3.0	2.5	2.5
28	12.5	11.5	12.0	9.0	6.5	7.5	5.5	3.5	4.5	2.5	2.0	2.0
29	12.0	11.5	12.0	8.0	6.5	7.0	6.5	5.0	5.0	2.5	1.5	2.0
30	12.5	10.5	12.0	8.5	8.0	8.0	6.5	4.0	5.0	2.5	2.0	2.0
31	12.5	12.0	12.5	---	---	---	7.0	5.0	5.5	2.5	2.0	2.0
MONTH	15.5	10.5	13.2	14.5	1.0	9.6	8.0	3.5	5.8	7.0	1.5	3.9

040871475 WILSON PARK CREEK AT GMIA OUTFALL #7 AT MILWAUKEE, WI—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	2.0	1.5	2.0	6.5	2.0	3.0	6.5	5.5	6.0	9.0	8.5	9.0
2	2.0	1.5	2.0	3.5	2.5	3.0	6.5	6.0	6.0	9.0	8.5	8.5
3	2.0	1.5	1.5	3.5	3.0	3.0	6.5	5.5	6.0	9.0	8.5	8.5
4	2.0	1.5	1.5	4.5	2.5	3.0	6.0	5.5	6.0	9.0	8.5	8.5
5	2.0	0.5	1.5	5.5	2.5	4.0	6.5	5.5	6.0	9.0	8.5	9.0
6	2.0	1.0	2.0	4.0	3.5	3.5	6.5	6.0	6.0	9.0	9.0	9.0
7	2.0	2.0	2.0	4.0	3.5	3.5	7.0	6.5	6.5	9.0	9.0	9.0
8	2.0	2.0	2.0	4.0	3.0	3.5	7.0	6.5	7.0	11.5	9.0	9.0
9	2.0	1.5	2.0	4.0	3.5	3.5	7.0	6.5	7.0	14.0	10.0	11.5
10	2.0	1.5	2.0	4.0	3.5	3.5	7.0	6.5	6.5	14.0	11.5	12.5
11	2.0	1.5	2.0	4.0	3.0	3.5	7.0	6.5	6.5	13.5	11.0	12.0
12	2.0	1.5	2.0	3.0	2.5	3.0	6.5	6.5	6.5	12.0	11.0	11.0
13	2.0	1.5	1.5	3.5	3.0	3.0	6.5	6.0	6.5	17.5	12.0	15.5
14	1.5	1.5	1.5	3.5	2.5	3.0	7.0	6.0	6.5	14.5	10.5	13.0
15	2.0	1.5	1.5	3.0	3.0	3.0	7.0	6.5	7.0	13.5	11.0	12.0
16	1.5	1.0	1.5	3.5	3.0	3.0	7.0	6.5	7.0	12.5	10.5	11.5
17	1.5	1.0	1.5	3.5	3.0	3.5	11.5	7.0	9.0	17.5	11.5	12.5
18	2.0	1.5	1.5	3.5	3.0	3.0	9.0	8.0	8.5	17.5	12.5	13.5
19	2.5	1.5	2.0	4.0	2.5	3.5	9.0	8.0	8.5	12.5	11.5	12.0
20	4.5	0.0	2.5	4.5	4.0	4.0	10.0	8.0	9.0	13.5	12.0	12.5
21	3.5	0.5	2.5	4.0	3.5	4.0	10.5	9.5	10.0	15.0	11.5	13.0
22	4.0	0.5	2.0	4.0	3.5	3.5	10.0	8.5	9.0	16.0	11.0	13.5
23	3.0	0.0	1.5	4.5	3.5	4.0	9.0	8.5	8.5	16.5	10.0	13.5
24	3.0	0.5	2.0	5.0	4.5	4.5	9.0	8.0	8.5	14.5	12.5	13.0
25	2.5	1.5	2.0	7.0	5.0	5.0	9.0	8.0	8.5	13.5	12.0	12.5
26	3.5	1.0	2.0	14.5	7.0	9.5	9.0	8.5	9.0	13.5	12.0	12.5
27	2.5	1.5	2.0	7.5	5.5	6.5	8.5	8.0	8.5	13.0	12.0	12.5
28	2.5	2.0	2.5	12.5	6.0	7.5	8.5	8.0	8.5	13.5	12.0	12.5
29	3.0	2.0	2.5	10.0	7.0	8.0	9.0	8.5	8.5	13.0	12.5	12.5
30	---	---	---	8.0	6.5	7.0	9.5	9.0	9.0	17.0	9.0	13.0
31	---	---	---	6.5	6.0	6.0	---	---	---	14.0	12.5	13.0
MONTH	4.5	0.0	1.9	14.5	2.0	4.2	11.5	5.5	7.5	17.5	8.5	11.7
		JUNE			JULY			AUGUST			SEPTEMBER	
1	14.0	12.5	13.0	16.0	15.5	15.5	17.5	17.0	17.0	17.5	17.5	17.5
2	13.5	12.5	13.0	16.0	15.5	15.5	17.5	17.0	17.0	17.5	17.5	17.5
3	13.5	12.5	13.0	22.5	15.5	17.0	22.0	17.0	18.0	18.0	17.5	17.5
4	13.5	12.5	13.0	20.0	18.0	18.5	23.0	18.0	20.0	17.5	17.5	17.5
5	13.5	12.5	13.0	18.0	16.5	17.0	19.5	18.0	18.5	17.5	17.5	17.5
6	13.5	12.5	13.0	17.0	16.5	16.5	18.5	18.0	18.0	17.5	17.5	17.5
7	13.5	13.0	13.5	20.5	17.0	18.0	18.0	18.0	18.0	17.5	17.0	17.5
8	14.5	13.5	14.0	17.0	16.0	16.5	18.0	17.5	18.0	17.5	17.0	17.0
9	14.5	14.0	14.5	16.5	16.0	16.0	17.5	17.5	17.5	17.5	17.0	17.0
10	16.5	14.5	15.0	16.5	16.0	16.5	17.5	17.5	17.5	17.5	17.0	17.0
11	16.0	15.0	15.5	22.5	16.0	17.0	17.5	17.0	17.0	17.5	17.0	17.0
12	16.5	14.0	15.5	21.0	18.0	19.0	17.0	17.0	17.0	17.5	17.0	17.0
13	16.5	14.5	15.5	18.5	17.5	17.5	17.0	16.5	17.0	17.5	17.0	17.0
14	22.5	15.5	18.0	18.0	17.0	17.5	16.5	16.5	16.5	17.5	17.0	17.0
15	18.0	15.5	16.5	17.5	17.0	17.0	17.0	16.5	16.5	21.5	17.0	17.5
16	16.5	15.0	15.5	23.0	17.0	18.0	17.0	16.5	16.5	20.0	18.0	19.0
17	19.0	16.0	17.0	19.5	17.5	18.0	18.0	16.5	17.0	18.0	17.5	18.0
18	16.5	15.5	16.0	17.5	17.0	17.5	19.5	16.5	17.0	17.5	17.5	17.5
19	16.0	15.0	15.5	17.5	17.0	17.5	18.5	17.0	17.5	17.5	17.5	17.5
20	15.5	15.0	15.0	17.5	17.0	17.5	17.0	16.5	17.0	17.5	17.0	17.5
21	18.0	15.0	16.0	24.0	17.0	19.0	17.0	16.5	16.5	17.5	17.0	17.0
22	16.5	15.0	15.5	20.0	18.5	19.0	17.0	16.5	16.5	17.5	15.0	17.0
23	18.0	15.0	16.0	18.5	18.0	18.0	17.0	16.5	17.0	17.5	17.0	17.0
24	17.0	15.0	15.5	18.0	17.5	18.0	21.5	16.5	17.5	17.0	17.0	17.0
25	15.5	14.5	15.0	17.5	17.5	17.5	20.5	18.5	19.0	17.0	16.5	17.0
26	15.5	14.5	15.0	17.5	17.0	17.5	18.5	17.5	18.0	17.0	16.5	17.0
27	18.0	15.0	15.5	17.5	17.0	17.0	23.0	17.5	19.5	17.0	16.5	16.5
28	18.0	15.5	16.0	17.5	17.0	17.0	21.5	16.0	19.0	17.0	16.0	16.0
29	16.0	15.0	15.5	17.5	17.0	17.0	21.5	16.5	17.5	16.0	15.0	15.5
30	16.0	15.5	15.5	17.0	17.0	17.0	18.0	17.5	18.0	15.5	15.0	15.5
31	---	---	---	17.5	17.0	17.0	18.0	17.5	17.5	---	---	---
MONTH	22.5	12.5	15.0	24.0	15.5	17.3	23.0	16.0	17.6	21.5	15.0	17.1
YEAR	24.0	0.0	10.5									

040871475 WILSON PARK CREEK AT GMIA OUTFALL #7 AT MILWAUKEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DISCRETE SAMPLES

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	COD, low level, water, unfltrd mg/L (00335)
FEB 06...	1117	.03	50	3,700
APR 06...	1010	.29	50	250

040871475 WILSON PARK CREEK AT GMIA OUTFALL #7 AT MILWAUKEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
COMPOSITE SAMPLES

Date	End date	Time	End time	Sampling method, code (82398)	pH, water, unfltrd lab, std units (00403)	Specif. conduc-tance, wat unf lab, uS/cm 25 degC (90095)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (00417)	Chlor-ide, water, fltrd, mg/L (00940)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	COD, low level, water, unfltrd mg/L (00335)	1,2-Propane-diol, water, unfltrd mg/L (91080)
DEC 10-11	20031211	1630	0820	50	--	--	--	--	--	--	--	60	--
DEC 11-18	20031218	1026	0256	50	--	--	--	--	--	--	--	460	--
DEC 23-30	20031230	1958	0749	50	--	--	--	--	--	--	--	760	--
DEC 31 2003-JAN 03 2004	20040103	0327	1711	50	--	--	--	--	--	--	--	340	--
JAN 04-05	20040105	0229	1208	50	--	--	--	--	--	--	--	300	--
JAN 04-05	20040105	1615	0415	50	8.0	1,920	339	384	1.8	1.27	108	220	52.0
JAN 06-06	20040106	0008	1841	50	--	--	--	--	--	--	--	640	--
JAN 10-11	20040111	0649	2313	50	--	--	--	--	--	--	--	1,500	--
JAN 12-13	20040113	1753	1207	50	--	--	--	--	--	--	--	1,900	--
JAN 14-16	20040116	0804	1104	50	--	--	--	--	--	--	--	1,600	--
JAN 16-19	20040119	1849	0450	50	--	--	--	--	--	--	--	13,000	--
JAN 17-18	20040118	0540	0500	50	7.9	10,500	433	3,480	9.3	.682	8,520	17,000	13,000
JAN 29-31	20040131	2203	0356	50	--	--	--	--	--	--	--	3,000	--
JAN 31-FEB 01	20040201	0913	0014	50	--	--	--	--	--	--	--	1,600	--
FEB 01-03	20040203	1322	0139	50	--	--	--	--	--	--	--	350	--
FEB 03-04	20040204	1001	0040	50	--	--	--	--	--	--	--	20,000	--
FEB 04-05	20040205	1101	0957	50	--	--	--	--	--	--	--	11,000	--
FEB 05-06	20040206	1855	1025	50	--	--	--	--	--	--	--	3,900	--
FEB 05-06	20040206	2217	0944	50	--	--	--	--	--	--	--	5,000	--
FEB 13-16	20040216	0000	1606	50	--	--	--	--	--	--	--	870	--
FEB 17-19	20040219	0714	1702	50	--	--	--	--	--	--	--	780	--
FEB 19-22	20040222	1805	0810	50	7.6	4,170	362	1,070	3.5	.135	2,030	3,800	1,900
FEB 19-20	20040220	2258	1049	50	--	--	--	--	--	--	--	1,600	--
FEB 20-20	20040220	1128	1336	50	--	--	--	--	--	--	--	4,400	--
FEB 20-20	20040220	1355	2320	50	--	--	--	--	--	--	--	2,000	--
FEB 21-21	20040221	0002	1144	50	--	--	--	--	--	--	--	6,400	--
FEB 21-21	20040221	1207	2320	50	--	--	--	--	--	--	--	5,000	--
FEB 22-22	20040222	0005	0746	50	--	--	--	--	--	--	--	2,500	--
FEB 22-22	20040222	0924	1807	50	--	--	--	--	--	--	--	2,700	--
FEB 22-23	20040223	2236	0436	50	--	--	--	--	--	--	--	470	--
FEB 23-23	20040223	0530	1440	50	--	--	--	--	--	--	--	1,500	--
FEB 23-26	20040226	1555	1841	50	--	--	--	--	--	--	--	1,400	--
FEB 26-MAR 03	20040303	2049	1655	50	--	--	--	--	--	--	--	840	--
MAR 04-04	20040304	0138	1913	50	--	--	--	--	--	--	--	570	--
MAR 04-05	20040305	1943	0400	50	--	--	--	--	--	--	--	110	--
MAR 05-05	20040305	0408	0731	50	--	--	--	--	--	--	--	70	--

040871475 WILSON PARK CREEK AT GMIA OUTFALL #7 AT MILWAUKEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	1,2-Ethanediol, water, unfltrd mg/L (91075)
DEC 10-11	--
DEC 11-18	--
DEC 23-30	--
DEC 31 2003-JAN 03 2004	--
JAN 04-05	--
JAN 04-05	<18.0
JAN 06-06	--
JAN 10-11	--
JAN 12-13	--
JAN 14-16	--
JAN 16-19	--
JAN 17-18	<18.0
JAN 29-31	--
JAN 31-FEB 01	--
FEB 01-03	--
FEB 03-04	--
FEB 04-05	--
FEB 05-06	--
FEB 05-06	--
FEB 13-16	--
FEB 17-19	--
FEB 19-22	<18.0
FEB 19-20	--
FEB 20-20	--
FEB 20-20	--
FEB 21-21	--
FEB 21-21	--
FEB 22-22	--
FEB 22-22	--
FEB 22-23	--
FEB 23-23	--
FEB 23-26	--
FEB 26-MAR 03	--
MAR 04-04	--
MAR 04-05	--
MAR 05-05	--

040871475 WILSON PARK CREEK AT GMIA OUTFALL #7 AT MILWAUKEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	End date	Time	End time	Sampling method, code (82398)	COD, low level, water, unfltrd mg/L (00335)
MAR 14-15	20040315	0044	0457	50	430
MAR 15-24	20040324	1927	1305	50	1,500
MAR 25-26	20040326	0547	1114	50	160
MAR 26-APR 03	20040403	1732	1147	50	120
APR 05-10	20040410	0213	0620	50	250
APR 17-17	20040417	0309	0956	50	180
APR 20-21	20040421	0700	0801	50	76
APR 24-25	20040425	2220	2013	50	94
MAY 08-13	20040513	2141	1206	50	72

040871476 HOLMES AVENUE CREEK TRIB AT GMIA OUTFALL #1 AT MILWAUKEE, WI

LOCATION.--Lat 42°56'40", long 87°54'37", in NE ¼ NE ¼ sec.32, T.6 N., R.22 E., Milwaukee County, Hydrologic Unit 04040003, 100 ft west of intersection at corner of Air Cargo Way and Howell Avenue, at Milwaukee.

DRAINAGE AREA.--0.03 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1996 through May 1997, November 1997 to current year.

GAGE.--Water-stage recorder in culvert. Elevation of gage is 695 ft above NGVD of 1929, from topographic map.

REMARKS.--Records poor (see page 13).

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.01	0.08	0.00	0.01	0.00	0.52	0.01	0.02	0.01	0.00	0.01	0.01
2	0.00	1.0	0.00	0.10	0.01	0.17	0.00	0.00	0.00	0.00	0.01	0.01
3	0.07	0.76	0.00	0.03	0.04	0.10	0.00	0.00	0.00	0.87	1.1	0.01
4	0.01	0.38	0.00	0.01	0.02	0.68	0.00	0.00	0.00	0.25	0.20	0.01
5	0.00	0.02	0.01	0.02	0.00	0.89	0.00	0.00	0.00	0.01	0.01	0.01
6	0.00	0.00	0.00	0.01	0.04	0.07	0.05	0.00	0.00	0.01	0.01	0.01
7	0.01	0.00	0.00	0.01	0.03	0.08	0.01	0.00	0.00	0.31	0.01	0.01
8	0.01	0.00	0.00	0.01	0.01	0.03	0.01	0.16	0.00	0.01	0.01	0.01
9	0.01	0.00	0.49	0.03	0.01	0.02	0.00	0.32	0.00	0.01	0.01	0.01
10	0.01	0.00	0.86	0.02	0.02	0.03	0.00	0.15	0.64	0.01	0.01	0.01
11	0.02	0.01	0.02	0.02	0.02	0.03	0.00	0.00	0.37	0.37	0.01	0.01
12	0.04	0.01	0.00	0.02	0.01	0.01	0.00	0.08	0.20	0.04	0.01	0.01
13	0.01	0.00	0.00	0.03	0.01	0.00	0.00	0.48	0.00	0.01	0.01	0.01
14	0.38	0.00	0.01	0.02	0.01	0.20	0.00	1.1	0.43	0.01	0.01	0.01
15	0.01	0.00	0.01	0.01	0.01	0.02	0.01	0.00	0.00	0.01	0.01	0.11
16	0.01	0.00	0.11	0.01	0.00	0.01	0.01	0.00	0.00	0.04	0.01	0.01
17	0.01	0.09	0.01	0.06	0.02	0.16	0.18	0.11	0.10	0.01	0.06	0.01
18	0.01	0.83	0.00	0.02	0.02	0.18	0.01	0.29	0.00	0.01	0.05	0.01
19	0.01	0.02	0.00	0.01	0.05	0.05	0.01	0.00	0.00	0.01	0.01	0.01
20	0.01	0.01	0.00	0.01	0.25	0.05	0.58	0.01	0.00	0.01	0.01	0.01
21	0.01	0.00	0.01	0.01	0.19	0.02	0.14	0.53	0.33	0.15	0.01	0.01
22	0.01	0.07	0.01	0.00	0.24	0.00	0.00	1.1	0.00	0.01	0.01	0.00
23	0.01	0.17	0.01	0.00	0.30	0.00	0.00	0.57	0.19	0.01	0.01	0.00
24	0.37	0.01	0.00	0.02	0.20	0.06	0.15	0.00	0.04	0.01	0.31	0.00
25	0.03	0.00	0.00	0.02	0.22	0.08	0.12	0.01	0.00	0.01	0.02	0.00
26	0.01	0.00	0.00	0.02	0.24	0.62	0.00	0.00	0.00	0.01	0.01	0.00
27	0.01	0.00	0.00	0.03	0.24	0.03	0.00	0.00	0.01	0.01	0.19	0.00
28	0.03	0.01	0.19	0.02	0.25	0.64	0.00	0.00	0.00	0.01	0.57	0.00
29	0.03	0.00	0.03	0.00	0.27	0.05	0.00	0.09	0.00	0.01	0.02	0.00
30	0.01	0.00	0.01	0.00	---	0.15	0.01	0.48	0.00	0.01	0.01	0.00
31	0.01	---	0.01	0.00	---	0.02	---	0.08	---	0.01	0.01	---
TOTAL	1.17	3.47	1.79	0.58	2.73	4.97	1.30	5.58	2.32	2.25	2.74	0.31
MEAN	0.04	0.12	0.06	0.02	0.09	0.16	0.04	0.18	0.08	0.07	0.09	0.01
MAX	0.38	1.0	0.86	0.10	0.30	0.89	0.58	1.1	0.64	0.87	1.1	0.11
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
CFSM	1.26	3.86	1.92	0.62	3.14	5.34	1.44	6.00	2.58	2.42	2.95	0.34
IN.	1.45	4.30	2.22	0.72	3.39	6.16	1.61	6.92	2.88	2.79	3.40	0.38

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

MEAN	0.04	0.04	0.02	0.03	0.06	0.05	0.07	0.09	0.07	0.06	0.08	0.06
MAX	0.08	0.12	0.06	0.06	0.12	0.16	0.10	0.18	0.12	0.16	0.12	0.16
(WY)	(2002)	(2004)	(2004)	(1999)	(2001)	(2004)	(1999)	(2000)	(1999)	(2000)	(2001)	(2000)
MIN	0.01	0.01	0.00	0.00	0.01	0.00	0.04	0.03	0.02	0.02	0.01	0.01
(WY)	(2000)	(2000)	(2001)	(2003)	(2003)	(1999)	(2003)	(1998)	(2003)	(1998)	(2003)	(2004)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1997 - 2004	
ANNUAL TOTAL	12.20		29.21			
ANNUAL MEAN	0.03		0.08		0.05	
HIGHEST ANNUAL MEAN					0.08	2004
LOWEST ANNUAL MEAN					0.02	2003
HIGHEST DAILY MEAN	1.0	Nov 2	(a)1.1	May 14	(e)2.9	Jul 2, 2000
LOWEST DAILY MEAN	0.00	Jan 1	0.00	many days	0.00	many days
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	many periods	0.00	many periods
MAXIMUM PEAK STAGE			2.98	Aug 3	(e)4.45	Jul 2, 2000
INSTANTANEOUS LOW FLOW			0.00	many days	0.00	many days
ANNUAL RUNOFF (CFSM)	1.11		2.66		1.83	
ANNUAL RUNOFF (INCHES)	15.13		36.22		24.80	
10 PERCENT EXCEEDS	0.07		0.25		0.15	
50 PERCENT EXCEEDS	0.00		0.01		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

(a) Also occurred May 22 and Aug. 3
(e) Estimated due to ice effect or missing record

040871476 HOLMES AVENUE CREEK TRIB AT GMIA OUTFALL #1 AT MILWAUKEE, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1996 to May 1997, November 1997 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: November 1996 to May 1997, November 1997 to Sept. 6, 1999, November 2000 to September 2001.

INSTRUMENTATION.--Stage-activated water-quality sampler since November 1996. Continuous water-temperature recorder since November 1996.

REMARKS.--Chemical analyses are by the Wisconsin State Laboratory of Hygiene. Samples are point samples unless otherwise indicated. Records represent water temperature at sensor within 0.5°C.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum observed, 29.5°C, July 20-21, 2001; minimum observed, 0.0°C, many days during winter.

EXTREMES FOR CURRENT YEAR.-- WATER TEMPERATURE; Maximum observed, 24.5°C, July 21; minimum observed, 0.0°C, many days during winter.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	14.5	11.0	13.0	13.0	6.5	11.0	11.0	8.0	9.0	9.5	7.5	8.0
2	13.5	11.5	12.5	12.5	7.0	8.5	9.5	7.0	8.0	10.0	4.0	8.0
3	17.0	8.5	12.0	11.5	5.5	7.5	10.0	7.5	8.5	9.0	5.5	7.5
4	14.0	12.0	13.0	15.5	6.5	10.0	10.0	8.0	9.0	8.5	5.5	6.5
5	14.0	10.5	12.0	12.5	10.5	11.0	10.5	6.0	8.0	7.5	0.0	4.5
6	13.5	11.5	12.0	12.5	10.0	11.0	10.0	7.0	8.0	8.5	6.0	7.0
7	14.0	12.5	13.0	12.0	8.0	10.5	10.5	7.5	8.5	8.0	6.5	7.5
8	15.0	13.0	13.5	10.0	7.0	8.5	10.5	9.0	9.5	7.5	6.0	6.5
9	14.5	13.5	14.0	10.5	8.5	9.5	11.0	3.0	7.5	6.0	0.0	4.0
10	14.5	13.5	13.5	11.5	8.5	10.0	6.0	3.0	4.0	6.5	1.5	5.5
11	15.5	13.5	14.0	12.0	10.5	11.0	9.0	4.5	7.0	8.0	6.0	6.5
12	15.5	13.5	14.0	12.0	9.5	11.0	10.0	7.5	9.0	8.5	6.5	7.0
13	14.5	13.0	13.5	10.5	7.5	9.0	9.5	8.0	8.5	8.5	7.0	7.0
14	14.5	10.0	12.5	11.0	9.0	10.0	10.0	3.5	7.5	8.5	5.0	6.5
15	14.5	13.0	13.5	11.0	8.5	10.0	10.5	8.0	9.0	7.5	5.5	6.0
16	14.0	11.0	12.0	11.0	9.5	10.0	10.5	0.0	5.5	8.0	5.5	6.5
17	14.0	12.0	13.0	11.5	8.0	10.5	9.0	2.0	7.0	8.0	0.0	3.5
18	13.5	12.0	12.5	12.5	7.5	10.0	10.0	8.0	9.0	6.5	5.0	6.0
19	13.0	11.5	12.0	12.0	10.5	11.0	8.5	7.5	8.0	7.0	5.0	5.5
20	14.0	12.5	13.5	12.5	11.0	11.5	9.5	7.5	8.0	7.5	5.5	6.5
21	13.5	12.0	12.5	12.5	7.5	9.5	10.0	6.5	8.5	6.5	5.0	6.0
22	12.5	10.5	11.0	11.5	6.5	9.0	10.0	8.5	9.0	6.0	4.5	5.0
23	13.5	11.0	12.0	12.5	8.0	10.0	9.0	7.0	8.5	5.0	4.5	4.5
24	14.0	9.0	11.5	11.5	10.0	10.5	8.5	7.5	8.0	5.0	0.0	2.0
25	13.5	9.5	12.0	11.5	9.5	10.0	9.5	7.5	8.5	4.5	2.5	3.5
26	13.5	11.5	12.0	11.0	9.5	10.0	9.0	7.5	8.0	4.5	0.0	2.5
27	13.0	11.5	12.0	12.0	9.5	10.5	10.0	8.0	8.5	4.5	0.0	2.0
28	13.5	8.0	11.5	11.0	9.0	10.0	10.0	1.5	5.5	4.0	0.5	2.5
29	13.0	8.0	11.5	10.5	8.5	9.5	9.5	7.0	8.0	4.5	2.0	3.0
30	13.0	9.5	11.5	11.5	9.0	9.5	10.0	8.0	8.5	4.5	3.0	3.5
31	13.5	12.0	12.5	---	---	---	10.0	8.0	8.5	4.0	3.0	3.5
MONTH	17.0	8.0	12.5	15.5	5.5	10.0	11.0	0.0	8.0	10.0	0.0	5.3

040871476 HOLMES AVENUE CREEK TRIB AT GMIA OUTFALL #1 AT MILWAUKEE, WI—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	6.5	3.0	4.0	8.0	2.0	3.5	6.5	5.0	5.0	8.5	6.5	7.0
2	7.0	2.5	5.0	5.0	2.5	3.5	6.5	4.5	5.5	7.0	5.5	6.0
3	6.0	0.0	3.0	5.5	3.0	4.0	7.0	4.5	5.5	7.5	5.5	6.5
4	6.5	3.0	4.0	5.5	1.5	3.5	6.0	4.5	4.5	8.0	6.0	7.0
5	6.0	4.0	4.5	7.0	1.5	3.5	6.0	4.0	4.5	8.0	6.5	7.0
6	6.0	1.5	4.0	5.5	3.0	4.0	9.0	5.0	6.5	8.0	7.0	7.0
7	5.5	1.5	3.5	5.5	2.5	3.5	7.5	5.5	6.5	8.0	6.0	7.0
8	5.0	3.5	4.0	5.5	3.0	4.5	7.0	5.5	6.5	12.5	6.0	7.5
9	6.5	4.5	5.0	5.5	4.0	4.0	7.0	5.5	6.0	19.5	8.0	11.5
10	6.5	4.5	5.5	6.0	4.0	5.0	6.5	4.5	5.5	18.5	9.0	12.0
11	6.5	4.5	5.0	6.0	4.0	5.0	6.0	4.0	5.0	13.0	9.0	10.0
12	6.5	4.5	5.0	6.0	4.0	5.0	6.0	3.0	4.5	19.0	8.5	10.5
13	6.0	4.0	5.0	6.5	4.0	4.5	6.0	3.5	4.5	18.5	12.0	14.5
14	6.5	3.5	4.5	5.0	0.5	3.0	6.5	4.0	5.0	16.0	9.5	12.5
15	5.0	2.5	3.5	5.5	3.0	4.0	6.5	5.0	5.5	12.0	9.0	10.0
16	5.0	3.0	4.0	5.5	3.5	4.5	7.0	5.5	6.0	10.5	9.0	9.5
17	7.0	3.5	4.5	5.5	0.0	2.5	12.5	5.5	7.5	18.5	9.0	10.0
18	6.5	4.0	4.5	5.5	0.0	2.0	8.0	6.5	7.0	18.5	9.5	11.5
19	6.5	2.5	4.5	5.5	2.0	3.5	8.0	6.5	7.0	11.0	9.0	9.5
20	4.0	0.0	1.5	6.0	3.5	4.5	11.0	6.0	7.5	13.5	9.0	11.0
21	5.5	0.0	1.0	5.5	3.0	3.5	13.0	7.5	9.5	16.0	7.5	11.5
22	3.5	0.0	1.0	5.5	3.5	4.0	9.0	6.0	7.5	17.0	9.5	13.0
23	2.0	0.0	0.5	6.0	4.0	4.5	7.5	5.5	6.5	15.0	8.5	11.5
24	3.5	0.0	1.0	7.5	4.5	5.0	8.0	5.0	6.5	12.0	9.5	10.5
25	4.0	0.0	1.5	13.0	5.0	5.5	12.5	6.0	8.0	11.5	8.5	10.0
26	3.5	0.0	1.5	13.5	6.5	9.5	9.0	6.5	7.5	11.0	9.5	9.5
27	4.0	0.5	1.5	8.5	6.0	6.0	8.0	6.0	6.5	11.0	9.0	9.5
28	4.0	0.5	2.0	14.5	6.0	8.0	8.0	6.5	7.0	10.5	8.5	9.5
29	5.5	1.0	2.5	9.5	6.0	7.0	8.0	6.5	7.0	14.0	9.0	11.0
30	---	---	---	9.5	5.0	7.0	8.5	6.0	7.0	14.5	9.5	11.5
31	---	---	---	7.0	5.0	6.0	---	---	---	16.5	11.5	13.0
MONTH	7.0	0.0	3.3	14.5	0.0	4.6	13.0	3.0	6.3	19.5	5.5	9.9
		JUNE			JULY			AUGUST			SEPTEMBER	
1	14.0	10.5	11.5	13.0	11.5	12.0	14.0	13.0	13.5	15.5	14.0	14.5
2	11.5	9.5	10.5	13.0	11.5	12.0	14.0	13.0	13.5	15.5	14.5	15.0
3	11.0	9.5	10.0	22.5	11.5	14.5	21.5	13.0	14.5	15.5	14.5	14.5
4	11.0	9.5	10.0	20.5	14.0	16.0	21.0	15.0	17.0	16.0	14.5	15.0
5	11.0	9.5	10.0	14.5	13.0	13.5	15.5	14.0	14.5	17.5	14.5	15.5
6	11.0	9.5	10.0	14.5	12.5	13.0	15.0	13.5	14.0	15.5	14.5	15.0
7	11.0	9.5	10.0	20.0	12.5	15.5	15.0	13.5	14.0	15.5	14.0	14.5
8	11.0	9.5	10.0	14.5	13.0	13.5	15.0	13.5	14.0	15.0	14.0	14.0
9	11.5	9.5	10.5	15.0	12.5	13.5	15.0	13.5	14.0	15.5	14.0	14.5
10	17.5	10.0	13.0	14.0	12.5	13.0	14.5	13.5	14.0	15.5	14.5	14.5
11	17.5	13.0	14.5	22.5	12.5	14.0	14.5	13.5	13.5	16.0	14.5	15.0
12	15.0	12.0	13.5	20.0	13.5	15.5	14.5	13.0	13.5	15.5	14.5	15.0
13	13.0	11.0	12.0	14.5	13.0	13.5	15.0	13.0	13.5	15.5	14.5	15.0
14	24.0	11.0	14.5	14.0	13.0	13.5	14.5	13.0	13.5	18.0	14.5	15.5
15	15.0	12.0	13.0	14.0	12.5	13.5	14.5	13.0	13.5	21.5	14.5	17.0
16	13.0	11.5	12.0	20.5	12.5	14.5	15.0	13.5	14.0	19.5	15.0	16.5
17	20.5	11.5	15.0	15.0	13.5	14.0	16.5	14.0	15.0	16.0	14.5	15.0
18	14.0	11.5	12.5	14.5	13.0	14.0	21.0	13.5	15.0	15.5	14.5	15.0
19	13.0	11.0	11.5	14.5	13.0	13.5	16.5	14.0	14.5	15.5	14.5	15.0
20	12.5	11.0	11.5	14.5	13.0	13.5	15.0	13.5	14.0	15.5	14.5	14.5
21	19.0	11.0	14.0	24.5	13.0	15.5	14.5	13.5	14.0	16.0	14.5	15.0
22	15.0	12.0	13.0	16.0	13.5	14.5	15.0	13.5	14.0	15.5	14.0	15.0
23	18.5	11.5	14.0	14.5	13.0	14.0	15.0	14.0	14.5	16.0	14.5	15.0
24	16.5	11.5	14.0	14.5	13.0	13.5	21.5	14.0	16.5	15.5	14.0	14.5
25	14.0	12.0	12.5	14.0	13.0	13.5	20.0	15.0	16.5	15.5	14.0	14.5
26	13.0	11.5	12.0	14.0	13.0	13.5	16.0	14.5	15.0	15.5	14.0	14.5
27	18.5	11.5	12.5	14.0	13.0	13.5	23.5	14.5	17.5	15.5	13.5	14.5
28	18.5	12.0	14.0	14.0	13.0	13.5	21.0	13.5	17.0	13.5	12.0	12.5
29	13.5	12.0	12.5	14.0	13.0	13.0	16.5	14.5	15.0	14.5	13.0	13.5
30	13.0	11.5	12.0	14.0	13.0	13.0	15.5	14.5	15.0	15.0	13.5	14.0
31	---	---	---	14.5	13.0	13.5	15.5	14.5	15.0	---	---	---
MONTH	24.0	9.5	12.2	24.5	11.5	13.8	23.5	13.0	14.6	21.5	12.0	14.8
YEAR	24.5	0.0	9.6									

040871476 HOLMES AVENUE CREEK TRIB AT GMIA OUTFALL #1 AT MILWAUKEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DISCRETE SAMPLES

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	COD, low level, water, unfltrd mg/L (00335)
FEB 06...	1117	.03	50	3,700
APR 06...	1010	.29	50	250

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
COMPOSITE SAMPLES

Date	End date	Time	End time	Sampling method, code (82398)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unf lab, uS/cm 25 degC (90095)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (00417)	Chloride, water, fltrd, mg/L (00940)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	COD, low level, water, unfltrd mg/L (00335)	1,2-Propanediol, water, unfltrd mg/L (91080)
DEC 10-10	20031210	1632	2351	50	--	--	--	--	--	--	--	260	--
DEC 28-28	20031228	0537	0857	50	--	--	--	--	--	--	--	540	--
JAN 02-02	20040102	1806	2341	50	--	--	--	--	--	--	--	410	--
JAN 04-04	20040104	1651	2309	50	7.4	2,410	743	168	4.3	2.65	1,080	1,400	<18.0
JAN 17-17	20040117	0858	2002	50	7.7	22,300	860	7,590	4.5	.746	9,200	19,000	12,000
JAN 26-27	20040127	1014	1027	50	--	--	--	--	--	--	--	1,200	--
FEB 03-03	20040203	1100	1749	50	--	--	--	--	--	--	--	9,800	--
FEB 06-11	20040211	1647	1753	50	--	--	--	--	--	--	--	17,000	--
FEB 19-20	20040220	1424	1328	50	--	--	--	--	--	--	--	11,000	--
FEB 20-22	20040222	1416	0441	50	7.8	2,730	490	412	4.4	.016	8,710	15,000	14,000
FEB 22-22	20040222	0856	2243	50	--	--	--	--	--	--	--	6,900	--
FEB 23-23	20040223	0113	1327	50	--	--	--	--	--	--	--	4,600	--
FEB 23-26	20040226	1755	1548	50	--	--	--	--	--	--	--	4,300	--
FEB 27-MAR 03	20040303	1358	1333	50	--	--	--	--	--	--	--	3,500	--
MAR 04-04	20040304	0554	2347	50	--	--	--	--	--	--	--	560	--
MAR 05-05	20040305	0018	0602	50	--	--	--	--	--	--	--	81	--
MAR 05-07	20040307	0711	0330	50	--	--	--	--	--	--	--	1,100	--
MAR 08-14	20040314	1218	1210	50	--	--	--	--	--	--	--	1,300	--
MAR 17-26	20040326	1122	0520	50	--	--	--	--	--	--	--	1,400	--
MAR 26-30	20040330	1721	0932	50	--	--	--	--	--	--	--	140	--
APR 17-22	20040422	0239	1244	50	--	--	--	--	--	--	--	130	--

040871476 HOLMES AVENUE CREEK TRIB AT GMIA OUTFALL #1 AT MILWAUKEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	1,2-Ethanediol, water, unfltrd mg/L (91075)	Runoff volume, thousands of cubic feet (99904)
DEC 10-10	--	3.1
DEC 28-28	--	6.9
JAN 02-02	--	4.9
JAN 04-04	<18.0	.07
JAN 17-17	<18.0	4.0
JAN 26-27	--	2.4
FEB 03-03	--	1.6
FEB 06-11	--	8.2
FEB 19-20	--	12
FEB 20-22	<18.0	29
FEB 22-22	--	14
FEB 23-23	--	12
FEB 23-26	--	54
FEB 27-MAR 03	--	120
MAR 04-04	--	54
MAR 05-05	--	54
MAR 05-07	--	21
MAR 08-14	--	25
MAR 17-26	--	93
MAR 26-30	--	71
APR 17-22	--	79

LOCATION.--Lat 42°59'23", long 87°57'07", in SE ¼ SE ¼ sec.12, T.6 N., R.21 E., Milwaukee County, Hydrologic Unit 04040003, on left bank 50 ft upstream from the Kinnickinnic River and 100 ft upstream of Kinnicknnic River Parkway bridge, at Milwaukee.

DRAINAGE AREA.--11.34 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1996 to May 1997, November 1997 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 640 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor (see page 11).

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	4.6	2.2	2.4	1.8	33	7.7	6.3	22	3.9	2.9	3.7
2	1.9	102	2.1	4.6	1.9	16	6.5	3.7	9.3	3.8	3.2	3.7
3	6.6	72	2.2	5.0	2.7	9.2	5.8	3.5	7.0	87	119	3.5
4	2.5	57	2.3	3.0	2.5	41	5.4	3.6	6.1	117	66	3.1
5	1.8	13	3.0	3.4	2.3	185	5.0	3.9	5.5	12	8.2	4.7
6	2.0	5.2	2.2	2.2	2.3	22	6.4	3.7	5.2	8.3	5.9	3.1
7	1.8	3.9	2.0	1.9	2.5	14	5.1	3.4	5.2	51	4.0	3.0
8	1.9	2.8	2.1	2.2	2.1	9.1	4.7	13	4.7	8.5	3.5	2.9
9	2.2	2.5	31	2.4	2.0	7.7	4.2	47	5.4	6.3	5.9	3.0
10	1.8	2.7	129	2.6	e2.0	6.3	4.0	30	78	5.4	3.5	3.1
11	1.8	3.2	14	2.6	e2.2	6.0	3.7	10	70	30	3.3	2.8
12	4.8	2.5	6.1	3.3	e2.3	5.2	3.5	7.0	51	27	3.4	2.7
13	1.9	2.4	4.4	3.0	2.4	4.9	3.6	93	13	6.1	3.4	3.0
14	33	2.4	4.3	3.0	2.5	14	3.2	212	106	5.0	3.1	3.0
15	3.5	2.1	3.7	2.5	2.3	5.4	3.1	34	18	4.4	2.9	11
16	2.4	2.2	11	2.6	2.2	4.8	3.3	18	15	9.8	3.0	8.7
17	2.2	2.7	4.6	4.7	2.5	9.5	22	21	26	5.6	4.7	3.3
18	1.8	89	3.6	2.4	2.6	11	4.1	81	10	3.7	4.3	2.8
19	1.9	8.4	3.0	e2.3	3.9	8.0	3.8	14	6.9	3.9	4.2	2.8
20	1.9	4.7	2.8	e2.2	14	6.3	63	11	5.9	4.3	3.0	2.7
21	2.2	3.5	3.0	e2.2	15	4.8	34	77	66	25	3.0	2.8
22	1.9	5.7	2.9	e2.1	12	4.3	6.8	208	38	6.7	2.6	2.6
23	2.1	15	2.9	e2.0	26	4.5	4.9	224	22	4.8	2.9	2.6
24	30	4.8	2.4	e1.9	17	6.2	8.4	28	22	4.6	26	2.6
25	13	3.2	2.2	e2.1	13	5.4	25	20	7.9	3.7	18	2.6
26	2.6	2.9	2.3	e2.2	12	87	6.2	13	5.8	3.8	4.4	2.6
27	2.3	2.7	2.3	e2.3	11	12	4.8	10	7.2	3.5	18	2.8
28	3.6	2.5	15	e2.2	11	83	4.4	8.3	16	3.8	61	2.8
29	2.5	2.3	4.0	e2.0	12	34	4.2	15	5.1	3.1	11	2.8
30	3.1	2.3	2.9	e1.9	---	19	4.7	70	4.3	3.4	4.3	2.8
31	1.9	---	2.8	1.8	---	10	---	27	---	2.9	4.0	---
TOTAL	144.8	430.2	278.3	81.0	188.0	688.6	271.5	1,319.4	664.5	468.3	412.6	103.6
MEAN	4.67	14.3	8.98	2.61	6.48	22.2	9.05	42.6	22.1	15.1	13.3	3.45
MAX	33	102	129	5.0	26	185	63	224	106	117	119	11
MIN	1.8	2.1	2.0	1.8	1.8	4.3	3.1	3.4	4.3	2.9	2.6	2.6
CFSM	0.41	1.26	0.79	0.23	0.57	1.96	0.80	3.75	1.95	1.33	1.17	0.30
IN.	0.48	1.41	0.91	0.27	0.62	2.26	0.89	4.33	2.18	1.54	1.35	0.34

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

MEAN	8.78	8.06	5.45	8.20	14.5	12.4	19.4	23.7	19.4	14.9	15.1	13.8
MAX	20.6	14.3	8.98	21.9	31.7	22.3	39.6	42.6	37.0	35.3	21.7	34.4
(WY)	(2002)	(2004)	(2004)	(1999)	(2001)	(1998)	(1999)	(2004)	(1999)	(2000)	(1998)	(2000)
MIN	4.67	3.42	3.00	1.25	1.90	7.04	8.55	12.4	6.23	7.20	5.31	3.45
(WY)	(2004)	(2003)	(2003)	(2003)	(2003)	(2003)	(1997)	(2002)	(2003)	(2003)	(2003)	(2004)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1997 - 2004	
ANNUAL TOTAL	2,780.60		5,050.8			
ANNUAL MEAN	7.62		13.8		13.7	
HIGHEST ANNUAL MEAN					17.6	2000
LOWEST ANNUAL MEAN					6.32	2003
HIGHEST DAILY MEAN	129	Dec 10	224	May 23	508	Jun 13, 1999
LOWEST DAILY MEAN	(a)0.50	Jan 23	1.8	(b)Oct 5	0.50	Jan 23, 2003
ANNUAL SEVEN-DAY MINIMUM	0.66	Jan 20	1.9	Oct 5	0.66	Jan 20, 2003
MAXIMUM PEAK FLOW			1,220	Aug 3	3,090	Jul 2, 2000
MAXIMUM PEAK STAGE			17.92	Aug 3	20.82	Jul 2, 2000
INSTANTANEOUS LOW FLOW			1.2	Oct 11	(a)0.43	Jan 23, 2003
ANNUAL RUNOFF (CFSM)	0.672		1.22		1.21	
ANNUAL RUNOFF (INCHES)	9.12		16.57		16.44	
10 PERCENT EXCEEDS	16		30		27	
50 PERCENT EXCEEDS	2.8		4.2		5.0	
90 PERCENT EXCEEDS	1.5		2.2		2.2	

(a) Result of freezeup
(b) Also occurred Oct. 7, 10, 11, 18, Jan. 31, Feb. 1
(e) Estimated due to ice effect or missing record

040871488 WILSON PARK CREEK AT ST. LUKES HOSPITAL AT MILWAUKEE, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1996 to April 1997, November 1997 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: November 1996 to April 1997, November 1997 to current year.
DISSOLVED OXYGEN: November, 1996 to April 1997, November 1997 to current year.
SPECIFIC CONDUCTANCE: January 2001 to current year.

INSTRUMENTATION.--Stage-activated water-quality sampler since November 1996. Continuous water-temperature recorder since November 1996. Dissolved-oxygen recorder since November 1996. Specific conductance recorder since January 2001.

REMARKS.--Chemical analyses are by the Wisconsin State Laboratory of Hygiene. Samples are point samples unless otherwise indicated. Dissolved-oxygen concentrations greater than 30 mg/L are out of calibration range of meter. Records represent water temperature at sensor within 0.5°C.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum observed, 29.5°C, July 30, 1999; minimum observed, 0.0°C, many days during winter.
DISSOLVED OXYGEN: Maximum observed, 22.7 mg/L, Oct. 14, 2000; minimum observed, 0.0 mg/L, Feb. 24, 1997, May 9, 10, 2004.
SPECIFIC CONDUCTANCE: Maximum observed, 27,500 µS/cm, Feb. 4, 2004; minimum observed, 38 µS/cm, Aug. 13, 2002.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum observed, 26.5°C, Aug. 3; minimum observed, 0.0°C, many days during winter.
DISSOLVED OXYGEN: Maximum observed, 21.7 mg/L, Apr. 16; minimum observed, 0.0 mg/L, May 9, 10.
SPECIFIC CONDUCTANCE: Maximum observed, 27,500 µS/cm, Feb. 4; minimum observed, 79 µS/cm, Aug. 3.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	11.0	10.0	10.0	11.5	10.5	10.5	4.5	3.0	3.0	3.5	2.5	2.5
2	12.0	9.5	9.5	10.5	10.0	10.0	3.5	2.0	2.0	6.0	4.0	4.0
3	11.5	10.0	10.0	10.0	9.5	9.5	4.5	3.0	3.0	6.0	4.0	4.0
4	13.0	11.0	11.0	15.0	11.5	11.5	5.0	4.0	4.0	2.0	1.0	1.0
5	13.0	10.5	10.5	12.5	9.5	9.5	5.5	4.5	4.5	0.5	0.0	0.0
6	14.0	11.5	11.5	9.0	7.0	7.0	5.0	4.0	4.0	0.0	0.0	0.0
7	16.0	13.0	13.0	7.0	5.0	5.0	5.0	4.0	4.0	1.0	0.5	0.5
8	18.0	15.5	15.5	6.0	3.0	3.0	5.5	5.0	5.0	0.5	0.5	0.5
9	15.5	14.5	14.5	6.0	4.0	4.0	7.0	6.0	6.0	0.5	0.0	0.0
10	18.0	15.5	15.5	7.0	5.0	5.0	6.0	5.5	5.5	0.0	0.0	0.0
11	18.0	16.0	16.0	9.5	8.0	8.0	4.0	2.0	2.0	0.5	0.0	0.0
12	17.0	15.0	15.0	10.5	8.0	8.0	0.5	0.0	0.0	1.0	0.5	0.5
13	16.0	14.0	14.0	5.5	4.0	4.0	1.0	0.5	0.5	0.5	0.0	0.0
14	14.5	13.5	13.5	7.5	5.0	5.0	2.5	1.5	1.5	0.5	0.0	0.0
15	13.5	12.0	12.0	7.5	7.0	7.0	3.0	2.0	2.0	0.0	0.0	0.0
16	12.0	10.5	10.5	8.5	8.0	8.0	3.5	3.0	3.0	0.5	0.0	0.0
17	12.5	10.0	10.0	10.0	8.5	8.5	2.0	1.0	1.0	0.5	0.0	0.0
18	14.5	12.0	12.0	11.5	10.5	10.5	1.5	1.0	1.0	0.0	0.0	0.0
19	14.0	12.5	12.5	10.0	8.5	8.5	1.5	0.5	0.5	0.5	0.0	0.0
20	16.5	13.5	13.5	10.5	8.0	8.0	0.5	0.0	0.0	0.5	0.5	0.5
21	14.0	13.0	13.0	9.0	7.5	7.5	2.0	1.0	1.0	0.5	0.0	0.0
22	12.5	11.0	11.0	8.5	7.5	7.5	4.5	3.0	3.0	0.0	0.0	0.0
23	11.5	11.0	11.0	12.0	9.5	9.5	3.5	2.5	2.5	1.0	0.5	0.5
24	12.5	10.5	10.5	7.5	4.0	4.0	1.5	0.5	0.5	0.5	0.0	0.0
25	14.0	11.5	11.5	4.0	2.5	2.5	1.5	0.5	0.5	0.5	0.5	0.5
26	10.0	9.0	9.0	6.0	4.5	4.5	2.0	1.5	1.5	0.5	0.5	0.5
27	10.5	9.0	9.0	7.5	6.5	6.5	3.5	2.5	2.5	0.5	0.0	0.0
28	10.5	9.0	9.0	5.5	3.5	3.5	5.5	4.5	4.5	0.0	0.0	0.0
29	10.0	9.0	9.0	3.5	2.5	2.5	5.0	4.0	4.0	0.0	0.0	0.0
30	13.0	11.0	11.0	7.0	5.0	5.0	4.0	2.5	2.5	0.0	0.0	0.0
31	14.5	13.5	13.5	---	---	---	4.0	2.5	2.5	0.5	0.5	0.5
MONTH	18.0	9.0	11.9	15.0	2.5	6.8	7.0	0.0	2.5	6.0	0.0	0.5

040871488 WILSON PARK CREEK AT ST. LUKES HOSPITAL AT MILWAUKEE, WI—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.0	0.5	0.5	7.0	4.5	4.5	11.5	7.0	7.0	11.0	9.5	9.5
2	1.0	0.5	0.5	5.5	4.5	4.5	12.0	7.5	7.5	14.5	10.0	10.0
3	0.5	0.0	0.0	5.0	4.5	4.5	9.0	6.5	6.5	15.0	10.5	10.5
4	0.0	0.0	0.0	5.5	4.5	4.5	9.0	6.0	6.0	17.5	12.5	12.5
5	0.5	0.0	0.0	6.0	4.5	4.5	10.5	6.5	6.5	15.0	12.0	12.0
6	0.5	0.0	0.0	7.0	4.5	4.5	13.0	8.5	8.5	16.0	13.0	13.0
7	0.0	0.0	0.0	5.0	4.0	4.0	14.0	10.0	10.0	14.5	12.0	12.0
8	0.0	0.0	0.0	6.0	3.5	3.5	11.0	9.0	9.0	17.0	12.5	12.5
9	0.5	0.0	0.0	6.0	3.5	3.5	12.5	9.0	9.0	17.5	14.0	14.0
10	0.5	0.0	0.0	7.5	4.5	4.5	11.5	8.5	8.5	19.5	16.0	16.0
11	0.5	0.0	0.0	5.5	3.0	3.0	11.0	7.5	7.5	17.0	15.0	15.0
12	0.5	0.0	0.0	3.5	1.0	1.0	9.5	6.5	6.5	22.0	17.5	17.5
13	0.0	0.0	0.0	3.5	2.0	2.0	11.5	7.0	7.0	22.0	18.5	18.5
14	0.5	0.0	0.0	4.5	3.5	3.5	13.5	9.5	9.5	18.0	14.0	14.0
15	0.0	0.0	0.0	4.0	2.5	2.5	15.0	11.0	11.0	17.0	13.5	13.5
16	0.5	0.0	0.0	5.0	2.5	2.5	18.0	14.0	14.0	16.5	13.0	13.0
17	0.0	0.0	0.0	3.5	3.0	3.0	18.0	14.5	14.5	20.5	16.0	16.0
18	0.5	0.0	0.0	3.5	2.5	2.5	19.0	15.0	15.0	18.5	15.0	15.0
19	0.5	0.0	0.0	7.5	4.5	4.5	16.5	15.0	15.0	17.5	14.0	14.0
20	0.0	0.0	0.0	10.0	6.0	6.0	13.0	11.0	11.0	21.5	17.0	17.0
21	0.0	0.0	0.0	5.0	3.0	3.0	14.5	12.0	12.0	16.5	14.0	14.0
22	0.5	0.0	0.0	7.0	3.0	3.0	10.5	9.5	9.5	15.5	14.0	14.0
23	0.0	0.0	0.0	10.0	5.5	5.5	15.5	10.5	10.5	16.5	14.0	14.0
24	1.5	0.5	0.5	10.5	7.5	7.5	12.0	10.0	10.0	15.0	13.5	13.5
25	4.0	1.5	1.5	13.0	10.5	10.5	12.5	10.0	10.0	18.0	14.5	14.5
26	5.5	2.0	2.0	12.5	11.0	11.0	13.0	10.0	10.0	18.0	14.5	14.5
27	5.5	2.5	2.5	9.5	8.5	8.5	14.0	9.5	9.5	20.0	15.5	15.5
28	5.5	2.5	2.5	14.0	11.0	11.0	17.5	12.5	12.5	18.5	14.5	14.5
29	7.0	4.0	4.0	13.0	10.0	10.0	17.5	15.0	15.0	14.0	12.5	12.5
30	---	---	---	9.0	8.0	8.0	14.5	11.0	11.0	14.5	13.0	13.0
31	---	---	---	9.0	6.5	6.5	---	---	---	17.5	15.0	15.0
MONTH	7.0	0.0	0.5	14.0	1.0	5.1	19.0	6.0	10.0	22.0	9.5	13.9
		JUNE			JULY			AUGUST			SEPTEMBER	
1	16.5	14.5	14.5	23.5	20.5	20.5	25.0	22.0	22.0	23.0	20.0	20.0
2	19.5	15.5	15.5	23.5	20.0	20.0	24.5	22.5	22.5	24.0	21.0	21.0
3	19.5	15.5	15.5	23.5	20.0	20.0	26.5	23.0	23.0	23.0	21.0	21.0
4	20.5	16.0	16.0	21.5	20.5	20.5	24.0	21.5	21.5	24.0	21.5	21.5
5	20.5	16.5	16.5	20.5	19.0	19.0	22.0	19.5	19.5	24.0	22.0	22.0
6	21.5	18.0	18.0	23.5	20.0	20.0	23.5	19.5	19.5	22.5	21.5	21.5
7	23.5	20.0	20.0	20.5	19.0	19.0	20.5	19.0	19.0	21.5	19.0	19.0
8	25.5	22.0	22.0	20.0	18.0	18.0	23.5	20.5	20.5	20.5	18.5	18.5
9	24.0	21.0	21.0	20.0	18.0	18.0	24.5	21.5	21.5	21.5	19.0	19.0
10	17.5	16.5	16.5	24.5	20.0	20.0	20.5	19.0	19.0	22.0	19.0	19.0
11	16.5	16.0	16.0	24.0	21.0	21.0	17.5	17.0	17.0	22.0	19.5	19.5
12	20.5	17.0	17.0	25.0	22.5	22.5	18.0	16.5	16.5	23.0	20.5	20.5
13	22.5	18.5	18.5	26.0	22.0	22.0	20.0	17.5	17.5	23.0	20.5	20.5
14	22.0	19.5	19.5	23.0	21.0	21.0	21.5	18.5	18.5	23.5	21.5	21.5
15	22.0	19.0	19.0	24.0	21.0	21.0	21.5	18.5	18.5	24.5	22.0	22.0
16	23.0	19.0	19.0	24.5	21.5	21.5	21.0	18.5	18.5	22.0	20.0	20.0
17	20.5	19.0	19.0	24.5	21.0	21.0	21.5	20.0	20.0	21.0	18.5	18.5
18	21.0	18.0	18.0	25.0	21.5	21.5	23.5	20.5	20.5	20.5	18.5	18.5
19	21.0	17.0	17.0	25.0	22.0	22.0	22.0	19.0	19.0	20.5	18.5	18.5
20	21.5	17.5	17.5	26.0	23.0	23.0	22.0	19.0	19.0	20.0	18.5	18.5
21	18.5	16.0	16.0	24.5	23.0	23.0	21.5	18.5	18.5	20.5	18.0	18.0
22	15.5	13.0	13.0	25.5	23.0	23.0	21.5	18.5	18.5	20.5	18.5	18.5
23	19.5	16.5	16.5	23.5	20.5	20.5	21.0	20.0	20.0	20.5	19.0	19.0
24	17.0	15.5	15.5	21.5	20.0	20.0	22.0	20.5	20.5	20.0	19.0	19.0
25	21.0	16.5	16.5	23.5	20.0	20.0	22.0	21.0	21.0	18.5	17.5	17.5
26	20.5	17.5	17.5	22.5	20.0	20.0	24.5	22.0	22.0	18.5	17.0	17.0
27	21.5	18.0	18.0	24.5	21.0	21.0	25.5	23.0	23.0	19.5	17.0	17.0
28	22.0	19.0	19.0	23.0	21.0	21.0	22.5	20.0	20.0	17.5	15.5	15.5
29	23.5	19.5	19.5	24.0	21.5	21.5	22.0	18.0	18.0	17.5	15.0	15.0
30	24.0	20.5	20.5	23.0	21.5	21.5	21.5	18.5	18.5	16.5	15.0	15.0
31	---	---	---	24.0	21.5	21.5	22.5	19.5	19.5	---	---	---
MONTH	25.5	13.0	17.6	26.0	18.0	20.8	26.5	16.5	19.8	24.5	15.0	19.1
YEAR	26.5	0.0	10.7									

040871488 WILSON PARK CREEK AT ST. LUKES HOSPITAL AT MILWAUKEE, WI—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	12.7	10.3	11.4	13.0	9.0	10.7	15.6	12.0	13.7	15.4	9.1	11.7
2	13.2	10.5	11.7	10.2	9.2	9.7	16.9	12.9	14.2	16.0	7.0	10.7
3	12.2	8.4	10.3	10.0	8.7	9.3	17.0	12.8	14.2	12.4	6.3	8.9
4	13.5	8.4	10.9	9.8	6.8	8.5	16.4	11.9	13.6	13.2	9.7	11.1
5	13.1	9.4	11.0	11.8	7.7	9.7	17.5	11.0	12.9	---	---	---
6	15.5	9.8	11.3	13.8	9.8	11.2	16.2	12.1	13.3	---	---	---
7	12.4	7.9	10.3	13.3	10.5	11.8	17.0	11.7	13.6	16.0	9.8	12.0
8	11.9	8.3	9.9	13.9	11.6	12.5	16.3	11.7	13.1	13.7	9.7	11.2
9	11.9	8.3	9.9	13.8	11.2	12.3	14.0	10.3	12.0	10.9	9.8	10.2
10	11.2	8.6	9.7	13.9	9.1	11.7	12.5	11.7	12.1	12.1	9.4	10.5
11	10.5	7.4	9.3	12.3	8.9	10.1	16.2	12.1	14.1	11.9	9.5	10.4
12	12.1	5.9	8.8	12.7	9.3	10.4	17.4	14.1	15.3	12.1	9.1	10.2
13	12.1	8.0	9.6	12.8	10.4	11.4	17.8	14.2	15.3	12.4	9.1	10.5
14	9.8	7.8	8.5	14.6	10.8	12.3	17.3	13.2	14.5	11.3	9.5	10.3
15	13.6	8.4	10.6	---	---	---	16.5	12.2	13.9	11.8	8.6	10
16	13.9	9.3	11.2	---	---	---	12.8	11.0	11.5	12.3	9.5	10.7
17	14.0	9.8	11.5	---	---	---	15.7	11.3	12.9	12.4	9.0	10.5
18	12.2	9.1	10.4	---	---	---	15.8	11.1	12.9	---	---	---
19	12.2	9.1	10.3	---	---	---	15.8	11.1	12.8	12.4	7.2	9.1
20	11.7	8.5	9.8	---	---	---	15.3	10.0	12.4	12.0	7.6	9.2
21	11.8	8.5	10.0	---	---	---	14.7	8.9	11.9	12.7	7.9	10.1
22	12.2	9.4	10.5	12.9	8.7	10.8	15.3	9.1	11.9	13.9	10.4	11.4
23	12.3	9.6	10.5	9.6	7.3	8.4	---	---	---	12.6	10.2	11.2
24	12.8	8.9	10.7	14.9	9.1	12.2	---	---	---	13.2	11.4	12.1
25	14.1	8.3	10.1	15.0	11.7	13.1	---	---	---	12.9	11.2	12.1
26	13.5	9.5	11.1	15.4	11.1	12.7	---	---	---	11.9	10.8	11.3
27	13.7	9.5	11.3	15.6	10.2	11.8	---	---	---	11.4	10.4	10.9
28	12.8	8.8	10.1	15.4	11.2	12.9	---	---	---	11.2	10.2	10.6
29	12.9	8.2	10.5	16.0	12.0	13.6	---	---	---	12.2	9.6	11.0
30	13.1	7.9	9.6	15.6	11.6	12.9	---	---	---	12.6	9.7	11.0
31	12.0	8.0	9.4	---	---	---	14.7	9.5	11.4	12.3	9.0	10.6
MONTH	15.5	5.9	10.3	16.0	6.8	11.3	17.8	8.9	13.2	16.0	6.3	10.7
		FEBRUARY			MARCH			APRIL			MAY	
1	12.3	9.8	11.2	---	---	---	---	---	---	13.7	4.5	8.4
2	11.9	10.0	10.7	---	---	---	---	---	---	16.5	8.4	12.5
3	10.6	9.4	10.2	12.1	9.1	10.5	---	---	---	16.0	8.6	12.2
4	9.5	7.7	8.3	14.0	9.2	11.0	17.8	12.3	15.1	15.4	8.0	11.5
5	9.9	8.0	9.0	14.2	9.6	11.7	18.8	11.6	15.3	16.8	7.8	12.2
6	15.3	8.2	10.2	12.9	9.4	10.8	---	---	---	14.5	8.2	11.2
7	16.4	9.0	10.7	11.7	10.1	10.8	---	---	---	16.2	6.3	11.8
8	12.8	9.6	10.4	12.6	8.0	10.8	---	---	---	15.1	2.0	10.6
9	---	---	---	14.8	9.1	11.4	---	---	---	7.2	0.0	3.7
10	---	---	---	16.2	8.8	11.8	---	---	---	12.7	0.0	6.1
11	---	---	---	16.3	9.2	12.1	---	---	---	15.6	3.2	10.5
12	---	---	---	17.5	10.5	13.5	---	---	---	15.8	1.7	9.8
13	11.6	10.7	11.2	---	---	---	---	---	---	10.5	0.3	6.8
14	13.0	11.2	11.9	---	---	---	14.0	9.3	11.6	10.6	5.5	8.9
15	13.5	12.4	13.0	---	---	---	17.8	9.8	14.2	11.9	9.2	10.3
16	13.3	12.1	12.9	10.1	7.4	8.8	21.7	10.3	16.3	12.2	9.0	10.6
17	14.7	12.3	13.4	9.4	5.5	7.3	17.1	8.1	11.6	12.0	7.7	10.0
18	14.1	10.6	13.0	7.8	4.6	6.2	12.6	6.6	9.9	11.4	6.4	9.5
19	11.8	8.3	10.6	---	---	---	---	---	---	13.3	9.0	11.1
20	11.3	8.1	9.6	---	---	---	---	---	---	12.1	7.6	9.7
21	11.4	9.6	10.3	---	---	---	---	---	---	10.5	8.1	9.0
22	12.3	10.3	10.7	12.2	7.3	9.9	---	---	---	10.6	8.3	9.6
23	12.8	11.5	12.1	---	---	---	12.3	7.6	10.2	11.2	6.9	9.5
24	12.3	10.9	11.6	---	---	---	15.2	7.7	11.7	12.1	7.7	10.5
25	12.3	9.7	11.2	---	---	---	10.3	5.2	8.4	12.4	9.0	10.6
26	11.8	8.6	10.4	---	---	---	13.4	4.0	9.4	14.1	9.0	11.5
27	10.3	8.0	9.1	---	---	---	14.1	6.2	10.6	16.7	10.2	12.5
28	10.1	7.5	8.9	---	---	---	14.3	5.1	10	18.7	10.0	14.0
29	---	---	---	---	---	---	16.5	3.0	10.5	13.6	8.4	10.9
30	---	---	---	---	---	---	16.2	7.1	11.0	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	16.4	7.5	10.9	17.5	4.6	10.5	21.7	3.0	11.7	18.7	0.0	10.2

040871488 WILSON PARK CREEK AT ST. LUKES HOSPITAL AT MILWAUKEE, WI—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	15.0	6.1	10.4	13.9	7.3	9.9	15.5	8.3	11.0
2	---	---	---	15.1	6.5	10.6	13.8	6.7	9.7	15.1	7.5	10.7
3	---	---	---	14.4	6.3	9.3	13.3	6.8	9.8	14.2	7.9	10.5
4	---	---	---	10.7	7.2	8.6	11.7	7.6	9.5	13.0	7.9	9.9
5	---	---	---	14.0	7.4	10.3	14.3	9.3	11.6	12.3	6.4	9.0
6	---	---	---	13.8	7.2	10.2	17.0	9.2	12.1	12.6	6.4	9.0
7	---	---	---	12.8	6.9	9.2	16.1	9.2	12.2	12.9	7.7	9.9
8	---	---	---	14.4	7.4	10.8	16.9	9.0	12.7	12.6	8.1	10.0
9	12.1	5.4	8.3	14.9	7.8	10.9	15.5	8.8	11.7	12.7	8.1	10.0
10	10.1	6.0	7.8	15.8	7.1	11.1	16.1	8.7	12.1	13.1	7.9	10
11	9.3	7.2	8.1	15.6	7.0	10.9	16.4	9.6	12.6	12.1	7.6	9.4
12	12.3	7.6	9.6	13.5	6.0	9.0	16.8	10.1	12.9	11.1	7.5	9.0
13	13.4	7.0	9.9	15.7	6.5	10.5	16.1	9.8	12.4	11.9	6.7	9.1
14	10.1	6.9	7.9	15.1	6.4	10.7	15.6	9.6	12.1	11.1	6.7	8.4
15	13.9	7.7	10.5	16.5	6.9	11.4	15.0	9.5	11.9	11.1	4.7	7.7
16	15.9	7.0	10.9	15.6	4.3	9.4	15.5	9.1	11.9	11.3	4.6	7.6
17	12.8	6.7	8.7	15.2	4.5	9.8	14.5	6.0	10.1	11.4	6.8	8.6
18	16.4	7.7	11.4	15.9	6.4	11.0	16.0	5.5	11.0	10.2	7.1	8.5
19	18.0	8.1	12.7	---	---	---	16.5	5.1	10.9	10.2	7.0	8.3
20	18.3	7.7	12.8	---	---	---	17.0	8.3	12.0	10.0	6.8	8.3
21	13.0	6.9	9.7	---	---	---	15.9	8.6	11.7	10.3	6.8	8.2
22	13.0	9.0	12.1	---	---	---	15.4	8.0	11.5	9.7	6.8	8.0
23	12.6	6.8	9.6	17.0	7.4	12.2	15.0	7.8	10.8	9.8	6.2	7.8
24	10.8	6.7	8.9	16.5	7.5	12.1	12.0	7.4	9.1	9.5	6.2	7.7
25	14.2	8.0	11.1	16.1	8.2	11.9	13.7	7.8	10.4	9.5	6.8	8.0
26	14.8	8.0	11.3	16.7	8.2	11.9	16.0	8.3	10.9	9.5	7.0	8.1
27	16.5	7.0	11.6	15.1	7.5	10.7	15.2	7.3	10.4	10.0	6.7	8.1
28	15.7	6.0	11.0	14.5	7.6	10.5	13.5	7.6	10.2	9.4	6.7	8.1
29	17.4	7.6	12.2	13.7	7.5	10.0	16.4	9.0	12.2	---	---	---
30	17.3	6.4	11.2	13.8	6.7	9.5	16.4	8.8	12.0	---	---	---
31	---	---	---	13.5	7.3	10.1	16.4	8.6	11.8	---	---	---
MONTH	18.3	5.4	10.3	17.0	4.3	10.5	17.0	5.1	11.3	15.5	4.6	8.9
YEAR	21.7	0.0	10.7									

040871488 WILSON PARK CREEK AT ST. LUKES HOSPITAL AT MILWAUKEE, WI—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	1,010	903	955	773	144	708	1,020	933	966	---	---	---
2	1,040	974	1,000	392	114	191	1,020	923	969	---	---	---
3	1,060	306	755	448	163	282	1,000	943	968	---	---	---
4	888	585	781	559	136	364	985	712	889	---	---	---
5	977	863	911	798	361	642	770	552	687	---	---	---
6	1,000	606	858	893	797	839	731	552	647	---	---	---
7	929	848	883	902	841	875	774	676	722	---	---	---
8	1,060	895	935	910	849	874	809	744	777	---	---	---
9	1,080	515	805	930	859	901	1,320	120	631	15,600	2,220	7,850
10	899	747	836	940	881	913	689	121	327	16,900	8,460	12,100
11	843	430	774	920	853	886	799	655	701	8,460	5,300	6,780
12	954	320	629	861	787	822	892	799	849	6,120	3,860	5,010
13	854	737	797	841	794	823	932	870	896	4,160	3,100	3,580
14	855	145	401	828	650	740	3,740	929	2,470	6,820	2,640	3,630
15	912	587	787	695	650	665	3,720	1,480	2,270	5,470	2,850	4,160
16	967	876	920	702	684	693	3,080	1,250	1,510	3,830	2,720	3,110
17	934	869	906	706	203	678	5,510	1,360	3,340	27,400	2,760	14,800
18	949	819	884	411	110	212	5,240	1,870	2,840	---	---	---
19	957	789	873	623	411	538	1,870	1,500	1,630	---	---	---
20	908	810	848	717	618	662	1,660	1,420	1,530	---	---	---
21	868	613	734	719	647	695	1,570	1,340	1,450	4,130	1,430	2,490
22	719	631	689	739	285	671	1,480	1,300	1,390	---	---	---
23	772	681	725	440	197	342	1,730	1,040	1,480	1,700	925	1,540
24	717	118	549	738	440	622	2,060	1,600	1,770	10,800	1,310	4,360
25	651	194	475	808	735	780	1,970	1,530	1,700	8,880	3,260	6,000
26	749	651	698	841	794	819	1,580	1,110	1,490	7,580	5,130	6,190
27	772	711	744	886	824	852	1,540	1,390	1,430	17,800	6,980	11,300
28	802	485	624	922	870	892	9,080	1,320	2,270	12,300	7,190	9,230
29	654	419	595	975	908	932	1,960	1,380	1,840	7,700	4,340	6,480
30	784	554	640	979	929	954	---	---	---	4,340	2,480	3,250
31	751	689	716	---	---	---	---	---	---	2,480	2,070	2,270
MONTH	1,080	118	765	979	110	696	9,080	120	1,390	27,400	925	6,010
		FEBRUARY			MARCH			APRIL			MAY	
1	3,720	2,230	2,770	---	---	---	---	---	---	---	---	---
2	10,900	2,600	4,640	---	---	---	---	---	---	---	---	---
3	26,100	7,190	18,400	3,350	2,970	3,180	---	---	---	---	---	---
4	27,500	7,620	16,200	3,340	601	2,770	---	---	---	---	---	---
5	7,620	4,220	5,550	1,990	568	1,200	---	---	---	---	---	---
6	19,300	4,000	11,900	2,440	1,980	2,260	---	---	---	---	---	---
7	20,100	11,700	15,800	2,660	2,370	2,490	---	---	---	---	---	---
8	12,500	6,200	9,470	2,610	2,470	2,560	---	---	---	---	---	---
9	---	---	---	2,600	2,090	2,420	---	---	---	---	---	---
10	---	---	---	2,610	2,370	2,510	---	---	---	---	---	---
11	---	---	---	2,520	2,380	2,440	---	---	---	---	---	---
12	---	---	---	2,630	2,280	2,460	---	---	---	---	---	---
13	4,290	3,050	3,680	2,440	2,110	2,360	---	---	---	---	---	---
14	3,310	2,500	2,930	2,650	962	1,730	---	---	---	---	---	---
15	3,080	2,280	2,740	2,430	2,160	2,340	---	---	---	---	---	---
16	3,080	2,210	2,700	2,360	2,080	2,250	---	---	---	---	---	---
17	3,170	1,990	2,430	8,240	2,270	4,260	---	---	---	---	---	---
18	3,690	2,710	3,100	4,030	2,350	2,990	---	---	---	---	---	---
19	5,880	3,420	4,490	3,340	2,240	2,790	---	---	---	---	---	---
20	8,500	4,800	6,090	4,680	2,380	3,350	---	---	---	---	---	---
21	12,400	6,300	9,360	---	---	---	---	---	---	---	---	---
22	7,330	3,960	6,400	---	---	---	---	---	---	---	---	---
23	4,960	3,860	4,350	---	---	---	---	---	---	---	---	---
24	4,780	4,090	4,440	---	---	---	---	---	---	---	---	---
25	4,730	3,360	4,200	---	---	---	---	---	---	---	---	---
26	4,850	2,950	3,690	---	---	---	---	---	---	---	---	---
27	3,700	2,940	3,450	---	---	---	---	---	---	---	---	---
28	3,580	2,720	3,270	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	27,500	1,990	6,340	8,240	568	2,580	---	---	---	---	---	---

040871488 WILSON PARK CREEK AT ST. LUKES HOSPITAL AT MILWAUKEE, WI—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	1,570	1,450	1,500	1,410	1,300	1,370	1,290	1,160	1,220
2	---	---	---	1,570	1,460	1,520	1,450	1,310	1,380	1,290	778	1,140
3	---	---	---	1,580	106	1,180	1,420	79	1,070	1,290	1,170	1,240
4	---	---	---	1,090	118	725	944	205	643	1,320	1,200	1,250
5	---	---	---	1,340	1,050	1,210	1,240	944	1,110	1,320	494	1,120
6	---	---	---	1,450	1,330	1,400	1,290	788	1,190	1,330	1,150	1,230
7	---	---	---	1,440	140	758	1,380	1,240	1,320	1,370	1,220	1,290
8	---	---	---	1,360	1,090	1,250	1,400	1,300	1,360	1,370	1,180	1,270
9	1,610	809	1,490	1,400	1,350	1,380	1,390	189	1,180	1,350	1,210	1,290
10	1,580	158	911	1,420	1,340	1,390	1,340	1,260	1,310	1,350	1,160	1,230
11	1,000	290	610	1,460	164	1,280	1,400	1,270	1,330	1,280	1,130	1,180
12	1,210	283	857	1,160	172	750	1,380	1,280	1,330	1,370	1,260	1,320
13	1,450	1,080	1,340	1,360	1,100	1,270	1,360	1,270	1,330	1,400	1,240	1,340
14	1,460	99	645	1,420	1,340	1,370	1,440	1,290	1,330	1,400	1,100	1,230
15	1,320	893	1,140	1,420	1,280	1,350	1,460	1,360	1,420	1,310	185	1,030
16	1,420	202	1,250	1,420	498	1,180	1,480	1,370	1,430	930	392	698
17	1,260	419	881	1,310	554	1,000	1,480	875	1,180	1,250	930	1,050
18	1,420	785	1,270	1,390	1,260	1,330	1,370	864	1,220	1,270	1,120	1,200
19	1,530	1,410	1,450	1,420	1,240	1,350	1,200	932	1,040	1,360	1,250	1,300
20	1,560	1,470	1,520	1,360	1,220	1,290	1,400	1,130	1,230	1,390	1,020	1,260
21	1,600	210	941	1,340	133	965	1,340	1,180	1,230	1,470	1,220	1,350
22	1,250	461	609	1,170	654	960	1,440	1,300	1,360	1,270	1,200	1,240
23	1,440	279	1,110	1,280	1,170	1,210	1,450	1,320	1,400	1,330	1,230	1,280
24	1,040	369	737	1,310	1,140	1,200	1,390	167	1,090	1,280	1,200	1,230
25	1,400	1,040	1,260	1,340	1,200	1,280	947	157	616	1,270	1,210	1,250
26	1,520	1,390	1,480	1,350	1,280	1,320	1,150	928	1,040	1,360	1,250	1,280
27	1,550	410	1,480	1,340	1,220	1,280	1,160	201	654	1,420	1,220	1,360
28	1,300	385	899	1,360	1,130	1,320	928	131	431	1,330	1,250	1,300
29	1,460	1,300	1,410	1,390	889	1,250	1,080	297	740	---	---	---
30	1,530	1,440	1,490	1,410	1,230	1,320	1,250	1,080	1,180	---	---	---
31	---	---	---	1,400	1,270	1,320	1,270	967	1,170	---	---	---
MONTH	1,610	99	1,130	1,580	106	1,220	1,480	79	1,150	1,470	185	1,220
YEAR	27,500	79	2,020									

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DISCRETE SAMPLES

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unf lab, uS/cm 25 degC (90095)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (00417)	Chloride, water, fltrd, mg/L (00940)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	COD, low level, water, unfltrd mg/L (00335)	1,2-Propanediol, water, unfltrd mg/L (91080)	1,2-Ethanediol, water, unfltrd mg/L (91075)
JAN													
29...	1912	2.4	10	7.7	4,760	215	1,420	.30	.056	<1,200	15	<18.0	<18.0
MAR													
23...	1355	4.5	10	8.0	2,370	275	578	.61	<.015	<30.0	53	<18.0	<18.0
SEP													
22...	2002	2.5	10	8.3	1,180	176	209	.40	.022	<2.0	30	<18.0	<18.0

040871488 WILSON PARK CREEK AT ST. LUKES HOSPITAL AT MILWAUKEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
COMPOSITE SAMPLES

Date	End date	Time	End time	Sampling method, code (82398)	pH, water, unfltrd lab, std units (00403)	Specif. conduc-tance, wat unf lab, uS/cm 25 degC (90095)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (00417)	Chlor-ide, water, fltrd, mg/L (00940)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	COD, low level, water, unfltrd mg/L (00335)	1,2-Propane-diol, water, unfltrd mg/L (91080)
JAN 04-05	20040105	1710	1113	50	8.1	6,180	229	1,900	.34	<.015	7.9	38	<18.0
JAN 05-05	20040105	1145	1505	50	--	--	--	--	--	--	--	44	--
JAN 17-18	20040118	0905	0450	50	7.7	20,600	176	7,730	1.0	.129	205	410	170
FEB 06-06	20040206	0030	1205	50	--	--	--	--	--	--	--	190	--
FEB 19-20	20040220	1946	1437	50	--	--	--	--	--	--	--	120	--
FEB 19-22	20040222	1946	1551	50	7.6	7,280	161	2,420	2.2	.036	252	440	300
FEB 20-20	20040220	1510	2008	50	--	--	--	--	--	--	--	470	--
FEB 20-21	20040221	2056	0822	50	--	--	--	--	--	--	--	520	--
FEB 21-21	20040221	0953	1748	50	--	--	--	--	--	--	--	750	--
FEB 22-22	20040222	0052	1551	50	--	--	--	--	--	--	--	580	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	1,2-Ethane-diol, water, unfltrd mg/L (91075)	Runoff volume, thousands of cubic feet (99904)
JAN 04-05	<18.0	200
JAN 05-05	--	51
JAN 17-18	<18.0	370
FEB 06-06	--	84
FEB 19-20	--	460
FEB 19-22	<18.0	3,100
FEB 20-20	--	540
FEB 20-21	--	510
FEB 21-21	--	530
FEB 22-22	--	470

04087159 KINNICKINNIC RIVER AT SOUTH 11TH STREET AT MILWAUKEE, WI

LOCATION.--Lat 42°59'51", long 87°55'35", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.8, T.6 N., R.22 E., Milwaukee County, Hydrologic Unit 04040003, on left bank 150 ft upstream from footbridge on South 11th Street, 3.2 mi upstream from mouth, at Milwaukee.

DRAINAGE AREA.--18.8 mi^2.

PERIOD OF RECORD.--October 1982 to current year. Low-flow records equivalent to records for Kinnickinnic River at Milwaukee, WI (04087160) September 1976 to January 1983 (discontinued). Discontinued gage was located 0.3 mi downstream from present gage.

REVISED RECORDS.--WDR WI-97-1: Drainage area.

GAGE.--Water-stage recorder and steel plate weir. Datum of gage is 588.88 ft above NGVD of 1929, from levels from the Southeast Wisconsin Regional Planning Commission.

REMARKS.--Records good except those for estimated daily discharges, which are poor, and those for discharges greater than 500 ft^3/s, which are fair (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	8.4	4.3	4.6	e4.0	56	13	11	43	7.7	5.0	6.2
2	3.6	199	4.3	7.0	e3.9	24	11	6.2	15	7.3	5.6	6.1
3	14	125	4.3	7.4	e3.9	13	9.3	6.2	12	170	358	5.7
4	4.8	131	4.6	e5.6	e3.9	63	8.2	6.2	11	378	123	5.3
5	3.6	23	5.8	e5.0	e3.8	358	8.0	6.4	9.6	20	11	8.8
6	4.1	9.2	4.4	e4.0	e3.8	33	10	6.0	9.2	14	8.0	5.4
7	3.7	7.0	4.1	e3.8	e3.8	23	8.2	5.7	9.3	105	6.6	5.5
8	3.8	5.7	4.2	e4.0	e3.8	15	7.5	18	8.7	15	6.0	5.8
9	4.2	5.1	59	e4.4	e3.8	12	6.8	85	17	12	21	6.0
10	3.7	5.2	248	e4.6	e3.7	10	6.6	84	150	9.9	6.9	6.3
11	3.8	5.7	22	e4.7	e3.7	10	6.2	17	111	49	6.0	4.7
12	9.2	5.0	9.6	e5.5	e3.6	9.1	6.0	11	70	46	5.6	4.4
13	3.7	5.3	8.2	e5.5	e3.6	7.3	6.3	201	19	11	5.3	4.8
14	59	5.6	7.5	e5.0	e3.6	26	6.3	431	260	9.0	4.8	5.1
15	6.0	5.5	6.5	e4.5	e3.6	8.1	6.6	52	31	8.3	4.4	19
16	4.6	4.6	20	e4.8	e3.8	7.5	e16	26	45	14	4.7	17
17	4.3	5.8	7.6	e5.0	e4.2	16	e40	30	50	9.7	7.6	5.0
18	4.2	160	6.4	e4.0	e6.0	19	e9.0	151	17	7.2	6.5	4.3
19	3.5	13	5.4	e3.6	e10	12	e8.0	21	12	7.2	7.3	4.2
20	3.8	7.7	5.4	e3.8	e40	9.1	143	19	11	7.4	6.0	4.3
21	4.0	6.3	6.6	e4.0	e32	7.3	59	168	111	42	5.6	4.5
22	3.7	9.9	5.5	e4.0	18	7.1	12	396	54	9.9	5.4	4.2
23	4.1	26	5.4	e4.0	43	7.1	8.9	409	31	7.1	5.8	4.3
24	59	7.7	4.7	e4.0	23	10	14	47	44	6.8	62	4.4
25	24	6.1	4.3	e4.0	18	8.2	46	33	13	6.4	84	4.4
26	4.6	5.1	4.7	e4.0	17	169	10	20	10	6.2	7.9	4.5
27	4.2	5.0	5.0	e3.7	15	18	8.5	16	11	6.0	39	4.4
28	7.7	4.6	28	e3.7	15	169	7.5	13	31	6.5	95	4.3
29	5.1	4.6	6.4	e3.6	17	54	7.1	26	8.9	5.9	18	4.2
30	6.5	4.4	5.2	e3.4	---	33	7.3	136	8.0	6.2	7.0	4.4
31	4.3	---	4.9	e3.2	---	17	---	50	---	5.4	6.5	---
TOTAL	278.7	816.5	522.3	138.4	318.5	1,230.8	516.3	2,507.7	1,232.7	1,016.1	945.5	177.5
MEAN	8.99	27.2	16.8	4.46	11.0	39.7	17.2	80.9	41.1	32.8	30.5	5.92
MAX	59	199	248	7.4	43	358	143	431	260	378	358	19
MIN	3.5	4.4	4.1	3.2	3.6	7.1	6.0	5.7	8.0	5.4	4.4	4.2
CFSM	0.48	1.45	0.90	0.24	0.58	2.11	0.92	4.30	2.19	1.74	1.62	0.31
IN.	0.55	1.62	1.03	0.27	0.63	2.44	1.02	4.96	2.44	2.01	1.87	0.35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2004, BY WATER YEAR (WY)

MEAN	19.4	23.5	16.7	14.2	20.8	24.6	34.3	29.8	30.5	28.5	34.6	24.9
MAX	60.5	67.8	48.9	43.7	56.3	44.9	104	80.9	81.6	66.8	82.3	69.5
(WY)	(1992)	(1986)	(1983)	(1988)	(2001)	(1993)	(1993)	(2004)	(1999)	(2000)	(1986)	(2000)
MIN	6.81	7.11	3.96	3.96	4.95	8.87	14.1	9.07	11.4	12.6	11.8	5.92
(WY)	(1995)	(2003)	(1990)	(2003)	(2003)	(1996)	(1989)	(1992)	(1985)	(1996)	(1999)	(2004)

04087159 KINNICKINNIC RIVER AT SOUTH 11TH STREET AT MILWAUKEE, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1983 - 2004	
ANNUAL TOTAL	5,561.2		9,701.0			
ANNUAL MEAN	15.2		26.5		25.2	
HIGHEST ANNUAL MEAN					39.8	1986
LOWEST ANNUAL MEAN					13.1	2003
HIGHEST DAILY MEAN	248	Dec 10	431	May 14	1,630	Aug 6, 1986
LOWEST DAILY MEAN	3.5	(a)Jan 1	(b)3.2	Jan 31	(b)2.9	Dec 26, 1989
ANNUAL SEVEN-DAY MINIMUM	3.7	Jan 19	3.6	Jan 27	(b)3.0	Dec 23, 1989
MAXIMUM PEAK FLOW			4,600	Jul 4	(c)10,600	Aug 6, 1986
MAXIMUM PEAK STAGE			12.55	Jul 4	(d)14.41	Aug 6, 1986
ANNUAL RUNOFF (CFSM)	0.810		1.41		1.34	
ANNUAL RUNOFF (INCHES)	11.00		19.20		18.18	
10 PERCENT EXCEEDS	31		57		48	
50 PERCENT EXCEEDS	5.7		7.1		9.3	
90 PERCENT EXCEEDS	3.8		4.0		5.5	

(a) Also occurred Oct. 19
(b) Ice affected
(c) From rating curve extended above 600 ft^3/s on basis of step-backwater analysis at peak gage height
(d) From inside gage, 16.01 ft, from floodmarks
(e) Estimated due to ice effect or missing record

04087204 OAK CREEK AT SOUTH MILWAUKEE, WI

LOCATION.--Lat 42°55'30", long 87°52'12", in SW ¼ NW ¼ sec.2, T.5 N., R.22 E., Milwaukee County, Hydrologic Unit 04040002, on left bank 25 ft downstream from 15th Avenue bridge in South Milwaukee and 2.8 mi upstream from mouth.

DRAINAGE AREA.--25.0 mi^2.

PERIOD OF RECORD.--October 1963 to current year.

REVISED RECORDS.--WDR WI-80-1: 1979 (average discharge).

GAGE.--Water-stage recorder, phone modem and crest-stage gage. Datum of gage is 631.40 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Low flows may occasionally be affected by construction and activity at gravel pit upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.8	3.0	4.4	e2.5	49	29	9.9	41	8.8	4.0	4.3
2	1.1	50	2.9	5.4	e2.5	56	23	9.1	28	7.7	4.0	3.5
3	1.4	83	2.8	7.4	e2.4	31	20	8.3	21	30	24	3.5
4	1.8	81	2.6	5.7	e2.4	34	17	7.8	18	236	122	3.2
5	1.6	36	2.8	e4.8	e2.4	369	16	7.8	16	60	21	2.9
6	1.1	14	2.8	e4.8	e2.4	145	16	7.5	14	26	11	2.6
7	0.89	8.1	2.5	e4.8	e2.4	59	16	7.2	13	38	7.8	2.4
8	0.75	5.6	2.4	e4.7	e2.4	38	14	8.2	11	23	6.6	2.2
9	0.80	4.5	9.3	e4.6	e2.4	29	12	53	10	17	5.5	2.9
10	0.91	4.0	155	e4.5	e2.4	24	11	44	46	15	4.8	3.4
11	0.64	3.7	61	e4.4	e2.4	21	10	28	118	38	4.2	3.2
12	0.81	3.3	20	e4.2	e2.4	17	9.8	20	118	223	3.7	2.6
13	1.2	2.7	14	e3.9	e2.4	15	9.2	165	49	53	3.5	1.8
14	17	2.4	9.3	e3.7	e2.5	19	8.9	447	55	28	3.3	1.6
15	11	2.4	7.9	e3.4	e2.6	17	8.5	369	47	20	2.9	2.3
16	3.8	2.2	e7.5	e3.2	e2.8	14	8.6	96	23	18	2.6	6.0
17	2.3	2.7	e7.2	e3.1	e3.3	15	21	52	40	13	4.2	3.5
18	1.7	81	7.1	e2.9	3.6	18	13	152	29	11	4.5	2.3
19	1.4	36	6.0	e2.9	3.7	19	9.5	65	18	9.4	4.2	1.9
20	1.1	14	e5.7	e2.8	5.4	20	17	48	14	8.3	3.4	1.7
21	0.91	8.6	e4.7	e2.9	7.8	16	68	100	64	12	2.8	1.6
22	0.82	6.9	e4.7	e3.0	17	13	24	337	71	15	2.4	1.8
23	0.77	14	e4.5	e2.8	33	13	16	505	28	8.3	2.2	2.2
24	5.6	12	e4.1	e2.7	38	14	14	257	30	6.5	13	2.1
25	21	6.7	e4.0	e2.7	28	15	31	87	22	5.9	31	1.7
26	6.6	5.5	e3.8	e2.6	29	102	21	54	15	5.3	7.8	1.6
27	3.1	4.8	e3.4	e2.6	28	46	15	40	14	5.0	12	1.7
28	2.2	4.2	e9.0	e2.6	27	68	13	30	24	5.0	28	1.6
29	1.9	3.6	8.7	e2.5	30	176	11	29	14	4.8	25	1.7
30	2.2	3.4	6.1	e2.5	---	60	9.8	78	9.9	4.7	8.4	2.0
31	2.2	---	5.0	e2.5	---	40	---	82	---	4.5	5.4	---
TOTAL	99.70	508.1	389.8	115.0	293.1	1,572	512.3	3,203.8	1,020.9	960.2	385.2	75.8
MEAN	3.22	16.9	12.6	3.71	10.1	50.7	17.1	103	34.0	31.0	12.4	2.53
MAX	21	83	155	7.4	38	369	68	505	118	236	122	6.0
MIN	0.64	1.8	2.4	2.5	2.4	13	8.5	7.2	9.9	4.5	2.2	1.6
CFSM	0.13	0.68	0.50	0.15	0.40	2.03	0.68	4.13	1.36	1.24	0.50	0.10
IN.	0.15	0.76	0.58	0.17	0.44	2.34	0.76	4.77	1.52	1.43	0.57	0.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2004, BY WATER YEAR (WY)

MEAN	11.8	17.1	18.1	14.2	25.0	46.3	48.0	28.2	24.1	15.9	14.2	17.2
MAX	48.4	85.3	65.3	77.3	84.5	149	151	103	85.8	95.8	52.7	110
(WY)	(1992)	(1986)	(1983)	(1974)	(2001)	(1979)	(1993)	(2004)	(1968)	(1969)	(1986)	(1972)
MIN	1.86	1.83	0.79	0.02	1.28	2.24	9.14	2.15	2.15	3.34	1.89	1.78
(WY)	(1976)	(1977)	(1977)	(1977)	(2003)	(1968)	(1968)	(1977)	(1988)	(1988)	(1970)	(1982)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1964 - 2004	
ANNUAL TOTAL	3,608.43		9,135.90			
ANNUAL MEAN	9.89		25.0		23.3	
HIGHEST ANNUAL MEAN					41.7	1974
LOWEST ANNUAL MEAN					6.67	1977
HIGHEST DAILY MEAN	184	May 9	505	May 23	855	Mar 5, 1976
LOWEST DAILY MEAN	0.44	Sep 7-9	0.64	Oct 11	0.00	(a)
ANNUAL SEVEN-DAY MINIMUM	0.46	Sep 4	0.84	Oct 6	0.00	Jan 7, 1977
MAXIMUM PEAK FLOW			732	May 14	1,140	Aug 6, 1986
MAXIMUM PEAK STAGE			7.90	May 14	9.88	Aug 6, 1986
INSTANTANEOUS LOW FLOW					0.00	(a)
ANNUAL RUNOFF (CFSM)	0.395		0.998		0.933	
ANNUAL RUNOFF (INCHES)	5.37		13.59		12.67	
10 PERCENT EXCEEDS	26		54		50	
50 PERCENT EXCEEDS	3.4		7.8		7.9	
90 PERCENT EXCEEDS	0.73		2.2		1.9	

(a) Several days during 1977
(e) Estimated due to ice effect or missing record

04087204 OAK CREEK AT SOUTH MILWAUKEE, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 2002 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January to September 2004.

INSTRUMENTATION.--Continuous specific conductance recorder from January to September 2004. Sensor located near left edge of water 30 ft downstream of gage.

REMARKS.--Records for specific conductance were faulty April 12-28 and August 20 to September 1.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 7,740 µS/cm, Feb. 22, 2004; minimum, 90 µS/cm, July 11, 2004.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 7,740 µS/cm, Feb. 22; minimum, 90 µS/cm, July 11.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	3,690	3,530	3,620
23	---	---	---	---	---	---	---	---	---	3,660	2,690	3,110
24	---	---	---	---	---	---	---	---	---	3,440	2,620	2,850
25	---	---	---	---	---	---	---	---	---	2,960	2,590	2,760
26	---	---	---	---	---	---	---	---	---	2,810	2,540	2,660
27	---	---	---	---	---	---	---	---	---	2,930	2,440	2,640
28	---	---	---	---	---	---	---	---	---	3,560	2,400	2,760
29	---	---	---	---	---	---	---	---	---	3,230	2,890	3,020
30	---	---	---	---	---	---	---	---	---	3,800	2,850	3,010
31	---	---	---	---	---	---	---	---	---	4,070	3,420	3,860
MONTH	---	---	---	---	---	---	---	---	---	4,070	2,400	3,030

04087204 OAK CREEK AT SOUTH MILWAUKEE, WI—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	3,420	2,890	3,170	2,370	1,660	2,240	1,450	1,400	1,430	1,600	1,480	1,580
2	2,890	2,590	2,700	2,310	2,100	2,180	1,480	1,450	1,460	1,650	1,600	1,630
3	4,230	2,530	3,360	2,290	2,240	2,270	1,520	1,480	1,490	1,670	1,600	1,640
4	5,330	3,140	3,990	2,360	840	2,070	1,550	1,520	1,540	1,660	1,580	1,630
5	5,390	4,500	4,920	1,170	789	902	1,570	1,540	1,560	1,710	1,430	1,620
6	6,750	4,450	5,380	1,440	1,030	1,250	1,580	1,440	1,530	1,780	1,580	1,680
7	6,270	4,240	5,240	1,680	1,440	1,580	1,620	1,540	1,570	1,690	1,610	1,650
8	6,550	6,270	6,440	1,780	1,680	1,740	1,600	1,520	1,540	1,700	626	1,620
9	6,770	5,470	6,270	1,850	1,770	1,810	1,620	1,560	1,580	1,260	364	905
10	5,470	4,860	5,230	1,850	1,770	1,830	1,650	1,540	1,620	1,130	654	957
11	5,360	4,640	4,960	1,880	1,840	1,860	1,640	1,560	1,610	1,200	1,100	1,160
12	4,640	3,820	4,280	1,960	1,850	1,890	---	---	---	1,290	539	1,230
13	4,130	3,780	3,950	1,980	1,880	1,920	---	---	---	845	290	637
14	3,880	3,710	3,830	2,040	1,560	1,870	---	---	---	874	263	534
15	3,710	3,580	3,620	2,000	1,930	1,970	---	---	---	733	463	587
16	3,820	3,130	3,480	2,060	1,980	2,020	---	---	---	952	733	859
17	3,330	3,060	3,170	3,210	1,980	2,270	---	---	---	1,080	650	1,010
18	3,060	2,660	2,840	3,020	2,210	2,420	---	---	---	874	498	721
19	2,940	2,560	2,720	2,980	2,490	2,660	---	---	---	1,040	864	960
20	4,350	2,720	3,170	2,640	2,410	2,510	---	---	---	1,070	960	1,040
21	7,630	3,530	5,230	2,430	2,200	2,300	---	---	---	1,110	270	840
22	7,740	5,680	6,400	2,200	2,090	2,120	---	---	---	705	411	574
23	6,700	5,240	5,960	2,090	2,030	2,050	---	---	---	677	409	510
24	5,240	4,080	4,520	2,390	1,780	2,030	---	---	---	815	561	678
25	4,080	3,320	3,700	2,090	1,450	2,040	---	---	---	987	815	916
26	3,460	2,870	3,190	1,480	600	1,200	---	---	---	1,070	987	1,030
27	3,030	2,680	2,860	1,570	1,410	1,490	---	---	---	1,120	1,030	1,070
28	2,760	2,490	2,640	1,650	486	1,360	---	---	---	1,170	1,080	1,130
29	2,550	2,300	2,440	1,150	724	948	1,540	1,400	1,510	1,200	918	1,140
30	---	---	---	1,320	1,150	1,240	1,580	1,490	1,550	1,230	456	929
31	---	---	---	1,430	1,320	1,370	---	---	---	969	559	828
MONTH	7,740	2,300	4,130	3,210	486	1,850	1,650	1,400	1,540	1,780	263	1,070
		JUNE			JULY			AUGUST			SEPTEMBER	
1	1,130	948	1,050	1,420	1,370	1,390	1,470	1,420	1,450	---	---	---
2	1,220	1,130	1,180	1,450	1,410	1,430	1,490	1,360	1,440	1,220	1,170	1,200
3	1,270	1,220	1,240	1,470	176	1,150	1,520	122	1,350	1,220	1,090	1,140
4	1,340	1,270	1,300	596	340	430	638	276	475	1,130	1,050	1,090
5	1,400	1,340	1,380	905	596	758	747	604	682	1,090	1,020	1,060
6	1,430	1,400	1,420	1,110	905	1,020	894	747	815	1,110	1,020	1,070
7	1,480	1,110	1,440	1,110	505	891	941	865	907	1,170	1,090	1,130
8	1,500	1,480	1,480	1,090	871	1,010	1,020	934	963	1,210	1,110	1,190
9	1,500	1,380	1,490	1,170	719	1,070	1,180	968	1,090	1,240	1,210	1,230
10	1,440	274	1,020	1,180	1,080	1,150	1,340	1,120	1,200	1,240	1,000	1,130
11	754	396	632	1,280	90	1,140	1,380	1,330	1,360	1,030	1,010	1,020
12	808	470	696	639	236	433	1,420	1,340	1,390	1,080	1,020	1,050
13	1,040	808	948	851	639	753	1,440	1,390	1,410	1,230	1,080	1,150
14	1,080	245	886	1,000	851	935	1,460	1,440	1,450	1,370	1,230	1,300
15	964	717	859	1,120	1,000	1,060	1,490	1,460	1,480	1,320	593	1,250
16	1,170	964	1,070	1,170	452	1,030	1,490	1,400	1,480	1,240	650	1,080
17	1,210	593	966	1,240	1,130	1,210	1,490	898	1,330	1,270	1,160	1,230
18	1,190	785	1,010	1,300	1,230	1,270	1,430	924	1,370	1,290	1,180	1,220
19	1,280	1,190	1,240	1,340	1,280	1,300	1,350	1,190	1,300	1,390	1,290	1,360
20	1,370	1,280	1,330	1,380	1,340	1,360	---	---	---	1,380	1,320	1,360
21	1,400	271	973	1,400	558	1,220	---	---	---	1,370	1,320	1,340
22	973	514	787	1,290	1,020	1,160	---	---	---	1,320	1,280	1,300
23	1,110	530	1,010	1,240	1,130	1,210	---	---	---	1,290	1,170	1,190
24	1,170	954	1,050	1,360	1,220	1,290	---	---	---	1,230	1,120	1,190
25	1,170	957	1,110	1,410	1,200	1,350	---	---	---	1,330	1,110	1,250
26	1,270	1,140	1,210	1,420	1,390	1,410	---	---	---	1,390	1,330	1,360
27	1,330	667	1,250	1,420	1,390	1,410	---	---	---	1,390	1,310	1,340
28	1,250	707	1,100	1,400	1,350	1,380	---	---	---	1,310	1,300	1,300
29	1,240	980	1,090	1,450	1,360	1,400	---	---	---	1,400	1,300	1,330
30	1,370	1,240	1,310	1,420	1,350	1,390	---	---	---	1,340	1,320	1,330
31	---	---	---	1,420	1,320	1,390	---	---	---	---	---	---
MONTH	1,500	245	1,120	1,470	90	1,140	1,520	122	1,210	1,400	593	1,210
YEAR	7,740	90	1,740									

04087204 OAK CREEK AT SOUTH MILWAUKEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Discharge, cfs (00060)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
OCT													
07...	0940	--	.92	70	751	10.6	93	7.2	1,260	8.8	84.1	34.9	4.59
NOV													
04...	0945	--	83	40	745	10.8	95	7.3	512	8.7	28.6	10.6	3.72
12...	0735	--	3.6	10	741	11.3	93	7.6	1,300	5.9	--	--	--
18...	1030	--	104	40	737	10.2	92	7.4	663	9.6	37.8	15.2	4.28
24...	1120	--	12	70	744	12.7	102	7.6	972	4.9	58.9	23.1	5.08
DEC													
01...	1000	--	3.1	70	757	14.9	109	7.7	1,420	2.0	99.0	40.9	4.28
JAN													
07...	1025	--	4.8	70	759	15.5	107	7.6	2,490	-.2	120	49.9	5.29
21...	1130	--	2.9	70	--	--	--	--	--	--	--	--	--
FEB													
04...	1025	--	2.4	70	763	12.4	85	7.4	3,350	-.4	107	44.2	5.39
04...	1145	--	2.4	70	--	--	--	--	--	--	--	--	--
11...	0710	2.4	--	70	750	14.2	100	7.5	5,150	-.4	--	--	--
18...	0710	--	3.1	40	758	21.7	149	7.5	3,010	-.3	111	44.8	5.06
MAR													
02...	1000	--	58	40	752	12.3	93	7.7	2,210	2.7	81.4	32.0	5.50
05...	1420	--	399	10	739	15.3	122	7.4	932	4.5	35.8	14.2	4.39
05...	1435	--	395	40	739	15.3	122	7.4	932	4.5	41.5	16.3	4.92
12...	0850	--	14	70	757	15.6	109	7.6	2,040	.2	117	48.0	4.06
APR													
07...	0940	--	15	70	750	12.6	110	7.6	1,840	8.2	105	47.7	4.38
13...	1430	--	9.5	40	752	15.3	136	8.1	1,810	9.3	--	--	--
28...	1025	--	12	10	--	--	--	--	--	--	--	--	--
MAY													
03...	0940	--	8.2	70	757	11.0	94	7.8	1,820	8.0	110	51.0	4.78
11...	1100	--	29	10	759	8.2	81	7.9	1,250	14.7	64.1	25.7	3.29
13...	1140	--	229	40	750	7.4	80	7.3	538	18.1	31.6	12.5	3.30
JUN													
01...	1010	--	42	70	740	8.2	83	7.4	1,040	14.5	85.4	35.4	3.44
10...	0935	--	9.9	70	--	--	--	--	--	--	--	--	--
16...	1215	--	22	10	754	8.3	89	7.5	1,100	18.0	--	--	--
29...	0650	--	15	70	--	--	--	--	--	--	--	--	--
JUL													
07...	1040	--	42	70	745	7.2	78	7.1	987	18.2	72.0	31.5	3.56
14...	1640	--	25	--	--	7.1	--	7.7	994	20.7	--	--	--
26...	1005	--	5.3	40	760	8.5	88	7.5	1,430	16.4	111	45.5	4.05
AUG													
02...	1015	--	3.6	70	752	8.3	95	7.6	1,520	20.9	109	51.0	4.01
04...	1050	--	155	10	741	6.1	70	7.2	393	21.2	25.5	8.01	3.39
04...	1055	--	154	10	--	6.1	--	7.2	393	21.2	26.3	8.26	3.29
18...	1700	--	4.1	--	--	--	--	--	--	--	--	--	--
18...	1705	--	4.1	--	--	9.8	--	7.9	1,080	19.5	--	--	--
SEP													
01...	1015	--	4.1	70	760	8.5	89	7.3	1,110	17.4	--	--	--
07...	0940	--	2.4	70	757	7.2	76	7.4	1,410	17.8	102	46.7	4.52

04087204 OAK CREEK AT SOUTH MILWAUKEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (00417)	Alka-linity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicar-bonate, wat flt incrm. titr., field, mg/L (00453)	Carbon-ate, wat flt incrm. titr., field, mg/L (00452)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)
OCT													
07...	121	--	211	--	--	--	212	--	--	90.7	--	.69	<.04
NOV													
04...	56.1	--	87	--	--	--	84.5	--	--	32.6	--	.55	<.04
12...	--	--	--	231	280	<1	212	--	--	99.0	--	--	E.04
18...	71.0	--	98	--	--	--	114	--	--	39.3	--	1.6	.05
24...	93.1	--	155	--	--	--	166	--	--	69.2	--	1.5	.29
DEC													
01...	124	--	221	--	--	--	229	--	--	109	--	.41	.11
JAN													
07...	332	--	254	--	--	--	619	--	--	135	--	.47	.09
21...	--	--	--	--	--	--	1,160	--	--	--	--	--	--
FEB													
04...	493	--	240	--	--	--	859	--	--	115	--	.78	.36
04...	--	--	--	--	--	--	833	--	--	--	--	--	--
11...	--	--	--	244	295	1	1,480	--	--	1,180	--	--	.28
18...	441	--	--	246	--	--	768	.6	6.61	101	1,630	--	.09
MAR													
02...	302	--	159	--	--	--	540	--	--	78.7	--	.89	.15
05...	102	--	96	97	117	1	188	<.2	4.94	33.2	484	--	.10
05...	116	--	97	--	--	--	194	--	--	35.0	--	.80	.25
12...	232	--	221	--	--	--	438	--	--	135	--	.71	<.04
APR													
07...	191	--	254	--	--	--	335	--	--	114	--	.52	<.04
13...	--	--	--	248	294	4	307	--	--	660	--	--	<.04
28...	--	240	--	--	--	--	312	--	--	--	--	--	--
MAY													
03...	198	--	276	--	--	--	335	--	--	126	--	.46	<.04
11...	122	--	194	151	--	--	229	.3	4.18	69.8	710	--	.07
13...	56.0	--	104	--	--	--	88.7	--	--	23.8	--	.57	.04
JUN													
01...	92.4	--	249	--	--	--	139	--	--	69.9	--	.76	.08
10...	--	283	--	--	--	--	225	--	--	--	--	--	--
16...	--	--	--	255	307	2	152	--	--	71.7	--	--	<.04
29...	--	198	--	--	--	--	147	--	--	--	--	--	--
JUL													
07...	82.7	--	241	--	--	--	136	--	--	59.1	--	.58	.06
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	114	--	310	292	--	--	211	.4	8.51	117	841	--	<.04
AUG													
02...	122	--	316	--	--	--	223	--	--	135	--	.31	E.02
04...	33.3	--	72	72	--	--	54.8	--	--	21.5	--	.48	<.04
04...	34.4	--	74	72	--	--	55.3	<.2	3.25	22.4	220	--	<.04
18...	--	280	--	--	--	--	230	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
01...	--	--	--	204	245	2	155	--	--	92.9	--	--	.04
07...	120	--	296	--	--	--	208	--	--	118	--	.37	E.02

04087204 OAK CREEK AT SOUTH MILWAUKEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, wat unf by analysis, mg/L (62855)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	COD, low level, water, unfltrd mg/L (00335)
OCT													
07...	.24	--	--	<.02	<.04	--	--	--	--	--	--	--	--
NOV													
04...	1.67	--	--	.03	E.03	--	--	--	--	--	--	--	--
12...	.59	.015	.03	E.005	--	.040	1.03	.5	<.1	.5	5.0	--	--
18...	.53	--	--	<.02	.05	--	--	--	--	--	--	--	--
24...	1.12	--	--	E.01	E.02	--	--	--	--	--	--	--	--
DEC													
01...	.62	--	--	<.02	E.02	--	--	--	--	--	--	--	--
JAN													
07...	.91	--	--	<.02	<.04	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
04...	.55	--	--	<.02	<.04	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	.43	.014	.03	E.003	--	.027	1.01	.4	<.1	.4	4.6	--	--
18...	.48	.009	.04	E.005	--	.031	.83	.3	<.1	.3	3.7	<2.0	20
MAR													
02...	2.14	--	--	<.02	E.03	--	--	--	--	--	--	--	--
05...	1.84	.017	.29	.053	--	.35	3.36	3.5	.3	3.2	6.3	5.9	57
05...	1.87	--	--	.05	.07	--	--	--	--	--	--	--	--
12...	3.07	--	--	<.02	<.04	--	--	--	--	--	--	--	--
APR													
07...	1.18	--	--	<.02	<.04	--	--	--	--	--	--	--	--
13...	.75	E.007	.06	E.003	--	.023	1.16	.6	<.1	.5	7.0	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
03...	.47	--	--	<.02	<.04	--	--	--	--	--	--	--	--
11...	.76	.033	.13	<.006	--	.055	1.54	.9	<.1	.9	8.7	4.8	40
13...	.77	--	--	.02	E.04	--	--	--	--	--	--	--	--
JUN													
01...	1.05	--	--	.02	E.04	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	1.07	.039	.11	.022	--	.102	1.74	1.4	<.1	1.4	7.7	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	.86	--	--	.02	E.03	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	.65	.012	.06	.010	--	.042	1.07	.5	<.1	.5	5.7	>22.0	150
AUG													
02...	.47	--	--	<.02	<.04	--	--	--	--	--	--	--	--
04...	.53	--	--	.04	.06	--	--	--	--	--	--	6.0	38
04...	.51	.025	.45	.053	--	.20	1.41	5.7	<.1	5.6	6.5	6.0	38
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
01...	.66	.011	.04	.025	--	.065	1.05	.6	<.1	.6	4.7	--	--
07...	.48	--	--	E.01	<.04	--	--	--	--	--	--	--	--

04087204 OAK CREEK AT SOUTH MILWAUKEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Chloro-phyll a wat unf trichr. method, uncorr, ug/L (32210)	Iron, water, fltrd, ug/L (01046)	Mangan-ese, water, fltrd, ug/L (01056)	Mercury water fltrd, ng/L (50287)	Mercury suspnd sedimnt total, ng/L (62976)	1,4-Di-chloro-benzene water, fltrd, ug/L (34572)	1-Methyl-naphth-alene, water, fltrd, ug/L (62054)	1-Naph-thol, water, fltrd 0.7u GF ug/L (49295)	2,6-Di-ethyl-aniline water fltrd 0.7u GF ug/L (82660)	2,6-Di-methyl-naphth-alene, water, fltrd, ug/L (62055)	2-[(2-Et-6-Me-Ph)--amino] propan-1-ol, ug/L (61615)	2Chloro-2,6'-' diethyl acet-anilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)
OCT													
07...	--	30	--	.66	.518	--	--	--	--	--	--	--	--
NOV													
04...	--	38	--	1.90	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	<.09	<.006	--	<.1	<.005	<.006
18...	--	40	--	1.52	--	--	--	--	--	--	--	--	--
24...	--	26	--	1.19	--	--	--	--	--	--	--	--	--
DEC													
01...	--	23	--	.33	.331	--	--	--	--	--	--	--	--
JAN													
07...	--	31	--	.42	.456	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
04...	--	27	--	.33	.486	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	<.09	<.006	--	<.1	<.005	E.006
18...	1.69	37	95.0	--	--	<.5	<.5	--	--	<.5	--	--	--
MAR													
02...	--	24	--	1.43	--	--	--	--	--	--	--	--	--
05...	7.73	37	30.0	--	--	<.5	<.5	--	--	<.5	--	--	--
05...	--	41	--	2.33	15.5	--	--	--	--	--	--	--	--
12...	--	45	--	--	.522	--	--	--	--	--	--	--	--
APR													
07...	--	32	--	1.02	.684	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	<.09	<.006	--	--	<.005	<.006
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
03...	--	102	--	--	--	--	--	--	--	--	--	--	--
11...	10.5	47	37.0	--	--	<.5	<.5	<.09	<.006	<.5	--	<.005	E.098
13...	--	38	--	--	--	--	--	--	--	--	--	--	--
JUN													
01...	--	72	--	1.82	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	<.09	<.006	--	--	<.005	E.032
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	38	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	1.36	33	70.8	.78	--	<.5	<.5	--	--	<.5	--	--	--
AUG													
02...	--	20	--	--	--	--	--	--	--	--	--	--	--
04...	6.01	24	--	2.72	--	--	--	--	--	--	--	--	--
04...	6.01	39	9.7	--	--	<.5	<.5	<.09	<.006	<.5	--	<.005	E.014
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
01...	--	--	--	--	--	--	--	E.02	<.006	--	--	<.005	<.006
07...	--	27	--	.17	--	--	--	--	--	--	--	--	--

04087204 OAK CREEK AT SOUTH MILWAUKEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	2-Ethyl-6-methylaniline water, fltrd, ug/L (61620)	2-Methylnaphthalene, water, fltrd, ug/L (62056)	3,4-Dichloroaniline water fltrd, ug/L (61625)	3-beta-Coprostanol, water, fltrd, ug/L (62057)	3-Methyl-1H-indole, water, fltrd, ug/L (62058)	3-tert-Butyl-4-hydroxyanisole wat flt ug/L (62059)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	4-Cumylphenol, water, fltrd, ug/L (62060)	4-Octylphenol, water, fltrd, ug/L (62061)	4-Nonylphenol, water, fltrd, ug/L (62085)	4-tert-Octylphenol, water, fltrd, ug/L (62062)	5-Methyl-1H-benzotriazole, wat flt ug/L (62063)	9,10-Anthraquinone water, fltrd, ug/L (62066)
OCT													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	<.004	--	<.004	--	--	--	<.006	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	<.004	--	<.004	--	--	--	<.006	--	--	--	--	--	--
18...	--	<.5	--	M	<1	<5	--	<1	<1	<5	<1	M	E.1
MAR													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	M	--	<2	<1	<5	--	<1	<1	<5	<1	<2	E.2
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	<.004	--	<.004	--	--	--	<.006	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	<.004	<.5	.046	<2	<1	<5	E.004	<1	<1	E2	<1	M	E.2
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	<.004	--	.006	--	--	--	E.006	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	<.5	--	<2	<1	<5	--	<1	<1	<5	<1	<2	<.5
AUG													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	<.004	<.5	.203	<2	<1	<5	E.006	<1	<1	<5	<1	<2	.5
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
01...	<.004	--	.015	--	--	--	<.006	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--

04087204 OAK CREEK AT SOUTH MILWAUKEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Aceto-chlor, water, fltrd, ug/L (49260)	Aceto-phenone water, fltrd, ug/L (62064)	AHTN, water, fltrd, ug/L (62065)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-HCH-d6, surrog, Sch2003 wat flt percent recovry (99995)	Anthra-cene, water, fltrd, ug/L (34221)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl oxon, water, fltrd, ug/L (61635)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)	Benzo-[a]-pyrene, water, fltrd, ug/L (34248)	Benzo-phenone water, fltrd, ug/L (62067)	beta-Sitos-terol, water, fltrd, ug/L (62068)
OCT													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	<.006	--	--	<.005	89.1	--	.012	<.03	<.050	<.010	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	<.006	--	--	<.005	96.2	--	.016	<.02	<.050	<.010	--	--	--
18...	--	<.5	<.5	--	--	<.5	--	--	--	--	<.5	E.1	<2
MAR													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	<.5	<.5	--	--	<.5	--	--	--	--	<.5	<.5	<2
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	<.006	--	--	<.005	94.4	--	.010	<.02	<.050	<.010	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	.082	<.5	<.5	<.005	92.2	<.5	.275	<.02	<.050	E.004	<.5	<.5	<2
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	.024	--	--	<.005	88.5	--	.100	<.02	<.050	<.010	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	<.5	<.5	--	--	M	--	--	--	--	<.5	M	<20
AUG													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	<.006	<.5	<.5	<.005	78.1	<.5	.022	<.07	<.050	<.010	<.5	<.5	<2
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
01...	<.006	--	--	<.005	100	--	.010	<.07	<.050	<.010	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--

04087204 OAK CREEK AT SOUTH MILWAUKEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	beta-Stigmastanol, water, fltrd, ug/L (62086)	Bisphenol A, water, fltrd, ug/L (62069)	Bisphenol A-d3 sur Sch 2033 & 8033, wat flt pct rcv (99583)	Bromacil, water, fltrd, ug/L (04029)	Caffeine, water, fltrd, ug/L (50305)	Caffeine-13C sur Sch 2033 & 8033, wat flt pct rcv (99584)	Camphor water, fltrd, ug/L (62070)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbazole, water, fltrd, ug/L (62071)	Chlorpyrifos oxon, water, fltrd, ug/L (61636)	Chlorpyrifos water, fltrd, ug/L (38933)	Cholesterol, water, fltrd, ug/L (62072)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)
OCT													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	<.041	--	<.06	<.005	--	<.006
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	<.041	--	<.06	<.005	--	<.006
18...	<2	M	78.9	<.5	E.1	100	<.5	<1	<.5	--	<.5	M	--
MAR													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	<2	<1	100	<.5	E.1	114	<.5	<1	E.1	--	<.5	<2	--
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	<.041	--	<.06	<.005	--	<.006
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	<2	<1	109	1.0	E.3	126	E.1	E.004	E.1	<.06	<.005	<2	<.006
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	E.026	--	<.06	<.005	--	<.006
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<20	<1	185	<.5	E.1	103	M	<1	<.5	--	<.5	<20	--
AUG													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	<2	<1	177	.5	.5	93.7	<.5	E.049	E.1	<.06	<.005	<2	<.006
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
01...	--	--	--	--	--	--	--	E.267	--	<.06	<.005	--	<.006
07...	--	--	--	--	--	--	--	--	--	--	--	--	--

04087204 OAK CREEK AT SOUTH MILWAUKEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Cotinine, water, fltrd, ug/L (62005)	Cyfluthrin, water, fltrd, ug/L (61585)	Cypermethrin water, fltrd, ug/L (61586)	DCPA, water fltrd 0.7u GF ug/L (82682)	DecaFbiphenl sur Sch 2033 & 8033, wat flt pct rcv (99585)	DEET, water, fltrd, ug/L (62082)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon oxon, water, fltrd, ug/L (61638)	Diazinon, water, fltrd, ug/L (39572)	Diazinon-d10 surrog, Sch2003 wat flt percent recovry (99994)	Dicrotophos, water fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)	Diethoxynonylphenol, water, fltrd, ug/L (62083)
OCT													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	<.008	<.009	<.003	--	--	<.012	<.01	<.005	104	--	<.009	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	<.008	<.009	<.003	--	--	<.012	<.01	<.005	108	<.08	<.009	--
18...	E.1800	--	--	--	73.7	E.1	--	--	<.5	--	--	--	E2
MAR													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	<1.00	--	--	--	72.7	<.5	--	--	<.5	--	--	--	E4
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	<.008	<.009	<.003	--	--	<.012	<.01	<.005	97.2	<.08	<.009	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	E.3600	<.008	<.009	<.003	91.3	E.1	<.012	<.01	<.005	98.2	<.08	<.009	<5
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	<.008	<.009	.004	--	--	E.006	<.01	.013	119	<.08	<.009	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<1.00	--	--	--	42.1	E.2	--	--	<.5	--	--	--	<5
AUG													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	<1.00	<.008	<.009	.004	66.2	E.2	<.012	<.01	.023	115	<.08	<.009	<5
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
01...	--	<.008	<.009	<.003	--	--	<.012	<.01	<.005	118	<.08	<.009	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--

04087204 OAK CREEK AT SOUTH MILWAUKEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Di-ethoxy-octyl-phenol, water, fltrd ug/L (61705)	Dimeth-oate, water, fltrd 0.7u GF ug/L (82662)	D-Limo-nene, water, fltrd, ug/L (62073)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Ethoxy-octyl-phenol, water, fltrd ug/L (61706)	Fenami-phos sulfone water, fltrd, ug/L (61645)	Fenami-phos sulf-oxide, water, fltrd, ug/L (61646)	Fenami-phos, water, fltrd, ug/L (61591)	Desulf-inyl-fipro-nil amide, wat flt ug/L (62169)	Fipro-nil sulfide water, fltrd, ug/L (62167)	Fipro-nil sulfone water, fltrd, ug/L (62168)	Fipro-nil, water, fltrd, ug/L (62166)
OCT													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	<.006	--	<.03	<.004	--	<.008	--	<.03	<.029	<.013	<.024	<.016
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	<.006	--	<.03	<.004	--	<.008	<.03	<.03	<.029	<.013	<.024	<.016
18...	M	--	<.5	--	--	<1	--	--	--	--	--	--	--
MAR													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	<1	--	<.5	--	--	<1	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	<.006	--	<.03	<.004	--	<.008	<.03	<.03	<.029	<.013	<.024	<.016
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	<1	<.006	<.5	<.03	<.004	<1	<.008	<.03	<.03	<.029	<.013	<.024	<.016
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	<.006	--	<.03	<.004	--	<.008	<.03	<.03	<.029	<.013	<.024	<.016
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<1	--	<.5	--	--	<1	--	--	--	--	--	--	--
AUG													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	<1	<.006	<.5	<.0020	<.004	<1	<.049	<.04	<.03	<.029	<.013	<.024	<.016
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
01...	--	<.006	--	<.0020	<.004	--	<.049	<.04	<.03	<.029	<.013	<.024	<.016
07...	--	--	--	--	--	--	--	--	--	--	--	--	--

04087204 OAK CREEK AT SOUTH MILWAUKEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Fluor-anthene water, fltrd, ug/L (34377)	Fluor-anthene -d10, sur Sch 20/8033 wat flt pct rcv (99586)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	HHCB, water, fltrd, ug/L (62075)	Hexa-zinone, water, fltrd, ug/L (04025)	Indole, water, fltrd, ug/L (62076)	Ipro-dione, water, fltrd, ug/L (61593)	Isobor-neol, water, fltrd, ug/L (62077)	Isofen-phos, water, fltrd, ug/L (61594)	Iso-phorone water, fltrd, ug/L (34409)	Iso-propyl-benzene water, fltrd, ug/L (62078)	Iso-quin-oline, water, fltrd, ug/L (62079)
OCT													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	<.002	<.003	--	<.013	--	<1	--	<.003	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	<.002	<.003	--	<.013	--	<1	--	<.003	--	--	--
18...	M	100	--	--	<.5	--	<.5	--	<.5	--	<.5	<.5	<.5
MAR													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	E.1	95.5	--	--	<.5	--	<.5	--	<.5	--	<.5	<.5	<.5
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	<.002	<.003	--	<.013	--	<1	--	<.003	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	E.1	122	<.002	<.003	<.5	<.013	<.5	<1	<.5	<.003	E.1	<.5	<.5
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	<.002	<.003	--	<.013	--	<1	--	<.003	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	E.1	83.7	--	--	<.5	--	<.5	--	<.5	--	M	<.5	<.5
AUG													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	E.1	99.5	<.003	<.003	<.5	<.013	<.5	<.387	<.5	<.003	<.5	<.5	<.5
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
01...	--	--	<.003	<.003	--	<.013	--	<.387	--	<.003	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--

04087204 OAK CREEK AT SOUTH MILWAUKEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Mala-oxon, water, fltrd, ug/L (61652)	Mala-thion, water, fltrd, ug/L (39532)	Menthol water, fltrd, ug/L (62080)	Meta-laxyl, water, fltrd, ug/L (50359)	Meta-laxyl, water, fltrd, ug/L (61596)	Methi-althion water, fltrd, ug/L (61598)	Methyl para-oxon, water, fltrd, ug/L (61664)	Methyl para-thion, water, fltrd 0.7u GF ug/L (82667)	Methyl salicy-late, water, fltrd, ug/L (62081)	Methyl-mercury water fltrd, ng/L (50285)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Mycio-butanil water, fltrd, ug/L (61599)
OCT													
07...	--	--	--	--	--	--	--	--	--	<.04	--	--	--
NOV													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	<.008	<.027	--	--	<.005	<.006	<.03	<.015	--	--	E.006	<.006	<.008
18...	--	--	--	--	--	--	--	--	--	<.04	--	--	--
24...	--	--	--	--	--	--	--	--	--	<.04	--	--	--
DEC													
01...	--	--	--	--	--	--	--	--	--	<.04	--	--	--
JAN													
07...	--	--	--	--	--	--	--	--	--	<.04	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
04...	--	--	--	--	--	--	--	--	--	<.04	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	<.008	<.027	--	--	<.005	<.006	<.03	<.015	--	--	E.003	<.006	<.008
18...	--	--	E.1	<.5	--	--	--	--	<.5	--	<.5	--	--
MAR													
02...	--	--	--	--	--	--	--	--	--	E.05	--	--	--
05...	--	--	<.5	<.5	--	--	--	--	<.5	--	E.1	--	--
05...	--	--	--	--	--	--	--	--	--	.06	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	<.008	<.027	--	--	<.005	<.006	<.03	<.015	--	--	E.004	<.006	<.008
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	<.008	<.027	E.1	<.5	<.005	<.006	<.03	<.015	<.5	--	.047	<.006	<.008
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	<.008	<.027	--	--	<.005	<.006	<.03	<.015	--	--	.128	<.006	<.008
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	.08	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	<.5	<.5	--	--	--	--	<.5	.07	M	--	--
AUG													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	.06	--	--	--
04...	<.030	<.027	<.5	<.5	<.005	<.006	<.03	<.015	<.5	--	.029	<.006	<.008
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
01...	<.030	<.027	--	--	<.005	<.006	<.03	<.015	--	--	<.013	<.006	<.008
07...	--	--	--	--	--	--	--	--	--	--	--	--	--

04087204 OAK CREEK AT SOUTH MILWAUKEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Naphth-alene, water, fltrd, ug/L (34443)	p-Cresol, water, fltrd, ug/L (62084)	Pendi-meth-alin, water, fltrd 0.7u GF ug/L (82683)	Penta-chloro-phenol, water, fltrd, ug/L (34459)	Phenan-threne, water, fltrd, ug/L (34462)	Phenol, water, fltrd, ug/L (34466)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)	Prome-ton, water, fltrd, ug/L (04037)	Prome-tryn, water, fltrd, ug/L (04036)	Propy-zamide, water, fltrd 0.7u GF ug/L (82676)
OCT													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	<.022	--	--	--	<.10	<.011	--	<.008	.02	<.005	<.004
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	<.022	--	--	--	<.10	<.011	<.06	<.008	.01	<.005	<.004
18...	<.5	<1	--	<2	<.5	<.5	--	--	--	--	<.5	--	--
MAR													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	M	M	--	<2	E.1	E.3	--	--	--	--	<.5	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	<.022	--	--	--	<.10	<.011	<.06	<.008	.01	<.005	<.004
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	<.5	<1	E.020	E1	M	<.5	<.10	<.011	<.06	<.008	.01	<.005	<.004
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	<.022	--	--	--	<.10	<.011	<.06	<.008	.02	<.005	<.004
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.5	<1	--	<2	M	.9	--	--	--	--	<.5	--	--
AUG													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	<.5	<1	<.022	<2	<.5	E.3	<.10	<.011	--	--	.05	<.005	<.004
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
01...	--	--	<.022	--	--	--	<.10	<.011	<.05	<.008	.02	<.005	<.004
07...	--	--	--	--	--	--	--	--	--	--	--	--	--

04087204 OAK CREEK AT SOUTH MILWAUKEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Pyrene, water, fltrd, ug/L (34470)	Sima-zine, water, fltrd, ug/L (04035)	Tebu-thiuron water fltrd 0.7u GF ug/L (82670)	Ter-bufos oxon sulfone water, fltrd, ug/L (61674)	Terbu-fos, water, fltrd 0.7u GF ug/L (82675)	Ter-buthyl-azine, water, fltrd, ug/L (04022)	Tetra-chloro-ethene, water, fltrd, ug/L (34476)	Tri-bromo-methane water, fltrd, ug/L (34288)	Tri-butyl phos-phate, water, fltrd, ug/L (62089)	Triclo-san, water, fltrd, ug/L (62090)	Tri-ethyl citrate water, fltrd, ug/L (62091)	Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661)	Tri-phenyl phos-phate, water, fltrd, ug/L (62092)
OCT													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	<.005	<.02	<.07	<.02	<.01	--	--	--	--	--	<.009	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	<.005	<.02	<.07	<.02	<.01	--	--	--	--	--	<.009	--
18...	M	--	--	--	--	--	<.5	E.1	E.1	<1	<.5	--	M
MAR													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	M	--	--	--	--	--	<.5	<.5	.5	<1	<.5	--	E.1
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	<.005	E.01	<.07	<.02	<.01	--	--	--	--	--	<.009	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	E.1	<.008	<.02	<.07	<.02	<.01	<.5	<.5	E.4	<1	<.5	E.004	E.1
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	<.005	E.01	<.07	<.02	<.01	--	--	--	--	--	E.001	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	M	--	--	--	--	--	<.5	<.5	M	<1	<.5	--	<.5
AUG													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	<.5	<.005	<.02	<.07	<.02	<.01	<.5	<.5	<.5	<1	<.5	E.004	<.5
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
01...	--	<.005	<.02	<.07	<.02	<.01	--	--	--	--	--	<.009	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--

04087204 OAK CREEK AT SOUTH MILWAUKEE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Tris(2-butoxy-ethyl) phos-phate, wat flt ug/L (62093)	Tris(2-chloro-ethyl) phos-phate, wat flt ug/L (62087)	Tris(di chloro-i-Pr) phos-phate, wat flt ug/L (62088)	Di-chlor-vos, water fltrd, ug/L (38775)	Methyl-mercury suspnd sedimnt total, ng/L (62977)	Sus-pended sedi-ment concen-tration mg/L (80154)
OCT						
07...	--	--	--	--	<.025	102
NOV						
04...	--	--	--	--	<.141	85
12...	--	--	--	<.01	--	157
18...	--	--	--	--	.500	149
24...	--	--	--	--	<.022	85
DEC						
01...	--	--	--	--	--	85
JAN						
07...	--	--	--	--	--	193
21...	--	--	--	--	--	--
FEB						
04...	--	--	--	--	--	209
04...	--	--	--	--	--	--
11...	--	--	--	<.01	--	426
18...	E.1	E.1	M	<1.00	--	--
MAR						
02...	--	--	--	--	.069	191
05...	<.5	<.5	E.1	<1.00	--	273
05...	--	--	--	--	.207	578
12...	--	--	--	--	<.028	183
APR						
07...	--	--	--	--	<.021	145
13...	--	--	--	<.01	--	183
28...	--	--	--	--	--	--
MAY						
03...	--	--	--	--	--	157
11...	E.4	E.1	E.1	<.01	--	13
13...	--	--	--	--	--	247
JUN						
01...	--	--	--	--	--	95
10...	--	--	--	--	--	--
16...	--	--	--	<.01	--	103
29...	--	--	--	--	--	--
JUL						
07...	--	--	--	--	--	117
14...	--	--	--	--	--	--
26...	<.5	M	<.5	--	--	19
AUG						
02...	--	--	--	--	--	148
04...	--	--	--	--	.168	130
04...	<.5	<.5	<.5	<.01	--	--
18...	--	--	--	--	--	--
18...	--	--	--	--	--	--
SEP						
01...	--	--	--	<.01	--	93
07...	--	--	--	--	--	134

04087214 ROOT RIVER AT GRANGE AVENUE AT GREENFIELD, WI

LOCATION.--Lat 42°56'42", long 88°00'51", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.28, T.6 N., R.21 E., Milwaukee County, Hydrologic Unit 04040002, on left bank 40 ft upstream from bridge on Grange Avenue, at Greenfield.

DRAINAGE AREA.-- 14.7 mi^2.

PERIOD OF RECORD.--April to September 2004.

GAGE.--Water-stage recorder. Datum of gage is 705 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good (see page 11).

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	13	5.5	51	3.8	1.6	2.3
2	---	---	---	---	---	---	11	3.4	22	2.9	1.6	2.2
3	---	---	---	---	---	---	8.2	3.0	14	37	45	1.8
4	---	---	---	---	---	---	6.6	3.0	11	324	171	1.7
5	---	---	---	---	---	---	5.8	2.6	8.5	29	12	2.3
6	---	---	---	---	---	---	6.2	2.5	6.9	19	6.4	1.7
7	---	---	---	---	---	---	5.3	2.3	5.8	60	4.6	1.5
8	---	---	---	---	---	---	4.7	5.7	4.6	14	3.5	1.4
9	---	---	---	---	---	---	4.0	42	13	9.2	22	1.3
10	---	---	---	---	---	---	3.6	31	51	7.1	4.3	1.1
11	---	---	---	---	---	---	3.4	22	78	13	3.2	1.1
12	---	---	---	---	---	---	3.1	7.3	40	27	2.9	1.0
13	---	---	---	---	---	---	3.0	82	21	6.8	2.5	0.97
14	---	---	---	---	---	---	3.0	212	131	5.0	2.2	1.0
15	---	---	---	---	---	---	2.9	56	40	4.0	1.9	4.6
16	---	---	---	---	---	---	3.1	26	28	3.4	1.8	4.0
17	---	---	---	---	---	---	20	22	43	3.1	2.6	0.99
18	---	---	---	---	---	---	4.1	94	18	2.8	2.6	0.81
19	---	---	---	---	---	---	3.2	26	11	2.6	2.9	0.79
20	---	---	---	---	---	---	32	17	8.4	2.4	1.7	0.72
21	---	---	---	---	---	---	97	81	42	17	1.7	0.77
22	---	---	---	---	---	---	18	426	21	4.3	1.7	0.72
23	---	---	---	---	---	---	9.4	257	13	2.5	1.7	0.74
24	---	---	---	---	---	---	9.3	55	30	2.1	16	0.84
25	---	---	---	---	---	---	26	36	12	2.0	58	1.3
26	---	---	---	---	---	---	8.3	26	7.2	1.8	4.3	1.2
27	---	---	---	---	---	---	5.9	19	7.3	1.8	24	0.93
28	---	---	---	---	---	---	5.0	13	17	1.8	33	0.87
29	---	---	---	---	---	---	4.2	17	5.1	1.7	17	0.72
30	---	---	---	---	---	---	3.8	76	4.7	1.7	3.9	0.73
31	---	---	---	---	---	---	---	47	---	1.7	2.8	---
TOTAL	---	---	---	---	---	---	333.1	1,718.3	765.5	614.5	460.4	42.10
MEAN	---	---	---	---	---	---	11.1	55.4	25.5	19.8	14.9	1.40
MAX	---	---	---	---	---	---	97	426	131	324	171	4.6
MIN	---	---	---	---	---	---	2.9	2.3	4.6	1.7	1.6	0.72

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2004, BY WATER YEAR (WY)

MEAN	---	---	---	---	---	---	11.1	55.4	25.5	19.8	14.9	1.40
MAX	---	---	---	---	---	---	11.1	55.4	25.5	19.8	14.9	1.40
(WY)	---	---	---	---	---	---	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)
MIN	---	---	---	---	---	---	11.1	55.4	25.5	19.8	14.9	1.40
(WY)	---	---	---	---	---	---	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)

SUMMARY STATISTICS	FOR 2004 WATER YEAR (April - September)	
ANNUAL TOTAL	3,933.90	
ANNUAL MEAN	21.5	
HIGHEST DAILY MEAN	426	May 22
LOWEST DAILY MEAN	0.72	Sep 20, 22, 29
ANNUAL SEVEN-DAY MINIMUM	0.77	Sep 18
MAXIMUM PEAK FLOW	582	Jul 3
MAXIMUM PEAK STAGE	15.40	Jul 3
10 PERCENT EXCEEDS	49	
50 PERCENT EXCEEDS	5.0	
90 PERCENT EXCEEDS	1.2	

04087220 ROOT RIVER NEAR FRANKLIN, WI

LOCATION.--Lat 42°52'25", long 87°59'45", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.22, T.5 N., R.21 E., Milwaukee County, Hydrologic Unit 04040002, on right bank 400 ft upstream from State Highway 100, 2.1 mi upstream from Root River Canal, 2.4 mi southeast of Franklin, 5.5 mi southeast of Hales Corners, and about 24 mi upstream from mouth.

DRAINAGE AREA.--49.2 mi^2.

PERIOD OF RECORD.--October 1963 to current year.

REVISED RECORD.--WDR WI-81-1: Drainage area. WDR WI-83-1: 1981.

GAGE.--Water-stage recorder. Datum of gage is 674.5 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Flow affected by urbanization in the drainage basin. Gage-height telemeter at station.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--Flood of Mar. 30, 1960, reached a stage of 9.57 ft, discharge, 5,130 ft^3/s, from rating curve extended above 2,000 ft^3/s on basis of contracted-opening measurement of peak flow.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	6.6	7.2	11	e3.6	84	66	19	135	16	4.5	11
2	1.7	54	5.4	10	e3.6	123	52	17	83	14	4.2	9.2
3	1.7	132	4.5	e14	e3.5	71	41	14	51	15	4.6	7.6
4	2.4	161	4.1	e11	e3.5	53	34	13	37	583	237	6.0
5	2.6	184	5.3	e7.0	e3.4	440	28	13	30	345	129	5.4
6	2.5	67	6.1	e6.9	e3.4	409	27	12	26	95	28	7.1
7	1.9	35	5.9	e6.9	e3.4	135	26	11	22	152	19	5.7
8	2.3	22	5.2	e6.8	e3.3	86	23	11	20	102	14	4.3
9	2.6	15	6.2	e6.7	e3.3	62	20	50	18	53	16	4.9
10	3.2	12	191	e6.5	e3.3	52	19	55	35	42	20	4.2
11	4.2	12	275	e6.3	e3.3	46	17	75	190	35	11	3.7
12	2.7	9.8	85	e6.1	e3.3	38	16	39	213	73	12	3.3
13	4.0	8.2	57	e5.6	e3.3	30	17	158	96	38	7.7	3.7
14	15	8.1	31	e5.2	e3.5	35	14	363	124	27	6.2	3.0
15	31	6.2	24	e4.9	e3.8	38	13	527	227	21	5.1	2.8
16	9.0	7.8	e23	e4.6	e4.0	30	13	169	67	19	4.4	14
17	3.7	8.4	e21	e4.3	e4.3	28	25	89	105	17	4.7	6.5
18	2.5	74	19	e4.2	e5.0	33	26	249	96	15	6.0	4.0
19	2.2	105	15	e4.2	e6.0	35	15	196	50	14	5.7	3.3
20	3.6	40	e12	e4.2	e8.0	34	15	89	33	14	5.0	2.8
21	8.5	23	e10	e4.2	e18	31	186	99	55	13	3.8	2.6
22	10	15	e9.8	e4.1	e36	26	91	614	126	29	3.3	2.6
23	6.4	17	e9.5	e4.0	e44	23	43	1,040	57	13	3.2	2.7
24	5.6	25	e9.0	e3.9	e52	30	32	555	56	10	6.3	2.9
25	43	14	e8.6	e3.9	e55	31	50	214	47	8.5	77	2.5
26	20	11	e8.0	e3.8	e58	173	43	123	31	6.8	37	2.3
27	3.1	11	e6.3	e3.8	e59	168	30	82	24	6.0	28	2.2
28	1.2	8.9	13	e3.7	59	95	25	56	37	5.7	48	2.3
29	2.1	6.2	27	e3.6	62	342	21	47	29	7.3	51	2.2
30	3.6	6.1	20	e3.6	---	167	18	81	21	5.1	23	1.9
31	6.6	---	12	e3.6	---	98	---	223	---	5.0	16	---
TOTAL	210.7	1,105.3	936.1	178.6	521.8	3,046	1,046	5,303	2,141	1,799.4	840.7	136.7
MEAN	6.80	36.8	30.2	5.76	18.0	98.3	34.9	171	71.4	58.0	27.1	4.56
MAX	43	184	275	14	62	440	186	1,040	227	583	237	14
MIN	1.2	6.1	4.1	3.6	3.3	23	13	11	18	5.0	3.2	1.9
CFSM	0.14	0.75	0.61	0.12	0.37	2.00	0.71	3.48	1.45	1.18	0.55	0.09
IN.	0.16	0.84	0.71	0.14	0.39	2.30	0.79	4.01	1.62	1.36	0.64	0.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2004, BY WATER YEAR (WY)

MEAN	23.4	30.6	34.2	30.3	47.4	89.8	87.1	50.6	46.5	28.6	26.2	30.8
MAX	95.5	151	118	190	161	315	316	171	164	142	72.3	214
(WY)	(1992)	(1986)	(1983)	(1974)	(1971)	(1979)	(1973)	(2004)	(1999)	(1969)	(1987)	(1972)
MIN	2.38	4.26	2.02	2.47	2.75	13.6	21.5	5.32	3.55	3.09	3.82	3.05
(WY)	(1964)	(1964)	(1964)	(1977)	(1977)	(1968)	(1977)	(1977)	(1988)	(1988)	(1971)	(1971)

04087220 ROOT RIVER NEAR FRANKLIN, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1964 - 2004	
ANNUAL TOTAL	7,764.03		17,265.3			
ANNUAL MEAN	21.3		47.2		43.7	
HIGHEST ANNUAL MEAN					84.0	1974
LOWEST ANNUAL MEAN					12.7	1977
HIGHEST DAILY MEAN	301	May 9	1,040	May 23	2,390	Apr 21, 1973
LOWEST DAILY MEAN	0.94	Sep 6	1.2	Oct 28	0.44	Aug 9, 10, 1971
ANNUAL SEVEN-DAY MINIMUM	0.99	Sep 6	2.1	Oct 1	0.99	Sep 6, 2003
MAXIMUM PEAK FLOW			1,190	May 23	(a)3,700	Apr 21, 1973
MAXIMUM PEAK STAGE			8.60	May 23	(b)9.43	Jul 3, 2000
INSTANTANEOUS LOW FLOW			0.88	Oct 28, 29	0.38	Aug 10, 1971
ANNUAL RUNOFF (CFSM)	0.432		0.959		0.888	
ANNUAL RUNOFF (INCHES)	5.87		13.05		12.07	
10 PERCENT EXCEEDS	53		123		93	
50 PERCENT EXCEEDS	6.9		15		16	
90 PERCENT EXCEEDS	1.7		3.3		4.4	

(a) Gage height, 9.31 ft
(b) Discharge, 2,420 ft^3/s
(e) Estimated due to ice effect or missing record

04087233 ROOT RIVER CANAL NEAR FRANKLIN, WI

LOCATION.--Lat 42°48'55", long 87°59'40", in SE ¼ SE ¼ sec.10, T.4 N., R.21 E., Racine County, Hydrologic Unit 04040002, on right bank 10 ft downstream from highway bridge 3.5 mi upstream from mouth, 5.5 mi southeast of intersection U.S. 45 and State Highway 100 in Franklin, and 8.7 mi southeast of Hales Corners.

DRAINAGE AREA.--57.0 mi^2.

PERIOD OF RECORD.--October 1963 to current year.

REVISED RECORD.--WDR WI-80-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 670 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges and for flows over 500 cfs, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.90	8.6	9.6	21	e6.8	179	104	24	237	54	9.9	8.7
2	2.8	12	8.0	22	e6.7	254	80	22	141	49	8.6	7.6
3	4.5	28	7.3	28	e6.6	168	65	20	103	49	7.8	6.4
4	6.1	103	7.2	e25	e6.5	120	56	19	83	705	25	5.8
5	6.3	139	7.4	e20	e6.4	560	49	17	72	624	17	5.0
6	5.4	69	7.1	e18	e6.4	652	45	15	64	267	12	4.5
7	4.3	36	6.2	e16	e6.3	452	41	14	57	156	9.5	4.2
8	3.8	22	6.0	e15	e6.3	241	37	14	50	111	8.5	3.9
9	3.5	14	6.2	e14	e6.2	158	33	194	45	87	7.3	3.4
10	3.1	11	215	e14	e6.1	115	30	272	52	77	6.7	3.0
11	2.9	11	406	e14	e6.1	94	27	433	e130	66	6.2	3.1
12	3.6	9.6	194	e13	e6.1	73	25	227	e170	76	5.7	3.1
13	3.7	7.8	99	e12	e6.0	62	23	422	e100	59	5.4	3.0
14	4.7	6.8	73	e11	e6.2	60	22	848	e80	47	4.9	2.6
15	3.8	6.4	53	e10	e6.6	53	20	1,070	66	39	4.7	2.4
16	1.3	6.2	48	e9.7	e7.4	47	19	736	52	36	4.2	2.9
17	1.4	5.2	44	e9.0	e8.2	45	22	356	343	33	7.7	3.0
18	2.1	50	34	e8.5	e9.3	43	21	536	628	27	9.2	2.5
19	2.4	149	28	e8.0	e10	42	19	466	322	24	5.7	2.8
20	2.7	78	27	e7.9	e12	51	18	245	137	21	4.8	2.4
21	3.1	48	22	e7.8	e17	48	60	354	201	23	4.3	2.1
22	3.9	34	21	e7.7	e23	41	57	941	404	37	4.0	1.9
23	4.4	30	e20	e7.6	e34	38	40	1,350	186	25	3.6	1.9
24	4.7	28	e18	e7.5	e80	40	32	1,150	471	19	3.9	2.4
25	6.5	21	e16	e7.4	e90	51	48	645	295	16	38	2.4
26	7.8	18	e13	e7.2	e94	167	51	343	145	14	16	2.8
27	6.8	15	e12	e7.1	e100	179	40	217	101	13	11	2.4
28	6.9	14	20	e7.0	99	138	34	156	85	12	15	2.4
29	7.2	12	35	e6.9	115	394	28	126	71	11	31	2.2
30	7.7	11	30	e6.8	---	240	24	169	61	11	17	1.6
31	8.4	---	26	e6.8	---	145	---	300	---	10	11	---
TOTAL	136.70	1,003.6	1,519.0	375.9	794.2	4,950	1,170	11,701	4,952	2,798	325.6	102.4
MEAN	4.41	33.5	49.0	12.1	27.4	160	39.0	377	165	90.3	10.5	3.41
MAX	8.4	149	406	28	115	652	104	1,350	628	705	38	8.7
MIN	0.90	5.2	6.0	6.8	6.0	38	18	14	45	10	3.6	1.6
CFSM	0.08	0.59	0.86	0.21	0.48	2.80	0.68	6.62	2.90	1.58	0.18	0.06
IN.	0.09	0.65	0.99	0.25	0.52	3.23	0.76	7.64	3.23	1.83	0.21	0.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2004, BY WATER YEAR (WY)

MEAN	22.6	34.5	41.0	33.1	61.2	106	104	64.5	52.0	25.9	19.6	30.5
MAX	120	154	200	219	193	352	312	377	165	141	138	212
(WY)	(2002)	(1993)	(1983)	(1974)	(2001)	(1979)	(1993)	(2004)	(2004)	(1978)	(1978)	(1972)
MIN	1.05	1.27	0.86	0.56	0.69	6.03	10.9	2.47	2.51	2.18	2.16	1.28
(WY)	(1964)	(1964)	(1964)	(1977)	(1977)	(1968)	(1977)	(1977)	(1977)	(1991)	(1999)	(1971)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1964 - 2004	
ANNUAL TOTAL	7,896.63		29,828.40			
ANNUAL MEAN	21.6		81.5		49.4	
HIGHEST ANNUAL MEAN					98.4	1974
LOWEST ANNUAL MEAN					4.57	1977
HIGHEST DAILY MEAN	406	Dec 11	1,350	May 23	1,410	Mar 4, 1974
LOWEST DAILY MEAN	0.90	Oct 1	0.90	Oct 1	(a)0.40	Dec 19, 1963
ANNUAL SEVEN-DAY MINIMUM	(b)0.95	Jan 24	2.3	Sep 19	(b)0.45	Feb 8, 1977
MAXIMUM PEAK FLOW			1,430	May 23	(c)1,440	Mar 4, 1974
MAXIMUM PEAK STAGE			11.28	May 23	11.28	May 23, 2004
ANNUAL RUNOFF (CFSM)	0.380		1.43		0.867	
ANNUAL RUNOFF (INCHES)	5.15		19.47		11.79	
10 PERCENT EXCEEDS	54		220		123	
50 PERCENT EXCEEDS	7.2		20		15	
90 PERCENT EXCEEDS	1.3		3.8		2.3	

(a) Result of freezeup
(b) Ice affected
(c) Gage height, 9.88 ft
(e) Estimated due to ice effect or missing record

04087233 ROOT RIVER CANAL NEAR FRANKLIN, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: July 16 to Nov. 15, 2004 (discontinued).
DISSOLVED OXYGEN: July 16 to Nov. 15, 2004 (discontinued).
SPECIFIC CONDUCTANCE: July 16 to Nov. 15, 2004 (discontinued).

INSTRUMENTATION.--Water-quality monitor since July 16, 2004.

REMARKS.--Temperature records good except for the period Sept. 20-22, which is fair. Dissolved oxygen records good except for the periods July 31 to Aug. 6 and Sept. 20-22 and Aug. 6-19, which are poor. Specific conductance records good.

EXTREMES FOR PERIOD MAY TO NOVEMBER 2004.--
WATER TEMPERATURE: Maximum, 25.0°C, Aug. 3; minimum, 4.5°C, Nov. 13-15.
DISSOLVED OXYGEN: Maximum, 15.0 mg/L, Nov. 14; minimum, 1.6 mg/L, Sept. 30.
SPECIFIC CONDUCTANCE: Maximum, 1,340 µS/cm, Oct. 1; minimum, 558 µS/cm, Aug. 25.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	24.0	21.5	23.0	20.0	18.5	19.0
2	---	---	---	---	---	---	24.0	23.0	23.5	22.0	19.0	20.0
3	---	---	---	---	---	---	25.0	23.0	23.5	21.5	20.5	21.0
4	---	---	---	---	---	---	24.0	21.0	22.5	22.5	20.5	21.0
5	---	---	---	---	---	---	22.0	18.5	20.0	23.5	21.0	22.0
6	---	---	---	---	---	---	21.5	18.0	19.5	23.5	21.0	22.0
7	---	---	---	---	---	---	21.5	19.5	20.0	21.0	19.0	20.0
8	---	---	---	---	---	---	22.0	19.0	20.0	19.5	18.5	19.0
9	---	---	---	---	---	---	23.0	21.0	22.0	19.0	18.0	18.5
10	---	---	---	---	---	---	22.5	19.0	20.5	19.5	17.0	18.5
11	---	---	---	---	---	---	19.0	17.0	17.5	20.5	18.5	19.5
12	---	---	---	---	---	---	17.0	16.0	16.5	21.5	19.0	20.0
13	---	---	---	---	---	---	18.0	16.0	16.5	21.5	19.5	20.5
14	---	---	---	---	---	---	18.5	16.5	17.5	22.0	20.5	21.5
15	---	---	---	---	---	---	19.0	16.5	18.0	23.0	22.0	22.5
16	---	---	---	---	---	---	19.5	17.0	18.5	22.0	19.5	21.0
17	---	---	---	22.5	19.0	20.5	20.5	18.5	19.5	19.5	18.0	18.5
18	---	---	---	23.0	18.5	21.0	21.0	18.5	20.0	19.0	17.5	18.0
19	---	---	---	23.0	20.0	21.5	21.0	19.5	20.0	19.5	18.0	18.5
20	---	---	---	24.0	21.0	22.0	20.5	19.0	19.5	19.5	18.0	19.0
21	---	---	---	24.0	22.0	22.5	20.0	18.0	19.0	19.0	17.5	18.5
22	---	---	---	24.5	21.0	22.5	20.0	17.5	19.0	18.5	17.5	18.0
23	---	---	---	23.5	20.0	21.5	20.5	19.5	19.5	18.5	17.5	18.0
24	---	---	---	22.0	18.5	19.5	21.0	19.5	20.5	19.5	18.0	19.0
25	---	---	---	21.0	17.5	19.0	21.0	19.5	20.5	18.0	16.0	17.0
26	---	---	---	21.0	18.0	19.0	23.0	19.5	20.5	16.0	14.5	15.5
27	---	---	---	22.0	18.0	20.0	24.0	22.0	23.0	16.0	14.5	15.0
28	---	---	---	22.0	20.0	21.0	24.0	18.5	21.5	16.5	14.5	15.5
29	---	---	---	22.5	20.5	21.5	20.0	16.5	18.0	15.0	13.0	14.0
30	---	---	---	22.5	21.0	22.0	19.5	16.0	18.0	14.0	12.0	13.0
31	---	---	---	24.0	20.5	22.0	20.0	17.5	18.5	---	---	---
MONTH	---	---	---	24.5	17.5	21.0	25.0	16.0	19.9	23.5	12.0	18.8
YEAR	25.0	12.0	19.7									

04087233 ROOT RIVER CANAL NEAR FRANKLIN, WI—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	6.8	3.4	5.0	7.7	4.8	6.0
2	---	---	---	---	---	---	6.1	3.7	4.6	7.0	4.8	5.7
3	---	---	---	---	---	---	5.5	4.2	4.9	7.7	3.4	5.5
4	---	---	---	---	---	---	6.3	4.7	5.7	6.4	4.0	5.2
5	---	---	---	---	---	---	7.6	4.9	6.3	6.7	3.8	5.1
6	---	---	---	---	---	---	9.6	6.0	7.5	6.1	3.6	4.7
7	---	---	---	---	---	---	9.7	6.5	7.9	6.9	4.3	5.3
8	---	---	---	---	---	---	8.8	6.8	8.0	8.5	5.0	6.3
9	---	---	---	---	---	---	9.8	6.1	8.0	7.2	5.1	5.9
10	---	---	---	---	---	---	8.7	5.8	7.1	8.0	4.8	6.3
11	---	---	---	---	---	---	8.1	6.2	7.4	7.8	4.8	6.0
12	---	---	---	---	---	---	9.7	7.3	8.5	7.4	5.0	5.9
13	---	---	---	---	---	---	8.0	6.8	7.5	6.5	4.1	5.2
14	---	---	---	---	---	---	9.0	6.8	7.9	5.6	3.4	4.6
15	---	---	---	---	---	---	9.4	6.3	7.6	5.2	3.5	4.2
16	---	---	---	---	---	---	8.9	5.6	7.3	4.6	3.3	4.0
17	---	---	---	---	---	---	7.1	5.2	6.0	6.0	4.4	5.1
18	---	---	---	---	---	---	6.1	5.0	5.5	6.6	4.8	5.8
19	---	---	---	---	---	---	6.3	4.1	5.0	7.0	5.2	6.3
20	---	---	---	---	---	---	7.2	4.5	5.7	6.9	4.6	5.7
21	---	---	---	---	---	---	8.3	5.1	6.3	6.3	4.2	5.4
22	---	---	---	---	---	---	8.9	5.0	6.5	6.1	3.8	5.3
23	---	---	---	5.2	4.2	4.5	7.0	4.7	5.6	5.8	3.4	4.7
24	---	---	---	5.7	4.7	5.0	6.0	4.1	4.7	4.8	2.0	3.4
25	---	---	---	5.7	4.6	5.1	7.4	4.2	5.5	3.6	2.2	2.9
26	---	---	---	6.2	4.3	5.1	5.4	4.9	5.2	4.1	2.8	3.5
27	---	---	---	6.4	3.7	5.0	5.4	4.0	4.6	4.8	3.3	4.1
28	---	---	---	7.2	4.0	5.2	6.5	4.5	5.3	5.8	4.0	4.8
29	---	---	---	6.9	4.2	5.3	7.2	6.2	6.7	4.7	2.0	3.9
30	---	---	---	6.6	4.0	5.1	7.8	6.6	7.1	4.6	1.6	3.5
31	---	---	---	6.8	3.6	5.1	7.7	5.9	6.7	---	---	---
MONTH	---	---	---	7.2	3.6	5.0	9.8	3.4	6.4	8.5	1.6	5.0
YEAR	9.8	1.6	5.6									

04087233 ROOT RIVER CANAL NEAR FRANKLIN, WI—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	---	---	---	883	854	867
2	---	---	---	---	---	---	---	---	---	904	883	896
3	---	---	---	---	---	---	---	---	---	968	904	927
4	---	---	---	---	---	---	---	---	---	967	936	946
5	---	---	---	---	---	---	---	---	---	990	948	959
6	---	---	---	---	---	---	---	---	---	1,000	980	988
7	---	---	---	---	---	---	891	841	865	1,010	977	990
8	---	---	---	---	---	---	907	891	903	1,020	997	1,010
9	---	---	---	---	---	---	928	904	919	1,040	1,010	1,030
10	---	---	---	---	---	---	949	912	929	1,100	1,030	1,060
11	---	---	---	---	---	---	968	916	938	1,100	1,090	1,100
12	---	---	---	---	---	---	991	952	964	1,100	1,080	1,090
13	---	---	---	---	---	---	1,020	970	986	1,120	1,090	1,110
14	---	---	---	---	---	---	987	978	981	1,180	1,120	1,150
15	---	---	---	---	---	---	1,020	987	1,000	1,210	1,170	1,190
16	---	---	---	---	---	---	1,040	1,020	1,020	1,200	1,190	1,200
17	---	---	---	737	674	706	1,040	935	1,010	1,200	1,170	1,180
18	---	---	---	783	707	751	1,090	892	1,010	1,250	1,180	1,220
19	---	---	---	795	772	785	892	805	832	1,290	1,240	1,260
20	---	---	---	820	778	798	962	864	907	1,280	1,140	1,200
21	---	---	---	829	751	802	1,040	962	986	1,270	1,170	1,220
22	---	---	---	826	714	766	1,080	1,040	1,050	1,280	1,250	1,270
23	---	---	---	814	719	765	1,100	1,080	1,090	1,300	1,270	1,280
24	---	---	---	841	766	813	1,120	1,060	1,110	1,300	1,280	1,280
25	---	---	---	863	831	851	1,110	558	757	1,280	1,260	1,270
26	---	---	---	874	846	857	827	632	739	1,300	1,270	1,290
27	---	---	---	873	780	848	875	825	852	1,300	1,270	1,280
28	---	---	---	881	785	849	905	834	874	1,280	1,270	1,270
29	---	---	---	894	845	875	846	762	801	1,310	1,280	1,300
30	---	---	---	896	813	869	819	776	790	1,320	1,300	1,320
31	---	---	---	---	---	---	857	819	841	---	---	---
MONTH	---	---	---	896	674	810	1,120	558	926	1,320	854	1,140
YEAR	1,320	558	995									

04087233 ROOT RIVER CANAL NEAR FRANKLIN, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Chloride, water, fltrd, mg/L (00940)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	E coli, Defined Substr. Tech., water, MPN/ 100 mL (50468)
JUN													
29...	1720	69	40	40.9	31	1.3	.110	5.51	.129	.175	.266	<2.0	--
JUL													
21...	1430	23	50	58.4	--	--	--	--	--	--	.279	--	--
21...	2030	27	50	61.0	--	--	--	--	--	--	.287	--	--
22...	0030	35	50	71.7	--	--	--	--	--	--	.292	--	--
22...	0630	42	50	65.7	--	--	--	--	--	--	.292	--	--
22...	0948	39	50	62.1	--	--	--	--	--	--	.316	--	--
AUG													
04...	0230	12	50	64.1	--	--	--	--	--	--	.245	--	--
04...	0645	19	50	58.6	--	--	--	--	--	--	.227	--	--
04...	1000	28	50	58.2	--	--	--	--	--	--	.250	--	--
04...	1600	33	50	60.1	--	--	--	--	--	--	.265	--	--
04...	2200	26	50	68.1	--	--	--	--	--	--	.274	--	--
05...	0400	20	50	87.0	--	--	--	--	--	--	.291	--	--
05...	1600	15	50	77.6	--	--	--	--	--	--	.260	--	--
06...	0400	13	50	75.6	--	--	--	--	--	--	.287	--	--
17...	0815	5.4	50	80.1	15	--	--	--	--	--	.207	--	--
17...	1415	8.4	50	77.8	14	--	--	--	--	--	.204	--	--
17...	2015	12	50	80.5	14	--	--	--	--	--	.204	--	--
18...	0215	12	50	105	18	--	--	--	--	--	.212	--	--
18...	0815	9.6	50	146	16	--	--	--	--	--	.192	--	--
18...	1415	8.4	50	106	27	--	--	--	--	--	.249	--	--
18...	1416	8.4	50	105	26	--	--	--	--	--	.250	--	--
18...	1429	8.4	50	117	19	--	--	--	--	--	.224	--	--
18...	1435	8.4	50	110	21	--	--	--	--	--	.215	--	--
19...	0000	6.3	50	154	21	--	--	--	--	--	.196	--	--
19...	0600	5.7	50	154	19	--	--	--	--	--	.195	--	--
19...	1200	5.9	50	152	20	--	--	--	--	--	.198	--	--
24...	1629	4.0	50	95.1	58	--	--	--	--	--	.413	--	--
25...	0430	34	50	74.9	65	--	--	--	--	--	.627	--	--
25...	0600	46	50	134	43	1.2	.104	6.27	.109	.129	.239	--	1,600
25...	1400	49	50	142	37	--	--	--	--	--	.247	--	--
26...	0230	21	50	135	30	--	--	--	--	--	.221	--	--
26...	0933	16	50	133	29	1.3	.125	5.91	.093	.116	.235	--	220
26...	1400	14	50	74.5	15	1.4	.129	3.72	.136	.158	.248	--	520
26...	1702	14	50	70.3	30	--	--	--	--	--	.277	--	--
27...	0640	11	50	80.3	20	1.2	.132	3.72	.135	.158	.256	--	770
28...	1515	17	50	77.7	26	--	--	--	--	--	.289	--	--
28...	2115	21	50	84.3	28	--	--	--	--	--	.287	--	--
29...	0315	29	50	80.1	29	--	--	--	--	--	.306	--	--
29...	0915	35	50	79.8	36	--	--	--	--	--	.384	--	--
29...	1515	34	50	92.8	44	--	--	--	--	--	.305	--	--
29...	2115	26	50	88.0	38	--	--	--	--	--	.304	--	--
30...	0315	21	50	93.9	37	--	--	--	--	--	.259	--	--
30...	1600	15	50	74.6	19	--	--	--	--	--	.269	--	--
SEP													
08...	1230	3.8	40	120	21	1.2	.079	6.51	.114	--	.220	<3.0	--
16...	0815	2.9	50	--	--	--	--	--	--	--	--	<2.0	--

04087233 ROOT RIVER CANAL NEAR FRANKLIN, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, M-FC 0.7u MF col/ 100 mL (31625)	Chloro-phyll a wat unf trichr. method, uncorr, ug/L (32210)	Copper, water, unfltrd recover-able, ug/L (01119)	Mercury water fltrd, ng/L (50287)	Zinc, water, unfltrd recover-able, ug/L (01094)	Mercury suspnd sedimnt total, ng/L (62976)	Methyl-mercury water fltrd, ng/L (50285)	Methyl-mercury suspnd sedimnt total, ng/L (62977)	Sus-pended sedi-ment concen-tration mg/L (80154)
JUN										
29...	--	--	3.40	4	--	<20	--	--	--	--
JUL										
21...	--	--	9.64	--	--	--	--	--	--	48
21...	--	--	8.69	--	--	--	--	--	--	42
22...	--	--	3.84	--	--	--	--	--	--	40
22...	--	--	4.61	--	--	--	--	--	--	47
22...	--	--	4.58	--	--	--	--	--	--	53
AUG										
04...	--	--	--	--	--	--	--	--	--	11
04...	--	--	--	--	--	--	--	--	--	13
04...	--	--	--	--	--	--	--	--	--	16
04...	--	--	--	--	--	--	--	--	--	22
04...	--	--	--	--	--	--	--	--	--	24
05...	--	--	--	--	--	--	--	--	--	36
05...	--	--	--	--	--	--	--	--	--	33
06...	--	--	--	--	--	--	--	--	--	43
17...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--
25...	--	1,400	3.05	38	--	<20	--	--	--	52
25...	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--
26...	--	310	1.49	28	--	<20	--	--	--	33
26...	--	210	2.08	4	--	<20	--	--	--	16
26...	--	--	--	--	--	--	--	--	--	--
27...	--	1,600	1.65	4	--	<20	--	--	--	20
28...	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
SEP										
08...	260	150	2.26	4	1.11	<20	1.19	.09	.022	21
16...	110	120	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instan-taneous dis-charge, cfs (00061)	Sam-pling method, code (82398)	Chlor-ide, water, fltrd, mg/L (00940)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, unfltrd mg/L (00665)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	E coli, Defined Substr. Tech., water, MPN/ 100 mL (50468)	E coli, m-TEC MF, water, col/ 100 mL (31633)
OCT													
23...	0830	7.8	50	206	3	--	--	--	--	.087	--	--	--
23...	2345	9.8	50	216	10	--	--	--	--	.103	--	--	--
24...	0851	11	50	200	10	--	--	--	--	.088	--	--	--
24...	1800	9.8	50	196	8	--	--	--	--	.153	--	--	--
25...	0646	8.4	50	173	12	.73	.100	8.94	.048	.127	<3.0	--	30
25...	1400	8.0	50	200	8	1.0	.071	9.32	.074	.157	<3.0	--	30
25...	1410	8.0	50	--	29	--	--	--	--	--	--	--	--
25...	1415	8.0	40	--	8	--	--	--	--	--	--	--	--
27...	0850	7.4	50	174	5	1.2	.058	6.94	.078	.169	<2.0	150	--
27...	0915	7.4	50	--	--	--	--	--	--	--	--	70	--

04087233 ROOT RIVER CANAL NEAR FRANKLIN, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Fecal coli-form, M-FC 0.7u MF col/ 100 mL (31625)	Chloro-phyll a wat unf trichr. method, uncorr, ug/L (32210)	Copper, water, unfltrd recover-able, ug/L (01119)	Zinc, water, unfltrd recover-able, ug/L (01094)	Sus-pended sedi-ment concen-tration mg/L (80154)
OCT					
23...	--	--	--	--	--
23...	--	--	--	--	--
24...	--	--	--	--	--
24...	--	--	--	--	--
25...	140	1.48	3	<20	12
25...	160	2.06	3	<20	7
25...	--	--	--	--	--
25...	--	--	--	--	--
27...	90	2.15	3	<20	8
27...	60	--	--	--	--

04087233 ROOT RIVER CANAL NEAR FRANKLIN, WI—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	14.5	12.5	13.5	10.5	9.5	10.0	---	---	---	---	---	---
2	14.0	11.5	13.0	9.5	9.0	9.5	---	---	---	---	---	---
3	12.5	11.0	12.0	10.0	9.5	9.5	---	---	---	---	---	---
4	13.0	10.5	12.0	9.5	8.5	9.5	---	---	---	---	---	---
5	11.0	9.0	10.0	8.5	7.0	7.5	---	---	---	---	---	---
6	12.5	10.0	11.5	8.5	7.0	7.5	---	---	---	---	---	---
7	13.5	11.5	12.5	9.0	8.0	8.5	---	---	---	---	---	---
8	---	---	---	8.0	6.5	7.0	---	---	---	---	---	---
9	---	---	---	7.0	6.0	6.5	---	---	---	---	---	---
10	---	---	---	7.5	6.5	7.0	---	---	---	---	---	---
11	---	---	---	8.0	6.0	7.0	---	---	---	---	---	---
12	---	---	---	6.5	5.0	6.0	---	---	---	---	---	---
13	---	---	---	5.5	4.5	5.0	---	---	---	---	---	---
14	---	---	---	5.0	4.5	5.0	---	---	---	---	---	---
15	---	---	---	5.0	4.5	5.0	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	12.5	11.5	12.5	---	---	---	---	---	---	---	---	---
27	12.5	11.5	12.0	---	---	---	---	---	---	---	---	---
28	11.5	10.5	11.0	---	---	---	---	---	---	---	---	---
29	14.0	11.5	12.5	---	---	---	---	---	---	---	---	---
30	14.5	12.5	14.0	---	---	---	---	---	---	---	---	---
31	12.5	10.5	11.5	---	---	---	---	---	---	---	---	---
MONTH	14.5	9.0	12.2	10.5	4.5	7.4	---	---	---	---	---	---

04087233 ROOT RIVER CANAL NEAR FRANKLIN, WI—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	4.4	2.1	3.4	7.3	4.9	5.8	---	---	---	---	---	---
2	6.1	4.3	5.3	9.8	5.8	8.0	---	---	---	---	---	---
3	7.3	5.8	6.5	6.3	2.9	4.4	---	---	---	---	---	---
4	7.9	4.8	6.8	8.6	3.9	6.7	---	---	---	---	---	---
5	9.7	7.0	8.5	10.8	8.2	9.7	---	---	---	---	---	---
6	8.9	6.4	8.0	10.9	6.0	9.1	---	---	---	---	---	---
7	8.1	2.8	6.2	11.5	5.8	8.6	---	---	---	---	---	---
8	---	---	---	12.9	7.5	10.4	---	---	---	---	---	---
9	---	---	---	14.7	9.3	11.8	---	---	---	---	---	---
10	---	---	---	13.5	8.0	11.3	---	---	---	---	---	---
11	---	---	---	14.1	7.0	11.5	---	---	---	---	---	---
12	---	---	---	12.9	6.3	10.1	---	---	---	---	---	---
13	---	---	---	14.4	6.1	9.6	---	---	---	---	---	---
14	---	---	---	15.0	5.9	10.1	---	---	---	---	---	---
15	---	---	---	10.3	4.4	7.4	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	7.4	4.2	6.7	---	---	---	---	---	---	---	---	---
27	6.8	2.5	4.6	---	---	---	---	---	---	---	---	---
28	5.9	4.4	5.3	---	---	---	---	---	---	---	---	---
29	5.1	2.0	3.2	---	---	---	---	---	---	---	---	---
30	5.6	2.0	4.5	---	---	---	---	---	---	---	---	---
31	5.7	4.8	5.2	---	---	---	---	---	---	---	---	---
MONTH	9.7	2.0	5.7	15.0	2.9	9.0	---	---	---	---	---	---

04087233 ROOT RIVER CANAL NEAR FRANKLIN, WI—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	1,340	1,320	1,330	1,280	1,240	1,260	---	---	---	---	---	---
2	1,330	1,310	1,320	1,290	1,200	1,250	---	---	---	---	---	---
3	1,310	1,290	1,300	1,220	990	1,060	---	---	---	---	---	---
4	1,310	1,280	1,290	1,070	1,010	1,040	---	---	---	---	---	---
5	1,310	1,280	1,290	1,120	1,070	1,100	---	---	---	---	---	---
6	1,280	1,270	1,280	1,120	1,020	1,060	---	---	---	---	---	---
7	1,270	1,160	1,200	1,100	1,040	1,080	---	---	---	---	---	---
8	---	---	---	1,120	1,080	1,090	---	---	---	---	---	---
9	---	---	---	1,150	1,110	1,130	---	---	---	---	---	---
10	---	---	---	1,210	1,140	1,170	---	---	---	---	---	---
11	---	---	---	1,210	1,180	1,190	---	---	---	---	---	---
12	---	---	---	1,220	1,190	1,210	---	---	---	---	---	---
13	---	---	---	1,240	1,200	1,220	---	---	---	---	---	---
14	---	---	---	1,240	1,220	1,240	---	---	---	---	---	---
15	---	---	---	1,270	1,230	1,250	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	1,320	1,210	1,290	---	---	---	---	---	---	---	---	---
27	1,210	1,020	1,110	---	---	---	---	---	---	---	---	---
28	1,090	1,020	1,050	---	---	---	---	---	---	---	---	---
29	1,220	1,090	1,150	---	---	---	---	---	---	---	---	---
30	1,260	1,220	1,240	---	---	---	---	---	---	---	---	---
31	1,280	1,260	1,280	---	---	---	---	---	---	---	---	---
MONTH	1,340	1,020	1,240	1,290	990	1,160	---	---	---	---	---	---

LOCATION.--Lat 42°45'05", long 87°49'25", in NW ¼ NE ¼ sec.6, T.3 N., R.23 E., Racine County, Hydrologic Unit 04040002, on left bank 30 ft downstream from State Highway 38 bridge in Racine, 350 ft downstream from Horlick Dam, and 5.2 mi upstream from mouth.

DRAINAGE AREA.--190 mi^2, of which 1.24 mi^2 is probably noncontributing.

PERIOD OF RECORD.--August 1963 to current year.

REVISED RECORD.--WDR WI-80-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 610 ft above NGVD of 1929, from topographic map. Prior to Feb. 5, 1964, nonrecording gage on bridge 30 ft upstream.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	8.4	27	51	e13	345	476	80	611	114	27	43
2	5.6	12	25	46	e12	512	309	78	528	97	25	31
3	5.3	69	23	46	e12	492	229	76	368	98	25	27
4	4.5	220	21	52	e12	509	174	72	246	414	45	23
5	3.5	260	20	48	e12	1,060	148	67	184	996	195	20
6	2.8	253	19	25	e12	1,250	134	65	156	1,310	166	20
7	2.4	160	20	e27	e12	1,360	123	62	138	778	71	18
8	2.5	84	20	e29	e12	1,030	114	63	119	416	47	15
9	2.6	56	22	e29	e12	595	104	146	106	310	37	15
10	2.7	44	122	e28	e12	371	93	495	108	198	31	14
11	2.7	35	433	e28	e12	281	84	712	179	154	35	13
12	1.9	34	589	e28	e12	224	79	649	342	272	30	12
13	1.7	29	447	e27	e12	178	76	845	397	254	26	10
14	2.2	25	263	e27	e11	156	73	1,380	320	158	23	9.4
15	1.0	22	138	e26	e11	150	68	2,060	246	118	20	9.4
16	3.9	19	107	26	e11	140	66	1,960	287	94	17	10
17	15	22	97	26	e11	124	68	1,560	365	84	18	9.1
18	17	34	90	25	11	119	78	1,260	577	75	17	11
19	13	160	72	24	11	120	84	970	758	64	17	11
20	9.5	249	44	23	12	132	71	979	603	56	18	9.9
21	6.9	135	65	19	14	135	106	849	403	57	17	8.8
22	4.3	82	53	e17	17	124	277	1,480	512	62	15	7.2
23	2.8	64	53	e14	34	110	232	2,130	624	76	13	5.7
24	2.3	58	49	e14	77	110	141	2,620	609	58	11	4.8
25	3.4	57	39	e14	130	117	129	2,430	558	45	13	3.9
26	7.2	46	43	e14	160	212	151	1,620	518	40	84	3.5
27	25	39	40	e14	179	402	138	894	292	36	78	3.2
28	26	35	40	e14	205	546	112	521	199	33	54	2.4
29	20	31	49	e14	237	709	99	366	174	32	84	2.0
30	14	29	69	e14	---	801	88	344	140	30	103	2.5
31	10	---	63	e14	---	769	---	485	---	29	64	---
TOTAL	228.3	2,371.4	3,162	803	1,288	13,183	4,124	27,318	10,667	6,558	1,426	374.8
MEAN	7.36	79.0	102	25.9	44.4	425	137	881	356	212	46.0	12.5
MAX	26	260	589	52	237	1,360	476	2,620	758	1,310	195	43
MIN	1.0	8.4	19	14	11	110	66	62	106	29	11	2.0
CFSM	0.04	0.42	0.54	0.14	0.24	2.25	0.73	4.67	1.88	1.12	0.24	0.07
IN.	0.04	0.47	0.62	0.16	0.25	2.60	0.81	5.38	2.10	1.29	0.28	0.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2004, BY WATER YEAR (WY)

MEAN	66.7	102	120	93.9	173	329	342	206	155	88.8	64.1	87.5
MAX	335	454	568	401	641	1,149	1,071	881	493	485	237	683
(WY)	(1987)	(1986)	(1983)	(1974)	(2001)	(1979)	(1993)	(2004)	(1996)	(1969)	(1987)	(1972)
MIN	2.79	8.90	3.08	2.21	3.98	30.6	61.8	8.73	7.75	5.18	6.60	2.58
(WY)	(1964)	(1964)	(1964)	(1977)	(1977)	(1968)	(1977)	(1977)	(1988)	(1988)	(1971)	(1963)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1963 - 2004	
ANNUAL TOTAL	21,829.4		71,503.5			
ANNUAL MEAN	59.8		195		152	
HIGHEST ANNUAL MEAN					268	1993
LOWEST ANNUAL MEAN					23.3	1977
HIGHEST DAILY MEAN	750	May 11	2,620	May 24	4,010	Mar 5, 1974
LOWEST DAILY MEAN	1.0	Oct 15	1.0	Oct 15	0.00	Jul 9-15, 1988
ANNUAL SEVEN-DAY MINIMUM	(a)2.0	Jan 24	2.1	Oct 9	0.00	Jul 9, 1988
MAXIMUM PEAK FLOW			2,940	May 24	4,500	Mar 5, 1974
MAXIMUM PEAK STAGE			7.01	May 24	8.54	Mar 5, 1974
INSTANTANEOUS LOW FLOW			0.65	Oct 15	0.00	Jul 9-15, 1988
ANNUAL RUNOFF (CFSM)	0.317		1.03		0.807	
ANNUAL RUNOFF (INCHES)	4.30		14.09		10.96	
10 PERCENT EXCEEDS	138		550		399	
50 PERCENT EXCEEDS	23		58		54	
90 PERCENT EXCEEDS	3.5		9.5		9.4	

(a) Ice affected
(e) Estimated due to ice effect or missing record

04087240 ROOT RIVER AT RACINE, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: June 22 to Nov. 15, 2004 (discontinued).
DISSOLVED OXYGEN: June 22 to Nov. 15, 2004 (discontinued).
SPECIFIC CONDUCTANCE: June 22 to Nov. 15, 2004 (discontinued).

INSTRUMENTATION.--Water-quality monitor since June 22, 2004.

REMARKS.--Temperature, dissolved oxygen, and specific conductance records poor due to channel conditions.

EXTREMES FOR PERIOD MAY TO NOVEMBER 2004.--
WATER TEMPERATURE: Maximum, 30.5°C, Aug. 2; minimum, 4.0°C, Nov. 14.
DISSOLVED OXYGEN: Maximum, 14.9 mg/L, Aug. 20; minimum, 0.7 mg/L, Oct. 30.
SPECIFIC CONDUCTANCE: Maximum, 1,030 µS/cm, Oct. 30; minimum, 52 µS/cm, Oct. 23.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	24.5	20.5	22.0	29.5	21.5	24.0	20.5	19.0	19.5
2	---	---	---	23.5	20.5	22.0	30.5	22.5	24.0	22.0	19.5	20.0
3	---	---	---	22.5	20.5	21.5	29.5	22.0	24.0	22.5	20.0	21.0
4	---	---	---	21.5	20.5	21.0	25.5	23.0	24.0	23.5	20.5	21.5
5	---	---	---	20.5	19.5	20.0	23.5	21.0	22.0	24.0	21.0	22.0
6	---	---	---	21.0	19.5	20.0	22.5	20.0	21.0	24.0	21.0	22.0
7	---	---	---	20.5	19.5	20.0	21.5	20.0	20.5	25.0	18.0	20.5
8	---	---	---	19.5	18.5	19.0	21.5	20.0	20.5	22.5	16.0	17.5
9	---	---	---	19.5	17.5	18.5	24.0	20.5	22.0	23.0	15.5	17.5
10	---	---	---	21.5	18.0	19.5	22.0	20.0	21.0	22.5	14.5	17.0
11	---	---	---	21.5	19.5	20.5	20.0	19.0	19.5	24.0	16.5	18.5
12	---	---	---	23.0	20.5	22.0	19.0	18.0	18.5	24.0	16.5	19.0
13	---	---	---	23.5	21.5	22.5	21.0	17.5	18.5	23.5	17.0	19.0
14	---	---	---	23.5	22.0	23.0	23.0	17.5	19.0	23.5	18.5	20.0
15	---	---	---	24.5	21.5	22.5	23.0	17.0	18.5	22.5	19.0	20.5
16	---	---	---	24.5	21.5	23.0	24.5	16.5	19.0	21.5	15.5	18.0
17	---	---	---	23.5	21.5	22.0	22.0	17.5	19.5	20.5	14.0	15.5
18	---	---	---	24.5	20.5	22.5	26.5	18.5	21.0	20.5	14.0	16.5
19	---	---	---	24.0	21.5	22.5	25.0	16.5	19.5	21.0	15.5	17.0
20	---	---	---	24.0	22.5	23.0	23.5	17.5	19.5	20.5	15.0	16.0
21	---	---	---	24.5	24.0	24.0	25.0	16.0	18.5	20.5	14.0	16.0
22	---	---	---	26.5	24.0	25.0	23.5	15.0	18.5	21.0	14.0	16.0
23	18.0	16.5	17.5	24.5	22.5	23.5	23.0	18.0	19.5	22.0	14.5	17.0
24	17.5	16.0	16.5	22.5	21.5	21.5	24.0	18.0	20.5	22.0	15.5	17.5
25	17.0	15.0	16.0	23.0	20.5	21.5	23.0	19.0	21.0	18.5	12.0	14.5
26	17.5	15.5	16.5	22.5	20.5	21.5	23.0	20.0	21.5	23.0	10.5	13.0
27	19.5	16.5	17.5	24.5	20.0	21.0	24.5	22.5	23.5	24.0	10.5	14.0
28	20.0	18.0	19.0	25.5	20.5	21.5	23.5	19.5	22.0	22.5	11.0	13.0
29	21.5	18.0	19.5	25.0	21.0	22.0	21.0	19.5	20.5	27.5	8.0	12.0
30	23.0	19.5	21.0	24.0	22.0	22.5	20.5	18.5	19.5	28.5	7.0	11.5
31	---	---	---	29.0	21.5	23.5	20.0	18.5	19.0	---	---	---
MONTH	23.0	15.0	17.9	29.0	17.5	21.8	30.5	15.0	20.6	28.5	7.0	17.4
YEAR	30.5	7.0	19.8									

04087240 ROOT RIVER AT RACINE, WI—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	7.0	6.6	6.8	8.0	3.8	5.4	8.7	7.2	7.7
2	---	---	---	6.8	6.2	6.6	8.0	3.5	4.7	9.2	6.8	7.5
3	---	---	---	6.8	6.3	6.5	8.7	3.4	4.8	9.4	6.5	7.5
4	---	---	---	7.4	6.5	7.0	6.3	3.7	5.2	10.3	6.3	7.6
5	---	---	---	7.5	7.2	7.3	7.1	5.9	6.9	11.3	4.7	7.6
6	---	---	---	7.5	7.1	7.3	7.0	6.0	6.7	---	---	---
7	---	---	---	7.3	7.1	7.2	6.9	5.6	6.3	---	---	---
8	---	---	---	7.5	7.2	7.3	6.8	5.6	6.1	---	---	---
9	---	---	---	7.6	7.2	7.4	7.7	5.5	6.3	---	---	---
10	---	---	---	7.4	6.7	7.1	8.5	5.4	6.7	---	---	---
11	---	---	---	7.5	6.7	7.1	8.7	6.3	7.1	---	---	---
12	---	---	---	7.4	7.1	7.3	9.8	6.5	7.6	---	---	---
13	---	---	---	7.3	6.8	7.1	11.9	6.7	8.4	---	---	---
14	---	---	---	7.0	6.7	6.9	13.2	7.6	9.1	---	---	---
15	---	---	---	7.0	6.6	6.8	13.7	6.1	8.8	---	---	---
16	---	---	---	6.8	6.0	6.7	---	---	---	---	---	---
17	---	---	---	7.1	6.7	6.8	---	---	---	---	---	---
18	---	---	---	7.1	6.5	6.8	---	---	---	---	---	---
19	---	---	---	7.0	6.4	6.7	---	---	---	---	---	---
20	---	---	---	7.0	6.4	6.6	14.9	5.0	8.2	---	---	---
21	---	---	---	7.1	6.0	6.6	---	---	---	---	---	---
22	---	---	---	7.3	6.5	6.8	---	---	---	---	---	---
23	7.7	7.1	7.4	7.3	6.5	6.9	---	---	---	---	---	---
24	7.7	7.3	7.5	7.3	6.6	6.9	---	---	---	---	---	---
25	7.9	7.5	7.7	8.1	7.1	7.4	---	---	---	---	---	---
26	8.1	7.5	7.8	8.6	7.0	7.7	---	---	---	---	---	---
27	8.2	7.5	7.9	---	---	---	8.8	7.2	8.0	---	---	---
28	7.9	7.5	7.7	11.1	7.6	8.9	7.7	6.8	7.2	---	---	---
29	---	---	---	9.9	6.4	8.1	7.8	7.0	7.5	---	---	---
30	7.5	6.8	7.2	9.5	5.7	6.9	8.2	7.6	7.9	---	---	---
31	---	---	---	8.5	4.8	6.3	8.3	7.0	7.8	---	---	---
MONTH	8.2	6.8	7.6	11.1	4.8	7.1	14.9	3.4	7.0	11.3	4.7	7.6
YEAR	14.9	3.4	7.1									

04087240 ROOT RIVER AT RACINE, WI—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	753	743	748	821	765	801	716	691	702
2	---	---	---	753	747	750	842	761	816	745	714	726
3	---	---	---	762	334	703	874	323	753	757	732	740
4	---	---	---	728	438	630	830	327	784	769	742	753
5	---	---	---	438	239	331	861	583	793	796	759	770
6	---	---	---	354	320	337	583	493	518	797	765	784
7	---	---	---	429	312	362	605	548	578	820	760	787
8	---	---	---	530	429	492	674	605	641	826	787	812
9	---	---	---	585	517	550	702	671	687	837	802	825
10	---	---	---	638	585	614	754	702	728	856	817	835
11	---	---	---	675	638	661	808	752	783	847	810	833
12	---	---	---	697	492	626	859	808	841	857	825	840
13	---	---	---	652	504	578	890	858	874	850	820	838
14	---	---	---	686	652	678	908	875	892	847	828	837
15	---	---	---	701	683	691	958	908	923	891	143	820
16	---	---	---	733	605	713	952	779	894	618	216	492
17	---	---	---	758	733	744	915	77	728	736	618	676
18	---	---	---	778	755	767	905	773	855	806	736	782
19	---	---	---	791	775	781	873	807	853	846	806	829
20	---	---	---	803	791	799	897	849	877	845	830	838
21	---	---	---	802	508	778	911	827	888	851	829	837
22	---	---	---	816	782	795	919	684	840	878	842	857
23	567	389	526	875	816	848	875	682	788	879	858	866
24	572	529	543	917	875	897	817	171	628	916	871	893
25	587	474	523	952	903	928	876	383	692	955	880	920
26	568	480	524	958	912	941	915	864	887	973	806	936
27	618	568	597	919	833	875	939	570	889	996	884	953
28	653	610	637	838	777	810	837	434	690	---	---	---
29	701	653	675	806	776	792	658	605	627	---	---	---
30	753	701	734	818	777	796	791	658	745	---	---	---
31	---	---	---	808	747	789	777	692	733	---	---	---
MONTH	753	389	595	958	239	703	958	77	775	996	143	807
YEAR	996	77	746									

04087240 ROOT RIVER AT RACINE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Dis-charge, cfs (00060)	Sam-pling method, code (82398)	Chlor-ide, water, fltrd, mg/L (00940)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	E coli, Defined Substr. Tech., water, MPN/ 100 mL (50468)
JUN													
29...	1500	196	40	48.2	35	.94	.072	3.66	.082	.094	.171	<2.0	--
JUL													
21...	1715	59	50	68.0	--	--	--	--	--	--	.134	--	--
21...	1915	59	50	61.3	--	--	--	--	--	--	.130	--	--
21...	2115	59	50	72.6	--	--	--	--	--	--	.149	--	--
21...	2330	59	50	60.2	--	--	--	--	--	--	.154	--	--
22...	0130	64	50	69.0	--	--	--	--	--	--	.159	--	--
22...	0330	64	50	61.9	--	--	--	--	--	--	.146	--	--
22...	0530	64	50	70.1	--	--	--	--	--	--	.166	--	--
22...	0830	64	50	61.1	--	--	--	--	--	--	.142	--	--
AUG													
04...	0445	47	50	57.3	--	--	--	--	--	--	.118	--	--
04...	0645	47	50	75.2	--	--	--	--	--	--	.180	--	--
04...	1045	47	50	64.6	--	--	--	--	--	--	.173	--	--
04...	1845	47	50	68.6	--	--	--	--	--	--	.108	--	--
04...	2045	47	50	59.9	--	--	--	--	--	--	.078	--	--
05...	0045	335	50	67.1	--	--	--	--	--	--	.122	--	--
05...	0645	335	50	52.7	--	--	--	--	--	--	.128	--	--
05...	1645	335	50	85.1	--	--	--	--	--	--	.111	--	--
18...	1301	18	50	90.7	12	--	--	--	--	--	.111	--	--
18...	1302	18	50	92.3	11	--	--	--	--	--	.111	--	--
18...	1304	18	50	91.5	20	--	--	--	--	--	.113	--	--
18...	1307	18	50	89.6	13	--	--	--	--	--	.107	--	--
18...	1310	18	50	90.5	13	--	--	--	--	--	.110	--	--
18...	1313	18	50	--	--	--	--	--	--	--	--	--	--
18...	1744	18	50	89.0	19	--	--	--	--	--	.110	--	--
18...	2200	18	50	87.2	32	--	--	--	--	--	.129	--	--
19...	0930	18	50	88.5	23	--	--	--	--	--	.115	--	--
19...	1630	18	50	81.4	11	--	--	--	--	--	.101	--	--
19...	2330	18	50	79.9	8	--	--	--	--	--	.100	--	--
20...	0630	19	50	74.0	16	--	--	--	--	--	.109	--	--
24...	1635	19	50	77.7	29	--	--	--	--	--	.138	--	--
25...	0345	14	50	78.5	19	--	--	--	--	--	.118	--	--
25...	1545	14	50	82.8	32	--	--	--	--	--	.145	--	--
26...	0345	142	50	80.9	34	--	--	--	--	--	.145	--	--
26...	0716	142	50	82.5	30	.56	.345	.190	.058	.074	.144	--	110
26...	1132	142	50	78.7	28	1.0	.340	.188	.054	.069	.131	--	140
26...	1716	142	50	97.9	22	--	--	--	--	--	.117	--	--
27...	0030	81	50	92.3	23	--	--	--	--	--	.110	--	--
27...	0630	81	50	91.2	81	1.4	.026	.091	.003	.016	.196	--	610
27...	0736	81	50	80.7	53	--	--	--	--	--	.152	--	--
27...	1322	81	50	103	47	--	--	--	--	--	.151	--	--
28...	0130	37	50	75.0	23	--	--	--	--	--	.094	--	--
28...	0813	37	50	94.7	55	--	--	--	--	--	.156	--	--
28...	2015	37	50	81.4	26	--	--	--	--	--	.105	--	--
29...	0815	87	50	104	54	--	--	--	--	--	.159	--	--
29...	2015	87	50	93.9	14	--	--	--	--	--	.098	--	--
30...	0815	107	50	83.1	24	--	--	--	--	--	.131	--	--
30...	0939	107	50	82.1	30	.77	.111	1.09	.063	.071	.145	--	--
30...	1243	107	50	80.7	30	--	--	--	--	--	.144	--	--
SEP													
08...	1030	16	40	97.6	40	1.5	.111	.457	.048	--	.220	4.0	--
16...	0905	10	50	--	--	--	--	--	--	--	--	<2.0	--

04087240 ROOT RIVER AT RACINE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, M-FC 0.7u MF col/ 100 mL (31625)	Chloro-phyll a wat unf trichr. method, uncorr, ug/L (32210)	Chrom-ium, water, unfltrd recover-able, ug/L (01118)	Copper, water, unfltrd recover-able, ug/L (01119)	Mercury water fltrd, ng/L (50287)	Zinc, water, unfltrd recover-able, ug/L (01094)	Mercury suspnd sedimnt total, ng/L (62976)	Methyl-mercury water fltrd, ng/L (50285)	Methyl-mercury suspnd sedimnt total, ng/L (62977)	Sus-pended sedi-ment concen-tration mg/L (80154)
JUN											
29...	--	--	2.47	--	4	--	<20	--	--	--	--
JUL											
21...	--	--	--	--	--	--	--	--	--	--	21
21...	--	--	--	--	--	--	--	--	--	--	35
21...	--	--	--	--	--	--	--	--	--	--	27
21...	--	--	--	--	--	--	--	--	--	--	36
22...	--	--	--	--	--	--	--	--	--	--	36
22...	--	--	--	--	--	--	--	--	--	--	32
22...	--	--	--	--	--	--	--	--	--	--	40
22...	--	--	--	--	--	--	--	--	--	--	30
AUG											
04...	--	--	--	--	--	--	--	--	--	--	32
04...	--	--	--	--	--	--	--	--	--	--	45
04...	--	--	--	--	--	--	--	--	--	--	63
04...	--	--	--	--	--	--	--	--	--	--	18
04...	--	--	--	--	--	--	--	--	--	--	7
05...	--	--	--	--	--	--	--	--	--	--	16
05...	--	--	--	--	--	--	--	--	--	--	11
05...	--	--	--	--	--	--	--	--	--	--	15
18...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	<1	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
26...	--	240	4.19	--	18	--	<20	--	--	--	33
26...	--	180	4.94	--	16	--	<20	--	--	--	29
26...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
27...	--	1,300	85.2	--	6	--	<20	--	--	--	93
27...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	11.9	--	4	--	<20	--	--	--	28
30...	--	--	--	--	--	--	--	--	--	--	--
SEP											
08...	100	270	43.0	--	3	.98	<20	4.32	.07	.066	35
16...	190	370	--	--	--	--	--	--	--	--	--

04087240 ROOT RIVER AT RACINE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Dis-charge, cfs (00060)	Sam-pling method, code (82398)	Chlor-ide, water, fltrd, mg/L (00940)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, unfltrd mg/L (00665)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	E coli, Defined Substr. Tech., water, MPN/ 100 mL (50468)	E coli, m-TEC MF, water, col/ 100 mL (31633)
OCT													
22...	2330	10	50	52.3	10	--	--	--	--	.104	--	--	--
23...	1830	15	50	87.9	16	--	--	--	--	.108	--	--	--
24...	0645	16	50	98.5	18	--	--	--	--	.110	--	--	--
24...	1845	16	50	87.0	14	--	--	--	--	.101	--	--	--
25...	0655	41	50	62.2	8	.73	.234	.373	.053	.092	<3.0	--	60
25...	1335	41	50	70.8	24	.74	.230	.353	.048	.121	<3.0	--	130
26...	2113	37	50	85.3	19	.80	.192	.373	.051	.111	<2.0	150	--
27...	0932	30	50	84.7	7	.79	.198	.394	.058	.099	<2.0	73	--
27...	0945	30	50	--	11	--	--	--	--	--	--	--	--
27...	0946	30	40	--	9	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Fecal coli-form, M-FC 0.7u MF col/ 100 mL (31625)	Chloro-phyll a wat unf trichr. method, uncorr, ug/L (32210)	Copper, water, unfltrd recover -able, ug/L (01119)	Zinc, water, unfltrd recover -able, ug/L (01094)	Sus-pended sedi-ment concen-tration mg/L (80154)
OCT					
22...	--	--	--	--	--
23...	--	--	--	--	--
24...	--	--	--	--	--
24...	--	--	--	--	--
25...	90	.350	27	<20	7
25...	230	1.09	7	<20	26
26...	170	.900	6	<20	15
27...	60	.630	5	<20	7
27...	--	--	--	--	--
27...	--	--	--	--	--

04087240 ROOT RIVER AT RACINE, WI—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	20.0	10.5	14.0	10.5	9.0	9.5	---	---	---	---	---	---
2	19.5	6.0	9.0	10.5	9.5	10.0	---	---	---	---	---	---
3	21.5	6.0	10.0	10.0	9.5	9.5	---	---	---	---	---	---
4	18.0	5.5	9.0	9.5	8.5	9.0	---	---	---	---	---	---
5	13.0	5.0	7.5	8.5	7.5	8.0	---	---	---	---	---	---
6	16.5	7.5	10.5	9.0	7.5	8.0	---	---	---	---	---	---
7	17.5	9.5	12.0	9.5	7.0	8.0	---	---	---	---	---	---
8	18.5	13.0	15.0	7.5	6.5	7.0	---	---	---	---	---	---
9	17.5	11.0	13.0	9.0	6.5	7.0	---	---	---	---	---	---
10	17.0	11.0	12.5	9.5	6.5	7.5	---	---	---	---	---	---
11	17.0	10.0	12.5	8.5	5.5	7.0	---	---	---	---	---	---
12	15.5	9.5	11.5	8.0	5.0	5.5	---	---	---	---	---	---
13	14.5	10.5	12.5	8.5	5.0	6.0	---	---	---	---	---	---
14	13.0	11.0	12.0	6.5	4.0	5.0	---	---	---	---	---	---
15	11.5	9.5	10.5	6.0	5.0	5.5	---	---	---	---	---	---
16	10.0	7.0	8.5	---	---	---	---	---	---	---	---	---
17	11.5	5.5	7.5	---	---	---	---	---	---	---	---	---
18	11.0	7.5	9.0	---	---	---	---	---	---	---	---	---
19	10.5	9.0	9.5	---	---	---	---	---	---	---	---	---
20	11.0	9.5	10.0	---	---	---	---	---	---	---	---	---
21	14.0	9.5	11.0	---	---	---	---	---	---	---	---	---
22	12.5	9.5	11.0	---	---	---	---	---	---	---	---	---
23	15.0	11.5	12.5	---	---	---	---	---	---	---	---	---
24	15.5	11.0	12.5	---	---	---	---	---	---	---	---	---
25	13.5	10.5	12.0	---	---	---	---	---	---	---	---	---
26	12.5	12.0	12.5	---	---	---	---	---	---	---	---	---
27	12.5	12.0	12.0	---	---	---	---	---	---	---	---	---
28	12.5	11.5	12.0	---	---	---	---	---	---	---	---	---
29	15.5	12.5	14.0	---	---	---	---	---	---	---	---	---
30	16.5	11.0	12.5	---	---	---	---	---	---	---	---	---
31	11.5	9.0	10.5	---	---	---	---	---	---	---	---	---
MONTH	21.5	5.0	11.2	10.5	4.0	7.5	---	---	---	---	---	---

04087240 ROOT RIVER AT RACINE, WI—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	8.8	1.0	4.5	---	---	---	---	---	---
2	---	---	---	9.2	7.9	8.7	---	---	---	---	---	---
3	---	---	---	9.1	8.5	8.9	---	---	---	---	---	---
4	---	---	---	9.3	8.4	8.8	---	---	---	---	---	---
5	---	---	---	9.7	8.9	9.3	---	---	---	---	---	---
6	---	---	---	9.7	8.5	9.2	---	---	---	---	---	---
7	---	---	---	9.9	9.1	9.5	---	---	---	---	---	---
8	---	---	---	10.7	9.3	10.0	---	---	---	---	---	---
9	9.3	5.0	6.8	10.3	8.6	9.6	---	---	---	---	---	---
10	9.8	7.4	8.2	10.7	8.3	9.2	---	---	---	---	---	---
11	10.1	6.7	8.3	11.3	7.1	9.5	---	---	---	---	---	---
12	9.1	5.5	7.4	11.3	8.1	9.6	---	---	---	---	---	---
13	8.9	4.8	6.8	10.4	7.4	9.0	---	---	---	---	---	---
14	8.0	4.9	6.4	11.7	9.7	10.6	---	---	---	---	---	---
15	7.6	0.9	5.2	11.9	10.4	11.1	---	---	---	---	---	---
16	9.1	3.6	6.8	---	---	---	---	---	---	---	---	---
17	8.4	3.5	6.5	---	---	---	---	---	---	---	---	---
18	6.8	2.3	4.8	---	---	---	---	---	---	---	---	---
19	8.7	5.8	7.1	---	---	---	---	---	---	---	---	---
20	8.4	4.4	6.0	---	---	---	---	---	---	---	---	---
21	8.5	2.5	5.1	---	---	---	---	---	---	---	---	---
22	8.2	3.2	5.5	---	---	---	---	---	---	---	---	---
23	8.7	3.3	6.1	---	---	---	---	---	---	---	---	---
24	8.7	5.0	6.5	---	---	---	---	---	---	---	---	---
25	9.3	5.5	8.2	---	---	---	---	---	---	---	---	---
26	8.8	8.2	8.5	---	---	---	---	---	---	---	---	---
27	8.6	7.8	8.2	---	---	---	---	---	---	---	---	---
28	8.7	6.8	7.8	---	---	---	---	---	---	---	---	---
29	8.3	1.9	6.0	---	---	---	---	---	---	---	---	---
30	7.3	0.7	4.3	---	---	---	---	---	---	---	---	---
31	5.4	1.4	3.5	---	---	---	---	---	---	---	---	---
MONTH	10.1	0.7	6.5	11.9	1.0	9.2	---	---	---	---	---	---

04087240 ROOT RIVER AT RACINE, WI—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	999	244	782	---	---	---	---	---	---
2	763	368	668	969	800	929	---	---	---	---	---	---
3	771	624	744	955	861	926	---	---	---	---	---	---
4	873	682	788	861	521	807	---	---	---	---	---	---
5	990	873	947	821	809	814	---	---	---	---	---	---
6	1,020	990	1,000	833	800	812	---	---	---	---	---	---
7	1,020	934	999	833	772	786	---	---	---	---	---	---
8	1,010	59	780	776	751	761	---	---	---	---	---	---
9	952	917	939	777	732	749	---	---	---	---	---	---
10	962	940	955	792	742	751	---	---	---	---	---	---
11	966	942	959	776	688	750	---	---	---	---	---	---
12	967	953	962	801	575	754	---	---	---	---	---	---
13	966	956	962	803	582	776	---	---	---	---	---	---
14	987	962	967	805	793	798	---	---	---	---	---	---
15	984	335	836	826	785	803	---	---	---	---	---	---
16	959	879	938	---	---	---	---	---	---	---	---	---
17	984	939	956	---	---	---	---	---	---	---	---	---
18	971	946	953	---	---	---	---	---	---	---	---	---
19	970	944	951	---	---	---	---	---	---	---	---	---
20	966	949	954	---	---	---	---	---	---	---	---	---
21	982	948	954	---	---	---	---	---	---	---	---	---
22	965	948	959	---	---	---	---	---	---	---	---	---
23	963	52	793	---	---	---	---	---	---	---	---	---
24	960	946	954	---	---	---	---	---	---	---	---	---
25	963	938	954	---	---	---	---	---	---	---	---	---
26	1,020	959	989	---	---	---	---	---	---	---	---	---
27	1,020	1,020	1,020	---	---	---	---	---	---	---	---	---
28	1,020	1,010	1,010	---	---	---	---	---	---	---	---	---
29	1,010	834	1,000	---	---	---	---	---	---	---	---	---
30	1,030	340	940	---	---	---	---	---	---	---	---	---
31	1,010	997	1,000	---	---	---	---	---	---	---	---	---
MONTH	1,030	52	928	999	244	800	---	---	---	---	---	---

04087242 ROOT RIVER NEAR MOUTH AT RACINE, WI

LOCATION.--Lat 42°44'02", long 87°47'04", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.9, T.3 N., R.23 E., Racine County, Hydrologic Unit 04040002, on left bank 300 ft upstream from South Main Street bridge in Racine, about 0.4 mi upstream from mouth.

DRAINAGE AREA.--197 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July to November, 2004 (discontinued).

GAGE.--Water-stage recorder. Side-looking velocity meter system. Datum of gage is 620 ft above NGVD of 1929, from topographic map.

REMARKS.--Records poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	e119	e28	e45
2	---	---	---	---	---	---	---	---	---	e101	20	e32
3	---	---	---	---	---	---	---	---	---	e102	26	e28
4	---	---	---	---	---	---	---	---	---	580	47	e24
5	---	---	---	---	---	---	---	---	---	1,270	335	e21
6	---	---	---	---	---	---	---	---	---	1,780	301	e21
7	---	---	---	---	---	---	---	---	---	1,080	74	e19
8	---	---	---	---	---	---	---	---	---	592	49	e16
9	---	---	---	---	---	---	---	---	---	e322	38	e16
10	---	---	---	---	---	---	---	---	---	e206	26	e15
11	---	---	---	---	---	---	---	---	---	e160	12	e14
12	---	---	---	---	---	---	---	---	---	e283	51	e12
13	---	---	---	---	---	---	---	---	---	e264	e27	e10
14	---	---	---	---	---	---	---	---	---	e164	e24	e10
15	---	---	---	---	---	---	---	---	---	e123	e21	e10
16	---	---	---	---	---	---	---	---	---	e98	e18	e10
17	---	---	---	---	---	---	---	---	---	e87	e19	e10
18	---	---	---	---	---	---	---	---	---	e78	e18	e11
19	---	---	---	---	---	---	---	---	---	e67	e18	e11
20	---	---	---	---	---	---	---	---	---	e58	e19	e10
21	---	---	---	---	---	---	---	---	---	e59	e18	e9.0
22	---	---	---	---	---	---	---	---	---	e64	e16	e6.0
23	---	---	---	---	---	---	---	---	---	e79	e14	e6.0
24	---	---	---	---	---	---	---	---	---	e60	e12	e5.0
25	---	---	---	---	---	---	---	---	---	e47	e14	e4.0
26	---	---	---	---	---	---	---	---	---	52	142	e4.0
27	---	---	---	---	---	---	---	---	---	27	e81	e3.0
28	---	---	---	---	---	---	---	---	---	e34	e37	e3.0
29	---	---	---	---	---	---	---	---	---	e33	e87	e2.0
30	---	---	---	---	---	---	---	---	---	e31	e107	e3.0
31	---	---	---	---	---	---	---	---	---	e30	e67	---
TOTAL	---	---	---	---	---	---	---	---	---	8,050	1,766	390.0
MEAN	---	---	---	---	---	---	---	---	---	260	57.0	13.0
MAX	---	---	---	---	---	---	---	---	---	1,780	335	45
MIN	---	---	---	---	---	---	---	---	---	27	12	2.0
CFSM	---	---	---	---	---	---	---	---	---	1.32	0.29	0.07
IN.	---	---	---	---	---	---	---	---	---	1.52	0.33	0.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2004, BY WATER YEAR (WY)

MEAN	---	---	---	---	---	---	---	---	---	260	57.0	13.0
MAX	---	---	---	---	---	---	---	---	---	260	57.0	13.0
(WY)	---	---	---	---	---	---	---	---	---	(2004)	(2004)	(2004)
MIN	---	---	---	---	---	---	---	---	---	260	57.0	13.0
(WY)	---	---	---	---	---	---	---	---	---	(2004)	(2004)	(2004)

SUMMARY STATISTICS	FOR 2004 WATER YEAR (July - September)	
ANNUAL TOTAL	10,206.0	
ANNUAL MEAN	111	
HIGHEST DAILY MEAN	1,780	Jul 6
LOWEST DAILY MEAN	2.0	Sep 29
ANNUAL SEVEN-DAY MINIMUM	3.4	Sep 24
ANNUAL RUNOFF (CFSM)	0.563	
ANNUAL RUNOFF (INCHES)	1.93	
10 PERCENT EXCEEDS	277	
50 PERCENT EXCEEDS	28	
90 PERCENT EXCEEDS	6.9	

(e) Estimated due to ice effect or missing record

04087242 ROOT RIVER NEAR MOUTH AT RACINE, WI

LOCATION.--Lat 42°44'02", long 87°47'04", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.9, T.3 N., R.23 E., Racine County, Hydrologic Unit 04040002, on left bank 300 ft upstream from South Main Street bridge in Racine, about 0.4 mi upstream from mouth.

DRAINAGE AREA.--197 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July to November, 2004 (discontinued).

GAGE.--Water-stage recorder. Side-looking velocity meter system. Datum of gage is 620 ft above NGVD of 1929, from topographic map.

REMARKS.--Records poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e3.0	18	---	---	---	---	---	---	---	---	---	---
2	e4.0	e30	---	---	---	---	---	---	---	---	---	---
3	e4.0	75	---	---	---	---	---	---	---	---	---	---
4	e4.0	e75	---	---	---	---	---	---	---	---	---	---
5	e6.0	e45	---	---	---	---	---	---	---	---	---	---
6	e7.0	e45	---	---	---	---	---	---	---	---	---	---
7	e5.0	e35	---	---	---	---	---	---	---	---	---	---
8	e7.0	e26	---	---	---	---	---	---	---	---	---	---
9	e10	e21	---	---	---	---	---	---	---	---	---	---
10	e10	24	---	---	---	---	---	---	---	---	---	---
11	e8.0	e18	---	---	---	---	---	---	---	---	---	---
12	e8.0	e18	---	---	---	---	---	---	---	---	---	---
13	e8.0	20	---	---	---	---	---	---	---	---	---	---
14	e8.0	e20	---	---	---	---	---	---	---	---	---	---
15	e10	---	---	---	---	---	---	---	---	---	---	---
16	e9.0	---	---	---	---	---	---	---	---	---	---	---
17	e9.0	---	---	---	---	---	---	---	---	---	---	---
18	e8.0	---	---	---	---	---	---	---	---	---	---	---
19	e10	---	---	---	---	---	---	---	---	---	---	---
20	e11	---	---	---	---	---	---	---	---	---	---	---
21	9.7	---	---	---	---	---	---	---	---	---	---	---
22	e10	---	---	---	---	---	---	---	---	---	---	---
23	e15	---	---	---	---	---	---	---	---	---	---	---
24	e16	---	---	---	---	---	---	---	---	---	---	---
25	41	---	---	---	---	---	---	---	---	---	---	---
26	e37	---	---	---	---	---	---	---	---	---	---	---
27	e30	---	---	---	---	---	---	---	---	---	---	---
28	31	---	---	---	---	---	---	---	---	---	---	---
29	16	---	---	---	---	---	---	---	---	---	---	---
30	e15	---	---	---	---	---	---	---	---	---	---	---
31	e14	---	---	---	---	---	---	---	---	---	---	---
TOTAL	383.7	470	---	---	---	---	---	---	---	---	---	---
MEAN	12.4	33.6	---	---	---	---	---	---	---	---	---	---
MAX	41	75	---	---	---	---	---	---	---	---	---	---
MIN	3.0	18	---	---	---	---	---	---	---	---	---	---
CFSM	0.06	0.17	---	---	---	---	---	---	---	---	---	---
IN.	0.07	0.09	---	---	---	---	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2005, BY WATER YEAR (WY)

MEAN	12.4	33.6	---	---	---	---	---	---	---	260	57.0	13.0
MAX	12.4	33.6	---	---	---	---	---	---	---	260	57.0	13.0
(WY)	(2005)	(2005)	---	---	---	---	---	---	---	(2004)	(2004)	(2004)
MIN	12.4	33.6	---	---	---	---	---	---	---	260	57.0	13.0
(WY)	(2005)	(2005)	---	---	---	---	---	---	---	(2004)	(2004)	(2004)

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR (July - September)		FOR 2005 WATER YEAR (October - November)		WATER YEARS 2004 - 2005 (July - November)	
ANNUAL TOTAL	11,059.7		853.7			
ANNUAL MEAN	80.7		19.0		80.7	
HIGHEST ANNUAL MEAN					111	2004
LOWEST ANNUAL MEAN					19.0	2005
HIGHEST DAILY MEAN	1,780	Jul 6	75	Nov 3	1,780	Jul 6, 2004
LOWEST DAILY MEAN	2.0	Sep 29	3.0	Oct 1	2.0	Sep 29, 2004
ANNUAL SEVEN-DAY MINIMUM	3.1	Sep 25	4.7	Oct 1	3.1	Sep 25, 2004
ANNUAL RUNOFF (CFSM)	0.410		0.096		0.410	
ANNUAL RUNOFF (INCHES)	2.09		0.16		5.57	
10 PERCENT EXCEEDS	146		43		146	
50 PERCENT EXCEEDS	21		14		21	
90 PERCENT EXCEEDS	6.0		4.6		6.0	

(e) Estimated due to ice effect or missing record

04087242 ROOT RIVER NEAR MOUTH AT RACINE, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: July 16 to Nov. 15, 2004 (discontinued).
DISSOLVED OXYGEN: July 16 to Nov. 15, 2004 (discontinued).
SPECIFIC CONDUCTANCE: July 16 to Nov. 15, 2004 (discontinued).

INSTRUMENTATION.--Water-quality monitor since July 16, 2004.

REMARKS.--Temperature records good. Dissolved oxygen and specific conductance records fair due to poor channel conditions.

EXTREMES FOR PERIOD MAY TO NOVEMBER 2004.--
WATER TEMPERATURE: Maximum, 25.0°C, July 20, 21, and 28; minimum, 7.0°C, Nov. 12-14.
DISSOLVED OXYGEN: Maximum, 12.9 mg/L, July 29; minimum, 1.1 mg/L, Oct. 13, 15, and 16.
SPECIFIC CONDUCTANCE: Maximum, 1,010 µS/cm, Oct. 30; minimum, 327 µS/cm, Sept. 30.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	23.5	22.0	22.5	21.5	19.5	20.5
2	---	---	---	---	---	---	23.5	21.5	22.5	23.0	20.0	21.5
3	---	---	---	---	---	---	23.0	20.0	22.0	22.0	20.5	21.0
4	---	---	---	---	---	---	24.5	23.0	23.5	22.5	20.5	21.5
5	---	---	---	---	---	---	23.5	22.5	23.0	22.5	21.0	22.0
6	---	---	---	---	---	---	23.5	20.5	22.0	22.0	20.5	21.5
7	---	---	---	---	---	---	22.5	21.5	22.0	21.0	19.5	20.5
8	---	---	---	---	---	---	22.5	21.0	21.5	20.0	19.5	19.5
9	---	---	---	---	---	---	22.5	21.5	22.0	21.0	19.0	20.0
10	---	---	---	---	---	---	22.0	21.0	22.0	21.5	19.0	20.5
11	---	---	---	---	---	---	21.0	20.5	21.0	21.0	20.0	20.5
12	---	---	---	---	---	---	20.5	20.0	20.0	22.0	20.0	21.0
13	---	---	---	---	---	---	20.5	19.5	20.0	23.0	20.5	21.5
14	---	---	---	---	---	---	21.0	19.0	20.0	23.5	21.0	22.0
15	---	---	---	---	---	---	21.5	19.5	20.5	23.0	21.0	21.5
16	---	---	---	---	---	---	22.0	20.5	21.0	21.5	19.5	20.5
17	---	---	---	23.0	22.0	22.5	21.5	20.0	21.0	19.5	18.0	19.0
18	---	---	---	23.5	22.0	22.5	22.0	21.0	21.5	19.5	17.5	18.5
19	---	---	---	24.0	22.5	23.0	22.5	21.0	21.5	20.5	18.5	19.5
20	---	---	---	25.0	22.5	23.5	22.0	20.5	21.0	20.0	18.0	19.0
21	---	---	---	25.0	23.5	24.0	22.0	20.5	21.0	19.5	17.5	18.0
22	---	---	---	24.5	23.0	24.0	21.0	20.5	21.0	18.5	15.5	16.5
23	---	---	---	24.5	23.5	24.0	21.0	20.0	20.5	16.5	14.5	15.5
24	---	---	---	24.0	22.5	23.0	21.0	20.0	20.5	15.0	13.0	14.0
25	---	---	---	23.5	22.0	22.5	20.5	19.5	20.0	14.5	13.0	13.5
26	---	---	---	23.5	22.0	22.5	22.5	19.5	21.0	15.5	13.0	14.0
27	---	---	---	24.5	22.0	23.0	23.0	19.0	21.5	15.5	13.0	14.0
28	---	---	---	25.0	22.5	23.5	22.0	19.0	20.5	13.5	12.5	13.0
29	---	---	---	24.5	23.0	23.5	22.0	20.0	20.5	14.5	13.0	13.5
30	---	---	---	23.5	23.0	23.5	21.0	19.5	20.0	15.5	14.0	15.0
31	---	---	---	24.5	22.5	23.5	21.5	19.5	20.0	---	---	---
MONTH	---	---	---	25.0	22.0	23.2	24.5	19.0	21.2	23.5	12.5	18.6
YEAR	25.0	12.5	20.6									

04087242 ROOT RIVER NEAR MOUTH AT RACINE, WI—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	6.5	4.5	5.6	4.9	3.5	4.1
2	---	---	---	---	---	---	6.7	3.4	5.4	4.0	2.5	3.3
3	---	---	---	---	---	---	6.4	4.0	5.1	3.8	2.6	3.2
4	---	---	---	---	---	---	5.0	3.1	4.1	3.8	2.2	2.9
5	---	---	---	---	---	---	9.8	1.2	4.0	3.5	2.2	2.7
6	---	---	---	---	---	---	9.7	3.2	5.5	3.9	2.2	3.1
7	---	---	---	---	---	---	6.2	3.3	4.8	4.9	3.6	4.1
8	---	---	---	---	---	---	4.8	3.0	3.9	4.9	3.8	4.3
9	---	---	---	---	---	---	4.3	2.9	3.7	5.2	3.6	4.3
10	---	---	---	---	---	---	4.1	2.5	3.2	5.2	3.5	4.1
11	---	---	---	---	---	---	3.3	2.0	2.6	4.3	2.8	3.5
12	---	---	---	---	---	---	3.5	2.3	2.8	4.2	2.8	3.3
13	---	---	---	---	---	---	4.2	2.7	3.4	4.7	2.6	3.6
14	---	---	---	---	---	---	4.8	3.2	3.9	5.5	3.2	4.2
15	---	---	---	---	---	---	5.8	3.4	4.3	4.8	3.0	3.9
16	---	---	---	---	---	---	6.7	4.0	5.3	4.7	3.3	4.0
17	---	---	---	4.5	3.0	3.8	10.0	5.0	7.3	5.7	4.1	4.8
18	---	---	---	5.2	3.4	4.3	7.4	4.6	6.1	5.2	3.4	4.3
19	---	---	---	5.7	3.9	4.7	5.7	2.9	4.3	4.1	2.9	3.5
20	---	---	---	5.5	3.9	4.5	3.3	1.7	2.8	4.4	3.1	3.8
21	---	---	---	6.1	4.4	4.9	4.3	1.7	2.7	4.9	3.5	4.1
22	---	---	---	5.4	2.6	3.9	4.9	2.2	3.5	6.2	3.9	4.4
23	---	---	---	4.3	2.5	3.3	5.4	3.5	4.5	5.4	3.8	4.6
24	---	---	---	5.6	3.0	4.5	5.7	4.0	4.7	6.2	4.4	5.1
25	---	---	---	5.3	3.3	4.1	4.5	3.2	3.8	6.0	3.8	5.0
26	---	---	---	5.9	3.3	4.4	9.2	3.0	4.8	5.5	4.2	4.8
27	---	---	---	---	---	---	10.4	5.1	7.6	5.3	3.8	4.4
28	---	---	---	5.8	2.5	4.0	6.7	4.9	5.8	6.1	4.5	5.2
29	---	---	---	12.9	4.5	8.0	5.1	2.7	3.8	4.8	3.5	4.3
30	---	---	---	8.5	5.5	7.2	5.1	3.6	4.3	6.1	3.0	4.2
31	---	---	---	7.2	4.4	5.7	5.3	3.9	4.6	---	---	---
MONTH	---	---	---	12.9	2.5	4.8	10.4	1.2	4.5	6.2	2.2	4.0
YEAR	12.9	1.2	4.4									

04087242 ROOT RIVER NEAR MOUTH AT RACINE, WI—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	684	602	640	800	709	773
2	---	---	---	---	---	---	661	512	594	785	729	761
3	---	---	---	---	---	---	582	352	531	738	665	702
4	---	---	---	---	---	---	708	531	644	672	643	656
5	---	---	---	---	---	---	882	507	695	660	617	634
6	---	---	---	---	---	---	878	514	726	654	521	608
7	---	---	---	---	---	---	540	509	527	560	501	538
8	---	---	---	---	---	---	577	540	557	559	532	548
9	---	---	---	---	---	---	611	537	587	636	521	577
10	---	---	---	---	---	---	603	531	582	618	552	585
11	---	---	---	---	---	---	661	556	592	634	575	600
12	---	---	---	---	---	---	725	633	688	647	564	618
13	---	---	---	---	---	---	701	671	687	669	588	640
14	---	---	---	---	---	---	734	672	708	670	618	638
15	---	---	---	---	---	---	750	669	708	640	427	592
16	---	---	---	---	---	---	792	634	714	608	449	563
17	---	---	---	736	647	721	858	622	768	565	489	528
18	---	---	---	779	733	762	831	765	811	551	451	510
19	---	---	---	790	621	754	783	661	749	581	512	564
20	---	---	---	775	650	728	705	592	634	565	495	531
21	---	---	---	797	483	731	602	564	580	564	501	529
22	---	---	---	776	580	667	678	569	623	545	414	495
23	---	---	---	793	589	709	680	604	631	486	369	450
24	---	---	---	848	760	809	648	513	618	446	369	424
25	---	---	---	855	837	847	709	566	654	463	392	422
26	---	---	---	873	850	864	817	592	704	437	391	419
27	---	---	---	882	796	846	872	590	764	452	350	425
28	---	---	---	908	837	883	831	594	703	406	351	379
29	---	---	---	918	872	893	855	692	767	440	377	408
30	---	---	---	877	767	825	692	621	641	475	327	408
31	---	---	---	771	643	713	746	644	691	---	---	---
MONTH	---	---	---	918	483	783	882	352	662	800	327	551
YEAR	918	327	642									

04087242 ROOT RIVER NEAR MOUTH AT RACINE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Dis-charge, cfs (00060)	Sam-pling method, code (82398)	Chlor-ide, water, fltrd, mg/L (00940)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	E coli, Defined Substr. Tech., water, MPN/ 100 mL (50468)
JUN													
29...	1500	196	40	48.2	35	.94	.072	3.66	.082	.094	.171	<2.0	--
JUL													
21...	1715	59	50	68.0	--	--	--	--	--	--	.134	--	--
21...	1915	59	50	61.3	--	--	--	--	--	--	.130	--	--
21...	2115	59	50	72.6	--	--	--	--	--	--	.149	--	--
21...	2330	59	50	60.2	--	--	--	--	--	--	.154	--	--
22...	0130	64	50	69.0	--	--	--	--	--	--	.159	--	--
22...	0330	64	50	61.9	--	--	--	--	--	--	.146	--	--
22...	0530	64	50	70.1	--	--	--	--	--	--	.166	--	--
22...	0830	64	50	61.1	--	--	--	--	--	--	.142	--	--
AUG													
04...	0445	47	50	57.3	--	--	--	--	--	--	.118	--	--
04...	0645	47	50	75.2	--	--	--	--	--	--	.180	--	--
04...	1045	47	50	64.6	--	--	--	--	--	--	.173	--	--
04...	1845	47	50	68.6	--	--	--	--	--	--	.108	--	--
04...	2045	47	50	59.9	--	--	--	--	--	--	.078	--	--
05...	0045	335	50	67.1	--	--	--	--	--	--	.122	--	--
05...	0645	335	50	52.7	--	--	--	--	--	--	.128	--	--
05...	1645	335	50	85.1	--	--	--	--	--	--	.111	--	--
18...	1301	18	50	90.7	12	--	--	--	--	--	.111	--	--
18...	1302	18	50	92.3	11	--	--	--	--	--	.111	--	--
18...	1304	18	50	91.5	20	--	--	--	--	--	.113	--	--
18...	1307	18	50	89.6	13	--	--	--	--	--	.107	--	--
18...	1310	18	50	90.5	13	--	--	--	--	--	.110	--	--
18...	1313	18	50	--	--	--	--	--	--	--	--	--	--
18...	1744	18	50	89.0	19	--	--	--	--	--	.110	--	--
18...	2200	18	50	87.2	32	--	--	--	--	--	.129	--	--
19...	0930	18	50	88.5	23	--	--	--	--	--	.115	--	--
19...	1630	18	50	81.4	11	--	--	--	--	--	.101	--	--
19...	2330	18	50	79.9	8	--	--	--	--	--	.100	--	--
20...	0630	19	50	74.0	16	--	--	--	--	--	.109	--	--
24...	1635	19	50	77.7	29	--	--	--	--	--	.138	--	--
25...	0345	14	50	78.5	19	--	--	--	--	--	.118	--	--
25...	1545	14	50	82.8	32	--	--	--	--	--	.145	--	--
26...	0345	142	50	80.9	34	--	--	--	--	--	.145	--	--
26...	0716	142	50	82.5	30	.56	.345	.190	.058	.074	.144	--	110
26...	1132	142	50	78.7	28	1.0	.340	.188	.054	.069	.131	--	140
26...	1716	142	50	97.9	22	--	--	--	--	--	.117	--	--
27...	0030	81	50	92.3	23	--	--	--	--	--	.110	--	--
27...	0630	81	50	91.2	81	1.4	.026	.091	.003	.016	.196	--	610
27...	0736	81	50	80.7	53	--	--	--	--	--	.152	--	--
27...	1322	81	50	103	47	--	--	--	--	--	.151	--	--
28...	0130	37	50	75.0	23	--	--	--	--	--	.094	--	--
28...	0813	37	50	94.7	55	--	--	--	--	--	.156	--	--
28...	2015	37	50	81.4	26	--	--	--	--	--	.105	--	--
29...	0815	87	50	104	54	--	--	--	--	--	.159	--	--
29...	2015	87	50	93.9	14	--	--	--	--	--	.098	--	--
30...	0815	107	50	83.1	24	--	--	--	--	--	.131	--	--
30...	0939	107	50	82.1	30	.77	.111	1.09	.063	.071	.145	--	--
30...	1243	107	50	80.7	30	--	--	--	--	--	.144	--	--
SEP													
08...	1030	16	40	97.6	40	1.5	.111	.457	.048	--	.220	4.0	--
16...	0905	10	50	--	--	--	--	--	--	--	--	<2.0	--

04087242 ROOT RIVER NEAR MOUTH AT RACINE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, M-FC 0.7u MF col/ 100 mL (31625)	Chloro-phyll a wat unf trichr. method, uncorr, ug/L (32210)	Chrom-ium, water, unfltrd recover-able, ug/L (01118)	Copper, water, unfltrd recover-able, ug/L (01119)	Mercury water fltrd, ng/L (50287)	Zinc, water, unfltrd recover-able, ug/L (01094)	Mercury suspnd sedimnt total, ng/L (62976)	Methyl-mercury water fltrd, ng/L (50285)	Methyl-mercury suspnd sedimnt total, ng/L (62977)	Sus-pended sedi-ment concen-tration mg/L (80154)
JUN											
29...	--	--	2.47	--	4	--	<20	--	--	--	--
JUL											
21...	--	--	--	--	--	--	--	--	--	--	21
21...	--	--	--	--	--	--	--	--	--	--	35
21...	--	--	--	--	--	--	--	--	--	--	27
21...	--	--	--	--	--	--	--	--	--	--	36
22...	--	--	--	--	--	--	--	--	--	--	36
22...	--	--	--	--	--	--	--	--	--	--	32
22...	--	--	--	--	--	--	--	--	--	--	40
22...	--	--	--	--	--	--	--	--	--	--	30
AUG											
04...	--	--	--	--	--	--	--	--	--	--	32
04...	--	--	--	--	--	--	--	--	--	--	45
04...	--	--	--	--	--	--	--	--	--	--	63
04...	--	--	--	--	--	--	--	--	--	--	18
04...	--	--	--	--	--	--	--	--	--	--	7
05...	--	--	--	--	--	--	--	--	--	--	16
05...	--	--	--	--	--	--	--	--	--	--	11
05...	--	--	--	--	--	--	--	--	--	--	15
18...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	<1	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
26...	--	240	4.19	--	18	--	<20	--	--	--	33
26...	--	180	4.94	--	16	--	<20	--	--	--	29
26...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
27...	--	1,300	85.2	--	6	--	<20	--	--	--	93
27...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	11.9	--	4	--	<20	--	--	--	28
30...	--	--	--	--	--	--	--	--	--	--	--
SEP											
08...	100	270	43.0	--	3	.98	<20	4.32	.07	.066	35
16...	190	370	--	--	--	--	--	--	--	--	--

04087242 ROOT RIVER NEAR MOUTH AT RACINE, WI—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	16.0	15.0	15.5	12.5	11.5	12.0	---	---	---	---	---	---
2	15.5	15.0	15.5	12.0	11.0	11.5	---	---	---	---	---	---
3	15.0	14.5	15.0	11.0	10.0	10.5	---	---	---	---	---	---
4	14.5	14.0	14.0	10.0	9.5	10.0	---	---	---	---	---	---
5	14.0	13.5	14.0	9.5	9.0	9.0	---	---	---	---	---	---
6	14.0	13.5	13.5	9.0	8.0	8.5	---	---	---	---	---	---
7	14.5	13.5	14.0	8.5	8.0	8.5	---	---	---	---	---	---
8	16.0	14.5	14.5	8.0	7.5	8.0	---	---	---	---	---	---
9	15.5	14.5	15.0	8.5	8.0	8.0	---	---	---	---	---	---
10	15.5	14.5	15.0	8.5	7.5	8.0	---	---	---	---	---	---
11	15.5	14.5	15.0	8.0	7.5	8.0	---	---	---	---	---	---
12	15.5	14.5	15.0	8.0	7.0	7.5	---	---	---	---	---	---
13	15.0	15.0	15.0	7.5	7.0	7.5	---	---	---	---	---	---
14	15.0	14.5	14.5	8.0	7.0	7.5	---	---	---	---	---	---
15	14.5	14.0	14.0	---	---	---	---	---	---	---	---	---
16	14.0	12.5	13.5	---	---	---	---	---	---	---	---	---
17	12.5	12.0	12.0	---	---	---	---	---	---	---	---	---
18	12.0	11.0	11.5	---	---	---	---	---	---	---	---	---
19	11.0	11.0	11.0	---	---	---	---	---	---	---	---	---
20	11.0	10.5	11.0	---	---	---	---	---	---	---	---	---
21	11.5	10.5	11.0	---	---	---	---	---	---	---	---	---
22	11.0	11.0	11.0	---	---	---	---	---	---	---	---	---
23	12.0	11.0	11.5	---	---	---	---	---	---	---	---	---
24	12.5	11.5	12.0	---	---	---	---	---	---	---	---	---
25	12.5	11.5	12.0	---	---	---	---	---	---	---	---	---
26	12.5	12.0	12.5	---	---	---	---	---	---	---	---	---
27	13.0	12.5	13.0	---	---	---	---	---	---	---	---	---
28	13.0	12.5	13.0	---	---	---	---	---	---	---	---	---
29	14.0	12.5	13.0	---	---	---	---	---	---	---	---	---
30	14.0	13.0	13.5	---	---	---	---	---	---	---	---	---
31	13.0	12.0	13.0	---	---	---	---	---	---	---	---	---
MONTH	16.0	10.5	13.4	12.5	7.0	8.9	---	---	---	---	---	---

04087242 ROOT RIVER NEAR MOUTH AT RACINE, WI—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	5.6	3.1	4.4	6.9	5.4	6.4	---	---	---	---	---	---
2	3.8	1.6	2.5	6.5	5.0	5.8	---	---	---	---	---	---
3	3.1	1.7	2.3	7.5	5.1	6.0	---	---	---	---	---	---
4	4.6	2.1	3.1	8.0	5.4	7.0	---	---	---	---	---	---
5	3.0	1.6	2.5	8.0	7.4	7.7	---	---	---	---	---	---
6	2.8	1.7	2.2	8.3	7.5	7.9	---	---	---	---	---	---
7	3.5	1.8	2.6	8.8	7.8	8.4	---	---	---	---	---	---
8	5.1	2.0	2.8	8.8	7.9	8.4	---	---	---	---	---	---
9	2.7	1.5	2.2	9.1	8.1	8.5	---	---	---	---	---	---
10	3.5	1.5	2.2	8.8	8.1	8.5	---	---	---	---	---	---
11	3.4	1.8	2.3	9.8	8.4	9.1	---	---	---	---	---	---
12	3.3	1.4	2.1	10.3	9.0	9.7	---	---	---	---	---	---
13	2.3	1.1	1.7	10.4	9.6	10.0	---	---	---	---	---	---
14	2.1	1.3	1.6	10.6	9.8	10.3	---	---	---	---	---	---
15	2.4	1.1	1.6	---	---	---	---	---	---	---	---	---
16	2.7	1.1	1.9	---	---	---	---	---	---	---	---	---
17	2.8	1.7	2.2	---	---	---	---	---	---	---	---	---
18	5.9	2.1	4.2	---	---	---	---	---	---	---	---	---
19	6.5	5.3	6.0	---	---	---	---	---	---	---	---	---
20	7.0	5.5	6.1	---	---	---	---	---	---	---	---	---
21	7.4	5.5	6.7	---	---	---	---	---	---	---	---	---
22	7.6	6.6	7.2	---	---	---	---	---	---	---	---	---
23	7.4	5.2	6.1	---	---	---	---	---	---	---	---	---
24	6.9	4.7	5.5	---	---	---	---	---	---	---	---	---
25	7.3	5.0	6.2	---	---	---	---	---	---	---	---	---
26	6.6	3.4	5.2	---	---	---	---	---	---	---	---	---
27	4.0	2.3	3.1	---	---	---	---	---	---	---	---	---
28	4.4	2.7	3.5	---	---	---	---	---	---	---	---	---
29	5.3	3.4	4.2	---	---	---	---	---	---	---	---	---
30	5.7	4.5	5.1	---	---	---	---	---	---	---	---	---
31	6.3	4.5	5.1	---	---	---	---	---	---	---	---	---
MONTH	7.6	1.1	3.7	10.6	5.0	8.1	---	---	---	---	---	---

04087242 ROOT RIVER NEAR MOUTH AT RACINE, WI—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	442	333	378	918	636	752	---	---	---	---	---	---
2	497	372	450	911	772	874	---	---	---	---	---	---
3	564	462	510	865	633	736	---	---	---	---	---	---
4	499	439	465	996	633	856	---	---	---	---	---	---
5	566	457	498	988	872	908	---	---	---	---	---	---
6	586	524	559	901	799	880	---	---	---	---	---	---
7	600	476	535	906	755	879	---	---	---	---	---	---
8	746	464	609	911	749	846	---	---	---	---	---	---
9	817	720	784	870	693	770	---	---	---	---	---	---
10	830	595	735	881	728	821	---	---	---	---	---	---
11	738	653	705	813	663	741	---	---	---	---	---	---
12	740	681	710	768	524	629	---	---	---	---	---	---
13	733	630	697	612	437	538	---	---	---	---	---	---
14	720	646	701	530	433	457	---	---	---	---	---	---
15	800	678	734	---	---	---	---	---	---	---	---	---
16	797	780	790	---	---	---	---	---	---	---	---	---
17	783	722	773	---	---	---	---	---	---	---	---	---
18	747	559	630	---	---	---	---	---	---	---	---	---
19	578	524	553	---	---	---	---	---	---	---	---	---
20	599	489	554	---	---	---	---	---	---	---	---	---
21	589	486	513	---	---	---	---	---	---	---	---	---
22	529	470	501	---	---	---	---	---	---	---	---	---
23	791	489	642	---	---	---	---	---	---	---	---	---
24	784	519	693	---	---	---	---	---	---	---	---	---
25	695	496	595	---	---	---	---	---	---	---	---	---
26	689	548	628	---	---	---	---	---	---	---	---	---
27	725	660	674	---	---	---	---	---	---	---	---	---
28	791	685	725	---	---	---	---	---	---	---	---	---
29	815	652	751	---	---	---	---	---	---	---	---	---
30	1,010	733	899	---	---	---	---	---	---	---	---	---
31	992	633	888	---	---	---	---	---	---	---	---	---
MONTH	1,010	333	641	996	433	763	---	---	---	---	---	---

04087257 PIKE RIVER NEAR RACINE, WI

LOCATION.--Lat 42°38'49", long 87°51'38", in SE ¼ NE ¼ sec.11, T.2 N., R.22 E., Kenosha County, Hydrologic Unit 04040002, on right bank just downstream from unnamed tributary, 1.7 mi downstream from Pike Creek, 6.8 mi southwest of Racine Post Office and 9.0 mi upstream from mouth.

DRAINAGE AREA.--38.5 mi^2.

PERIOD OF RECORD.--October 1971 to current year.

REVISED RECORDS.--WDR WI-76-1: 1975. WDR WI-80-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 620.09 ft above NGVD of 1929 (Southeastern Wisconsin Regional Planning Commission).

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Low flows considerably affected by effluent discharge in upper portion of basin, and by occasional regulation of small recreation dam 1.1 mi upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	6.9	9.3	13	e7.5	131	55	21	148	28	12	12
2	12	78	9.1	14	e7.5	168	45	19	97	24	12	12
3	13	119	9.1	15	e7.5	97	38	18	68	30	13	11
4	13	112	8.7	14	e7.5	79	32	18	53	237	46	11
5	11	66	8.7	e13	e7.5	630	28	18	44	84	20	9.3
6	11	30	7.9	e13	e7.5	248	27	18	39	49	16	8.0
7	11	19	7.7	e12	e7.5	146	25	18	34	39	14	8.9
8	11	15	8.8	e12	e7.5	95	24	17	32	31	12	10
9	13	13	11	e11	e7.5	72	21	284	34	27	13	11
10	12	13	252	e10	e7.5	54	19	173	106	24	13	11
11	12	13	159	e9.8	e7.5	47	18	191	168	22	12	11
12	15	11	66	e9.4	e7.5	37	18	101	280	21	11	9.9
13	13	14	43	e8.7	e7.5	32	18	299	118	20	10	11
14	25	13	34	e8.4	e7.7	37	17	616	70	19	9.4	11
15	15	11	29	e8.0	e7.8	32	17	306	54	18	9.6	11
16	11	8.7	e27	e7.8	e8.2	30	17	145	44	18	11	19
17	9.2	8.7	e24	e7.7	e8.6	29	e17	97	487	18	26	12
18	9.0	50	e21	e7.7	e9.1	30	e17	375	210	15	18	10
19	9.2	39	e18	e7.6	e9.6	29	e17	143	88	15	14	8.3
20	9.7	21	e17	e7.6	e11	31	e22	211	58	15	12	8.4
21	8.8	16	e15	e7.6	e15	24	57	974	213	27	11	9.6
22	8.9	14	e14	e7.6	17	22	34	1,270	198	23	10	9.6
23	9.9	14	e13	e7.6	34	22	26	1,130	100	16	11	9.7
24	9.1	18	e12	e7.5	56	55	23	467	220	15	12	10
25	18	13	e11	e7.5	54	59	42	234	122	14	15	9.1
26	12	12	e11	e7.5	58	106	33	149	71	13	13	7.2
27	9.5	9.3	e11	e7.5	61	76	26	105	54	14	16	7.6
28	11	8.3	16	e7.5	65	99	23	72	45	14	18	9.0
29	11	8.3	18	e7.5	79	256	21	61	38	13	17	9.4
30	11	8.5	17	e7.5	---	123	21	162	32	13	13	8.6
31	8.2	---	15	e7.5	---	75	---	267	---	13	13	---
TOTAL	364.5	782.7	923.3	292.5	598.5	2,971	798	7,979	3,325	929	453.0	305.6
MEAN	11.8	26.1	29.8	9.44	20.6	95.8	26.6	257	111	30.0	14.6	10.2
MAX	25	119	252	15	79	630	57	1,270	487	237	46	19
MIN	8.2	6.9	7.7	7.5	7.5	22	17	17	32	13	9.4	7.2
CFSM	0.31	0.68	0.77	0.25	0.54	2.49	0.69	6.69	2.88	0.78	0.38	0.26
IN.	0.35	0.76	0.89	0.28	0.58	2.87	0.77	7.71	3.21	0.90	0.44	0.30

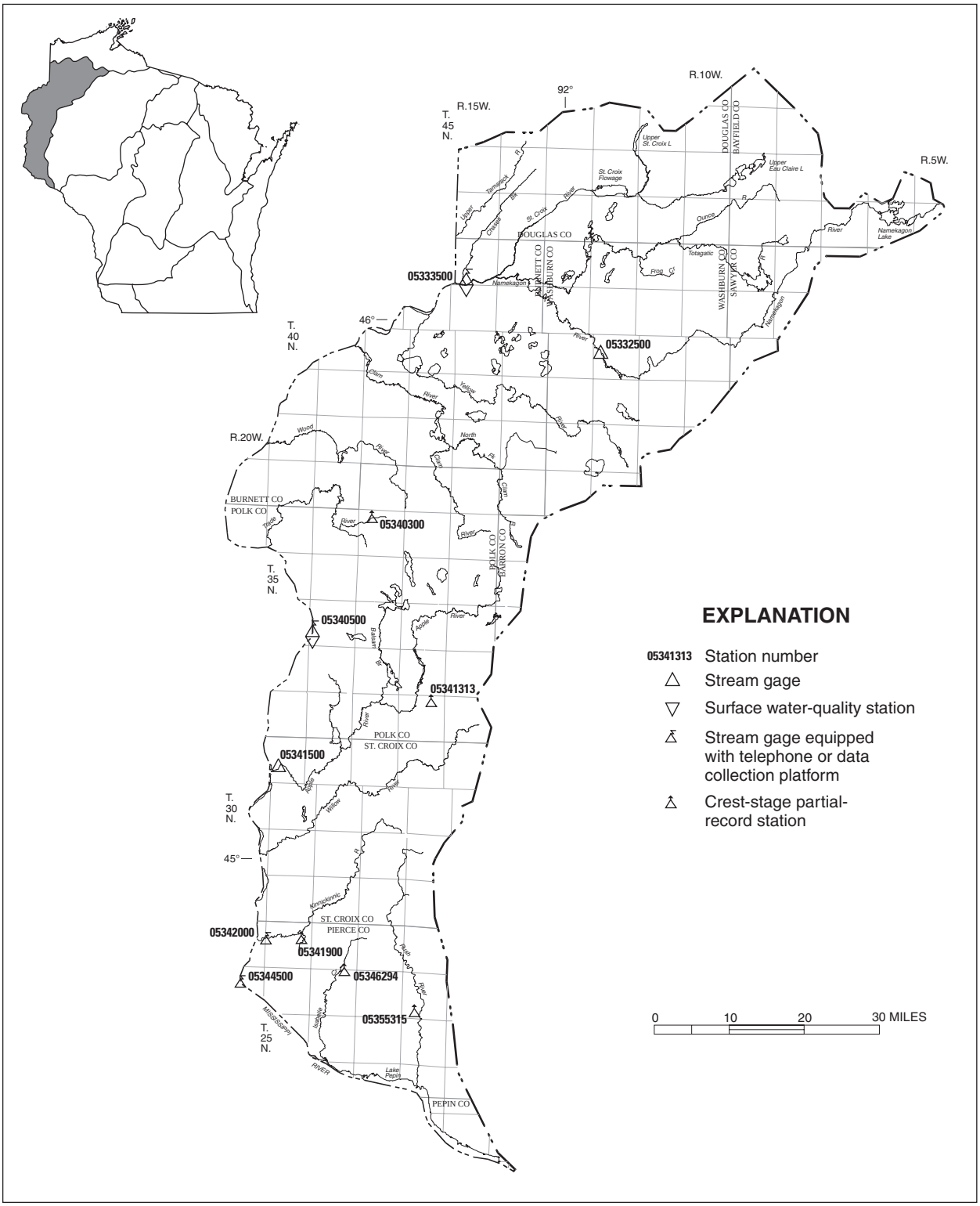
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2004, BY WATER YEAR (WY)

MEAN	19.6	29.1	31.9	25.8	38.5	69.2	71.0	52.2	41.0	21.4	20.1	26.1
MAX	91.3	126	101	97.1	109	258	185	257	150	129	92.5	131
(WY)	(2002)	(1986)	(1983)	(1974)	(2001)	(1979)	(1993)	(2004)	(2000)	(1978)	(1978)	(1986)
MIN	4.40	3.62	2.35	2.05	3.74	14.3	12.1	4.57	8.32	4.93	4.35	3.25
(WY)	(1972)	(1972)	(1977)	(1977)	(1977)	(1996)	(1977)	(1977)	(1988)	(1976)	(1976)	(1976)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1972 - 2004	
ANNUAL TOTAL	7,913.6		19,722.1			
ANNUAL MEAN	21.7		53.9		37.1	
HIGHEST ANNUAL MEAN					59.0	1993
LOWEST ANNUAL MEAN					8.10	1977
HIGHEST DAILY MEAN	252	Dec 10	1,270	May 22	1,270	May 22, 2004
LOWEST DAILY MEAN	(a)5.8	(b)Jan 23	6.9	Nov 1	0.35	Sep 28, 1976
ANNUAL SEVEN-DAY MINIMUM	(a)5.9	Feb 11	(a)7.5	Jan 24	1.7	Nov 10, 1971
MAXIMUM PEAK FLOW			1,650	May 23	(c)1,650	May 23, 2004
MAXIMUM PEAK STAGE			8.10	May 23	(d)9.14	Feb 20, 1994
ANNUAL RUNOFF (CFSM)	0.563		1.40		0.964	
ANNUAL RUNOFF (INCHES)	7.65		19.06		13.09	
10 PERCENT EXCEEDS	43		122		81	
50 PERCENT EXCEEDS	13		16		16	
90 PERCENT EXCEEDS	6.4		8.0		6.0	

(a) Ice affected
(b) Also occurred Feb. 14-16
(c) Gage height, 8.10 ft
(d) Backwater from ice
(e) Estimated due to ice effect or missing record

UPPER MISSISSIPPI RIVER BASIN RECORDS



Base from U.S. Geological Survey 1:100,000 digital data; modified by Wisconsin Department of Natural Resources. Wisconsin Transverse Mercator projection.

ST. CROIX RIVER BASIN

05332500 NAMEKAGON RIVER NEAR TREGO, WI

LOCATION.--Lat 45°56'53", long 91°53'17", in NW ¼ SW ¼ sec.17, T.40 N., R.12 W., Washburn County, Hydrologic Unit 07030002, at powerplant of Northern States Power Co., 4.0 mi downstream from Potato Creek, and 4.4 mi northwest of Trego.

DRAINAGE AREA.--488 mi^2.

PERIOD OF RECORD.--October 1927 to September 1970. October 1987 to current year.

REVISED RECORD.--WDR WI-88-1: Drainage area.

GAGE.--Headwater and tailwater read hourly.

REMARKS.--Diurnal fluctuation caused by Trego powerplant.

COOPERATION.--Records of daily discharge furnished by Northern States Power Company and reviewed by Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	340	550	370	375	315	400	960	700	1,300	430	600	380
2	350	550	370	375	315	400	960	700	1,200	430	600	380
3	350	420	370	375	315	400	960	640	1,200	430	400	380
4	350	420	370	375	315	400	960	600	910	430	400	380
5	350	420	370	310	315	400	659	600	910	430	400	380
6	350	360	370	310	315	400	660	600	910	430	375	380
7	350	360	370	310	315	400	660	540	870	430	375	380
8	350	360	370	310	315	400	640	540	870	480	375	380
9	350	360	375	310	315	400	640	540	870	480	375	380
10	350	360	375	310	350	400	640	560	870	480	375	440
11	350	360	375	310	350	400	640	560	870	520	375	440
12	350	360	375	360	330	300	640	560	870	500	375	440
13	690	360	375	360	330	300	620	560	870	500	375	440
14	690	250	375	360	330	300	620	660	820	430	375	440
15	690	250	375	360	330	300	620	660	820	430	375	440
16	690	250	375	360	330	340	560	660	820	398	380	460
17	350	250	375	360	330	340	560	660	820	398	380	460
18	350	375	375	360	330	400	560	660	600	665	380	460
19	350	375	375	330	330	400	1,050	660	600	590	380	460
20	350	375	375	330	330	400	1,550	660	600	430	380	440
21	350	375	375	330	330	400	1,550	860	500	430	380	375
22	350	375	375	330	330	400	1,550	860	500	430	380	410
23	350	375	375	330	350	400	1,050	860	480	390	380	410
24	350	375	375	330	350	400	1,050	860	480	390	360	410
25	350	325	375	330	350	400	1,050	860	480	390	360	410
26	350	375	375	330	350	500	940	920	480	360	380	410
27	320	375	375	315	350	500	940	760	480	360	380	380
28	320	375	375	315	350	850	1,000	760	480	310	380	380
29	320	480	375	315	350	1,330	1,000	760	430	310	380	380
30	275	480	375	315	---	1,100	700	760	430	600	380	380
31	550	---	375	315	---	960	---	760	---	600	380	---
TOTAL	12,235	11,275	11,585	10,405	9,615	14,720	25,989	21,340	22,340	13,881	12,190	12,285
MEAN	395	376	374	336	332	475	866	688	745	448	393	410
MAX	690	550	375	375	350	1,330	1,550	920	1,300	665	600	460
MIN	275	250	370	310	315	300	560	540	430	310	360	375
CFSM	0.81	0.77	0.77	0.69	0.68	0.97	1.78	1.41	1.53	0.92	0.81	0.84
IN.	0.93	0.86	0.88	0.79	0.73	1.12	1.98	1.63	1.70	1.06	0.93	0.94

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2004, BY WATER YEAR (WY)

MEAN	447	446	390	354	349	445	734	651	562	495	420	474
MAX	909	814	581	531	512	778	1,827	1,156	1,093	1,026	728	1,834
(WY)	(2003)	(1997)	(2002)	(1969)	(1969)	(1945)	(2001)	(1950)	(1944)	(1958)	(1999)	(1941)
MIN	252	288	251	245	241	282	408	389	276	235	195	214
(WY)	(1949)	(1934)	(1933)	(1933)	(1933)	(1934)	(1931)	(1934)	(1934)	(1934)	(1933)	(1933)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1928 - 2004	
ANNUAL TOTAL	175,474		177,860			
ANNUAL MEAN	481		486		481	
HIGHEST ANNUAL MEAN					654	2002
LOWEST ANNUAL MEAN					300	1934
HIGHEST DAILY MEAN	1,530	May 13	1,550	Apr 20-22	5,200	Sep 2, 1941
LOWEST DAILY MEAN	250	Nov 14-17	250	Nov 14-17	113	(a)Aug 17, 1930
ANNUAL SEVEN-DAY MINIMUM	286	Sep 8	297	Nov 11	159	Dec 1, 1927
ANNUAL RUNOFF (CFSM)	0.985		0.996		0.985	
ANNUAL RUNOFF (INCHES)	13.38		13.56		13.38	
10 PERCENT EXCEEDS	710		860		738	
50 PERCENT EXCEEDS	380		380		419	
90 PERCENT EXCEEDS	320		328		288	

(a) Also occurred Sept. 7, 1930

05333500 ST. CROIX RIVER NEAR DANBURY, WI

LOCATION.--Lat 46°04'30", long 92°14'50", in NW $^1/_4$ SE $^1/_4$ sec.33, T.42 N., R.15 W., Burnett County, Hydrologic Unit 07030001, St. Croix National Scenic Waterway, on left bank at downstream side of bridge on State Highway 35, 3.5 mi downstream from Namekagon River, 10 mi northeast of Danbury, and at mile 129.2.

DRAINAGE AREA.--1,580 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1914 to September 1981, October 1984 to current year. Prior to October 1933, published as "at Swiss".

REVISED RECORDS.--WSP 1438: 1915(M), 1919-20, 1923-24(M), 1927(M), 1931(M), 1934, 1935-37(M). WSP 1628: 1918. WDR WI-85-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 882.21 ft above NGVD of 1929. Prior to Apr. 23, 1937, nonrecording gage 40 ft downstream at same datum. Apr. 23, 1937, to Jan. 5, 1939, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	799	1,120	e940	e800	e700	e920	3,240	1,900	3,420	1,030	1,500	1,050
2	792	1,010	e940	e780	e700	e960	2,950	1,880	3,670	1,000	1,320	1,030
3	785	992	e940	e760	e700	e960	2,430	1,670	3,460	961	1,170	948
4	783	1,000	e940	e760	e700	e920	2,550	1,510	3,170	998	1,050	977
5	785	987	e940	e740	e700	e920	2,390	1,470	2,640	1,030	956	993
6	784	e920	e960	e720	e700	e920	2,040	1,440	2,530	1,010	919	1,420
7	767	e840	e960	e740	e700	e920	2,000	1,390	2,390	1,030	903	1,510
8	799	e780	e960	e740	e700	e920	2,090	1,320	2,460	1,020	1,170	1,350
9	784	e800	e900	e760	e720	e920	1,890	1,240	2,270	999	1,360	1,260
10	784	e820	e900	e780	e720	e920	1,700	1,240	2,090	957	1,460	1,230
11	799	953	e920	e800	e740	e900	1,580	1,230	1,820	1,050	1,510	1,200
12	873	960	e920	e800	e740	e880	1,490	1,210	1,840	1,280	1,490	1,160
13	892	e900	e900	e780	e760	e880	1,490	1,180	1,790	1,280	1,370	1,100
14	854	e880	e900	e760	e760	e860	1,460	1,280	1,710	1,230	1,300	1,060
15	834	e900	e900	e760	e720	e920	1,440	1,300	1,650	1,120	1,210	1,190
16	821	e940	e900	e740	e740	e940	1,390	1,260	1,650	995	1,170	1,360
17	804	959	e900	e740	e760	e960	1,280	1,580	1,580	934	1,140	1,350
18	801	961	e900	e720	e780	e980	1,500	2,100	1,480	900	1,100	1,250
19	795	957	e900	e720	e800	e980	2,530	2,080	1,310	1,210	1,040	1,260
20	797	956	e900	e720	e800	e980	3,080	2,020	1,260	1,590	972	1,220
21	774	963	e880	e720	e820	e1,000	3,720	2,080	1,210	1,410	951	1,190
22	782	947	e860	e720	e820	e1,000	4,030	2,020	1,170	1,220	941	1,170
23	793	961	e840	e720	e860	1,050	3,770	1,800	1,110	1,100	895	1,140
24	800	e860	e820	e720	e860	1,010	3,460	2,000	1,100	1,020	871	1,150
25	800	e780	e800	e720	e840	1,050	3,220	1,990	1,130	896	857	1,160
26	786	e860	e800	e720	e800	1,190	3,080	1,820	1,090	848	926	1,130
27	792	e920	e800	e700	e800	1,500	2,800	2,170	1,080	825	991	1,090
28	841	e920	e800	e700	e800	1,990	2,120	2,170	1,070	819	1,000	1,050
29	904	e960	e800	e680	e840	2,670	1,990	2,120	1,040	1,230	1,040	1,020
30	996	e1,000	e800	e680	---	3,160	1,920	2,140	1,010	1,350	1,070	1,000
31	1,030	---	e780	e700	---	3,240	---	2,790	---	1,460	1,040	---
TOTAL	25,430	27,806	27,400	22,900	22,080	37,420	70,630	53,400	55,200	33,802	34,692	35,018
MEAN	820	927	884	739	761	1,207	2,354	1,723	1,840	1,090	1,119	1,167
MAX	1,030	1,120	960	800	860	3,240	4,030	2,790	3,670	1,590	1,510	1,510
MIN	767	780	780	680	700	860	1,280	1,180	1,010	819	857	948
CFSM	0.52	0.59	0.56	0.47	0.48	0.76	1.49	1.09	1.16	0.69	0.71	0.74
IN.	0.60	0.65	0.65	0.54	0.52	0.88	1.66	1.26	1.30	0.80	0.82	0.82

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2004, BY WATER YEAR (WY)

MEAN	1,187	1,210	1,020	906	903	1,333	2,376	1,845	1,514	1,297	1,072	1,201
MAX	2,489	2,216	1,910	1,555	1,518	2,930	4,944	4,023	3,797	3,230	2,223	4,759
(WY)	(1969)	(1997)	(1992)	(1997)	(1997)	(1973)	(2001)	(1950)	(1944)	(1958)	(1955)	(1941)
MIN	590	631	551	600	535	703	939	889	626	514	432	564
(WY)	(1933)	(1926)	(1933)	(1924)	(1936)	(1934)	(1931)	(1931)	(1934)	(1934)	(1934)	(1933)

05333500 ST. CROIX RIVER NEAR DANBURY, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1914 - 2004	
ANNUAL TOTAL	441,190		445,778			
ANNUAL MEAN	1,209		1,218		1,321	
HIGHEST ANNUAL MEAN					1,982	1986
LOWEST ANNUAL MEAN					795	1934
HIGHEST DAILY MEAN	4,690	May 12	4,030	Apr 22	10,600	Apr 24, 2001
LOWEST DAILY MEAN	593	Sep 10	(a)680	Jan 29, 30	405	(b)Aug 6, 1934
ANNUAL SEVEN-DAY MINIMUM	635	Sep 6	(a)694	Jan 27	417	Aug 12, 1934
MAXIMUM PEAK FLOW			(c)4,100	Apr 22	11,000	Apr 24, 2001
MAXIMUM PEAK STAGE			(a)4.74	Dec 4	8.72	Apr 24, 2001
INSTANTANEOUS LOW FLOW			(a)		393	Aug 6, 13, 1934
ANNUAL RUNOFF (CFSM)	0.765		0.771		0.836	
ANNUAL RUNOFF (INCHES)	10.39		10.50		11.36	
10 PERCENT EXCEEDS	2,060		2,080		2,180	
50 PERCENT EXCEEDS	904		980		1,080	
90 PERCENT EXCEEDS	765		760		730	

(a) Ice affected
(b) Also occurred Aug. 13, 16, 17, 1934
(c) Gage height, 4.03 ft
(e) Estimated due to ice effect or missing record

05333500 ST. CROIX RIVER NEAR DANBURY, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 1995 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: April to September 1997, December 1999 to current year.

INSTRUMENTATION.--Continuous water temperature recorder April to September 1997 and December 1999 to current year.

REMARKS.--Records represent water temperature at sensor within 0.5°C.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum temperature, 30.5°C, Aug. 6, 2001; minimum, 0.0°C on many days.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum temperature, 27.5°C, July 21; minimum 0.0° on many days.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	9.5	7.0	8.5	5.0	4.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0
2	9.0	6.0	7.5	4.5	3.5	4.0	0.0	0.0	0.0	0.0	0.0	0.0
3	10.0	8.0	9.0	4.0	2.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0
4	10.5	8.0	9.5	3.0	2.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0
5	10.5	7.5	9.0	3.0	1.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0
6	11.5	8.0	9.5	1.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
7	12.5	9.0	11.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	14.5	10.5	12.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	16.0	13.0	14.5	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
10	16.0	14.0	15.0	1.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
11	15.0	13.0	14.5	4.0	1.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0
12	13.5	11.0	12.5	3.0	1.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0
13	13.0	11.0	12.0	1.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
14	12.0	10.0	11.0	1.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
15	10.5	9.0	9.5	3.0	1.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0
16	9.0	7.0	8.0	4.0	3.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0
17	9.5	7.0	8.5	4.5	3.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0
18	11.0	8.0	9.5	5.5	4.5	5.0	0.0	0.0	0.0	0.0	0.0	0.0
19	11.5	9.0	10.5	4.5	3.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0
20	12.5	9.5	11.0	3.5	2.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
21	11.5	10.0	11.0	2.5	1.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
22	10.0	7.5	9.0	1.5	1.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
23	9.0	7.5	8.0	1.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
24	8.5	7.0	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	7.5	6.0	7.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	6.5	5.5	6.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	6.5	5.0	5.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	5.5	5.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	6.0	5.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	6.0	5.5	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	6.0	5.0	5.5	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0
MONTH	16.0	5.0	9.3	5.5	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0

05333500 ST. CROIX RIVER NEAR DANBURY, WI—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	0.0	0.0	0.0	0.0	0.0	0.0	5.0	2.5	4.0	12.5	9.5	11.0
2	0.0	0.0	0.0	0.0	0.0	0.0	5.5	3.0	4.5	12.0	10.0	11.0
3	0.0	0.0	0.0	0.0	0.0	0.0	7.0	5.0	5.5	12.5	9.0	10.5
4	0.0	0.0	0.0	0.0	0.0	0.0	6.0	4.0	5.0	14.5	10.5	12.0
5	0.0	0.0	0.0	0.0	0.0	0.0	6.0	4.5	5.0	13.0	10.5	11.5
6	0.0	0.0	0.0	0.0	0.0	0.0	9.0	5.5	7.0	14.5	11.0	12.5
7	0.0	0.0	0.0	0.0	0.0	0.0	8.0	6.5	7.5	13.0	11.5	12.0
8	0.0	0.0	0.0	0.0	0.0	0.0	7.0	5.5	6.5	15.5	11.0	13.0
9	0.0	0.0	0.0	0.5	0.0	0.0	7.0	4.0	5.5	17.0	13.5	15.0
10	0.0	0.0	0.0	0.5	0.0	0.0	6.5	5.5	5.5	18.0	14.0	15.5
11	0.0	0.0	0.0	0.0	0.0	0.0	5.5	4.5	5.0	18.0	13.5	15.5
12	0.0	0.0	0.0	0.0	0.0	0.0	6.5	3.5	5.0	18.0	16.0	17.0
13	0.0	0.0	0.0	0.0	0.0	0.0	8.5	4.0	6.5	16.0	12.0	13.5
14	0.0	0.0	0.0	0.0	0.0	0.0	9.5	7.5	8.0	14.0	11.0	12.0
15	0.0	0.0	0.0	0.5	0.0	0.0	10.5	6.5	8.5	14.5	11.0	13.0
16	0.0	0.0	0.0	0.5	0.0	0.0	11.5	9.0	10.0	17.0	13.0	15.0
17	0.0	0.0	0.0	0.5	0.0	0.0	11.0	8.0	9.5	15.5	13.5	14.5
18	0.0	0.0	0.0	2.0	0.0	0.5	10.5	9.0	9.5	16.5	12.5	14.5
19	0.0	0.0	0.0	2.5	0.0	1.0	11.0	8.5	9.5	16.5	14.5	15.5
20	0.0	0.0	0.0	2.0	0.0	1.0	10.5	9.0	9.5	17.5	15.0	16.0
21	0.0	0.0	0.0	2.5	0.0	0.5	10.0	9.0	9.5	16.5	14.0	15.5
22	0.0	0.0	0.0	2.5	0.0	1.0	10.0	8.0	9.0	14.0	13.0	13.5
23	0.0	0.0	0.0	4.0	0.0	1.5	10.5	8.5	9.5	13.0	11.5	12.5
24	0.0	0.0	0.0	4.0	0.5	2.0	10.5	8.5	9.5	14.0	10.5	12.0
25	0.0	0.0	0.0	4.0	1.5	2.5	10.5	9.5	10.0	14.0	13.0	13.5
26	0.0	0.0	0.0	6.5	2.5	4.5	9.5	8.5	9.0	15.5	12.0	13.5
27	0.0	0.0	0.0	5.0	4.0	4.5	9.0	7.5	8.5	15.5	14.0	15.0
28	0.0	0.0	0.0	5.5	3.5	4.5	13.5	8.5	11.0	16.5	12.5	14.5
29	0.0	0.0	0.0	4.5	3.0	4.0	13.0	10.5	12.0	15.5	14.0	15.0
30	---	---	---	4.0	2.5	3.0	11.5	9.0	10.0	14.0	13.5	14.0
31	---	---	---	4.5	2.0	3.5	---	---	---	15.5	14.0	14.5
MONTH	0.0	0.0	0.0	6.5	0.0	1.1	13.5	2.5	7.8	18.0	9.0	13.7
		JUNE			JULY			AUGUST			SEPTEMBER	
1	15.5	14.0	15.0	24.5	19.5	21.5	24.5	20.0	22.0	19.0	17.0	18.0
2	16.5	13.5	15.0	24.5	19.0	21.5	25.0	22.0	23.5	22.0	17.5	19.5
3	17.5	15.0	16.5	24.5	20.5	22.5	23.5	21.0	22.5	23.0	19.5	21.0
4	18.5	16.5	17.5	24.0	21.5	22.5	23.5	19.5	21.0	22.5	19.5	21.0
5	18.0	16.5	17.0	22.0	19.5	20.5	23.5	18.5	21.0	21.5	20.5	20.5
6	19.5	16.0	18.0	20.0	18.0	18.5	23.0	18.5	21.0	20.5	19.0	20.0
7	22.5	19.0	20.5	18.0	17.0	17.5	21.5	19.0	20.0	19.5	17.5	18.5
8	22.0	20.5	21.5	21.5	16.5	19.0	21.0	18.5	19.5	18.0	16.0	17.0
9	20.5	18.0	19.5	23.0	19.0	21.0	21.5	19.5	20.5	19.5	16.5	18.0
10	19.0	17.0	18.0	23.5	20.0	21.5	20.0	17.0	18.5	19.5	17.5	18.5
11	18.0	17.5	18.0	23.0	20.5	21.5	17.0	15.5	16.5	20.5	18.0	19.0
12	21.5	17.5	19.5	24.0	20.0	22.0	18.5	15.0	16.5	20.5	17.5	19.0
13	22.5	20.5	21.5	24.5	21.5	23.0	20.0	16.0	18.0	21.0	18.5	19.5
14	21.5	19.5	20.5	25.0	20.5	23.0	20.0	16.0	18.0	20.5	19.0	19.5
15	22.5	18.5	20.5	25.0	21.0	23.0	20.0	16.5	18.5	19.0	17.0	18.5
16	22.5	20.5	21.0	25.5	21.5	23.5	18.5	17.5	18.0	18.0	15.5	17.0
17	23.0	20.0	21.0	24.5	21.0	23.0	20.0	16.5	18.0	18.5	16.0	17.0
18	21.0	19.0	20.0	24.0	20.0	22.0	20.0	17.5	18.5	19.0	16.0	17.5
19	20.0	17.0	18.5	25.5	21.5	23.5	18.5	15.0	17.0	20.5	17.5	19.0
20	21.5	17.0	19.5	27.0	23.0	25.0	19.0	15.0	17.0	20.0	18.0	19.0
21	22.0	18.5	20.0	27.5	24.0	25.5	18.5	14.5	16.5	19.0	17.5	18.0
22	20.5	17.5	19.0	25.5	23.0	24.0	21.0	16.5	18.5	19.5	17.0	18.0
23	19.0	16.5	17.5	23.5	20.0	22.0	20.0	17.0	18.5	20.0	17.5	18.5
24	18.0	14.5	16.0	23.5	19.0	21.0	20.5	18.0	19.0	18.5	16.0	17.0
25	18.0	15.0	16.5	24.0	19.0	21.5	21.5	18.5	20.0	17.0	14.5	16.0
26	18.0	15.5	16.5	24.5	20.0	22.0	20.5	19.0	20.0	17.5	14.5	16.0
27	18.0	15.0	16.5	24.5	19.5	22.0	20.0	18.0	19.0	17.0	15.5	16.0
28	20.0	15.0	17.5	22.5	20.5	21.5	18.5	16.5	17.5	15.5	13.0	14.5
29	22.5	17.0	19.5	23.5	20.0	21.5	18.0	15.0	16.5	15.0	12.0	13.5
30	24.0	18.5	21.0	22.0	18.5	20.0	20.0	16.5	18.0	15.0	12.0	13.5
31	---	---	---	21.5	17.5	19.5	19.0	17.0	18.0	---	---	---
MONTH	24.0	13.5	18.6	27.5	16.5	21.8	25.0	14.5	18.9	23.0	12.0	17.9
YEAR	27.5	0.0	9.3									

05340500 ST. CROIX RIVER AT ST. CROIX FALLS, WI

LOCATION.--Lat 45°24'25", long 92°38'49", in SW $^1/_4$ NW $^1/_4$ sec.30, T.34 N., R.18 W., Polk County, Hydrologic Unit 07030005, St. Croix National Scenic Riverway, on left bank, 1,500 ft downstream from powerplant of Northern States Power Co., in St. Croix Falls, and at mile 52.2.

DRAINAGE AREA.--6,240 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1902 to current year. Prior to January 1910, monthly discharge only, published in WSP 1308. Prior to October 1939, published as "near St. Croix Falls."

REVISED RECORDS.--WSP 1115: 1929. WDR WI-82-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 689.94 ft above NGVD of 1929. Prior to July 1905, gage heights and discharge measurements were used by Loweth and Wolff, consulting engineers of St. Paul, Minn., to determine the flow. July 1905 to February 1940, records were computed from power generation at the St. Croix Falls Powerplant. February 1940 to Sept. 30, 1979, water-stage recorder at site 300 ft downstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Diurnal fluctuation caused by St. Croix Falls Powerplant 1,500 ft upstream. Gage-height telemeter and data-collection platform at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,550	3,120	2,910	2,540	2,050	2,660	14,000	7,220	16,900	3,220	3,570	3,010
2	2,370	3,420	2,860	2,840	2,090	2,790	13,400	6,850	20,400	2,960	3,680	2,800
3	2,400	3,300	2,470	2,510	2,200	2,990	12,700	6,460	21,400	2,980	3,760	2,620
4	2,470	3,170	2,710	2,570	2,020	2,870	11,700	6,360	19,900	2,980	3,560	2,300
5	2,430	3,330	3,080	2,690	2,270	3,170	10,900	4,930	17,500	2,910	3,200	2,610
6	2,220	3,140	3,070	2,220	2,240	3,100	10,100	4,930	16,000	3,230	2,710	3,450
7	2,320	2,970	2,950	1,970	2,230	3,090	9,280	4,810	15,200	3,170	2,490	3,840
8	2,330	2,160	2,960	1,880	2,130	3,010	8,350	4,750	14,500	3,260	3,040	4,320
9	2,310	1,920	3,100	1,890	2,320	3,030	8,030	4,170	13,500	3,170	2,990	4,340
10	2,290	3,210	2,370	1,920	2,350	3,030	7,530	4,490	12,100	2,990	3,660	4,390
11	2,610	3,990	2,100	2,130	2,310	3,060	6,860	4,200	10,900	3,280	4,080	4,220
12	2,430	3,270	1,780	2,130	2,240	3,030	6,380	4,260	10,100	3,410	4,220	3,790
13	2,610	2,900	1,770	2,240	2,310	3,010	5,940	4,280	9,560	4,410	4,140	3,520
14	2,870	3,110	2,020	2,300	2,300	3,040	5,740	4,210	9,080	4,780	3,990	4,040
15	2,620	2,880	2,170	2,170	e2,200	2,890	5,460	4,170	8,320	4,750	3,560	3,950
16	2,310	3,000	2,680	2,410	2,050	2,670	5,240	4,030	7,820	4,480	3,550	4,260
17	2,720	2,830	2,700	2,210	2,360	2,920	4,910	5,080	7,450	4,010	3,440	4,340
18	2,360	3,410	2,690	2,220	2,180	2,970	4,790	6,420	6,960	3,650	3,040	4,510
19	2,280	3,040	2,870	2,160	2,330	2,980	6,290	7,640	6,450	3,150	2,880	4,550
20	2,830	3,240	2,510	2,090	2,430	3,340	8,060	8,170	5,800	2,790	2,830	4,190
21	2,200	3,170	2,500	2,020	2,350	3,540	9,410	7,600	5,540	3,770	2,820	4,240
22	2,400	3,080	2,710	2,070	2,280	3,500	10,700	7,530	4,720	3,740	2,400	4,210
23	2,420	3,100	2,610	2,090	2,450	3,530	12,300	7,360	4,390	3,410	2,200	4,440
24	2,530	1,880	2,570	2,070	2,410	4,060	12,200	7,660	4,390	2,970	2,330	4,620
25	2,620	1,830	2,540	1,820	2,400	4,690	11,400	7,570	4,100	2,620	2,330	4,790
26	2,510	2,220	2,550	2,090	2,330	5,140	10,600	7,610	3,840	2,740	2,890	4,870
27	2,500	2,680	2,610	2,070	2,350	5,820	10,000	9,220	3,850	2,580	2,850	4,810
28	3,080	3,270	3,130	2,200	2,470	8,710	9,550	10,300	3,770	2,570	2,760	4,590
29	2,760	3,180	2,730	e2,200	2,460	10,000	8,480	10,800	3,580	2,400	3,000	4,340
30	2,740	3,040	2,780	e2,000	---	12,400	7,800	10,200	3,450	2,770	2,940	3,920
31	3,180	---	2,850	2,090	---	14,100	---	12,600	---	3,460	2,790	---
TOTAL	78,270	88,860	81,350	67,810	66,110	135,140	268,100	205,880	291,470	102,610	97,700	119,880
MEAN	2,525	2,962	2,624	2,187	2,280	4,359	8,937	6,641	9,716	3,310	3,152	3,996
MAX	3,180	3,990	3,130	2,840	2,470	14,100	14,000	12,600	21,400	4,780	4,220	4,870
MIN	2,200	1,830	1,770	1,820	2,020	2,660	4,790	4,030	3,450	2,400	2,200	2,300
CFSM	0.40	0.47	0.42	0.35	0.37	0.70	1.43	1.06	1.56	0.53	0.51	0.64
IN.	0.47	0.53	0.48	0.40	0.39	0.81	1.60	1.23	1.74	0.61	0.58	0.71

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1902 - 2004, BY WATER YEAR (WY)

MEAN	3,763	3,501	2,604	2,197	2,171	4,233	10,317	7,538	5,771	4,205	2,944	3,506
MAX	14,270	11,910	5,821	4,279	6,021	14,420	29,600	21,840	19,510	17,260	9,777	14,590
(WY)	(1969)	(1972)	(1984)	(1984)	(1984)	(1945)	(2001)	(1950)	(1944)	(1952)	(1955)	(1941)
MIN	1,380	1,342	1,288	1,157	1,257	1,538	2,212	2,430	1,481	1,014	839	1,152
(WY)	(1933)	(1911)	(1911)	(1911)	(1913)	(1912)	(1902)	(1934)	(1934)	(1934)	(1934)	(1933)

05340500 ST. CROIX RIVER AT ST. CROIX FALLS, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1902 - 2004	
ANNUAL TOTAL	1,765,370		1,603,180			
ANNUAL MEAN	4,837		4,380		4,408	
HIGHEST ANNUAL MEAN					8,569	1986
LOWEST ANNUAL MEAN					1,754	1934
HIGHEST DAILY MEAN	22,200	May 13	21,400	Jun 3	59,500	Apr 26, 2001
LOWEST DAILY MEAN	1,690	Sep 11	1,770	Dec 13	75	Jul 17, 1910
ANNUAL SEVEN-DAY MINIMUM	1,760	Sep 5	2,020	Jan 6	754	Jul 29, 1934
MAXIMUM PEAK FLOW			21,700	Jun 2	60,900	Apr 25, 2001
MAXIMUM PEAK STAGE			10.79	Jun 2	25.88	Apr 25, 2001
ANNUAL RUNOFF (CFSM)	0.775		0.702		0.706	
ANNUAL RUNOFF (INCHES)	10.52		9.56		9.59	
10 PERCENT EXCEEDS	11,400		9,120		8,990	
50 PERCENT EXCEEDS	2,930		3,080		2,810	
90 PERCENT EXCEEDS	2,090		2,200		1,580	

(e) Estimated due to ice effect or missing record

05340500 ST. CROIX RIVER AT ST. CROIX FALLS, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: January 2000 to current year.

INSTRUMENTATION.--Water temperature recorder since January 21, 2000, provides 15-minute readings.

REMARKS.--Records represent water temperature at sensor, within 0.5°C, located near the orifice.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum, 30.5°C, Aug. 7-9, 2001; minimum 0.0°C on many days.

EXTREMES FOR CURRENT PERIOD.--
WATER TEMPERATURE: Maximum, 28.5°C, July 22; minimum 0.0°C on many days.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	10.0	9.0	9.5	5.5	4.5	5.0	0.5	0.0	0.0	0.5	0.0	0.0
2	10.0	8.5	9.0	5.5	4.0	5.0	0.5	0.0	0.0	0.5	0.0	0.0
3	10.0	8.5	9.0	5.0	3.5	4.0	0.5	0.0	0.0	0.5	0.0	0.0
4	10.5	8.0	9.5	4.0	3.0	3.5	0.5	0.0	0.0	0.5	0.0	0.0
5	11.0	9.0	10.0	3.5	1.5	2.5	0.5	0.0	0.0	0.0	0.0	0.0
6	12.0	10.0	11.0	2.5	1.0	2.0	0.5	0.0	0.0	0.5	0.0	0.0
7	13.0	10.5	11.5	1.5	0.0	1.0	0.5	0.0	0.0	0.5	0.0	0.0
8	13.5	11.5	12.5	1.0	0.0	0.5	0.5	0.0	0.0	0.5	0.0	0.0
9	15.0	12.5	14.0	1.5	0.0	0.5	0.5	0.0	0.0	0.5	0.0	0.0
10	16.5	14.0	15.0	1.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
11	17.0	15.5	16.0	1.0	0.0	0.5	0.0	0.0	0.0	0.5	0.0	0.0
12	17.0	15.0	16.0	0.5	0.0	0.5	0.5	0.0	0.0	0.5	0.0	0.0
13	15.5	13.5	15.0	1.0	0.0	0.5	0.5	0.0	0.0	0.5	0.0	0.0
14	14.5	12.5	13.5	1.5	0.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0
15	13.5	11.0	12.5	2.0	0.5	1.0	0.0	0.0	0.0	0.5	0.0	0.0
16	12.5	10.0	11.5	2.5	1.5	2.0	0.0	0.0	0.0	0.5	0.0	0.0
17	11.0	9.5	10.5	4.5	2.5	3.0	0.0	0.0	0.0	0.5	0.0	0.0
18	11.5	9.5	10.0	5.0	3.0	4.0	0.5	0.0	0.0	0.5	0.0	0.0
19	11.5	9.5	10.0	5.5	4.5	5.0	0.0	0.0	0.0	0.5	0.0	0.0
20	12.0	10.0	11.0	5.5	4.5	5.0	0.5	0.0	0.0	0.5	0.0	0.0
21	12.5	10.5	11.5	4.5	3.5	4.0	0.5	0.0	0.0	0.5	0.0	0.0
22	12.5	11.0	11.5	3.5	2.0	3.0	0.5	0.0	0.0	0.5	0.0	0.0
23	12.0	10.0	11.0	2.5	0.0	1.5	0.0	0.0	0.0	0.5	0.0	0.0
24	11.0	9.0	10.0	0.5	0.0	0.0	0.5	0.0	0.0	0.5	0.0	0.0
25	10.0	8.5	9.0	0.5	0.0	0.0	0.5	0.0	0.0	0.5	0.0	0.0
26	9.0	7.0	8.0	0.5	0.0	0.0	0.5	0.0	0.0	0.5	0.0	0.0
27	7.5	6.0	7.0	0.5	0.0	0.0	0.5	0.0	0.0	0.5	0.0	0.0
28	7.0	5.5	6.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
29	6.0	5.0	5.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	6.0	5.0	5.5	0.5	0.0	0.0	0.5	0.0	0.0	0.5	0.0	0.0
31	5.5	4.5	5.0	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0
MONTH	17.0	4.5	10.6	5.5	0.0	1.9	0.5	0.0	0.0	0.5	0.0	0.0

05340500 ST. CROIX RIVER AT ST. CROIX FALLS, WI—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	0.5	0.0	0.0	0.5	0.0	0.0	4.5	2.0	3.5	12.0	11.0	11.5
2	0.0	0.0	0.0	0.5	0.0	0.0	5.5	3.0	4.0	12.5	11.0	12.0
3	0.0	0.0	0.0	0.5	0.0	0.0	6.0	4.0	5.0	12.5	11.0	11.5
4	0.5	0.0	0.0	0.5	0.0	0.0	6.5	4.0	5.0	12.5	11.0	11.5
5	0.5	0.0	0.0	0.5	0.0	0.0	6.5	5.0	5.5	13.5	11.0	12.5
6	0.0	0.0	0.0	0.5	0.0	0.0	7.5	5.5	6.5	13.5	11.5	12.5
7	0.0	0.0	0.0	0.5	0.0	0.0	8.0	6.5	7.5	14.5	12.0	13.5
8	0.0	0.0	0.0	0.5	0.0	0.0	8.0	7.0	7.5	13.5	12.0	13.0
9	0.5	0.0	0.0	1.0	0.0	0.0	8.0	7.0	7.5	15.5	12.5	14.0
10	0.0	0.0	0.0	1.0	0.0	0.0	7.5	5.5	6.5	17.5	14.5	16.0
11	0.5	0.0	0.0	0.5	0.0	0.0	6.5	5.0	5.5	18.0	16.0	17.0
12	0.5	0.0	0.0	1.0	0.0	0.0	5.5	5.0	5.0	18.5	16.5	17.5
13	0.5	0.0	0.0	0.5	0.0	0.0	7.0	4.5	5.5	18.0	15.5	17.0
14	0.5	0.0	0.0	0.5	0.0	0.0	8.0	5.0	7.0	16.0	13.5	14.5
15	0.5	0.0	0.0	1.0	0.0	0.0	10.0	7.0	8.5	14.5	12.5	13.5
16	0.5	0.0	0.0	1.0	0.0	0.0	11.5	8.5	10.0	15.0	12.5	14.0
17	0.5	0.0	0.0	1.0	0.0	0.0	12.5	10.0	11.0	15.5	13.5	14.5
18	0.5	0.0	0.0	1.0	0.0	0.5	13.0	10.5	11.5	16.5	14.5	15.5
19	0.5	0.0	0.0	1.5	0.0	0.5	13.0	11.0	12.0	17.0	15.5	16.0
20	0.5	0.0	0.0	1.5	0.0	0.5	11.5	10.0	11.0	17.5	16.0	16.5
21	0.5	0.0	0.0	1.0	0.0	0.5	10.5	9.5	10.0	17.5	16.0	16.5
22	0.5	0.0	0.0	1.5	0.0	0.5	10.5	8.5	9.5	16.5	14.5	15.5
23	0.5	0.0	0.0	2.0	0.0	1.0	10.5	9.0	9.5	15.0	12.5	14.0
24	0.5	0.0	0.0	2.0	0.0	1.0	10.5	9.0	9.5	13.0	12.0	12.5
25	0.5	0.0	0.0	1.5	0.5	1.0	11.0	9.0	10.0	14.0	12.0	13.0
26	0.5	0.0	0.0	2.0	0.5	1.5	10.5	9.5	10.0	14.5	12.5	13.5
27	0.5	0.0	0.0	3.0	1.5	2.0	10.0	8.5	9.5	15.0	13.5	14.5
28	0.5	0.0	0.0	3.0	0.5	2.0	11.0	8.5	9.5	16.5	14.0	15.0
29	1.0	0.0	0.0	3.5	0.5	2.0	12.5	11.0	11.5	16.0	15.0	15.5
30	---	---	---	3.5	1.5	2.5	12.0	11.0	11.5	15.5	14.0	15.0
31	---	---	---	3.5	1.5	2.5	---	---	---	15.5	14.5	15.0
MONTH	1.0	0.0	0.0	3.5	0.0	0.6	13.0	2.0	8.2	18.5	11.0	14.3
		JUNE			JULY			AUGUST			SEPTEMBER	
1	16.0	14.0	15.0	24.0	21.5	22.5	---	---	---	21.0	19.0	20.0
2	15.0	13.5	14.5	24.5	23.0	23.5	---	---	---	22.0	20.0	21.0
3	16.5	14.0	15.0	24.5	23.5	24.0	---	---	---	22.5	21.5	21.5
4	17.5	15.0	16.5	24.5	23.5	24.0	---	---	---	23.5	21.5	22.5
5	18.5	17.0	17.5	24.5	23.0	23.5	---	---	---	23.5	22.0	22.5
6	19.0	17.0	18.0	24.0	21.5	23.0	---	---	---	23.0	21.5	22.5
7	21.5	18.0	19.5	22.5	20.0	21.0	---	---	---	22.0	20.0	21.0
8	22.5	20.5	21.5	20.5	19.5	20.0	---	---	---	20.5	18.5	19.5
9	22.0	20.5	21.5	21.0	19.5	20.0	---	---	---	19.5	18.0	18.5
10	21.0	18.5	20.0	22.0	20.5	21.0	---	---	---	20.0	18.0	18.5
11	19.0	17.0	18.0	23.5	21.5	22.5	---	---	---	20.5	18.5	19.0
12	19.0	16.5	18.0	24.0	22.5	23.5	---	---	---	21.0	18.5	20.0
13	21.5	19.0	20.0	25.5	23.5	24.0	---	---	---	21.5	19.5	20.5
14	22.0	20.5	21.0	25.5	23.5	24.5	---	---	---	21.5	20.5	21.0
15	22.0	20.5	21.5	25.5	23.5	24.5	---	---	---	21.5	20.0	21.0
16	22.0	20.5	21.5	25.5	23.5	24.5	---	---	---	20.5	18.5	19.5
17	22.0	21.0	21.5	26.0	23.5	25.0	---	---	---	19.5	17.5	18.5
18	22.0	20.5	21.5	25.5	23.5	24.5	---	---	---	19.5	17.5	18.5
19	21.5	20.0	21.0	25.5	23.5	24.5	---	---	---	20.0	18.0	19.0
20	21.0	19.5	20.0	27.0	24.5	25.0	---	---	---	20.5	18.5	19.5
21	21.5	19.5	20.5	28.0	25.5	26.5	19.5	18.0	18.5	20.0	19.0	19.5
22	21.5	19.5	20.0	28.5	26.5	27.5	19.5	18.0	19.0	20.0	18.5	19.5
23	21.5	19.0	20.0	27.5	25.0	26.0	20.0	18.5	19.0	20.5	18.5	19.5
24	20.5	18.5	19.5	25.5	23.5	24.5	20.5	19.0	20.0	19.5	18.0	19.0
25	19.0	17.5	18.5	24.0	23.0	23.5	20.5	19.0	20.0	18.0	16.5	17.5
26	19.5	17.5	18.5	24.5	22.5	23.5	20.5	19.5	20.0	18.0	16.0	17.0
27	19.0	17.5	18.0	24.5	22.5	23.5	21.5	20.0	20.5	18.5	16.5	17.5
28	19.0	17.5	18.0	24.0	22.5	23.5	20.5	19.0	20.0	18.0	16.0	17.0
29	20.5	17.5	19.0	24.0	22.5	23.0	20.5	19.0	19.5	17.0	15.5	16.0
30	22.5	19.5	21.0	---	---	---	20.0	18.5	19.0	16.0	14.5	15.5
31	---	---	---	---	---	---	20.0	18.5	19.0	---	---	---
MONTH	22.5	13.5	19.2	28.5	19.5	23.7	21.5	18.0	19.5	23.5	14.5	19.4
YEAR	28.5	0.0	9.2									

05341500 APPLE RIVER NEAR SOMERSET, WI

LOCATION.--Lat 45°09'27", long 92°42'59", in NE ¼ SE ¼ sec.21, T.31 N., R.19 W., St. Croix County, Hydrologic Unit 07030005, at powerplant of Northern States Power Co., 3.5 mi downstream from Somerset.

DRAINAGE AREA.--579 mi^2.

PERIOD OF RECORD.--January 1901 to June 1914 (monthly discharge only), July 1914 to September 1970, October 1986 to current year.

REVISED RECORDS.--WSP 1388: 1929, 1933. WDR-87-1: Drainage area.

GAGE.--Headwater and tailwater gages read hourly.

REMARKS.--Records of daily discharge computed on the basis of gate openings, head, and plant efficiency. Flow regulated by many powerplants upstream, but service ponds are small and monthly flows are only slightly affected.

COOPERATION.--Records of daily discharge furnished by Northern States Power Company and reviewed by Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	328	503	406	279	361	373	1,210	499	877	345	283	257
2	335	434	400	423	385	343	1,650	495	902	296	305	277
3	312	416	458	477	373	409	931	507	788	273	324	264
4	314	406	460	299	385	454	781	496	832	357	378	282
5	333	405	401	240	358	419	795	486	877	364	302	274
6	336	408	397	265	396	455	811	448	832	382	342	462
7	342	359	414	352	397	468	716	449	839	363	450	510
8	312	365	414	326	396	407	647	444	877	370	377	394
9	267	439	400	385	373	441	497	423	740	380	247	418
10	285	463	421	388	381	491	452	431	832	376	227	379
11	263	445	300	391	383	409	470	439	723	416	242	410
12	317	419	229	401	391	376	485	382	760	398	341	382
13	378	460	387	389	384	491	485	360	710	419	320	317
14	336	504	399	385	384	429	498	312	562	344	215	289
15	401	409	452	366	361	463	570	318	562	299	187	287
16	399	454	414	387	352	419	418	460	562	334	265	477
17	334	465	402	388	400	418	442	469	567	300	243	538
18	438	432	419	375	385	400	439	557	643	233	286	496
19	602	468	394	286	387	441	479	518	571	220	354	547
20	364	472	347	329	396	432	473	470	391	210	289	490
21	407	442	395	389	385	425	638	470	516	244	213	442
22	343	409	395	363	385	356	669	470	462	273	192	480
23	333	505	354	359	377	385	638	562	547	253	231	409
24	318	398	359	325	371	389	655	637	425	215	193	415
25	309	356	305	376	375	530	685	812	378	243	184	397
26	334	384	401	370	369	548	564	812	413	243	185	322
27	377	441	479	379	372	865	721	812	376	286	355	349
28	374	320	404	368	373	1,040	560	898	363	271	377	386
29	354	368	411	306	415	1,440	638	941	349	228	286	368
30	452	397	374	327	---	1,390	493	941	375	283	278	336
31	435	---	368	342	---	1,300	---	921	---	279	281	---
TOTAL	11,032	12,746	12,159	11,035	11,050	17,206	19,510	17,239	18,651	9,497	8,752	11,654
MEAN	356	425	392	356	381	555	650	556	622	306	282	388
MAX	602	505	479	477	415	1,440	1,650	941	902	419	450	547
MIN	263	320	229	240	352	343	418	312	349	210	184	257
CFSM	0.61	0.73	0.68	0.61	0.66	0.96	1.12	0.96	1.07	0.53	0.49	0.67
IN.	0.71	0.82	0.78	0.71	0.71	1.11	1.25	1.11	1.20	0.61	0.56	0.75

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1901 - 2004, BY WATER YEAR (WY)

MEAN	298	294	259	241	247	390	568	442	395	290	249	299
MAX	811	727	616	519	479	730	1,361	1,069	1030	582	704	808
(WY)	(2003)	(1997)	(1997)	(1997)	(2000)	(1946)	(2001)	(2003)	(1905)	(2003)	(1995)	(1962)
MIN	104	135	123	124	120	151	197	140	81.7	69.9	74.2	89.8
(WY)	(1933)	(1934)	(1934)	(1938)	(1934)	(1934)	(1930)	(1934)	(1934)	(1934)	(1934)	(1933)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1914 - 2004	
ANNUAL TOTAL	181,293		160,531			
ANNUAL MEAN	497		439		330	
HIGHEST ANNUAL MEAN					563	1996
LOWEST ANNUAL MEAN					144	1934
HIGHEST DAILY MEAN	2,450	May 15	1,650	Apr 2	2,650	Apr 26, 2001
LOWEST DAILY MEAN	223	Sep 9	184	Aug 25	7.0 (a)	Aug 21, 1927
ANNUAL SEVEN-DAY MINIMUM	261	Sep 5	212	Aug 20	49	Aug 2, 1933
ANNUAL RUNOFF (CFSM)	0.858		0.758		0.57	
ANNUAL RUNOFF (INCHES)	11.65		10.31		7.74	
10 PERCENT EXCEEDS	747		649		560	
50 PERCENT EXCEEDS	409		396		263	
90 PERCENT EXCEEDS	305		279		149	

(a) Also occurred Sept. 30, 1929, July 19, 1932, and Aug. 2, 3, 1933

LOCATION.--Lat 44°49'51", long 92°43'59", in NE ¼ NW ¼ sec.18, T.27 N., R.19 W., Pierce County, Hydrologic Unit 07030005, on left bank, 50 ft upstream from County Trunk Highway F, 1.9 mi upstream from mouth, 4.8 mi downstream from Lake Louise Dam, and 5.5 mi west of River Falls.

DRAINAGE AREA.--165 mi^2.

PERIOD OF RECORD.--October 1916 to September 1921 (monthly discharge for some periods published in WSP 1308), October 1998 to September 1999, July 2002 to current year.

REVISED RECORDS.--WSP 1308. WDR WI-99-1: Drainage area. WDR WI-02-1: Statistics table.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 690 ft above NGVD of 1929, from topographic map. Prior to Oct. 1, 1921, recording gage near present site at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109	108	108	e80	e95	214	117	105	149	105	113	97
2	110	108	105	e87	e99	441	115	104	138	104	105	96
3	109	111	107	e84	e99	336	115	104	120	106	102	95
4	109	114	107	e81	e97	213	113	103	116	122	101	94
5	108	113	107	e78	e97	165	111	103	118	109	99	113
6	108	110	107	e73	e96	128	115	103	118	109	97	116
7	106	108	108	e78	e99	120	112	101	115	113	100	100
8	106	107	111	e81	e98	113	111	101	112	105	100	91
9	106	107	113	e85	e92	109	109	122	177	106	99	101
10	109	109	111	e92	e91	e100	108	135	167	104	98	97
11	116	111	e110	e92	e91	e100	107	111	142	149	99	95
12	116	114	e100	e92	e91	e100	107	111	148	124	99	96
13	114	110	e100	e91	e89	e100	107	134	130	107	97	94
14	110	108	e100	e91	e88	107	107	138	117	105	96	115
15	109	111	e100	e91	e87	104	106	113	114	104	96	223
16	108	111	e98	e91	e86	106	108	108	110	104	113	150
17	108	113	e96	e91	e88	137	106	119	111	101	105	115
18	108	e130	e95	e84	e88	190	111	112	109	101	100	108
19	108	e120	e94	e80	e91	236	134	107	107	101	98	105
20	109	e110	e94	e76	e95	339	119	118	106	101	96	103
21	109	e110	e94	e78	e94	232	125	123	106	100	95	102
22	110	108	e93	e84	e93	142	122	120	105	99	97	102
23	110	111	e88	e87	e92	132	113	149	106	97	95	103
24	110	109	e82	e88	e93	166	108	148	107	95	96	103
25	109	108	e78	e90	e92	189	130	119	108	96	101	103
26	108	108	e78	e94	e92	200	124	113	107	96	101	101
27	109	108	e78	e95	e93	152	111	140	108	95	97	100
28	111	107	e82	e93	e95	151	111	128	108	99	97	99
29	113	107	e77	e94	e100	138	108	139	107	113	97	99
30	111	108	e78	e91	---	125	107	156	106	103	102	100
31	109	---	e78	e94	---	120	---	175	---	103	97	---
TOTAL	3,395	3,317	2,977	2,686	2,701	5,205	3,397	3,762	3,592	3,276	3,088	3,216
MEAN	110	111	96.0	86.6	93.1	168	113	121	120	106	99.6	107
MAX	116	130	113	95	100	441	134	175	177	149	113	223
MIN	106	107	77	73	86	100	106	101	105	95	95	91
CFSM	0.66	0.67	0.58	0.53	0.56	1.02	0.69	0.74	0.73	0.64	0.60	0.65
IN.	0.77	0.75	0.67	0.61	0.61	1.17	0.77	0.85	0.81	0.74	0.70	0.73

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1917 - 2004, BY WATER YEAR (WY)

MEAN	98.0	99.5	91.1	80.3	81.7	213	103	102	121	88.1	90.2	88.1
MAX	165	131	119	108	115	469	135	166	167	133	136	126
(WY)	(2003)	(1999)	(2003)	(2003)	(1999)	(1919)	(2003)	(2003)	(1920)	(2003)	(2002)	(2002)
MIN	65.2	62.5	72.9	60.0	55.0	87.9	78.8	69.1	74.3	43.5	27.4	41.9
(WY)	(1918)	(1917)	(1917)	(1918)	(1918)	(1921)	(1918)	(1917)	(1921)	(1920)	(1920)	(1920)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1917 - 2004	
ANNUAL TOTAL	45,504		40,612			
ANNUAL MEAN	125		111		104	
HIGHEST ANNUAL MEAN					133	2003
LOWEST ANNUAL MEAN					74.3	1921
HIGHEST DAILY MEAN	1,130	Jun 25	441	Mar 2	2,870	Mar 15, 1920
LOWEST DAILY MEAN	(a)77	Dec 29	(a)73	Jan 6	13	Aug 30, 1920
ANNUAL SEVEN-DAY MINIMUM	(a)78	Dec 25	(a)78	Dec 25	19	Aug 5, 1920
MAXIMUM PEAK FLOW			516	Mar 2	(b)4,760	Mar 15, 1920
MAXIMUM PEAK STAGE			11.31	Mar 2	(c)7.98	Mar 15, 1920
INSTANTANEOUS LOW FLOW			64	Sep 8	11	Aug 30, 1920
ANNUAL RUNOFF (CFSM)	0.756		0.672		0.629	
ANNUAL RUNOFF (INCHES)	10.26		9.16		8.55	
10 PERCENT EXCEEDS	133		133		127	
50 PERCENT EXCEEDS	111		107		91	
90 PERCENT EXCEEDS	103		91		60	

(a) Ice affected (b) From rating curve extended above 1,000 ft^3/s, based on contracted-opening measurement of peak flow
(c) Datum then in use (e) Estimated due to ice effect or missing record

05344500 MISSISSIPPI RIVER AT PRESCOTT, WI

LOCATION.--Lat 44°44'45", long 92°48'00", in sec. 9, T.26 N., R.20 W., Pierce County, Hydrologic Unit 07040001,on left bank at Prescott, 200 ft downstream from St. Croix River, 300 ft south of Chicago, Burlington & Quincy Railroad bridge, 800 ft south of bridge on U.S. Highway 10, and at mile 811.4 upstream from Ohio River.

DRAINAGE AREA.--44,800 mi^2 (approximately).

PERIOD OF RECORD.--June 1928 to current year.

REVISED RECORDS.--WSP 1508: 1941. WRD MN-74: 1973.

GAGE.--Water-stage recorder. Datum of gage is 649.50 ft above sea level (NGVD of 1929). Prior to Aug. 2, 1932, nonrecording gage at railroad bridge 300 ft upstream at following datums: June 3, 1928 to Sept. 30, 1929, 19.27 ft higher; Oct. 1, 1929 to Sept. 30, 1930, 17.68 ft higher; Oct. 1, 1930 to Aug. 1, 1932, 19.28 ft higher. Aug. 2, 1932 to Oct. 30, 1938, water-stage recorder at present site at datum 19.28 ft higher; Nov. 1, 1938 to Sept. 7, 1971, water-stage recorder at present site at datum 50.00 ft lower. Auxiliary water-stage recorder 10.7 mi downstream from base gage is used in discharge computations.

REMARKS.--Records good except for those determined by flow routing, which are estimated and rated fair to poor. Discharges below a stage of about 27 ft may be computed by routing flows from the Mississippi River at St. Paul (05331000) and St. Croix River at St. Croix Falls, WI (05340500). In the 2004 water year, discharges for the periods Oct. 1 to Mar. 24, May 5-16, and July 24 to Sep. 13 were obtained by routing. Some regulation by reservoirs, navigation dams, and power plants at low and medium stages.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e6,810	e7,750	e7,850	e7,820	e5,590	e6,790	30,700	20,900	41,700	19,800	e12,300	e8,630
2	e6,920	e8,050	e7,970	e7,160	e5,650	e7,160	31,400	19,200	46,600	16,700	e12,300	e8,720
3	e6,390	e8,560	e8,230	e7,250	e5,910	e7,430	31,200	17,800	51,300	16,500	e11,900	e8,760
4	e6,600	e8,430	e7,930	e7,180	e5,950	e7,950	30,700	17,400	55,100	16,300	e11,600	e8,370
5	e6,500	e8,000	e8,130	e7,160	e5,540	e7,960	29,600	e16,600	57,400	15,500	e12,000	e7,530
6	e6,550	e8,540	e8,520	e6,900	e5,940	e8,460	28,500	e14,900	58,300	16,200	e11,400	e7,720
7	e6,240	e8,320	e8,340	e6,140	e6,160	e8,590	27,600	e14,500	57,600	18,700	e11,000	e9,290
8	e6,190	e8,310	e8,600	e5,710	e6,240	e8,670	26,300	e14,100	57,400	19,000	e11,200	e10,300
9	e6,230	e7,050	e8,380	e5,730	e6,120	e8,770	24,100	e14,000	57,400	18,900	e12,600	e12,100
10	e6,210	e6,300	e8,410	e6,220	e6,200	e8,380	23,000	e12,700	56,700	20,000	e12,800	e12,300
11	e6,190	e7,490	e7,870	e6,360	e6,270	e9,000	22,400	e12,800	55,300	22,300	e13,100	e11,500
12	e6,610	e8,380	e6,970	e6,720	e6,300	e8,870	21,200	e12,100	55,300	24,000	e13,100	e12,000
13	e6,410	e7,470	e4,830	e6,950	e6,250	e8,980	19,500	e12,500	55,400	25,200	e13,000	e12,100
14	e6,900	e7,710	e4,900	e6,970	e6,350	e9,000	18,800	e11,800	55,900	26,400	e12,400	14,700
15	e6,980	e8,530	e5,590	e6,680	e6,350	e10,700	18,500	e12,100	55,900	27,500	e11,900	17,700
16	e6,950	e8,260	e6,830	e6,430	e6,230	e11,700	18,600	e11,600	56,200	28,100	e11,400	17,100
17	e6,530	e8,310	e8,050	e6,650	e5,880	e11,400	17,600	14,500	55,800	27,800	e11,100	16,000
18	e6,360	e7,850	e8,010	e6,510	e6,280	e12,000	16,200	16,400	54,800	26,400	e10,500	20,900
19	e5,970	e8,690	e7,300	e6,560	e6,100	e12,100	19,100	17,600	53,000	24,400	e9,780	24,400
20	e6,900	e8,700	e7,660	e5,950	e6,310	e11,300	18,800	19,300	51,100	22,000	e9,630	26,400
21	e7,260	e8,930	e7,300	e5,450	e6,610	e13,000	20,400	20,200	49,300	19,100	e9,640	28,100
22	e7,090	e8,880	e7,460	e5,610	e6,430	e13,600	23,000	21,400	46,400	18,000	e9,500	29,100
23	e7,250	e8,800	e7,860	e5,710	e6,190	e13,800	23,800	22,500	43,100	17,200	e9,180	30,200
24	e6,900	e8,730	e7,780	e5,850	e6,360	e14,200	25,600	24,200	40,000	e16,200	e8,560	31,700
25	e6,700	e7,260	e7,740	e5,920	e6,490	15,300	26,900	26,700	36,900	e15,200	e8,380	32,600
26	e6,840	e6,840	e7,440	e5,770	e6,440	17,600	27,200	28,800	33,500	e14,400	e8,430	32,700
27	e6,480	e6,600	e7,430	e6,200	e6,340	19,600	25,700	30,000	30,600	e14,600	e8,630	32,700
28	e6,850	e6,660	e7,720	e6,170	e6,430	20,900	24,800	32,100	28,100	e13,600	e9,190	32,300
29	e7,500	e7,330	e8,370	e6,440	e6,580	24,700	24,000	34,300	24,300	e13,100	e9,570	31,200
30	e7,150	e7,190	e8,200	e6,160	---	28,200	22,400	36,300	22,200	e12,400	e9,360	29,800
31	e7,440	---	e8,180	e5,570	---	29,500	---	38,800	---	e12,300	e8,870	---
TOTAL	207,900	237,920	235,850	197,900	179,490	395,610	717,600	618,100	1,442,600	597,800	334,320	576,920
MEAN	6,706	7,931	7,608	6,384	6,189	12,760	23,920	19,940	48,090	19,280	10,780	19,230
MAX	7,500	8,930	8,600	7,820	6,610	29,500	31,400	38,800	58,300	28,100	13,100	32,700
MIN	5,970	6,300	4,830	5,450	5,540	6,790	16,200	11,600	22,200	12,300	8,380	7,530
AC-FT	412,400	471,900	467,800	392,500	356,000	784,700	1,423,000	1,226,000	2,861,000	1,186,000	663,100	1,144,000
CFSM	0.15	0.18	0.17	0.14	0.14	0.28	0.53	0.45	1.07	0.43	0.24	0.43
IN.	0.17	0.20	0.20	0.16	0.15	0.33	0.60	0.51	1.20	0.50	0.28	0.48

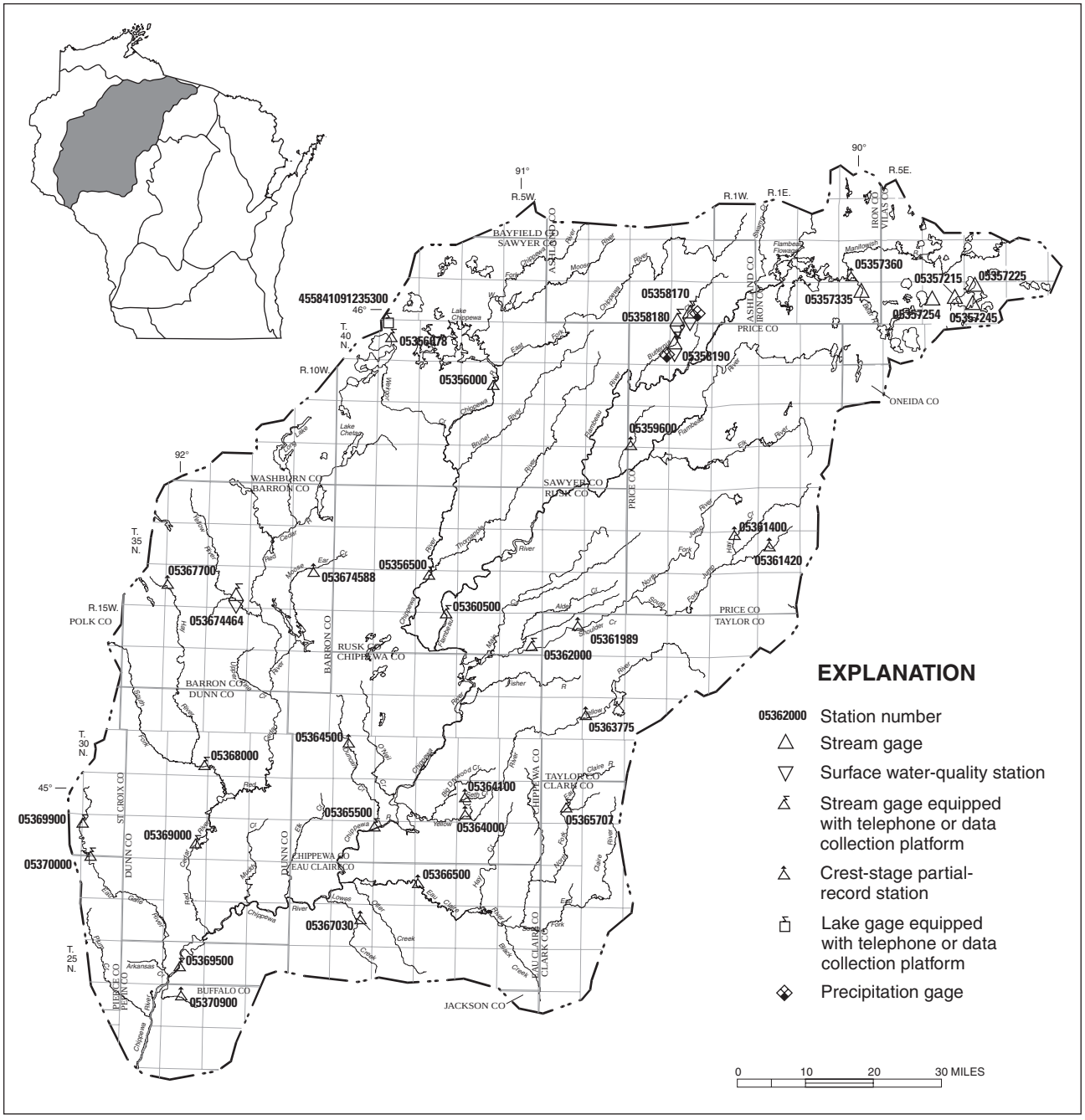
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2004, BY WATER YEAR (WY)

MEAN	13,510	13,390	10,110	8,365	8,241	17,150	41,800	32,800	26,620	21,060	13,590	12,930
MAX	49,740	40,360	21,460	16,060	21,390	55,010	122,400	90,100	69,890	87,420	48,350	45,950
(WY)	(1987)	(1972)	(1983)	(1983)	(1966)	(1983)	(2001)	(1986)	(1993)	(1993)	(1993)	(1986)
MIN	3,526	3,874	3,379	3,153	3,519	4,369	7,215	6,304	4,185	3,197	2,366	3,002
(WY)	(1933)	(1977)	(1934)	(1935)	(1934)	(1934)	(1931)	(1931)	(1934)	(1934)	(1934)	(1976)

05344500 MISSISSIPPI RIVER AT PRESCOTT, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1928 - 2004	
ANNUAL TOTAL	6,227,900		5,742,010			
ANNUAL MEAN	17,060		15,690		a18,340	
HIGHEST ANNUAL MEAN					38,540	1986
LOWEST ANNUAL MEAN					4,367	1934
HIGHEST DAILY MEAN	58,900	May 15	58,300	Jun 6	226,000	Apr 18, 1965
LOWEST DAILY MEAN	4,830	Dec 13	4,830	Dec 13	1,380	Jul 13, 1940
ANNUAL SEVEN-DAY MINIMUM	5,760	Sep 6	5,740	Jan 31	2,190	Aug 11, 1936
MAXIMUM PEAK FLOW			58,500	Jun 6	228,000	Apr 18, 1965
MAXIMUM PEAK STAGE			31.97	Jun 6	43.11	Apr 18, 1965
ANNUAL RUNOFF (AC-FT)	12,350,000		11,390,000		13,290,000	
ANNUAL RUNOFF (CFSM)	0.381		0.350		0.409	
ANNUAL RUNOFF (INCHES)	5.17		4.77		5.56	
10 PERCENT EXCEEDS	41,500		31,300		39,400	
50 PERCENT EXCEEDS	8,560		9,600		12,000	
90 PERCENT EXCEEDS	6,760		6,240		5,240	

(a) Median of annual mean discharges is 19,000 ft^3/s
(e) Estimated



Base from U.S. Geological Survey 1:100,000 digital data; modified by Wisconsin Department of Natural Resources. Wisconsin Transverse Mercator projection.

CHIPPEWA RIVER BASIN

05356000 CHIPPEWA RIVER AT BISHOPS BRIDGE, NEAR WINTER, WI

LOCATION.--Lat 45°50'57", long 91°04'44", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.23, T.39 N., R.6 W., Sawyer County, Hydrologic Unit 07050001, on right bank 15 ft upstream from highway bridge on County Trunk Highway G, 3.2 mi downstream from Lake Chippewa Dam, and 3.7 mi northwest of Winter.

DRAINAGE AREA.--790 mi^2.

PERIOD OF RECORD.--February 1912 to current year. March, April, 1912, and December 1912 to April 1913, monthly discharge only published in WSP 1308. Unpublished daily discharges stored from February 1912 to April 1913 from District records.

REVISED RECORDS.--WSP 1438: 1913(M), 1915-18(M), 1919, 1920-23(M), 1924, 1925(M), 1927(M), 1928, 1929-30(M), 1939(M). WDR WI-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,256.78 ft above NGVD of 1929 (levels by Wilhelm Engineering Co.). See WSP 1708 or 1728 for history of changes prior to July 23, 1930.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Flow regulated by Moose Lake and Lake Chippewa. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	312	303	e300	299	547	814	445	1,450	2,260	469	465	435
2	317	303	e300	299	546	815	298	1,450	2,250	469	464	435
3	313	303	e300	299	540	815	305	1,450	2,400	469	602	435
4	313	304	300	299	541	815	301	1,450	2,700	472	685	435
5	315	305	301	e300	535	817	297	1,450	2,700	469	683	461
6	317	305	301	e300	535	815	294	1,110	2,700	469	682	455
7	316	304	303	300	535	814	292	918	2,690	469	685	441
8	317	303	303	299	535	813	293	919	2,400	469	692	525
9	317	304	302	299	650	813	414	921	1,910	469	690	532
10	317	305	303	299	855	815	754	883	1,650	469	690	679
11	320	307	e300	299	855	813	954	712	909	469	691	678
12	317	306	e300	299	849	811	1,030	576	921	469	689	678
13	317	305	303	299	845	810	1,670	499	912	468	687	671
14	315	304	303	298	841	810	1,830	498	912	465	686	672
15	317	304	301	299	839	803	1,840	491	919	465	686	703
16	317	304	299	299	837	803	1,280	487	749	461	690	526
17	317	307	299	299	830	802	563	493	469	457	689	356
18	315	312	299	e300	830	800	534	487	468	458	688	356
19	317	307	299	299	829	800	1,250	487	468	459	689	355
20	317	306	299	381	829	798	2,600	487	469	457	687	362
21	315	303	299	550	825	795	5,870	486	469	458	690	443
22	317	303	299	552	825	795	5,990	723	469	455	693	692
23	316	306	299	547	820	799	5,970	928	470	455	689	697
24	317	305	301	547	817	642	5,950	1,530	469	456	690	697
25	317	e300	299	547	816	511	5,570	1,810	469	457	688	693
26	305	303	299	547	815	520	4,400	1,790	469	456	550	691
27	304	303	299	547	813	532	2,800	1,800	469	457	452	689
28	311	303	300	547	812	615	1,920	1,790	469	460	452	686
29	304	303	299	547	811	611	1,900	1,790	469	467	448	575
30	309	303	299	547	---	579	1,630	1,790	469	470	439	376
31	307	---	299	547	---	568	---	1,920	---	465	438	---
TOTAL	9,745	9,133	9,307	12,090	21,557	23,163	59,244	33,575	35,547	14,377	19,449	16,429
MEAN	314	304	300	390	743	747	1,975	1,083	1,185	464	627	548
MAX	320	312	303	552	855	817	5,990	1,920	2,700	472	693	703
MIN	304	300	299	298	535	511	292	486	468	455	438	355

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 2004, BY WATER YEAR (WY)

MEAN	673	825	961	892	760	450	588	807	798	680	618	694
MAX	2,896	1,884	1,910	1,770	1,550	1,097	3,453	2,823	2,950	2,122	2,235	3,769
(WY)	(1986)	(1992)	(1992)	(1983)	(1928)	(1920)	(1922)	(1954)	(1939)	(1996)	(1972)	(1941)
MIN	43.6	143	234	201	194	117	20.0	24.2	39.8	40.3	146	140
(WY)	(1925)	(1925)	(2000)	(1922)	(1918)	(1923)	(1925)	(1923)	(1925)	(1925)	(1970)	(1970)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1912 - 2004	
ANNUAL TOTAL	223,263		263,616			
ANNUAL MEAN	612		720		728	
HIGHEST ANNUAL MEAN					1,174	1996
LOWEST ANNUAL MEAN					258	1923
HIGHEST DAILY MEAN	5,470	May 13	5,990	Apr 22	7,520	Sep 5, 1941
LOWEST DAILY MEAN	239	Aug 15	292	Apr 7	14	(a)Apr 17-20, 1925
ANNUAL SEVEN-DAY MINIMUM	273	Feb 27	297	Apr 2	15	Apr 30, 1925
MAXIMUM PEAK FLOW			6,050	Apr 21	7,520	Sep 4, 1941
MAXIMUM PEAK STAGE			9.95	Apr 21	11.05	Sep 4, 1941
INSTANTANEOUS LOW FLOW			290	(b)Jan 14, 16	14	(a)Apr 17-20, 1925
10 PERCENT EXCEEDS	1,020		1,450		1,400	
50 PERCENT EXCEEDS	320		470		580	
90 PERCENT EXCEEDS	277		300		174	

(a) Also occurred May 1-5, 1925
(b) Also occurred April 2, and April 5-9
(e) Estimated

05356500 CHIPPEWA RIVER NEAR BRUCE, WI

LOCATION.--Lat 45°27'06", long 91°15'40", in SE ¼ SW ¼ SE ¼ sec.5, T.34 N., R.7 W., Rusk County, Hydrologic Unit 07050001, on right bank 1.0 mi east of Bruce and 1.0 mi downstream from Thornapple River.

DRAINAGE AREA.--1,650 mi^2.

PERIOD OF RECORD.--December 1913 to current year.

REVISED RECORDS.--WSP 875: 1936-38. WSP 1308: 1922, 1937(M). WSP 1508: 1914-26(M), 1927, 1928-31(M), 1932, 1933(M), 1934-36, 1938. WDR WI-81-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,059.62 ft above NGVD of 1929. Prior to May 28, 1935, nonrecording gage at railroad bridge 0.8 mi upstream at datum 2.30 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Flow from 48 percent of the drainage area regulated by Moose Lake and Lake Chippewa. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e520	686	e670	e550	e800	e1,200	4,850	2,670	8,020	778	843	685
2	e520	667	e700	e530	e790	e1,200	4,350	2,460	7,540	779	793	710
3	e520	648	e700	e530	e780	e1,200	4,050	2,320	5,930	774	784	683
4	524	662	e700	e520	e780	e1,200	4,010	2,190	4,930	794	830	617
5	530	690	e700	e500	e800	e1,300	3,390	2,130	4,420	861	944	738
6	527	677	e650	e480	e800	e1,300	3,030	2,070	4,540	863	937	1,490
7	514	e640	e630	e480	e800	e1,300	2,950	1,540	4,350	840	911	1,260
8	513	e700	e600	e490	e800	e1,200	2,510	1,550	3,960	842	970	1,020
9	493	e800	e600	e510	e790	e1,300	2,320	1,500	3,820	816	1,040	953
10	478	e700	e600	e540	e870	e1,400	2,020	1,680	3,970	782	1,030	992
11	499	672	e600	e530	e1,000	e1,400	2,210	1,640	3,130	760	1,050	1,020
12	694	619	e600	e530	e1,100	e1,300	2,150	1,470	2,430	794	1,080	989
13	682	e570	e600	e540	e1,100	e1,400	2,120	1,730	2,580	755	989	972
14	631	e600	e610	e540	e1,100	e1,400	2,610	2,890	2,230	781	980	930
15	603	e600	e660	e540	e1,100	e1,500	2,620	2,910	1,980	840	949	1,170
16	569	593	e700	e540	e1,100	e1,500	2,540	2,270	1,830	806	980	1,470
17	572	599	e660	e550	e1,100	e1,600	1,630	1,900	1,450	776	1,120	1,180
18	562	691	e630	e550	e1,100	e1,600	1,370	1,850	1,180	760	1,010	903
19	555	812	e620	e530	e1,200	e1,500	2,670	1,610	1,080	774	982	859
20	545	775	e610	e550	e1,200	e1,500	5,330	1,430	1,030	792	953	748
21	537	723	e600	e550	e1,200	e1,500	6,740	1,320	974	786	927	692
22	553	687	e600	e780	e1,200	e1,500	8,700	1,560	947	772	918	801
23	562	683	e600	e800	e1,200	1,510	8,340	2,550	926	780	898	916
24	550	e620	e600	e770	e1,200	1,140	7,720	4,230	887	744	898	907
25	455	e600	e600	e800	e1,200	952	7,520	4,580	853	687	903	966
26	574	e700	e600	e830	e1,200	938	7,090	3,750	828	680	884	954
27	576	e750	e600	e840	e1,200	1,410	5,660	3,630	818	684	767	971
28	592	e710	e620	e800	e1,200	3,350	3,660	4,320	830	676	714	1,000
29	642	e700	e630	e780	e1,200	6,640	3,200	3,790	808	726	649	886
30	679	e700	e600	e770	---	7,030	3,080	3,330	790	826	652	775
31	694	---	e580	e780	---	5,850	---	5,310	---	867	630	---
TOTAL	17,465	20,274	19,470	19,030	29,910	59,120	120,440	78,180	79,061	24,195	28,015	28,257
MEAN	563	676	628	614	1,031	1,907	4,015	2,522	2,635	780	904	942
MAX	694	812	700	840	1,200	7,030	8,700	5,310	8,020	867	1,120	1,490
MIN	455	570	580	480	780	938	1,370	1,320	790	676	630	617

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2004, BY WATER YEAR (WY)

MEAN	1,277	1,405	1,366	1,180	1,059	1,461	2,781	2,006	1,749	1,269	1,051	1,348
MAX	5,666	3,662	2,842	2,200	2,100	3,964	8,007	5,971	7,483	3,990	2,915	7,423
(WY)	(1986)	(1992)	(1992)	(1942)	(1971)	(1973)	(1916)	(1954)	(1943)	(1968)	(1972)	(1941)
MIN	296	459	442	356	338	404	590	390	411	317	364	338
(WY)	(1934)	(1990)	(1990)	(1922)	(1918)	(1923)	(1987)	(1925)	(1949)	(1925)	(1964)	(1976)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1914 - 2004	
ANNUAL TOTAL	499,442		523,417			
ANNUAL MEAN	1,368		1,430		1,493	
HIGHEST ANNUAL MEAN					2,290	1986
LOWEST ANNUAL MEAN					666	1934
HIGHEST DAILY MEAN	14,700	May 13	8,700	Apr 22	24,900	Sep 1, 1941
LOWEST DAILY MEAN	400	Aug 16	455	Oct 25	155	Jun 10, 1932
ANNUAL SEVEN-DAY MINIMUM	502	Aug 30	(a)501	Jan 3	218	Aug 3, 1925
MAXIMUM PEAK FLOW			8,790	Apr 22	(b)29,000	Sep 17, 1994
MAXIMUM PEAK STAGE			9.84	Apr 22	(c)20.46	Sep 1, 1941
INSTANTANEOUS LOW FLOW			430	Oct 25	155	Jun 10, 1932
10 PERCENT EXCEEDS	2,670		3,240		2,720	
50 PERCENT EXCEEDS	753		848		1,100	
90 PERCENT EXCEEDS	527		552		502	

(a) Ice affected
(b) From rating curve extended above 25,100 ft^3/s, gage height 18.12 ft
(c) From floodmarks
(e) Estimated due to ice effect or missing record

05357215 ALLEQUASH CREEK AT CTH M, NEAR BOULDER JUNCTION, WI

LOCATION.--Lat 46°01'26", long 89°39'10" (revised), in NW¼ NW¼ sec.20, T.41 N., R.7 E., Vilas County, Hydrologic Unit 07050002, on right bank approximately 400 ft downstream from County Trunk Highway M, 6.1 mi south of Boulder Junction.

DRAINAGE AREA.--8.43 mi^2.

PERIOD OF RECORD.--May 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,620 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11).

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	20	e27	e9.0	e8.8	e10	18	18	14	e21	e11	e6.4
2	15	20	e23	e8.9	e9.0	e10	17	17	13	e27	e11	e6.0
3	16	20	e21	e8.9	e9.3	e10	16	15	13	e18	e12	e6.7
4	15	20	e19	e8.9	e9.9	e10	16	15	13	e15	e12	e6.3
5	14	19	e18	e8.9	e9.2	e11	15	14	12	e13	e13	e6.6
6	12	18	e17	e8.9	e8.9	e11	15	14	12	e11	e13	e8.0
7	11	17	e16	e8.9	e8.6	e11	15	13	e11	e9.0	e13	e8.0
8	7.9	17	e15	e8.9	e8.6	e11	16	12	e9.8	e12	e15	e8.1
9	8.3	15	e17	e8.9	e8.5	e11	16	11	e9.2	e8.9	e17	e7.4
10	8.5	16	e18	e8.8	e8.6	e11	15	12	e8.9	e8.9	e19	e8.0
11	12	15	e18	e8.8	e8.6	e13	15	12	e9.1	e9.0	e20	e10
12	17	14	e17	e8.8	e8.7	e15	13	12	e12	e8.2	e21	e8.9
13	19	14	e16	e8.8	e8.7	e16	13	15	e14	e9.4	e19	e8.1
14	18	13	e16	e10	e8.7	e15	13	15	e15	e12	e18	e9.5
15	18	13	e15	e9.9	e8.7	e15	12	14	e13	e8.5	e18	e11
16	14	15	e14	e9.7	e8.6	e15	11	13	e10	e8.5	e15	e11
17	13	14	e13	e9.5	e8.5	e14	11	13	e9.8	e10	e14	e10
18	13	21	e13	e9.3	e8.6	e14	19	12	e9.4	e9.3	e13	e9.4
19	14	23	e12	e9.1	e9.8	e14	40	11	e9.0	e12	e15	e8.3
20	14	23	e11	e9.1	e11	e14	39	11	e8.4	e12	e14	e8.1
21	15	22	e10	e9.1	e11	e14	39	11	e8.4	e9.9	e12	e7.8
22	16	e20	e9.6	e9.1	e11	e14	33	10	e8.5	e9.9	e9.5	e7.4
23	16	e20	e9.4	e8.9	e11	e14	27	12	e9.7	e9.4	e9.2	e7.0
24	17	e20	e9.3	e8.9	e11	14	25	12	e11	e9.4	e8.2	e6.5
25	18	e19	e9.3	e8.9	e11	14	24	11	e14	e9.4	e7.5	e6.3
26	18	e17	e9.3	e8.9	e11	16	23	11	e11	e11	e7.3	e6.1
27	18	e17	e9.3	e8.9	e11	17	21	12	e11	e11	e6.8	e5.8
28	20	e16	e9.2	e8.8	e11	18	20	11	e11	e10	e6.4	e5.5
29	20	e22	e9.2	e8.7	e11	20	19	11	e11	e11	e6.0	e5.4
30	20	e33	e9.1	e8.7	---	20	19	11	e16	e12	e6.2	e5.3
31	20	---	e9.1	e8.8	---	18	---	13	---	e11	e6.5	---
TOTAL	472.7	553	438.8	279.7	278.3	430	595	394	337.2	356.7	388.6	228.9
MEAN	15.2	18.4	14.2	9.02	9.60	13.9	19.8	12.7	11.2	11.5	12.5	7.63
MAX	20	33	27	10	11	20	40	18	16	27	21	11
MIN	7.9	13	9.1	8.7	8.5	10	11	10	8.4	8.2	6.0	5.3
CFSM	1.81	2.19	1.68	1.07	1.14	1.65	2.35	1.51	1.33	1.36	1.49	0.91
IN.	2.09	2.44	1.94	1.23	1.23	1.90	2.63	1.74	1.49	1.57	1.71	1.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2004, BY WATER YEAR (WY)

MEAN	11.9	12.8	11.5	10.2	10.0	11.4	14.9	12.5	11.0	11.9	9.66	9.37
MAX	22.7	20.2	14.5	14.9	12.8	15.8	19.8	19.3	14.9	17.1	12.5	14.8
(WY)	(1992)	(1992)	(1998)	(1998)	(1998)	(1997)	(2004)	(1996)	(1993)	(1997)	(2004)	(1994)
MIN	4.84	8.55	8.36	8.77	8.80	8.53	9.50	6.75	6.53	7.52	6.91	4.53
(WY)	(2000)	(1999)	(2000)	(2002)	(1992)	(1999)	(1999)	(2000)	(2001)	(2003)	(1998)	(1999)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1991 - 2004	
ANNUAL TOTAL	4,444.2		4,752.9			
ANNUAL MEAN	12.2		13.0		11.4	
HIGHEST ANNUAL MEAN					14.4	1997
LOWEST ANNUAL MEAN					9.15	2001
HIGHEST DAILY MEAN	(a)33	Nov 30	40	Apr 19	56	Oct 5, 1991
LOWEST DAILY MEAN	(b)1.4	Aug 2	(c)5.3	Sep 30	0.93	Aug 8, 1992
ANNUAL SEVEN-DAY MINIMUM	(b)1.8	Jul 28	(c)5.8	Sep 24	1.1	Aug 2, 1992
MAXIMUM PEAK FLOW			(d)44	Apr 20	(f)79	Oct 5, 1991
MAXIMUM PEAK STAGE			(c)2.63	Sep 15	(h)2.77	Mar 25, 1996
INSTANTANEOUS LOW FLOW			(g)		0.69	Aug 7, 1992
ANNUAL RUNOFF (CFSM)	1.44		1.54		1.36	
ANNUAL RUNOFF (INCHES)	19.61		20.97		18.41	
10 PERCENT EXCEEDS	19		19		16	
50 PERCENT EXCEEDS	12		12		11	
90 PERCENT EXCEEDS	6.8		8.5		7.4	

(a) Ice affected
(b) Due to storage from beaver dam upstream of gage
(c) Backwater from beaver dam
(d) Gage height, 1.93 ft
(e) Estimated due to beaver activity, ice effect, or missing record
(f) Gage height, 2.36 ft
(g) Unknown
(h) Ice jam

05357225 STEVENSON CREEK, AT COUNTY TRUNK HIGHWAY M, NEAR BOULDER JUNCTION, WI

LOCATION.--Lat 46°03'41", long 89°38'50" (revised), in NW $^1/_4$ SE $^1/_4$ sec.5, T.41 N., R.7 E., Vilas County, Hydrologic Unit 07050002, at County Highway M, 3.6 mi south of Boulder Junction.

DRAINAGE AREA.--7.96 mi^2.

PERIOD OF RECORD.--May 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,620 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). There is a small dam 2.5 miles upstream of the gage which occasionally affects discharge.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e4.0	2.3	e3.1	e2.8	e2.0	e3.2	3.6	2.1	4.8	9.9	2.7	4.0
2	e2.6	2.4	e3.1	e2.8	e2.0	e3.2	3.7	2.0	3.8	5.9	2.9	3.9
3	e2.8	2.4	e3.1	e2.7	e2.0	e3.1	3.4	1.9	3.0	5.1	3.1	3.8
4	e1.9	2.6	e3.1	e2.6	e2.0	3.0	3.3	1.9	2.6	4.9	3.8	3.8
5	e1.5	2.6	e3.2	e2.5	e2.1	2.8	3.5	1.9	2.6	4.6	3.8	3.9
6	e1.2	2.4	e3.2	e2.5	e2.1	2.7	4.0	2.0	2.5	4.4	3.7	4.7
7	e1.1	2.4	e3.2	e2.4	e2.1	2.7	3.7	1.9	2.8	4.4	3.8	4.2
8	e1.0	2.4	e3.2	e2.3	e2.1	2.6	5.0	1.9	2.8	3.7	3.8	4.1
9	e1.0	2.4	e3.2	e2.2	e2.1	2.6	3.9	2.0	2.6	3.3	4.1	3.9
10	e1.0	2.5	e3.2	e2.2	e2.1	2.6	3.5	2.0	2.4	3.1	6.7	3.8
11	0.93	2.6	e3.2	e2.2	e2.1	2.7	3.4	1.8	2.3	2.8	7.3	3.8
12	1.1	2.6	e3.1	e2.2	e2.1	2.6	3.2	3.6	2.7	2.5	7.0	3.7
13	0.90	2.5	e3.2	e2.2	e2.1	2.6	3.2	4.9	3.1	2.4	6.7	3.6
14	1.0	2.5	e3.2	e2.2	e2.1	2.6	3.3	3.5	3.7	2.0	6.2	3.6
15	1.1	2.7	e3.2	e2.2	e2.1	2.6	3.6	2.9	3.1	1.9	5.8	5.6
16	0.95	2.7	e3.2	e2.2	e2.3	2.5	4.0	2.6	2.5	2.4	5.8	5.2
17	0.74	2.8	e3.4	e2.1	e2.4	2.5	3.4	2.5	2.4	2.8	5.8	4.7
18	0.69	5.3	e3.4	e2.1	e2.5	2.5	7.5	2.3	2.4	2.6	5.8	4.7
19	0.67	3.5	e3.5	e2.1	e2.6	2.5	12	2.1	2.2	2.3	5.6	4.4
20	0.66	3.1	e3.5	e2.1	e2.7	2.5	4.2	2.2	2.1	2.0	5.1	4.2
21	0.65	2.9	e3.5	e2.0	e2.8	2.4	3.6	2.1	2.1	2.7	4.9	4.1
22	0.67	2.9	e3.4	e2.0	e2.8	2.4	3.2	2.2	2.2	2.7	4.8	4.0
23	0.73	3.0	e3.4	e2.0	e2.9	2.4	2.8	3.0	2.6	2.5	4.5	3.9
24	0.73	2.9	e3.4	e2.0	e3.0	2.5	2.5	3.6	7.8	2.7	4.5	4.0
25	0.73	e2.9	e3.5	e2.0	e3.0	2.7	2.6	3.1	30	3.0	4.6	4.0
26	0.75	e2.9	e3.5	e2.0	e3.1	3.6	2.5	3.0	35	3.0	4.5	3.9
27	0.83	e2.9	e3.4	e2.0	e3.1	3.6	2.2	3.4	34	3.0	4.3	3.8
28	0.99	e2.9	e3.3	e2.0	e3.1	6.2	2.2	2.9	32	2.9	4.2	3.8
29	1.0	e2.9	e3.2	e2.0	e3.2	4.8	2.4	2.6	30	3.2	4.0	3.7
30	1.2	e3.0	e3.0	e2.0	---	3.6	2.5	2.7	25	2.9	4.0	3.6
31	1.4	---	e2.9	e2.0	---	3.4	---	4.5	---	3.0	4.0	---
TOTAL	36.52	83.9	101.0	68.6	70.6	91.7	111.9	81.1	257.1	104.6	147.8	122.4
MEAN	1.18	2.80	3.26	2.21	2.43	2.96	3.73	2.62	8.57	3.37	4.77	4.08
MAX	4.0	5.3	3.5	2.8	3.2	6.2	12	4.9	35	9.9	7.3	5.6
MIN	0.65	2.3	2.9	2.0	2.0	2.4	2.2	1.8	2.1	1.9	2.7	3.6
CFSM	0.15	0.35	0.41	0.28	0.31	0.37	0.47	0.33	1.08	0.42	0.60	0.51
IN.	0.17	0.39	0.47	0.32	0.33	0.43	0.52	0.38	1.20	0.49	0.69	0.57

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2004, BY WATER YEAR (WY)

MEAN	2.92	3.42	2.87	2.57	2.71	2.96	3.37	3.34	3.70	3.63	3.42	3.94
MAX	4.02	6.28	4.12	3.53	3.87	4.34	5.28	6.18	8.57	7.50	4.84	6.85
(WY)	(1996)	(1994)	(2003)	(1998)	(1998)	(1992)	(2002)	(1997)	(2004)	(2003)	(1997)	(1992)
MIN	1.18	1.24	1.65	1.93	1.70	1.58	1.29	1.34	1.47	2.27	1.62	2.53
(WY)	(2004)	(2000)	(2001)	(1999)	(1997)	(1995)	(1995)	(2000)	(1992)	(1998)	(1994)	(1995)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1991 - 2004	
ANNUAL TOTAL	1,260.42		1,277.22			
ANNUAL MEAN	3.45		3.49		3.20	
HIGHEST ANNUAL MEAN					3.79	2003
LOWEST ANNUAL MEAN					2.61	1995
HIGHEST DAILY MEAN	24	Jul 3	(a)35	Jun 26	36	Jun 29, 1991
LOWEST DAILY MEAN	0.65	Oct 21	0.65	Oct 21	0.54	Aug 19, 1994
ANNUAL SEVEN-DAY MINIMUM	0.69	Oct 18	0.69	Oct 18	0.69	Oct 18, 2003
MAXIMUM PEAK FLOW			(a)35	Jun 27	(b)39	Jun 29, 1991
MAXIMUM PEAK STAGE			(a)9.55	Jun 27	(c)10.31	Sep 4, 2003
INSTANTANEOUS LOW FLOW			0.57	Oct 20	0.33	Oct 19, 1991
ANNUAL RUNOFF (CFSM)	0.434		0.438		0.402	
ANNUAL RUNOFF (INCHES)	5.89		5.97		5.46	
10 PERCENT EXCEEDS	5.0		4.7		4.8	
50 PERCENT EXCEEDS	3.1		2.9		2.9	
90 PERCENT EXCEEDS	1.8		2.0		1.6	

(a) Small dam failure 2.5 miles upstream of gage
(b) Gage height, 9.62 ft
(c) Beaver dams
(e) Estimated due to ice effect or missing record

05357245 TROUT RIVER AT TROUT LAKE NEAR BOULDER JUNCTION, WI

LOCATION.--Lat 46°02'08", long 89°42'20", in SE ¼ NE ¼ sec.14, T.41 N., R.6 E., Vilas County, Hydrologic Unit 07050002, on right bank 20 ft upstream from U.S. Highway 51 bridge, approximately 500 ft downstream from outlet of Trout Lake, 6.0 mi southwest of Boulder Junction.

DRAINAGE AREA.--46.2 mi^2.

PERIOD OF RECORD.--May 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,620 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	23	36	32	31	35	42	78	67	39	22	10
2	14	23	36	32	33	36	42	75	67	37	22	10
3	14	24	36	32	34	36	41	72	70	36	22	10
4	14	27	36	31	34	36	41	68	69	36	20	10
5	14	26	35	31	34	39	40	67	66	e36	18	e10
6	14	25	35	31	34	40	40	65	67	e36	17	e11
7	14	24	35	30	34	42	40	62	66	e35	16	e11
8	14	23	35	30	33	41	43	59	66	34	16	e12
9	15	22	37	29	33	41	43	59	67	32	15	e12
10	15	23	40	29	34	40	42	61	66	32	17	e11
11	15	23	41	30	34	42	41	58	e62	32	19	e11
12	17	23	40	30	34	41	41	62	e61	32	19	e12
13	17	23	40	30	33	42	40	80	61	32	18	e13
14	17	23	39	32	33	44	40	81	63	32	18	e14
15	16	23	39	33	32	43	39	79	63	31	e17	e16
16	15	24	40	33	32	42	40	77	53	30	e15	16
17	15	25	40	33	31	42	39	76	50	29	e13	16
18	15	33	39	33	31	42	53	73	46	28	e14	15
19	15	35	37	33	31	41	81	e71	43	27	13	15
20	15	35	36	32	34	40	83	e69	40	27	12	14
21	15	34	36	33	35	39	85	67	39	27	11	13
22	15	35	35	33	35	38	87	66	36	26	11	13
23	16	36	35	32	37	37	84	69	37	24	11	13
24	16	37	35	32	37	36	83	70	36	23	11	13
25	17	37	34	32	36	37	84	66	35	21	11	13
26	17	36	33	32	36	38	84	e64	36	22	11	12
27	17	37	33	32	35	39	82	66	36	21	11	12
28	19	37	33	32	35	42	80	64	36	20	11	11
29	20	36	33	31	35	44	79	62	36	20	11	11
30	22	37	33	31	---	44	81	65	37	21	10	10
31	23	---	32	31	---	43	---	66	---	22	10	---
TOTAL	497	869	1,124	977	980	1,242	1,740	2,117	1,577	900	462	370
MEAN	16.0	29.0	36.3	31.5	33.8	40.1	58.0	68.3	52.6	29.0	14.9	12.3
MAX	23	37	41	33	37	44	87	81	70	39	22	16
MIN	14	22	32	29	31	35	39	58	35	20	10	10
CFSM	0.35	0.63	0.78	0.68	0.73	0.87	1.26	1.48	1.14	0.63	0.32	0.27
IN.	0.40	0.70	0.91	0.79	0.79	1.00	1.40	1.70	1.27	0.72	0.37	0.30

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2004, BY WATER YEAR (WY)

MEAN	30.5	35.4	38.2	37.9	36.6	36.8	46.5	52.6	45.1	42.5	32.4	27.6
MAX	46.9	55.4	58.1	60.1	47.9	44.9	62.2	74.5	59.6	57.0	49.7	44.4
(WY)	(2003)	(1997)	(1992)	(1997)	(1997)	(1992)	(2002)	(2002)	(1996)	(1996)	(1996)	(1997)
MIN	12.2	16.2	22.5	25.8	28.1	23.8	31.9	27.6	28.4	29.0	14.9	12.3
(WY)	(2000)	(2000)	(2000)	(1999)	(1999)	(1999)	(1999)	(2000)	(2000)	(2004)	(2004)	(2004)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1991 - 2004
ANNUAL TOTAL	12,758	12,855	
ANNUAL MEAN	35.0	35.1	38.3
HIGHEST ANNUAL MEAN			49.8 1996
LOWEST ANNUAL MEAN			29.2 2000
HIGHEST DAILY MEAN	84 May 12	87 Apr 22	96 May 9, 2002
LOWEST DAILY MEAN	14 (a)Sep 25	10 (a)Aug 30	9.9 Oct 25, 26, 1999
ANNUAL SEVEN-DAY MINIMUM	14 Oct 2	10 Aug 30	10 (b)Oct. 22, 1999
MAXIMUM PEAK FLOW		89 Apr 21	101 May 8, 2002
MAXIMUM PEAK STAGE		1.89 Apr 21	1.99 May 19, 1996
INSTANTANEOUS LOW FLOW		9.4 Sep 30	8.3 Oct 7, 25, 1999
ANNUAL RUNOFF (CFSM)	0.757	0.760	0.828
ANNUAL RUNOFF (INCHES)	10.27	10.35	11.26
10 PERCENT EXCEEDS	53	66	55
50 PERCENT EXCEEDS	33	34	37
90 PERCENT EXCEEDS	17	13	22

(a) Also occurred additional days
(b) Also occurred Aug. 30, 2004
(e) Estimated due to ice effect or missing record

05357254 TROUT RIVER AT COUNTY TRUNK HIGHWAY H NEAR BOULDER JUNCTION, WI

LOCATION.--Lat 46°02'02", long 89°46'21", in SE ¼ NW ¼ sec.17, T.41 N., R.6 E., Vilas County, Hydrologic Unit 07050002, on left bank 18 ft upstream from County Trunk Highway H, 8.3 mi southwest of Boulder Junction.

DRAINAGE AREA.--58.9 mi^2.

PERIOD OF RECORD.--October 1998 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,610 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges and periods of variable backwater, June 5 to Sept. 30, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	31	e40	e30	e44	e50	60	90	74	54	35	50
2	31	29	e40	e30	e46	e50	59	85	69	54	34	53
3	32	29	e42	e30	e44	e48	57	81	65	56	34	53
4	32	32	e44	e30	e42	e46	54	78	63	59	34	55
5	35	37	e44	e32	e44	e44	53	74	62	57	32	56
6	34	e38	e44	e34	e46	e44	58	70	65	57	31	63
7	24	e36	e46	e34	e46	e44	58	67	62	56	30	59
8	28	e34	e44	e36	e46	e42	67	64	62	56	30	58
9	24	e32	e42	e36	e46	e44	64	64	63	56	30	59
10	20	e30	e40	e38	e46	e46	60	68	61	56	31	57
11	23	28	e40	e38	e46	e48	57	65	59	55	32	53
12	21	27	e40	e38	e48	e48	55	67	61	54	32	51
13	24	26	e38	e38	e48	e50	52	99	60	54	31	49
14	25	e26	e36	e40	e48	e50	50	103	60	55	30	45
15	25	25	e36	e40	e46	e50	48	97	59	54	29	48
16	24	26	e36	e40	e46	e52	49	90	59	54	29	48
17	27	28	e34	e40	e46	e52	49	86	59	55	31	45
18	25	45	e36	e42	e46	e54	82	82	57	55	32	41
19	22	49	e36	e42	e44	e56	169	77	56	55	32	38
20	21	45	e36	e42	e44	e56	142	75	53	55	30	33
21	31	43	e34	e42	e44	e58	125	74	52	51	30	e30
22	44	42	e34	e44	e44	e58	114	72	50	50	31	e23
23	27	43	e34	e44	e44	e58	104	78	50	47	30	27
24	27	e42	e34	e44	e44	e60	96	81	50	43	29	26
25	27	e40	e34	e44	e44	e62	96	76	48	41	29	25
26	28	e42	e34	e44	e44	e64	95	70	49	39	30	26
27	24	e44	e36	e44	e46	e66	90	72	48	38	30	27
28	25	e42	e36	e46	e48	e70	88	69	49	36	30	26
29	26	e42	e34	e46	e50	e78	90	65	50	36	33	25
30	31	e42	e32	e46	---	70	97	65	52	35	40	25
31	31	---	e30	e44	---	64	---	73	---	36	46	---
TOTAL	851	1,075	1,166	1,218	1,320	1,682	2,338	2,377	1,727	1,559	987	1,274
MEAN	27.5	35.8	37.6	39.3	45.5	54.3	77.9	76.7	57.6	50.3	31.8	42.5
MAX	44	49	46	46	50	78	169	103	74	59	46	63
MIN	20	25	30	30	42	42	48	64	48	35	29	23
CFSM	0.47	0.61	0.64	0.67	0.77	0.92	1.32	1.30	0.98	0.85	0.54	0.72
IN.	0.54	0.68	0.74	0.77	0.83	1.06	1.48	1.50	1.09	0.98	0.62	0.80

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)

MEAN	30.8	37.8	36.6	37.3	42.8	49.6	67.3	66.0	59.8	66.6	57.2	42.4
MAX	50.3	63.9	46.5	42.0	48.4	54.3	91.8	94.1	74.6	83.8	85.3	54.0
(WY)	(2003)	(2003)	(2003)	(2001)	(2000)	(2004)	(2002)	(2002)	(2002)	(2000)	(2001)	(2002)
MIN	20.0	23.2	27.2	32.9	36.7	40.5	49.1	41.3	49.4	50.3	31.8	27.6
(WY)	(2000)	(2000)	(1999)	(1999)	(2003)	(1999)	(1999)	(2000)	(1999)	(2004)	(2004)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1999 - 2004	
ANNUAL TOTAL	17,231		17,574			
ANNUAL MEAN	47.2		48.0		49.5	
HIGHEST ANNUAL MEAN					57.3	2002
LOWEST ANNUAL MEAN					41.9	1999
HIGHEST DAILY MEAN	137	May 12	169	Apr 19	169	Apr 19, 2004
LOWEST DAILY MEAN	20	Oct 10	20	Oct 10	16	Oct 27-29, 1999
ANNUAL SEVEN-DAY MINIMUM	23	Oct 9	23	Oct 9	17	Oct 23, 1999
MAXIMUM PEAK FLOW			(a)180	Apr 19	(a)180	Apr 19, 2004
MAXIMUM PEAK STAGE			(b)6.78	Mar 16	6.98	Jul 9, 2000
ANNUAL RUNOFF (CFSM)	0.801		0.815		0.841	
ANNUAL RUNOFF (INCHES)	10.88		11.10		11.43	
10 PERCENT EXCEEDS	71		70		75	
50 PERCENT EXCEEDS	40		44		46	
90 PERCENT EXCEEDS	27		28		29	

(a) Gage height, 6.20 ft
(b) Ice affected
(e) Estimated

05357335 BEAR RIVER NEAR MANITOWISH WATERS, WI

LOCATION.--Lat 46°02'56", long 89°59'04", in SE ¼ NW ¼ sec.10, T.41 N., R.4 E., Iron County, Hydrologic Unit 07050002, on right bank 10 ft upstream from East River Trail bridge, 2.3 mi upstream from Little Bear Creek, 7.7 mi southwest of Manitowish Waters, and 5.3 mi upstream from mouth.

DRAINAGE AREA.--81.3 mi^2.

PERIOD OF RECORD.--May 1991 to current year.

GAGE.--Water-stage recorder and Doppler velocity meter. Elevation of gage is 1,580 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	15	e19	e25	e32	e35	e130	146	148	46	e30	20
2	12	15	e19	e25	e31	e34	e130	139	145	45	e30	20
3	11	15	e19	e26	e31	e34	e130	133	136	43	e30	19
4	10	15	e19	e25	e31	e34	e120	122	126	42	e30	19
5	9.3	16	e19	e25	e31	e34	e120	113	121	43	e29	19
6	8.4	17	e19	e27	e32	e34	e120	105	121	43	e28	22
7	7.1	17	e19	e28	e33	e33	e120	100	120	42	e27	23
8	3.9	17	e21	e28	e34	e33	e133	97	111	42	e26	24
9	1.9	16	e22	e29	e35	e34	e139	100	111	41	e27	25
10	0.98	16	e23	e30	e35	e36	e133	102	111	40	e27	25
11	0.72	16	e24	e30	e36	e36	e121	106	105	38	e28	26
12	3.2	16	e25	e30	e37	e37	e113	110	106	38	e28	26
13	4.5	15	e26	e30	e37	e38	e104	126	99	38	e27	26
14	4.7	16	e26	e30	e37	e38	e98	136	93	39	e26	25
15	3.8	17	e26	e31	e37	e38	e98	139	86	38	e25	31
16	3.6	18	e26	e31	e38	e40	e97	136	80	37	e25	37
17	4.3	e18	e26	e32	e38	e42	e98	128	76	37	e26	38
18	5.1	e19	e26	e32	e37	e44	134	120	73	37	e28	37
19	6.1	e18	e27	e31	e37	e45	227	116	71	37	e28	37
20	5.6	e18	e28	e30	e36	e46	254	109	67	37	28	35
21	4.7	e18	e28	e30	e35	e47	251	106	63	37	27	32
22	5.2	e18	e27	e30	e35	e48	240	103	58	37	27	30
23	7.0	e18	e27	e31	e34	e51	223	107	59	36	26	28
24	8.0	e18	e27	e32	e33	e54	206	122	59	36	25	27
25	8.5	e18	e27	e32	e33	e59	193	125	57	36	24	25
26	8.6	e19	e27	e32	e33	e72	184	120	55	e35	23	23
27	8.9	e20	e27	e31	e34	e78	176	121	54	e34	23	22
28	10	e20	e25	e31	e35	e97	168	119	52	e33	22	22
29	11	e19	e25	e31	e36	e140	155	116	49	e32	21	21
30	13	e19	e25	e31	---	e130	153	119	48	e32	21	21
31	14	---	e25	e32	---	e130	---	139	---	e31	21	---
TOTAL	218.10	517	749	918	1,003	1,651	4,568	3,680	2,660	1,182	813	785
MEAN	7.04	17.2	24.2	29.6	34.6	53.3	152	119	88.7	38.1	26.2	26.2
MAX	14	20	28	32	38	140	254	146	148	46	30	38
MIN	0.72	15	19	25	31	33	97	97	48	31	21	19
CFSM	0.09	0.21	0.30	0.36	0.43	0.66	1.87	1.46	1.09	0.47	0.32	0.32
IN.	0.10	0.24	0.34	0.42	0.46	0.76	2.09	1.68	1.22	0.54	0.37	0.36

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2004, BY WATER YEAR (WY)

MEAN	54.4	63.5	56.6	47.6	52.6	75.4	137	119	84.2	75.7	62.9	50.4
MAX	130	151	118	105	110	187	275	230	129	131	198	159
(WY)	(1995)	(1992)	(2002)	(1992)	(1992)	(1992)	(2002)	(2002)	(1993)	(2001)	(2001)	(1994)
MIN	6.13	8.52	8.20	7.92	12.2	26.6	44.1	36.9	54.4	38.1	8.08	4.60
(WY)	(1999)	(1999)	(1999)	(1999)	(1999)	(1999)	(1999)	(1998)	(1992)	(2004)	(1998)	(1998)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1992 - 2004	
ANNUAL TOTAL	19,749.10		18,744.10			
ANNUAL MEAN	54.1		51.2		73.4	
HIGHEST ANNUAL MEAN					107	2002
LOWEST ANNUAL MEAN					34.3	1999
HIGHEST DAILY MEAN	314	May 13	254	Apr 20	570	Sep 23, 1994
LOWEST DAILY MEAN	(a)0.72	Oct 11	(a)0.72	Oct 11	(a)0.72	Oct 11, 2003
ANNUAL SEVEN-DAY MINIMUM	(a)2.8	Oct 9	(a)2.8	Oct 9	(a)2.8	Oct 9, 2003
MAXIMUM PEAK FLOW			(b)260	Apr 20	(c)589	Sep 23, 1994
MAXIMUM PEAK STAGE			(d)3.17	Mar 29	3.62	Apr 17, 2002
ANNUAL RUNOFF (CFSM)	0.666		0.630		0.902	
ANNUAL RUNOFF (INCHES)	9.04		8.58		12.26	
10 PERCENT EXCEEDS	121		123		140	
50 PERCENT EXCEEDS	31		32		58	
90 PERCENT EXCEEDS	12		16		21	

(a) Result of beaver dam upstream
(b) Gage height, 3.04 ft
(c) Gage height, 3.47 ft
(d) Ice affected
(e) Estimated due to ice effect or missing record

05358170 BUTTERNUT CREEK AT CUTOFF ROAD NEAR BUTTERNUT, WI

LOCATION.--Lat 45°59'47", long 90°03'11", in SW ¼ SE ¼ SW ¼ sec.28, T.41 N., R.1 W., Ashland County, Hydrologic Unit 07050002, on left bank downstream side of bridge on Cutoff Road.

DRAINAGE AREA.--28.9 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 2002 to October 2004 (discontinued).

GAGE.--Water-stage recorder. Side-looking velocity meter system. Elevation of gage is 1,490 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	18	e9.8	e7.7	e8.2	e8.8	194	44	89	10	13	6.6
2	e6.0	7.1	e9.6	e7.7	e8.7	e9.0	146	39	83	10	10	7.3
3	e6.2	13	e9.5	e7.5	e8.9	e9.2	142	33	62	9.1	6.7	6.9
4	e6.5	14	e9.4	e7.4	e9.0	e9.3	130	27	42	16	5.3	7.1
5	e6.2	14	e9.2	e7.4	e8.9	e9.3	120	26	35	18	7.0	18
6	e6.4	18	e9.0	e7.4	e8.8	e9.4	118	22	43	15	5.1	37
7	6.6	11	e9.5	e7.2	e8.8	e9.4	128	22	48	17	3.9	39
8	6.5	8.0	e10	e7.1	e8.9	e9.3	149	20	36	14	6.8	30
9	e5.8	7.9	e10	e7.1	e8.8	e9.0	164	20	30	12	7.0	21
10	9.0	e7.3	e10	e7.2	e8.6	e9.8	162	20	30	10	9.0	11
11	19	e7.1	e10	e7.1	e8.6	e10	138	18	27	8.6	17	8.8
12	e14	6.8	e10	e7.6	e8.6	e9.7	106	18	28	12	18	7.9
13	12	7.8	e9.8	e7.6	e8.6	e9.4	81	37	25	9.9	17	11
14	5.6	e7.0	e9.6	e7.5	e8.5	e9.2	70	72	21	8.3	14	6.2
15	7.5	e6.8	e9.4	e7.4	e8.5	e9.0	69	74	17	9.6	11	16
16	11	9.4	e9.4	e7.4	e8.4	e8.8	76	53	14	8.6	10	28
17	e8.0	15	e9.0	e7.3	e8.4	e8.6	85	42	12	6.5	8.8	23
18	e7.2	39	e8.8	e7.3	e8.4	e8.4	140	37	11	6.8	10	21
19	e6.8	53	e7.8	e7.3	e8.7	e8.3	413	32	9.9	7.7	7.4	17
20	11	51	e7.2	e7.3	e8.8	e8.3	513	28	11	24	4.9	15
21	9.4	35	e7.0	e7.3	e8.9	e8.2	325	28	8.9	21	5.9	7.6
22	8.1	26	e6.9	e7.2	e8.9	e8.2	226	24	8.6	12	5.5	11
23	6.9	e18	e6.6	e7.2	e9.0	e8.2	168	35	9.1	8.9	3.6	8.7
24	7.9	e15	e6.5	e7.2	e8.6	e8.1	128	68	10	12	2.3	5.5
25	12	e14	e6.4	e7.1	e8.0	e11	106	77	8.5	6.3	4.1	7.0
26	8.4	e13	e6.7	e7.1	e7.6	e19	95	64	8.4	7.0	7.7	7.8
27	16	e12	e7.0	e7.1	e7.9	e24	86	54	6.8	5.0	6.9	8.5
28	e17	e11	e7.4	e7.1	e8.1	e43	72	49	8.8	4.4	8.7	7.4
29	e14	e10	e7.5	e7.1	e8.4	e140	62	45	8.0	8.6	9.3	7.4
30	15	e9.8	e7.6	e7.1	---	e160	53	47	6.8	11	8.5	2.8
31	23	---	e7.7	e7.7	---	e170	---	81	---	15	7.3	---
TOTAL	311.0	485.0	264.3	226.7	248.5	781.9	4,465	1,256	757.8	344.3	261.7	411.5
MEAN	10.0	16.2	8.53	7.31	8.57	25.2	149	40.5	25.3	11.1	8.44	13.7
MAX	23	53	10	7.7	9.0	170	513	81	89	24	18	39
MIN	5.6	6.8	6.4	7.1	7.6	8.1	53	18	6.8	4.4	2.3	2.8
CFSM	0.35	0.56	0.30	0.25	0.30	0.87	5.15	1.40	0.87	0.38	0.29	0.47
IN.	0.40	0.62	0.34	0.29	0.32	1.01	5.75	1.62	0.98	0.44	0.34	0.53

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2004, BY WATER YEAR (WY)

MEAN	10.0	15.7	8.40	4.98	5.33	15.1	114	73.3	23.0	9.85	7.85	10.4
MAX	10.0	16.2	8.53	7.31	8.57	25.2	149	106	25.3	11.1	8.44	13.7
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2003)	(2004)	(2004)	(2004)	(2004)
MIN	10.0	15.3	8.27	2.65	1.98	5.01	79.7	40.5	20.7	8.58	7.26	7.03
(WY)	(2004)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2004)	(2003)	(2003)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2003 - 2004	
ANNUAL TOTAL	8,355.06		9,813.7			
ANNUAL MEAN	22.9		26.8		26.8	
HIGHEST ANNUAL MEAN					26.8	2004
LOWEST ANNUAL MEAN					26.8	2004
HIGHEST DAILY MEAN	608	May 12	513	Apr 20	608	May 12, 2003
LOWEST DAILY MEAN	0.66	Sep 11	2.3	Aug 24	0.66	Sep 11, 2003
ANNUAL SEVEN-DAY MINIMUM	(a)1.6	Jan 23	4.8	Aug 19	(a)1.6	Jan 23, 2003
ANNUAL RUNOFF (CFSM)	0.792		0.928		0.928	
ANNUAL RUNOFF (INCHES)	10.75		12.63		12.61	
10 PERCENT EXCEEDS	50		69		69	
50 PERCENT EXCEEDS	8.3		9.4		9.4	
90 PERCENT EXCEEDS	1.8		6.8		6.8	

(a) Ice affected
(e) Estimated due to ice effect or missing record

05358170 BUTTERNUT CREEK AT CUTOFF ROAD NEAR BUTTERNUT, WI--Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	---	---	---	---	---	---	---	---	---	---	---
2	18	---	---	---	---	---	---	---	---	---	---	---
3	18	---	---	---	---	---	---	---	---	---	---	---
4	18	---	---	---	---	---	---	---	---	---	---	---
5	9.4	---	---	---	---	---	---	---	---	---	---	---
6	11	---	---	---	---	---	---	---	---	---	---	---
7	9.6	---	---	---	---	---	---	---	---	---	---	---
8	9.3	---	---	---	---	---	---	---	---	---	---	---
9	8.6	---	---	---	---	---	---	---	---	---	---	---
10	9.5	---	---	---	---	---	---	---	---	---	---	---
11	8.2	---	---	---	---	---	---	---	---	---	---	---
12	8.5	---	---	---	---	---	---	---	---	---	---	---
13	6.7	---	---	---	---	---	---	---	---	---	---	---
14	6.6	---	---	---	---	---	---	---	---	---	---	---
15	5.7	---	---	---	---	---	---	---	---	---	---	---
16	7.2	---	---	---	---	---	---	---	---	---	---	---
17	9.7	---	---	---	---	---	---	---	---	---	---	---
18	11	---	---	---	---	---	---	---	---	---	---	---
19	11	---	---	---	---	---	---	---	---	---	---	---
20	e12	---	---	---	---	---	---	---	---	---	---	---
21	e13	---	---	---	---	---	---	---	---	---	---	---
22	e15	---	---	---	---	---	---	---	---	---	---	---
23	18	---	---	---	---	---	---	---	---	---	---	---
24	26	---	---	---	---	---	---	---	---	---	---	---
25	26	---	---	---	---	---	---	---	---	---	---	---
26	20	---	---	---	---	---	---	---	---	---	---	---
27	e17	---	---	---	---	---	---	---	---	---	---	---
28	14	---	---	---	---	---	---	---	---	---	---	---
29	e29	---	---	---	---	---	---	---	---	---	---	---
30	e38	---	---	---	---	---	---	---	---	---	---	---
31	e36	---	---	---	---	---	---	---	---	---	---	---
TOTAL	458.0	---	---	---	---	---	---	---	---	---	---	---
MEAN	14.8	---	---	---	---	---	---	---	---	---	---	---
MAX	38	---	---	---	---	---	---	---	---	---	---	---
MIN	5.7	---	---	---	---	---	---	---	---	---	---	---
CFSM	0.51	---	---	---	---	---	---	---	---	---	---	---
IN.	0.59	---	---	---	---	---	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2005, BY WATER YEAR (WY)

MEAN	12.4	15.7	8.40	4.98	5.33	15.1	114	73.3	23.0	9.85	7.85	10.4
MAX	14.8	16.2	8.53	7.31	8.57	25.2	149	106	25.3	11.1	8.44	13.7
(WY)	(2005)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2003)	(2004)	(2004)	(2004)	(2004)
MIN	10.0	15.3	8.27	2.65	1.98	5.01	79.7	40.5	20.7	8.58	7.26	7.03
(WY)	(2004)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2004)	(2003)	(2003)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR (January - October)		FOR 2005 WATER YEAR (October)		WATER YEARS 2003 - 2005	
ANNUAL TOTAL	9,211.4		458.0			
ANNUAL MEAN	30.2		14.8		25.0	
HIGHEST ANNUAL MEAN					26.8	2004
LOWEST ANNUAL MEAN					14.8	2005
HIGHEST DAILY MEAN	513	Apr 20	38	Oct 30	608	May 12, 2003
LOWEST DAILY MEAN	2.3	Aug 24	5.7	Oct 15	0.66	Sep 11, 2003
ANNUAL SEVEN-DAY MINIMUM	4.8	Aug 19	7.5	Oct 10	(a)1.6	Jan 23, 2003
ANNUAL RUNOFF (CFSM)	1.05		0.511		0.865	
ANNUAL RUNOFF (INCHES)	11.86		0.59		11.76	
10 PERCENT EXCEEDS	79		28		54	
50 PERCENT EXCEEDS	9.6		11		9.3	
90 PERCENT EXCEEDS	7.0		6.8		3.3	

(e) Estimated due to ice effect or missing record

05358170 BUTTERNUT CREEK AT CUTOFF ROAD NEAR BUTTERNUT, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 2002 to October 2004 (discontinued).

PERIOD OF DAILY RECORD.--
TOTAL-PHOSPHORUS DISCHARGE: November 2002 to October 2004 (discontinued).

INSTRUMENTATION.--Automatic, pumping, and refrigerated water sampler.

REMARKS.--Total-phosphorus loads generally are good. For periods during which discharge records were estimated, load estimates are fair to poor.

EXTREMES FOR PERIOD OF RECORD.--
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 131 lb, Apr. 20, 2004; minimum daily, 0.18 lb, Mar. 10, 2003.

EXTREMES FOR CURRENT PERIOD (OCTOBER 2003 TO OCTOBER 2004).--
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 131 lb, Apr. 20; minimum daily, 0.66 lb, Aug. 24.

PHOSPHORUS, WATER, UNFILTERED, POUNDS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.21	3.42	e2.39	e1.50	e2.49	e1.81	53.4	5.65	19.6	4.09	4.03	2.04
2	e1.59	1.33	e2.37	e1.52	e2.68	e1.85	36.7	5.04	15.3	4.10	3.11	2.28
3	e1.60	2.52	e2.37	e1.50	e2.79	e2.12	32.1	4.28	10.6	3.56	2.03	2.17
4	e1.65	2.66	e2.38	e1.50	e2.86	e2.14	26.5	3.45	7.56	6.35	1.59	2.27
5	e1.55	2.66	e2.36	e1.53	e2.87	e1.98	25.4	3.33	6.48	6.88	2.07	5.84
6	e1.57	3.32	e2.34	e1.55	e2.88	e1.97	26.0	2.82	8.28	5.82	1.50	11.9
7	1.60	2.13	e2.50	e1.53	e2.92	e1.94	27.6	2.89	9.65	6.31	1.16	12.8
8	1.54	1.52	e2.67	e1.53	e3.00	e1.89	27.0	2.61	7.61	5.21	1.98	10.0
9	e1.34	1.49	e2.67	e1.55	e3.01	e1.81	27.5	2.62	6.67	4.42	2.05	7.10
10	2.07	e1.38	e2.56	e1.59	e2.98	e1.94	27.6	2.59	6.85	3.68	2.59	3.86
11	4.22	e1.35	e2.43	e1.59	e3.03	e1.95	25.7	2.33	6.54	3.16	4.78	2.97
12	e3.09	1.29	e2.31	e1.73	e3.07	e1.86	19.2	2.34	6.97	4.21	5.25	2.71
13	2.74	1.49	e2.15	e1.76	e3.12	e1.78	14.6	8.76	6.48	3.57	4.81	3.68
14	1.21	e1.35	e2.01	e1.76	e3.12	e1.71	12.8	23.5	5.77	2.99	4.01	2.17
15	1.58	e1.30	e1.87	e1.76	e3.17	e1.98	12.7	19.1	4.89	3.42	3.02	5.51
16	2.35	1.80	e1.78	e1.78	e3.18	e1.92	14.1	12.3	4.03	3.04	2.79	9.89
17	e1.63	3.31	e1.62	e1.79	e3.23	e1.94	16.2	8.96	3.71	2.27	2.46	8.40
18	e1.44	13.1	e1.50	e1.81	e3.27	e2.00	40.4	7.80	3.69	2.34	2.84	7.48
19	e1.34	21.7	e1.28	e1.84	e3.44	e1.98	128	6.31	3.34	2.63	2.05	6.11
20	2.21	11.7	e1.18	e1.86	e3.53	e1.99	131	5.15	3.75	8.01	1.37	5.44
21	1.79	7.53	e1.17	e1.89	e3.62	e1.97	67.4	4.79	3.24	6.93	1.67	2.83
22	1.52	5.57	e1.17	e1.89	e3.68	e1.98	39.5	3.79	3.27	4.00	1.56	4.22
23	1.27	e3.95	e1.13	e1.92	e3.77	e1.98	24.2	5.43	3.63	2.94	1.02	3.23
24	1.46	e3.34	e1.13	e1.95	e3.47	e2.15	17.4	11.9	4.23	3.76	0.66	2.06
25	2.30	e3.15	e1.13	e1.95	e1.75	e3.39	15.6	12.4	3.51	2.02	1.21	2.61
26	2.33	e2.97	e1.20	e1.98	e1.56	e6.70	13.0	9.71	3.43	2.23	2.26	2.89
27	2.97	e2.77	e1.27	e2.01	e1.62	e9.25	11.1	8.06	2.78	1.59	2.05	3.17
28	e3.14	e2.58	e1.36	e2.04	e1.66	e18.0	9.31	7.12	3.56	1.40	2.61	2.76
29	e2.60	e2.37	e1.40	e2.07	e1.72	e62.5	8.09	6.42	3.21	2.67	2.81	2.73
30	2.77	e2.36	e1.44	e2.10	---	e66.2	6.81	7.44	2.69	3.28	2.58	1.03
31	4.23	---	e1.48	e2.31	---	58.0	---	16.1	---	4.46	2.23	---
TOTAL	65.91	117.41	56.62	55.09	83.49	270.68	936.91	224.99	181.32	121.34	76.15	142.15

WTR YR 2004 TOTAL 2,332.06

e Estimated

05358170 BUTTERNUT CREEK AT CUTOFF ROAD NEAR BUTTERNUT, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Dis-charge, cfs (00060)	Instan-taneous dis-charge, cfs (00061)	Sam-pling method, code (82398)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)
OCT						
23...	1215	--	9.3	50	--	.034
NOV						
18...	1345	--	43	50	.039	.064
19...	1530	--	52	50	--	.086
20...	0915	--	56	50	--	.039
DEC						
09...	1015	10	--	50	--	.050
19...	1300	7.8	--	70	.019	.030
JAN						
21...	1415	7.3	--	50	.033	.048
FEB						
24...	1640	8.6	--	50	--	.079
25...	0720	8.0	--	50	.031	.038
MAR						
03...	0130	9.2	--	50	--	.038
04...	0130	9.3	--	50	--	.049
04...	1330	9.3	--	50	--	.040
15...	1100	9.0	--	50	--	.034
15...	1110	9.0	--	50	.029	.049
16...	2300	8.8	--	50	--	.037
17...	1600	8.6	--	70	--	.044
26...	0845	19	--	50	--	.065
29...	1435	140	--	50	.034	.085
31...	1230	170	--	10	--	.067
31...	1235	170	--	50	--	.068
31...	1900	170	--	50	--	.051
APR						
01...	1115	--	240	50	--	.052
02...	1115	--	159	50	--	.047
04...	1215	--	131	50	--	.037
06...	1745	--	115	10	--	.042
06...	1750	--	115	50	.024	.040
07...	1215	--	128	50	--	.041
08...	1215	--	151	50	--	.033
10...	0015	--	167	50	--	.030
11...	1215	--	134	50	--	.035
13...	0015	--	94	50	--	.033
17...	1815	--	87	50	--	.035
18...	1815	--	170	50	--	.060
19...	1815	--	494	50	--	.057
20...	1430	--	487	10	--	.046
20...	1435	--	488	50	--	.046
20...	1815	--	471	50	--	.042
21...	1815	--	307	50	--	.037
22...	1300	--	218	50	--	.032
24...	0100	--	142	50	--	.024
25...	1300	--	103	50	--	.028
27...	0100	--	97	50	--	.024
MAY						
11...	0745	--	15	50	--	.024
13...	2045	--	66	50	--	.072
15...	0845	--	72	50	--	.048
17...	1745	--	40	50	.024	.038
17...	1800	--	43	50	--	.041
24...	2130	--	78	50	--	.032
25...	1530	--	74	50	--	.029
26...	0930	--	67	50	--	.028
30...	2230	--	65	50	--	.033
JUN						
01...	1030	--	88	50	--	.043
02...	2230	--	73	50	--	.031
24...	1350	--	13	50	.033	.077
JUL						
15...	1030	--	2.0	50	.047	.066
30...	1515	--	13	50	--	.057
AUG						
19...	1005	--	6.8	50	.038	.051
SEP						
21...	1440	--	14	50	.044	.069
28...	0940	--	9.3	50	--	.069

05358170 BUTTERNUT CREEK AT CUTOFF ROAD NEAR BUTTERNUT, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)
OCT					
05...	0950	3.7	50	--	.047
11...	0745	22	50	--	.040
25...	1300	26	50	--	.046
27...	1445	17	50	.021	.037
29...	1000	29	50	--	.042
29...	1005	29	10	.026	.042

05358180 SPILLER CREEK AT COUNTY HIGHWAY B NEAR BUTTERNUT, WI

LOCATION.--Lat 45°58'44", long 90°31'48", in SE ¼ NE ¼ NE ¼ sec.6, T.40 N., R.1 W., Price County, Hydrologic Unit 07050002, on right bank approximately 200 ft upstream of culvert on County Highway B, and approximately 2,000 ft upstream of Butternut Lake.

DRAINAGE AREA.--9.1 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 2002 to October 2004 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is approximately 1,495 ft above NGVD, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	5.5	e4.2	e3.4	e3.0	e1.8	58	13	53	2.7	3.9	2.5
2	2.5	4.3	e4.0	e3.3	e3.0	e2.0	55	11	39	2.5	3.9	2.3
3	2.8	3.7	e3.9	e3.2	e3.0	e2.2	58	9.0	22	3.3	3.6	2.2
4	3.5	4.1	e3.7	e3.1	e3.0	e2.4	58	8.3	14	4.7	3.0	2.2
5	2.4	4.5	e3.5	e2.9	e2.9	e2.4	56	7.3	12	4.8	3.0	5.7
6	2.7	4.5	e3.4	e2.8	e2.9	e2.4	60	6.6	17	4.3	2.4	13
7	3.8	e4.2	e3.5	e2.7	e2.9	e2.4	62	5.9	13	4.4	2.6	17
8	1.7	e4.0	e3.6	e2.7	e2.9	e2.4	61	5.7	9.0	4.1	3.4	10
9	2.0	e3.8	e3.6	e2.7	e2.9	e2.3	55	5.4	10	3.6	3.5	4.5
10	2.9	e3.6	e3.5	e2.7	e2.9	e2.2	44	6.0	10	3.3	4.7	3.1
11	4.1	e3.4	e3.4	e2.9	e2.8	e3.1	34	5.3	7.8	3.3	4.6	2.8
12	5.9	e3.4	e3.4	e3.2	e2.7	e3.2	26	5.4	9.5	4.4	5.2	2.4
13	4.9	e3.4	e3.4	e3.2	e2.5	e3.1	21	19	8.7	6.1	4.4	2.2
14	4.1	e3.3	e3.3	e3.1	e2.2	e3.0	19	47	7.1	5.9	3.7	2.1
15	4.0	3.1	e3.3	e3.0	e1.9	e2.9	19	33	6.1	4.7	3.1	4.2
16	3.1	3.6	e3.3	e3.0	e1.9	e2.9	22	19	5.4	3.8	3.1	8.9
17	2.9	4.5	e3.3	e3.0	e2.0	e2.8	22	16	5.0	3.2	3.2	6.1
18	3.1	13	e3.2	e2.9	e2.1	e2.6	49	15	4.6	2.9	3.0	4.1
19	2.6	16	e3.2	e2.9	e2.1	e2.4	167	11	4.0	2.8	3.0	3.2
20	3.4	11	e3.2	e2.8	e2.1	e2.2	125	9.7	3.7	3.2	2.8	3.6
21	1.9	8.1	e3.2	e2.8	e1.9	e2.2	83	8.7	4.0	3.4	2.5	2.1
22	2.0	6.7	e3.0	e2.8	e1.7	e2.2	64	7.8	4.2	3.2	2.4	2.0
23	2.1	6.1	e3.0	e2.8	e1.7	2.2	45	14	3.5	2.8	2.2	1.9
24	2.3	e6.0	e2.9	e2.8	e1.6	2.2	31	32	3.9	2.5	2.3	2.2
25	2.1	e5.8	e2.9	e2.8	e1.5	2.9	31	26	3.9	2.4	2.3	2.3
26	2.4	e5.4	e3.0	e2.8	e1.4	7.7	32	16	4.3	2.3	2.6	2.9
27	2.2	e5.1	e3.1	e2.8	e1.5	20	25	16	3.1	2.2	2.7	2.1
28	3.3	e4.7	e3.3	e2.8	e1.6	69	21	15	2.7	2.2	2.7	2.1
29	3.5	e4.5	e3.4	e2.8	e1.7	85	18	11	2.8	3.3	2.3	2.1
30	4.7	e4.4	e3.4	e2.8	---	69	16	17	2.7	3.3	2.6	2.0
31	6.2	---	e3.4	e2.9	---	63	---	50	---	4.0	2.3	---
TOTAL	97.6	163.7	104.5	90.4	66.3	376.1	1,437	472.1	296.0	109.6	97.0	123.8
MEAN	3.15	5.46	3.37	2.92	2.29	12.1	47.9	15.2	9.87	3.54	3.13	4.13
MAX	6.2	16	4.2	3.4	3.0	85	167	50	53	6.1	5.2	17
MIN	1.7	3.1	2.9	2.7	1.4	1.8	16	5.3	2.7	2.2	2.2	1.9
CFSM	0.35	0.60	0.37	0.32	0.25	1.33	5.26	1.67	1.08	0.39	0.34	0.45
IN.	0.40	0.67	0.43	0.37	0.27	1.54	5.87	1.93	1.21	0.45	0.40	0.51

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2004, BY WATER YEAR (WY)

MEAN	3.15	5.07	3.17	2.40	2.02	8.32	36.9	22.8	8.53	3.06	2.54	3.06
MAX	3.15	5.46	3.37	2.92	2.29	12.1	47.9	30.4	9.87	3.54	3.13	4.13
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2003)	(2004)	(2004)	(2004)	(2004)
MIN	3.15	4.69	2.96	1.88	1.75	4.51	25.8	15.2	7.20	2.58	1.95	1.99
(WY)	(2004)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2004)	(2003)	(2003)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2003 - 2004	
ANNUAL TOTAL	2,744.7		3,434.1			
ANNUAL MEAN	7.52		9.38		9.38	
HIGHEST ANNUAL MEAN					9.38	2004
LOWEST ANNUAL MEAN					9.38	2004
HIGHEST DAILY MEAN	192	May 12	167	Apr 19	192	May 12, 2003
LOWEST DAILY MEAN	1.2	Sep 3	(a)1.4	Feb 26	1.2	Sep 3, 2003
ANNUAL SEVEN-DAY MINIMUM	(a)1.3	Feb 10	(a)1.6	Feb 22	(a)1.3	Feb 10, 2003
MAXIMUM PEAK FLOW			185	Apr 19	229	May 12, 2003
MAXIMUM PEAK STAGE			9.92	Apr 19	10.29	May 12, 2003
INSTANTANEOUS LOW FLOW			(a)		1.0	Aug 15, 2003
ANNUAL RUNOFF (CFSM)	0.826		1.03		1.03	
ANNUAL RUNOFF (INCHES)	11.22		14.04		14.01	
10 PERCENT EXCEEDS	16		21		21	
50 PERCENT EXCEEDS	3.1		3.3		3.3	
90 PERCENT EXCEEDS	1.6		2.2		2.2	

(a) Ice affected
(e) Estimated due to ice effect or missing record

05358180 SPILLER CREEK AT COUNTY HIGHWAY B NEAR BUTTERNUT, WI—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8		---	---	---	---	---	---	---	---	---	---
2	4.4		---	---	---	---	---	---	---	---	---	---
3	4.1	---	---	---	---	---	---	---	---	---	---	---
4	3.3	---	---	---	---	---	---	---	---	---	---	---
5	3.0	---	---	---	---	---	---	---	---	---	---	---
6	2.6	---	---	---	---	---	---	---	---	---	---	---
7	2.4	---	---	---	---	---	---	---	---	---	---	---
8	2.6	---	---	---	---	---	---	---	---	---	---	---
9	2.5	---	---	---	---	---	---	---	---	---	---	---
10	2.4	---	---	---	---	---	---	---	---	---	---	---
11	2.3	---	---	---	---	---	---	---	---	---	---	---
12	2.4	---	---	---	---	---	---	---	---	---	---	---
13	2.3	---	---	---	---	---	---	---	---	---	---	---
14	2.5	---	---	---	---	---	---	---	---	---	---	---
15	2.5	---	---	---	---	---	---	---	---	---	---	---
16	2.5	---	---	---	---	---	---	---	---	---	---	---
17	2.4	---	---	---	---	---	---	---	---	---	---	---
18	2.4	---	---	---	---	---	---	---	---	---	---	---
19	2.3	---	---	---	---	---	---	---	---	---	---	---
20	2.3	---	---	---	---	---	---	---	---	---	---	---
21	2.2	---	---	---	---	---	---	---	---	---	---	---
22	2.3	---	---	---	---	---	---	---	---	---	---	---
23	5.4	---	---	---	---	---	---	---	---	---	---	---
24	10	---	---	---	---	---	---	---	---	---	---	---
25	7.6	---	---	---	---	---	---	---	---	---	---	---
26	5.4	---	---	---	---	---	---	---	---	---	---	---
27	4.2	---	---	---	---	---	---	---	---	---	---	---
28	5.0	---	---	---	---	---	---	---	---	---	---	---
29	13	---	---	---	---	---	---	---	---	---	---	---
30	15	---	---	---	---	---	---	---	---	---	---	---
31	14	---	---	---	---	---	---	---	---	---	---	---
TOTAL	138.1	---	---	---	---	---	---	---	---	---	---	---
MEAN	4.45	---	---	---	---	---	---	---	---	---	---	---
MAX	15	---	---	---	---	---	---	---	---	---	---	---
MIN	2.2	---	---	---	---	---	---	---	---	---	---	---
CFSM	0.49	---	---	---	---	---	---	---	---	---	---	---
IN.	0.56	---	---	---	---	---	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2005, BY WATER YEAR (WY)

MEAN	3.80	5.17	3.17	2.40	2.02	8.32	36.9	22.8	8.53	3.06	2.54	3.06
MAX	4.45	8.20	3.37	2.92	2.29	12.1	47.9	30.4	9.87	3.54	3.13	4.13
(WY)	(2005)	(2005)	(2004)	(2004)	(2004)	(2004)	(2004)	(2003)	(2004)	(2004)	(2004)	(2004)
MIN	3.15	4.69	2.96	1.88	1.75	4.51	25.8	15.2	7.20	2.58	1.95	1.99
(WY)	(2004)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2004)	(2003)	(2003)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2003 - 2005	
ANNUAL TOTAL	3,222.8		154.5			
ANNUAL MEAN	10.5		4.68		8.46	
HIGHEST ANNUAL MEAN					9.38	2004
LOWEST ANNUAL MEAN					4.68	2005
HIGHEST DAILY MEAN	167	Apr 19	15	Oct 30	192	May 12, 2003
LOWEST DAILY MEAN	1.4	Feb 26	2.2	Oct 21	1.2	Sep 3, 2003
ANNUAL SEVEN-DAY MINIMUM	1.6	Feb 22	2.3	Oct 16	1.3	Feb 10, 2003
MAXIMUM PEAK FLOW					229	May 12, 2003
MAXIMUM PEAK STAGE					10.29	May 12, 2003
INSTANTANEOUS LOW FLOW					1.0	Aug 15, 2003
ANNUAL RUNOFF (CFSM)	1.15		0.514		0.930	
ANNUAL RUNOFF (INCHES)	13.17		0.63		12.63	
10 PERCENT EXCEEDS	27		12		19	
50 PERCENT EXCEEDS	3.2		2.6		3.2	
90 PERCENT EXCEEDS	2.2		2.3		1.8	

05358180 SPILLER CREEK AT COUNTY HIGHWAY B NEAR BUTTERNUT, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 2002 to October 2004 (discontinued).

PERIOD OF DAILY RECORD.--
TOTAL-PHOSPHORUS DISCHARGE: November 2002 to October 2004 (discontinued).

INSTRUMENTATION.--Automatic, pumping, refrigerated water sampler.

REMARKS.--Total-phosphorus loads generally good. For periods during which discharge records were estimated, load estimates are fair to poor.

EXTREMES FOR PERIOD OF RECORD.--
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 82.2 lb, May 11, 2003; minimum daily, 0.17 lb, Mar. 10 and 12, 2003.

EXTREMES FOR CURRENT PERIOD (OCTOBER 2003 TO OCTOBER 2004).--
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 60.9 lb, Apr. 19; minimum daily, 0.25 lb, Oct. 8 and 21, 2003.

PHOSPHORUS, WATER, UNFILTERED, POUNDS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.36	0.80	e0.64	e0.69	e0.61	e0.39	18.7	4.04	10.4	0.81	0.78	0.31
2	0.37	0.57	e0.60	e0.67	e0.60	e0.44	16.5	3.34	7.14	0.78	0.76	0.30
3	0.41	0.49	e0.59	e0.64	e0.59	e0.49	15.2	2.81	4.04	1.02	0.67	0.29
4	0.50	0.54	e0.55	e0.62	e0.58	e0.55	14.3	2.57	2.66	1.47	0.54	0.33
5	0.34	0.59	e0.52	e0.58	e0.55	e0.56	13.4	2.24	2.35	1.53	0.53	1.46
6	0.39	0.59	e0.50	e0.56	e0.54	e0.57	14.4	2.01	3.27	1.36	0.42	3.34
7	0.56	e0.55	e0.52	e0.53	e0.53	e0.58	14.3	1.79	2.50	1.41	0.43	4.24
8	0.25	e0.53	e0.53	e0.53	e0.53	e0.59	12.0	1.70	1.81	1.34	0.54	2.34
9	0.28	e0.50	e0.53	e0.53	e0.54	e0.58	10.7	1.62	2.14	1.19	0.55	0.88
10	0.41	e0.47	e0.52	e0.53	e0.54	e0.56	8.38	1.79	2.21	1.10	0.71	0.58
11	0.59	e0.45	e0.51	e0.56	e0.52	e0.79	6.36	1.57	1.68	1.09	0.68	0.55
12	0.83	e0.45	e0.52	e0.63	e0.50	e0.79	4.80	1.58	2.10	1.47	0.73	0.47
13	0.68	e0.45	e0.53	e0.64	e0.47	e0.74	3.84	8.82	1.96	2.06	0.60	0.45
14	0.56	e0.44	e0.52	e0.64	e0.41	e0.69	3.49	13.2	1.64	2.03	0.49	0.43
15	0.55	0.41	e0.53	e0.63	e0.36	e0.64	3.73	6.39	1.43	1.60	0.39	0.88
16	0.43	0.48	e0.54	e0.65	e0.36	e0.62	4.42	3.62	1.29	1.28	0.38	1.97
17	0.40	0.61	e0.55	e0.66	e0.38	e0.58	5.20	3.37	1.23	1.04	0.39	1.44
18	0.41	4.11	e0.54	e0.66	e0.40	e0.54	25.6	3.57	1.15	0.92	0.36	1.02
19	0.35	5.18	e0.55	e0.67	e0.40	e0.50	60.9	2.58	1.03	0.86	0.34	0.84
20	0.46	2.32	e0.56	e0.67	e0.40	e0.46	31.8	2.26	0.98	0.94	0.32	1.01
21	0.25	1.47	e0.57	e0.68	e0.37	e0.46	17.0	1.99	1.06	0.98	0.29	0.62
22	0.27	1.17	e0.55	e0.67	e0.33	e0.46	11.3	1.75	1.15	0.87	0.28	0.58
23	0.27	1.02	e0.56	e0.66	e0.33	0.45	6.57	4.63	0.99	0.75	0.26	0.53
24	0.29	e0.97	e0.55	e0.65	e0.31	0.47	4.62	10.2	1.13	0.64	0.27	0.60
25	0.26	e0.91	e0.56	e0.64	e0.30	0.61	4.72	6.06	1.12	0.60	0.27	0.60
26	0.29	e0.84	e0.59	e0.63	e0.28	1.64	4.43	3.85	1.25	0.55	0.31	0.73
27	0.26	e0.79	e0.62	e0.62	e0.31	10.3	3.93	3.72	0.91	0.51	0.33	0.52
28	0.38	e0.72	e0.67	e0.61	e0.33	55.1	3.90	3.39	0.80	0.50	0.33	0.51
29	0.41	e0.69	e0.70	e0.60	e0.36	40.6	4.03	2.47	0.84	0.73	0.29	0.49
30	0.66	e0.67	e0.69	e0.59	---	24.6	4.29	4.75	0.81	0.71	0.33	0.48
31	0.98	---	e0.69	e0.60	---	21.6	---	14.3	---	0.83	0.29	---
TOTAL	13.45	29.78	17.60	19.24	12.73	167.95	352.81	127.98	63.07	32.97	13.86	28.79

WTR YR 2004 TOTAL 880.23

e Estimated

05358180 SPILLER CREEK AT COUNTY HIGHWAY B NEAR BUTTERNUT, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Dis-charge, cfs (00060)	Instan-taneous dis-charge, cfs (00061)	Sam-pling method, code (82398)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)
OCT						
07...	0645	--	5.7	50	--	.027
23...	1145	--	2.1	50	--	.024
29...	0730	--	3.3	50	--	.021
31...	0700	--	6.1	50	--	.030
NOV						
18...	1000	--	12	50	.030	.067
18...	1001	--	12	10	--	.065
25...	0745	5.8	--	50	--	.029
DEC						
09...	1045	3.6	--	50	--	.027
19...	0915	3.2	--	50	.023	.032
29...	0700	3.4	--	50	--	.038
JAN						
12...	0230	3.2	--	50	--	.036
21...	1115	2.8	--	50	.036	.045
FEB						
07...	1145	2.9	--	50	--	.034
24...	1545	1.6	--	50	.040	.036
MAR						
11...	0700	3.1	--	50	--	.048
17...	1510	2.8	--	70	--	.038
27...	2330	--	34	50	--	.157
28...	0615	--	53	50	--	.181
28...	1230	--	72	50	--	.163
28...	1745	--	92	50	--	.131
29...	0245	--	91	50	--	.103
29...	0930	--	86	50	--	.087
29...	1745	--	81	10	--	.080
29...	1800	--	81	50	.048	.083
30...	0245	--	75	50	--	.068
30...	1145	--	64	50	--	.069
31...	0115	--	66	50	--	.058
31...	1230	--	59	50	--	.067
APR						
01...	1045	--	64	50	--	.060
02...	1515	--	57	50	--	.056
03...	0400	--	58	50	--	.046
03...	1615	--	59	50	--	.050
04...	0630	--	59	50	--	.046
05...	0200	--	56	50	--	.045
06...	0215	--	59	50	--	.044
07...	1318	--	61	50	.028	.044
07...	1325	--	61	10	--	.044
08...	0615	--	62	50	--	.036
09...	0645	--	58	50	--	.036
14...	0745	--	20	50	--	.033
18...	0745	--	30	50	--	.118
18...	1200	--	51	50	--	.140
18...	2015	--	71	50	--	.073
19...	0545	--	167	50	--	.078
19...	2215	--	168	50	--	.056
20...	1030	--	128	50	--	.047
20...	1845	--	103	10	--	.042
20...	1900	--	104	50	--	.040
21...	1115	--	84	50	--	.038
22...	1200	--	64	50	--	.033
23...	0430	--	50	50	--	.027
24...	0515	--	34	50	--	.027
25...	1900	--	33	50	--	.029
26...	1130	--	33	50	--	.024
MAY						
01...	0745	--	13	50	--	.059
13...	1700	--	32	50	--	.142
13...	2100	--	44	50	--	.072
14...	1330	--	48	50	--	.049
15...	0600	--	38	50	--	.035
17...	1400	--	16	10	.025	.034
17...	1415	--	16	50	--	.046
24...	1415	--	33	50	--	.062
24...	2300	--	31	50	--	.044
31...	1445	--	54	50	--	.044
31...	1500	--	55	50	--	.055
31...	2300	--	55	50	--	.040

05358180 SPILLER CREEK AT COUNTY HIGHWAY B NEAR BUTTERNUT, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)
JUN					
01...	1530	53	50	--	.035
01...	2345	49	50	--	.035
02...	1615	36	50	--	.033
24...	1455	4.0	50	.038	.053
JUL					
15...	1125	4.8	50	.043	.064
AUG					
19...	1045	3.1	50	.007	.021
SEP					
21...	1620	2.0	50	.039	.056
28...	0915	2.0	50	--	.044

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)
OCT					
05...	0915	2.9	50	--	.032
25...	1705	6.8	50	.026	.036

05358190 BUTTERNUT CREEK AT COUNTY HIGHWAY B NEAR PARK FALLS, WI

LOCATION.--Lat 45°56'20", long 90°32'18", in SE ¼ SW ¼ SE ¼ sec.18, T.40 N., R.1 W., Price County, Hydrologic Unit 07050002, on right bank approximately 20 ft downstream of bridge on County Highway B, and approximately 1,000 ft downstream of Butternut Lake.

DRAINAGE AREA.--47.6 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 2002 to current year.

GAGE.--Water-stage recorder. Elevation of gage is approximately 1,490 ft above NGVD, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	28	27	18	12	14	196	98	129	17	17	5.9
2	10	29	25	18	14	15	197	86	140	15	18	5.1
3	9.6	30	24	18	15	16	198	73	133	14	18	5.1
4	8.9	30	22	17	15	17	194	65	117	21	16	4.7
5	8.8	28	21	17	14	20	186	56	103	23	13	10
6	8.4	26	20	16	15	20	183	53	99	24	12	29
7	8.4	25	19	15	14	22	182	47	91	25	9.5	38
8	7.7	23	19	14	13	21	192	43	88	23	9.9	39
9	6.6	22	e20	13	14	20	196	41	86	22	10	36
10	6.2	21	e19	13	14	19	194	44	79	21	13	30
11	7.1	21	e19	12	14	22	184	39	68	21	14	27
12	11	21	e18	12	13	21	165	38	62	22	15	24
13	12	20	e18	12	13	21	142	51	60	22	16	21
14	13	18	e18	14	13	22	123	73	57	23	15	19
15	12	18	18	14	12	21	108	86	51	21	14	24
16	12	18	18	14	12	20	100	88	46	20	14	30
17	12	19	18	14	11	20	96	88	41	19	14	32
18	12	30	17	e12	11	19	114	84	36	16	13	32
19	11	46	17	e12	12	18	257	75	30	15	11	30
20	11	55	16	e12	14	18	462	71	25	17	9.7	27
21	11	55	16	e11	14	18	514	64	23	19	7.9	26
22	11	55	16	e11	14	16	445	60	21	20	6.9	25
23	11	53	16	e11	15	16	357	64	22	18	6.5	23
24	11	47	15	e11	14	16	282	73	22	17	5.4	22
25	11	42	15	e11	13	16	232	82	21	15	5.3	20
26	12	39	14	12	13	20	195	86	20	14	5.2	18
27	11	36	14	12	13	26	165	92	19	12	5.7	16
28	16	34	16	12	12	52	142	88	18	10	5.7	14
29	17	31	17	e11	12	107	126	83	18	12	5.6	12
30	20	29	18	e11	---	156	111	85	16	13	5.6	10
31	24	---	18	e11	---	183	---	106	---	16	5.6	---
TOTAL	354.7	949	568	411	385	1,012	6,238	2,182	1,741	567	337.5	654.8
MEAN	11.4	31.6	18.3	13.3	13.3	32.6	208	70.4	58.0	18.3	10.9	21.8
MAX	24	55	27	18	15	183	514	106	140	25	18	39
MIN	6.2	18	14	11	11	14	96	38	16	10	5.2	4.7
CFSM	0.24	0.66	0.38	0.28	0.28	0.69	4.37	1.48	1.22	0.38	0.23	0.46
IN.	0.28	0.74	0.44	0.32	0.30	0.79	4.88	1.71	1.36	0.44	0.26	0.51

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2004, BY WATER YEAR (WY)

MEAN	11.4	31.4	20.4	13.4	12.5	30.2	158	108	45.9	16.6	8.34	12.9
MAX	11.4	31.6	22.4	13.6	13.3	32.6	208	145	58.0	18.3	10.9	21.8
(WY)	(2004)	(2004)	(2003)	(2003)	(2004)	(2004)	(2004)	(2003)	(2004)	(2004)	(2004)	(2004)
MIN	11.4	31.1	18.3	13.3	11.8	27.7	109	70.4	33.8	14.9	5.80	4.03
(WY)	(2004)	(2003)	(2004)	(2004)	(2003)	(2003)	(2003)	(2004)	(2003)	(2003)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2003 - 2004	
ANNUAL TOTAL	13,003.6		15,400.0			
ANNUAL MEAN	35.6		42.1		42.1	
HIGHEST ANNUAL MEAN					42.1	2004
LOWEST ANNUAL MEAN					42.1	2004
HIGHEST DAILY MEAN	563	May 13	514	Apr 21	563	May 13, 2003
LOWEST DAILY MEAN	1.4	Sep 11	4.7	Sep 4	1.4	Sep 11, 2003
ANNUAL SEVEN-DAY MINIMUM	1.6	Sep 5	5.4	Aug 29	1.6	Sep 5, 2003
MAXIMUM PEAK FLOW			541	Apr 21	631	May 13, 2003
MAXIMUM PEAK STAGE			6.08	Apr 21	6.41	May 13, 2003
INSTANTANEOUS LOW FLOW			3.9	Sep 5	1.0	Sep 12, 2003
ANNUAL RUNOFF (CFSM)	0.748		0.884		0.884	
ANNUAL RUNOFF (INCHES)	10.16		12.04		12.01	
10 PERCENT EXCEEDS	64		104		104	
50 PERCENT EXCEEDS	16		19		19	
90 PERCENT EXCEEDS	5.6		11		11	

(e) Estimated due to ice effect or missing record

05358190 BUTTERNUT CREEK AT COUNTY HIGHWAY B NEAR PARK FALLS, WI—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10		---	---	---	---	---	---	---	---	---	---
2	12		---	---	---	---	---	---	---	---	---	---
3	11	---	---	---	---	---	---	---	---	---	---	---
4	11	---	---	---	---	---	---	---	---	---	---	---
5	8.2	---	---	---	---	---	---	---	---	---	---	---
6	7.2	---	---	---	---	---	---	---	---	---	---	---
7	5.9	---	---	---	---	---	---	---	---	---	---	---
8	6.2	---	---	---	---	---	---	---	---	---	---	---
9	6.1	---	---	---	---	---	---	---	---	---	---	---
10	8.6	---	---	---	---	---	---	---	---	---	---	---
11	10	---	---	---	---	---	---	---	---	---	---	---
12	8.9	---	---	---	---	---	---	---	---	---	---	---
13	7.8	---	---	---	---	---	---	---	---	---	---	---
14	5.8	---	---	---	---	---	---	---	---	---	---	---
15	5.2	---	---	---	---	---	---	---	---	---	---	---
16	5.3	---	---	---	---	---	---	---	---	---	---	---
17	4.7	---	---	---	---	---	---	---	---	---	---	---
18	4.4	---	---	---	---	---	---	---	---	---	---	---
19	4.6	---	---	---	---	---	---	---	---	---	---	---
20	4.9	---	---	---	---	---	---	---	---	---	---	---
21	5.1	---	---	---	---	---	---	---	---	---	---	---
22	5.1	---	---	---	---	---	---	---	---	---	---	---
23	11	---	---	---	---	---	---	---	---	---	---	---
24	19	---	---	---	---	---	---	---	---	---	---	---
25	24	---	---	---	---	---	---	---	---	---	---	---
26	26	---	---	---	---	---	---	---	---	---	---	---
27	26	---	---	---	---	---	---	---	---	---	---	---
28	29	---	---	---	---	---	---	---	---	---	---	---
29	39	---	---	---	---	---	---	---	---	---	---	---
30	52	---	---	---	---	---	---	---	---	---	---	---
31	76	---	---	---	---	---	---	---	---	---	---	---
TOTAL	460.0		---	---	---	---	---	---	---	---	---	---
MEAN	14.8		---	---	---	---	---	---	---	---	---	---
MAX	76		---	---	---	---	---	---	---	---	---	---
MIN	4.4		---	---	---	---	---	---	---	---	---	---
CFSM	0.31		---	---	---	---	---	---	---	---	---	---
IN.	0.36		---	---	---	---	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2005, BY WATER YEAR (WY)

MEAN	20.2	33.1	20.4	13.4	12.5	30.2	158	108	45.9	16.6	8.34	12.9
MAX	51.2	84.0	22.4	13.6	13.3	32.6	208	145	58.0	18.3	10.9	21.8
(WY)	(2003)	(2005)	(2003)	(2003)	(2004)	(2004)	(2004)	(2003)	(2004)	(2004)	(2004)	(2004)
MIN	11.4	31.1	18.3	13.3	11.8	27.7	109	70.4	33.8	14.9	5.80	4.03
(WY)	(2004)	(2003)	(2004)	(2004)	(2003)	(2003)	(2003)	(2004)	(2003)	(2003)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2003 - 2005	
ANNUAL TOTAL	14,156.3		628.0			
ANNUAL MEAN	46.1		19.0		39.5	
HIGHEST ANNUAL MEAN					42.1	2004
LOWEST ANNUAL MEAN					19.0	2005
HIGHEST DAILY MEAN	514	Apr 21	88	Nov 1	563	May 13, 2003
LOWEST DAILY MEAN	4.4	Oct 18	4.4	Oct 18	1.4	Sep 11, 2003
ANNUAL SEVEN-DAY MINIMUM	4.9	Oct 16	4.9	Oct 16	1.6	Sep 5, 2003
MAXIMUM PEAK FLOW					631	May 13, 2003
MAXIMUM PEAK STAGE					6.41	May 13, 2003
INSTANTANEOUS LOW FLOW					1.0	Sep 12, 2003
ANNUAL RUNOFF (CFSM)	0.969		0.400		0.830	
ANNUAL RUNOFF (INCHES)	11.06		0.49		11.27	
10 PERCENT EXCEEDS	118		66		88	
50 PERCENT EXCEEDS	19		8.9		19	
90 PERCENT EXCEEDS	8.5		4.8		6.8	

05358190 BUTTERNUT CREEK AT COUNTY HIGHWAY B NEAR PARK FALLS, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 2002 to October 2004 (discontinued).

PERIOD OF DAILY RECORD.--
TOTAL-PHOSPHORUS DISCHARGE: November 2002 to October 2004 (discontinued).

REMARKS.--Water sampled manually. Total-phosphorus loads generally good. For periods during which discharge records were estimated, load estimates are fair to poor.

EXTREMES FOR PERIOD OF RECORD.--
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 173 lb, Apr. 21, 2004; minimum daily, 0.30 lb, Sept. 11, 2003.

EXTREMES FOR CURRENT PERIOD (OCTOBER 2003 TO OCTOBER 2004).--
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 173 lb, Apr. 21; minimum daily, 0.99 lb, Oct. 18, 2004.

PHOSPHORUS, WATER, UNFILTERED, POUNDS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.35	5.73	5.11	2.76	1.66	2.04	44.3	26.0	28.9	4.18	4.03	1.37
2	2.00	6.09	4.69	2.74	1.96	2.22	44.7	22.4	31.8	3.73	4.40	1.19
3	1.93	6.15	4.37	2.76	2.21	2.30	45.4	18.7	30.2	3.59	4.27	1.18
4	1.79	6.28	4.06	2.69	2.10	2.50	44.8	16.6	26.6	5.32	3.85	1.10
5	1.77	5.93	3.79	2.56	2.02	2.97	43.3	14.1	23.6	5.85	3.19	2.43
6	1.70	5.47	3.54	2.42	2.08	3.01	43.1	13.2	22.8	6.07	2.85	6.80
7	1.70	5.30	3.35	2.27	2.05	3.29	43.2	11.5	21.1	6.31	2.26	8.80
8	1.55	4.88	3.35	2.14	1.93	3.18	45.6	10.3	20.4	5.89	2.37	8.98
9	1.33	4.56	e3.52	2.00	1.96	3.01	46.5	9.62	20.1	5.47	2.49	8.29
10	1.24	4.48	e3.32	1.90	1.94	2.91	46.1	10.4	18.5	5.24	3.05	6.99
11	1.44	4.37	e3.29	1.86	1.94	3.38	43.7	9.03	16.0	5.21	3.33	6.33
12	2.17	4.37	e3.09	1.84	1.92	3.31	39.2	8.62	14.8	5.51	3.55	5.62
13	2.35	4.12	e3.06	1.83	1.84	3.38	33.8	11.4	14.3	5.54	3.65	4.77
14	2.58	3.81	e3.04	2.08	1.83	3.51	29.4	16.0	13.6	5.72	3.61	4.36
15	2.42	3.83	3.04	2.09	1.76	3.39	25.8	18.7	12.3	5.23	3.32	5.48
16	2.37	3.85	3.06	2.05	1.68	3.23	23.9	18.8	11.0	5.04	3.24	6.86
17	2.35	3.97	2.97	2.03	1.62	3.24	22.9	18.6	9.95	4.68	3.34	7.37
18	2.38	6.36	2.85	e1.77	1.58	3.15	27.7	17.7	8.67	4.11	3.13	7.36
19	2.32	9.59	2.77	e1.76	1.64	2.99	73.6	15.9	7.31	3.83	2.64	6.85
20	2.30	11.4	2.64	e1.75	2.00	2.96	155	15.1	6.11	4.25	2.26	6.35
21	2.30	11.4	2.57	e1.60	1.95	2.87	173	13.8	5.64	4.64	1.84	6.14
22	2.19	11.1	2.49	e1.60	1.94	2.69	141	12.9	5.12	4.89	1.61	5.86
23	2.28	10.7	2.50	e1.60	2.04	2.60	107	13.8	5.42	4.43	1.51	5.32
24	2.20	9.44	2.42	e1.60	1.95	2.58	82.7	15.8	5.43	4.12	1.25	5.00
25	2.31	8.40	2.36	e1.60	1.89	2.70	67.1	17.8	5.17	3.71	1.24	4.65
26	2.42	7.67	2.28	1.79	1.85	3.33	55.5	18.9	5.08	3.42	1.22	4.09
27	2.36	7.11	2.24	1.79	1.80	4.41	46.3	20.3	4.78	3.04	1.33	3.71
28	3.25	6.55	2.47	1.77	1.78	9.39	39.4	19.5	4.54	2.54	1.33	3.29
29	3.53	5.96	2.65	e1.59	1.79	21.5	34.3	18.3	4.38	2.93	1.29	2.82
30	4.21	5.55	2.77	e1.59	---	34.3	29.9	18.9	4.09	3.24	1.30	2.35
31	4.98	---	2.77	e1.59	---	41.0	---	23.8	---	3.96	1.29	---
TOTAL	72.07	194.42	96.43	61.42	54.71	187.34	1,698.2	496.47	407.69	141.69	80.04	151.71

WTR YR 2004 TOTAL 3,642.19

e Estimated

05358190 BUTTERNUT CREEK AT COUNTY HIGHWAY B NEAR PARK FALLS, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Phosphorus, water, unfltrd mg/L (00665)
OCT				
21...	1755	11	10	.038
NOV				
18...	0925	30	10	.039
DEC				
19...	0805	17	10	.030
JAN				
21...	0825	11	10	.027
FEB				
24...	1335	14	10	.026
MAR				
17...	1355	20	10	.030
30...	1025	154	10	.041
APR				
07...	1520	181	10	.044
20...	1720	494	10	.065
MAY				
17...	1200	87	10	.039
JUN				
23...	1615	21	10	.046
JUL				
15...	1150	21	10	.047
AUG				
18...	1210	13	10	.043
SEP				
22...	1535	24	10	.043

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Phosphorus, water, unfltrd mg/L (00665)
OCT				
25...	1335	25	10	.041

05360500 FLAMBEAU RIVER NEAR BRUCE, WI

LOCATION.--Lat 45°22'21", long 91°12'34", in Lot 7 of SE ¼ NW ¼ sec.2, T.33 N., R.7 W., Rusk County, Hydrologic Unit 07050002, on right bank 2.5 mi downstream from Thornapple Powerplant, 6.0 mi upstream from mouth, and 7.0 mi southeast of Bruce.

DRAINAGE AREA.--1,860 mi^2.

PERIOD OF RECORD.--August 1951 to current year.

REVISED RECORDS.--WDR WI-78-1: 1971. WDR WI-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,056.34 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Flow regulated by several powerplants above station and by Rest Lake and Flambeau Flowage Reservoirs. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	574	898	1,050	e760	e760	e1,100	5,750	3,810	6,460	818	809	644
2	575	809	727	e730	e680	e1,200	4,840	2,720	6,170	992	802	662
3	628	763	765	e730	e640	e1,300	3,980	3,040	4,680	874	733	605
4	588	797	793	e680	e570	e1,100	5,020	2,910	4,090	754	663	585
5	451	817	930	e470	e700	e1,200	5,130	1,950	3,320	768	735	595
6	396	1,090	974	e450	e730	e1,100	4,530	1,430	3,210	793	754	1,030
7	581	856	600	e510	e730	e1,100	5,020	1,840	3,270	945	825	1,510
8	511	564	620	e520	e700	e1,000	4,020	1,580	2,750	816	738	988
9	646	561	735	e540	e730	e1,100	4,100	1,680	3,880	1,030	797	1,170
10	575	730	769	e540	e750	e1,300	4,150	2,270	3,580	812	962	1,070
11	523	804	e720	e540	e690	e1,200	4,030	1,640	3,340	927	930	915
12	740	752	e600	e380	e700	e1,100	3,850	1,670	2,870	830	1,070	939
13	532	680	e630	e380	e710	e1,100	2,730	2,140	2,930	672	1,070	669
14	472	601	e770	e370	e730	e1,100	2,350	3,790	3,020	614	902	580
15	532	792	e890	e480	e710	e1,100	2,320	4,200	2,670	671	988	809
16	601	665	e830	e600	e830	e1,200	2,220	3,800	1,950	721	796	1,230
17	653	718	e980	e640	e750	e1,200	2,280	3,040	1,910	737	794	1,010
18	583	1,070	e800	e730	e780	e1,300	2,250	2,860	1,530	740	806	812
19	537	1,220	e690	e810	e790	1,130	4,030	2,780	1,120	677	1,140	1,000
20	590	1,390	e730	e770	e810	1,300	8,920	2,550	1,060	768	746	987
21	560	1,600	e950	e650	e840	1,540	9,910	1,890	1,230	723	680	860
22	511	1,220	e830	e580	e800	1,500	9,470	2,780	912	663	679	737
23	537	1,250	e720	e610	e870	1,240	8,360	3,050	885	663	658	708
24	565	1,190	e750	e410	e1,000	1,020	7,340	3,390	1,050	657	634	725
25	475	828	e700	e460	e860	1,520	5,730	3,880	1,110	593	628	747
26	566	642	e680	e720	e840	2,420	5,150	3,750	949	565	642	682
27	510	938	e760	e700	e860	2,680	5,970	3,140	847	640	650	641
28	589	1,070	e930	e680	e870	4,240	5,040	3,220	833	578	710	610
29	739	832	e860	e650	e930	7,570	3,560	2,960	812	652	673	573
30	635	765	e870	e750	---	8,420	3,150	2,990	959	722	628	550
31	784	---	e800	e830	---	7,240	---	5,760	---	825	630	---
TOTAL	17,759	26,912	24,453	18,670	22,360	62,620	145,200	88,510	73,397	23,240	24,272	24,643
MEAN	573	897	789	602	771	2,020	4,840	2,855	2,447	750	783	821
MAX	784	1,600	1,050	830	1,000	8,420	9,910	5,760	6,460	1,030	1,140	1,510
MIN	396	561	600	370	570	1,000	2,220	1,430	812	565	628	550

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2004, BY WATER YEAR (WY)

MEAN	1,732	1,622	1,277	1,119	1,134	1,692	3,705	2,659	2,043	1,610	1,438	1,760
MAX	5,616	4,404	2,542	2,006	2,411	5,490	7,379	6,082	6,066	4,339	3,765	5,089
(WY)	(1986)	(1992)	(1992)	(1973)	(1969)	(1973)	(2002)	(1954)	(1968)	(1968)	(1972)	(1994)
MIN	363	430	382	451	474	971	1,013	758	572	596	553	420
(WY)	(1977)	(1977)	(1977)	(1977)	(1977)	(1959)	(1990)	(1987)	(1988)	(1988)	(1998)	(1998)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1951 - 2004	
ANNUAL TOTAL	534,388		552,036			
ANNUAL MEAN	1,464		1,508		1,813	
HIGHEST ANNUAL MEAN					2,900	1973
LOWEST ANNUAL MEAN					993	1988
HIGHEST DAILY MEAN	16,000	May 13	9,910	Apr 21	23,200	Sep 16, 1994
LOWEST DAILY MEAN	396	Oct 6	(a)370	Jan 14	(a)190	Dec 23, 1998
ANNUAL SEVEN-DAY MINIMUM	511	Sep 8	(a)461	Jan 9	309	Sep 8, 1998
MAXIMUM PEAK FLOW			10,400	Mar 30	24,100	Sep 16, 1994
MAXIMUM PEAK STAGE			8.07	Mar 30	12.44	Sep 16, 1994
10 PERCENT EXCEEDS	2,840		3,790		3,390	
50 PERCENT EXCEEDS	833		822		1,340	
90 PERCENT EXCEEDS	557		575		739	

(a) Ice affected
(e) Estimated due to ice effect or missing record

05362000 JUMP RIVER AT SHELDON, WI

LOCATION.--Lat 45°18'29", long 90°57'23", in SE ¼ SW ¼ sec.26, T.33 N., R.5 W., Rusk County, Hydrologic Unit 07050004, on right bank just downstream from highway bridge in Sheldon, 1,500 ft upstream from Shoulder Creek and 11 mi upstream from mouth.

DRAINAGE AREA.--576 mi^2.

PERIOD OF RECORD.--July 1915 to current year.

REVISED RECORDS.--WSP 975: 1938. WSP 1438: 1916-17(M), 1919(M), 1920, 1921(M), 1922, 1923-26(M), 1927, 1928-31(M), 1932, 1933-37(M), 1945-46(M), 1948-50(M). WDR WI-81-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,092.75 ft above NGVD of 1929. Prior to Feb. 9, 1939, Sept. 1, 1941, to Apr. 1, 1953, and Feb. 18, 1954, to Sept. 27, 1964, nonrecording gage at same site and datum. Apr. 2, 1953, to Feb. 18, 1954, nonrecording gage in creamery wellhouse 400 ft upstream at same datum. Feb. 9, 1939, to Aug. 31, 1941, and from Sept. 27, 1964, water-stage recorder at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	132	e150	e140	e42	e88	4,770	646	4,120	104	43	46
2	75	129	e140	e120	e42	e92	4,050	570	3,590	95	44	45
3	73	109	e120	e120	e43	e98	3,610	485	2,660	84	46	43
4	69	108	e120	e110	e42	e100	3,170	427	1,720	85	47	42
5	67	116	e130	e90	e42	e110	2,690	383	1,170	87	46	46
6	68	e130	e120	e81	e44	e130	2,340	351	1,080	109	44	57
7	71	e140	e120	e71	e47	e140	2,160	321	939	106	42	58
8	74	e120	e120	e60	e50	e160	1,980	299	740	98	46	89
9	69	e110	e110	e53	e52	e150	1,800	304	1,460	93	45	94
10	61	e100	e100	e53	e52	e150	1,540	375	2,400	88	86	81
11	59	107	e96	e56	e52	e150	1,260	557	1,720	82	153	70
12	82	102	e100	e60	e51	e140	1,050	542	1,760	79	132	62
13	101	e110	e110	e57	e51	e150	875	784	1,880	79	114	56
14	119	e100	e120	e54	e50	e150	768	1,430	1,350	77	102	51
15	111	e100	e110	e50	e50	e150	717	1,460	963	72	88	75
16	110	113	e110	e50	e50	e140	656	1,190	728	64	86	158
17	108	107	e110	e53	e50	e140	593	909	571	57	84	255
18	106	138	e110	e50	e52	e130	613	724	466	54	92	204
19	107	289	e110	e50	e53	e130	1,270	595	377	52	96	158
20	105	359	e110	e50	e58	e130	2,220	508	308	49	88	127
21	101	307	e110	e50	e60	e120	2,130	461	262	50	79	105
22	103	261	e110	e48	e70	e110	1,930	452	222	79	69	90
23	104	232	e110	e47	e80	e110	1,580	611	185	64	62	80
24	104	e200	e100	e48	e82	e120	1,230	1,770	159	57	58	74
25	103	e150	e94	e50	e83	e160	1,070	2,140	146	51	56	68
26	102	e180	e91	e50	e84	e500	1,190	1,670	135	48	54	68
27	102	e200	e90	e48	e85	e1,600	1,070	1,280	126	47	50	65
28	108	e170	e100	e46	e85	e6,000	933	1,160	118	43	48	61
29	116	e150	e110	e42	e85	10,200	860	937	112	44	46	58
30	126	e150	e120	e40	---	8,700	734	915	104	44	46	54
31	133	---	e140	e41	---	5,730	---	4,070	---	47	47	---
TOTAL	2,913	4,719	3,491	1,938	1,687	35,978	50,859	28,326	31,571	2,188	2,139	2,540
MEAN	94.0	157	113	62.5	58.2	1,161	1,695	914	1,052	70.6	69.0	84.7
MAX	133	359	150	140	85	10,200	4,770	4,070	4,120	109	153	255
MIN	59	100	90	40	42	88	593	299	104	43	42	42
CFSM	0.16	0.27	0.20	0.11	0.10	2.01	2.94	1.59	1.83	0.12	0.12	0.15
IN.	0.19	0.30	0.23	0.13	0.11	2.32	3.28	1.83	2.04	0.14	0.14	0.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 2004, BY WATER YEAR (WY)

MEAN	423	429	183	102	105	732	1,840	862	662	264	241	442
MAX	1,897	2,022	1,092	392	620	3,184	4,126	2,514	3,442	1,293	1,916	4,145
(WY)	(2003)	(1992)	(1992)	(1946)	(1984)	(1973)	(1982)	(1973)	(1943)	(1968)	(1941)	(1941)
MIN	27.5	35.3	34.7	25.6	21.4	61.2	360	134	54.6	17.5	21.9	25.4
(WY)	(1949)	(1977)	(1934)	(1917)	(1924)	(1940)	(1946)	(1987)	(1934)	(1936)	(1933)	(1976)

05362000 JUMP RIVER AT SHELDON, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1915 - 2004	
ANNUAL TOTAL	164,856		168,349			
ANNUAL MEAN	452		460		523	
HIGHEST ANNUAL MEAN					923	1942
LOWEST ANNUAL MEAN					214	1948
HIGHEST DAILY MEAN	11,200	May 12	10,200	Mar 29	40,800	Aug 31, 1941
LOWEST DAILY MEAN	36	Sep 11	(a)40	Jan 30	(b)11	Dec 18, 1943
ANNUAL SEVEN-DAY MINIMUM	37	Sep 5	(a)42	Jan 29	14	(c)Jan 25, 1924
MAXIMUM PEAK FLOW			10,600	Mar 29	(d)46,000	Aug 31, 1941
MAXIMUM PEAK STAGE			11.19	Mar 29	(f)18.80	Aug 31, 1941
INSTANTANEOUS LOW FLOW			(a)		(b)11	Dec 18, 1943
ANNUAL RUNOFF (CFSM)	0.784		0.799		0.907	
ANNUAL RUNOFF (INCHES)	10.65		10.87		12.33	
10 PERCENT EXCEEDS	919		1,270		1,300	
50 PERCENT EXCEEDS	110		108		158	
90 PERCENT EXCEEDS	45		48		47	

(a) Ice affected
(b) Result of freezeup
(c) Jan. 25, 1924, ice-affected, also occurred July 11, 1936
(d) From rating curve extended above 13,000 ft^3/s on basis of contracted-opening measurement of peak flow
(e) Estimated due to ice effect or missing record
(f) From floodmark

05365500 CHIPPEWA RIVER AT CHIPPEWA FALLS, WI

LOCATION.--Lat 44°55'37", long 91°24'33", in Lot 1, NE $^1/_4$ NE $^1/_4$ sec.12, T.28 N., R.9 W., Chippewa County, Hydrologic Unit 07050005, on right bank at Chippewa Falls, 1.0 mi downstream from Duncan Creek.

DRAINAGE AREA.--5,650 mi^2.

PERIOD OF RECORD.--June 1888 to September 1983, October 1986 to current year. Monthly discharge for some periods published in WSP 1308.

REVISED RECORDS.--WSP 785: 1934(M). WSP 1508: 1897, 1905, 1918(M), 1924(M). WDR WI-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 798.46 ft above NGVD of 1929. Prior to January 1914, nonrecording gage, and January 1914 to June 19, 1932, water-stage recorder at site 1 mi upstream at different datum. June 19, 1932, to current year, water-stage recorder at present site and datum.

REMARKS.--Records good (see page 11). Considerable regulation by Moose Lake, Lake Chippewa, Rest Lake, Flambeau Flowage, and Lake Wissota Reservoirs. Diurnal fluctuation caused by hydroelectric plant 1.1 mi upstream. Gage-height telemeter at station.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--A stage of 26.94 ft occurred Sept. 10, 1884, site and datum in use June 1932.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,470	2,260	1,900	2,250	1,920	2,740	27,000	8,000	30,100	2,100	2,660	1,300
2	1,480	2,290	1,930	2,220	1,920	3,190	18,800	8,040	29,100	2,110	1,930	1,300
3	1,490	2,400	2,230	2,140	1,920	3,230	18,200	7,970	25,000	2,130	1,930	1,400
4	1,500	2,180	2,170	2,030	1,880	3,250	17,600	7,080	17,000	2,140	2,000	1,500
5	1,490	2,120	2,480	1,710	1,870	3,800	17,400	6,870	14,300	2,120	1,730	1,500
6	1,530	2,190	2,980	1,480	1,960	3,580	13,600	5,090	8,680	2,130	1,500	2,270
7	1,510	2,260	2,200	1,380	1,960	2,730	10,800	4,740	9,870	2,180	1,510	3,790
8	1,450	2,260	2,190	1,280	1,950	2,240	12,200	4,160	12,400	2,190	1,880	3,500
9	1,340	2,200	2,000	1,230	1,960	3,290	12,000	4,110	11,400	2,190	2,650	2,810
10	1,340	1,890	1,800	1,200	1,930	4,550	11,600	5,290	12,300	2,190	2,620	2,100
11	1,610	1,860	1,670	1,230	1,920	4,260	11,000	5,750	13,100	2,200	2,640	2,110
12	2,230	1,850	1,410	1,360	1,930	2,950	9,630	5,670	13,100	2,180	2,590	1,810
13	1,740	1,760	1,370	1,350	1,940	2,370	6,450	6,660	9,420	2,180	3,060	2,220
14	1,370	1,720	1,340	1,350	1,930	2,670	6,490	11,000	7,570	2,140	2,200	2,240
15	1,370	1,800	1,390	1,400	1,960	4,490	7,410	14,700	8,520	1,990	2,160	4,060
16	1,580	1,780	2,030	1,660	2,600	4,370	7,390	13,000	8,360	1,940	2,180	4,010
17	1,830	1,840	2,180	1,530	3,170	3,870	7,150	8,930	5,740	1,720	2,200	3,240
18	1,970	2,440	2,460	1,480	2,210	3,450	5,840	6,840	4,500	1,340	2,210	3,240
19	1,640	3,240	2,180	1,500	2,660	3,270	8,190	6,950	4,130	1,320	2,210	2,080
20	1,530	4,310	1,980	1,520	2,500	3,250	16,700	6,480	3,110	1,300	2,200	1,930
21	1,620	3,970	1,850	1,540	1,900	2,450	22,200	5,800	2,180	1,360	2,200	1,930
22	1,610	3,180	1,540	1,530	2,260	3,510	21,700	4,840	2,180	1,390	2,100	1,930
23	1,600	2,840	1,710	1,520	3,450	4,440	21,800	7,100	2,760	1,460	1,920	1,760
24	1,600	2,980	1,900	1,570	2,970	4,970	21,400	10,700	3,370	1,470	1,920	1,700
25	1,600	2,240	1,510	1,570	3,490	5,520	18,500	15,800	3,160	1,440	1,960	1,970
26	1,480	2,230	1,450	1,540	3,090	10,800	15,700	15,200	2,220	1,290	1,950	1,970
27	1,410	2,240	1,520	1,910	2,030	15,000	15,400	9,490	2,180	1,440	1,470	1,860
28	1,540	2,260	1,860	1,580	1,820	28,400	15,100	8,610	2,170	1,470	1,510	1,770
29	1,990	2,880	2,230	1,940	1,830	40,500	10,400	12,800	2,170	1,490	1,370	1,730
30	1,990	2,330	2,240	1,950	---	42,400	7,920	12,200	2,160	1,510	1,300	2,280
31	1,870	---	2,270	1,920	---	35,000	---	19,600	---	1,520	1,300	---
TOTAL	49,780	71,800	59,970	49,870	64,930	260,540	415,570	269,470	272,250	55,630	63,060	67,310
MEAN	1,606	2,393	1,935	1,609	2,239	8,405	13,850	8,693	9,075	1,795	2,034	2,244
MAX	2,230	4,310	2,980	2,250	3,490	42,400	27,000	19,600	30,100	2,200	3,060	4,060
MIN	1,340	1,720	1,340	1,200	1,820	2,240	5,840	4,110	2,160	1,290	1,300	1,300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1888 - 2004, BY WATER YEAR (WY)

MEAN	4,245	4,185	3,004	2,578	2,641	5,378	11,852	8,614	6,880	4,299	3,401	4,411
MAX	15,570	15,990	7,897	5,305	6,569	17,630	28,900	22,700	30,570	13,620	9,805	23,030
(WY)	(1901)	(1992)	(1992)	(1973)	(1969)	(1973)	(1916)	(1903)	(1943)	(1968)	(1900)	(1941)
MIN	798	800	950	831	800	1,210	2,210	1,688	1,162	1,172	1,124	929
(WY)	(1977)	(1890)	(1893)	(1917)	(1895)	(1890)	(1895)	(1987)	(1988)	(1988)	(1894)	(1976)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1888 - 2004	
ANNUAL TOTAL	1,698,600		1,700,180			
ANNUAL MEAN	4,654		4,645		5,120	
HIGHEST ANNUAL MEAN					8,833	1903
LOWEST ANNUAL MEAN					2,453	1934
HIGHEST DAILY MEAN	53,900	May 13	42,400	Mar 30	95,500	Sep 1, 1941
LOWEST DAILY MEAN	1,160	Aug 23	1,200	Jan 10	40	Feb 4, 1917
ANNUAL SEVEN-DAY MINIMUM	1,170	Aug 17	1,290	Jan 8	308	Jan 29, 1917
MAXIMUM PEAK FLOW			44,600	Mar 30	102,000	Sep 1, 1941
MAXIMUM PEAK STAGE			16.88	Mar 30	24.80	Sep 1, 1941
10 PERCENT EXCEEDS	9,580		12,200		9,890	
50 PERCENT EXCEEDS	2,170		2,190		3,460	
90 PERCENT EXCEEDS	1,350		1,470		1,340	

05365707 NORTH FORK EAU CLAIRE RIVER NEAR THORP, WI

LOCATION.--Lat 44°58'25", long 90°50'57", in NW ¼ NE ¼ sec.27, T.29 N., R.4 W., Clark County, Hydrologic Unit 07050006, on left bank 15 ft downstream from town road, 0.3 mi downstream from Goggle-Eye Creek, and 2.6 mi northwest of Thorp.

DRAINAGE AREA.--51.0 mi^2.

PERIOD OF RECORD.--April 1986 to December 2003 (discontinued).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,115 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	3.2	e3.6	---	---	---	---	---	---	---	---	---
2	1.3	3.2	e2.7	---	---	---	---	---	---	---	---	---
3	1.6	3.3	e2.2	---	---	---	---	---	---	---	---	---
4	1.7	5.0	2.1	---	---	---	---	---	---	---	---	---
5	1.5	5.6	2.2	---	---	---	---	---	---	---	---	---
6	1.5	4.9	2.3	---	---	---	---	---	---	---	---	---
7	1.5	4.3	2.5	---	---	---	---	---	---	---	---	---
8	1.4	3.6	2.8	---	---	---	---	---	---	---	---	---
9	1.2	3.2	4.0	---	---	---	---	---	---	---	---	---
10	1.0	3.2	e4.5	---	---	---	---	---	---	---	---	---
11	1.3	3.5	e3.7	---	---	---	---	---	---	---	---	---
12	3.1	3.7	e3.1	---	---	---	---	---	---	---	---	---
13	3.6	4.1	e2.7	---	---	---	---	---	---	---	---	---
14	4.4	4.4	e3.2	---	---	---	---	---	---	---	---	---
15	4.0	4.3	e3.6	---	---	---	---	---	---	---	---	---
16	3.5	4.3	e4.0	---	---	---	---	---	---	---	---	---
17	3.0	5.0	e3.8	---	---	---	---	---	---	---	---	---
18	2.1	13	e3.5	---	---	---	---	---	---	---	---	---
19	1.5	16	e3.4	---	---	---	---	---	---	---	---	---
20	2.2	12	e3.4	---	---	---	---	---	---	---	---	---
21	2.7	9.1	e3.5	---	---	---	---	---	---	---	---	---
22	2.8	7.8	e3.6	---	---	---	---	---	---	---	---	---
23	2.8	e7.7	e3.6	---	---	---	---	---	---	---	---	---
24	2.8	e6.6	e3.1	---	---	---	---	---	---	---	---	---
25	2.8	e5.7	e2.9	---	---	---	---	---	---	---	---	---
26	2.8	e5.0	e2.9	---	---	---	---	---	---	---	---	---
27	2.8	4.1	e3.0	---	---	---	---	---	---	---	---	---
28	3.2	4.3	e3.0	---	---	---	---	---	---	---	---	---
29	3.4	3.8	e3.1	---	---	---	---	---	---	---	---	---
30	3.4	3.7	e2.7	---	---	---	---	---	---	---	---	---
31	3.3	---	e2.4	---	---	---	---	---	---	---	---	---
TOTAL	75.6	167.6	97.1	---	---	---	---	---	---	---	---	---
MEAN	2.44	5.59	3.13	---	---	---	---	---	---	---	---	---
MAX	4.4	16	4.5	---	---	---	---	---	---	---	---	---
MIN	1.0	3.2	2.1	---	---	---	---	---	---	---	---	---
CFSM	0.05	0.11	0.06	---	---	---	---	---	---	---	---	---
IN.	0.06	0.12	0.07	---	---	---	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2004, BY WATER YEAR (WY)

MEAN	29.4	40.6	14.3	5.54	12.9	97.0	133	57.0	70.3	20.2	46.1	45.8
MAX	149	262	79.7	31.4	86.6	181	332	184	338	49.4	172	420
(WY)	(2003)	(1992)	(1992)	(1997)	(1998)	(1989)	(2001)	(1993)	(1993)	(1986)	(2002)	(1986)
MIN	2.17	3.57	0.56	0.28	0.45	9.95	25.9	5.29	1.34	0.31	0.37	0.81
(WY)	(1990)	(1990)	(1990)	(1990)	(1990)	(1996)	(1987)	(1987)	(1988)	(1988)	(1988)	(1988)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR (October - December)		WATER YEARS 1986 - 2004	
ANNUAL TOTAL	13,006.77					
ANNUAL MEAN	35.6				46.4	
HIGHEST ANNUAL MEAN					93.0	1993
LOWEST ANNUAL MEAN					23.0	1999
HIGHEST DAILY MEAN	1,180	May 11	16	Nov 19	3,670	Sep 22, 1986
LOWEST DAILY MEAN	0.12	Sep 11	1.0	Oct 10	0.03	Jul 31, 1988
ANNUAL SEVEN-DAY MINIMUM	0.18	Sep 5	1.3	Oct 5	0.07	Jul 28, 1988
MAXIMUM PEAK FLOW			18	Nov 18	(a)9,050	Sep 22, 1986
MAXIMUM PEAK STAGE			1.90	Dec 1	10.13	Sep 22, 1986
INSTANTANEOUS LOW FLOW			0.98	Oct 8	0.02	Jul 30, 31, 1988
ANNUAL RUNOFF (CFSM)	0.699				0.909	
ANNUAL RUNOFF (INCHES)	9.49				12.35	
10 PERCENT EXCEEDS	63				96	
50 PERCENT EXCEEDS	3.2				9.4	
90 PERCENT EXCEEDS	0.50				1.6	

(a) From rating curve extended above 2,500 ft^3/s on basis of step-backwater measurement of peak flow
(e) Estimated due to ice effect or missing record

053674464 YELLOW RIVER AT BARRON, WI

LOCATION.--Lat 45°23'43", long 91°49'48", in SE ¼ SE ¼ sec.27, T.34 N., R.12 W., Barron County, Hydrologic Unit 07050007, on left bank 1.0 mi southeast of intersection of U.S. Highway 8 and State Highway 25 in Barron, 0.5 mi downstream from Quaderer Creek, in Becker Park, and 7.3 mi upstream from mouth.

DRAINAGE AREA.--153 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,090 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Flow is regulated occasionally at small dam upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	95	84	74	77	85	215	111	233	69	137	78
2	84	90	77	86	75	89	256	103	229	70	112	74
3	85	89	82	82	73	90	181	100	225	76	97	74
4	85	94	82	69	e72	90	200	95	156	242	93	73
5	84	97	81	e68	73	92	189	92	151	214	88	115
6	84	93	81	69	74	93	178	91	149	154	84	169
7	82	88	82	68	76	91	168	82	143	108	84	168
8	85	81	85	69	74	86	158	84	134	94	98	133
9	84	79	88	69	75	88	145	90	147	85	113	106
10	81	86	85	69	75	89	132	105	149	80	156	96
11	89	88	73	73	74	90	125	95	136	84	149	88
12	102	93	79	76	75	83	118	94	135	87	119	80
13	105	89	80	76	74	89	111	127	132	82	113	82
14	89	86	81	76	73	87	110	166	119	73	105	86
15	87	87	84	74	e74	82	105	154	102	71	95	140
16	85	88	85	75	75	82	105	131	102	70	97	147
17	85	89	84	76	74	88	102	131	99	68	97	130
18	86	106	82	e76	75	88	114	129	97	67	97	105
19	85	107	81	e72	77	79	171	120	91	90	90	97
20	90	95	74	e70	80	84	174	116	90	121	82	92
21	83	86	82	e72	79	80	169	106	90	115	79	85
22	83	86	81	e70	79	80	163	118	90	83	77	83
23	84	90	81	73	79	84	149	257	82	77	75	84
24	85	85	72	70	79	95	130	281	85	72	72	87
25	86	83	77	70	78	100	140	353	86	68	73	85
26	86	94	78	71	77	389	145	241	79	69	93	82
27	86	91	81	71	76	903	132	203	77	70	105	80
28	93	87	86	e70	77	1,970	126	317	77	68	91	80
29	101	85	87	e70	79	1,440	125	350	74	100	84	80
30	101	85	84	e72	---	685	118	256	69	118	90	77
31	100	---	80	e74	---	352	---	238	---	159	80	---
TOTAL	2,730	2,692	2,519	2,250	2,198	7,923	4,454	4,936	3,628	3,004	3,025	2,956
MEAN	88.1	89.7	81.3	72.6	75.8	256	148	159	121	96.9	97.6	98.5
MAX	105	107	88	86	80	1,970	256	353	233	242	156	169
MIN	81	79	72	68	72	79	102	82	69	67	72	73
CFSM	0.58	0.59	0.53	0.47	0.50	1.67	0.97	1.04	0.79	0.63	0.64	0.64
IN.	0.66	0.65	0.61	0.55	0.53	1.93	1.08	1.20	0.88	0.73	0.74	0.72

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2004, BY WATER YEAR (WY)

MEAN	104	112	85.6	77.9	91.7	152	245	143	121	103	111	105
MAX	204	184	112	90.5	179	256	587	272	222	146	170	191
(WY)	(1996)	(2001)	(2002)	(2003)	(2000)	(2004)	(2001)	(2003)	(1993)	(2000)	(1995)	(2002)
MIN	74.4	74.2	72.0	63.2	64.0	84.6	99.9	85.7	73.9	80.6	67.5	75.1
(WY)	(1992)	(1995)	(2000)	(1995)	(1995)	(2001)	(2000)	(1998)	(1994)	(1994)	(1994)	(1998)

053674464 YELLOW RIVER AT BARRON, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1991 - 2004	
ANNUAL TOTAL	45,508		42,315			
ANNUAL MEAN	125		116		120	
HIGHEST ANNUAL MEAN					158	2001
LOWEST ANNUAL MEAN					93.5	1994
HIGHEST DAILY MEAN	1,330	May 12	1,970	Mar 28	1,970	Mar 28, 2004
LOWEST DAILY MEAN	59	Aug 13	67	Jul 18	(a)23	Sep 11, 15, 1993
ANNUAL SEVEN-DAY MINIMUM	66	Sep 5	(b)69	Jan 4	55	Aug 18, 1994
MAXIMUM PEAK FLOW			2,660	Mar 28	2,660	Mar 28, 2004
MAXIMUM PEAK STAGE			7.98	Mar 28	7.98	Mar 28, 2004
INSTANTANEOUS LOW FLOW			(a)41	Aug 25	(a)7.3	Sep 11, 1993
ANNUAL RUNOFF (CFSM)	0.815		0.756		0.786	
ANNUAL RUNOFF (INCHES)	11.06		10.29		10.68	
10 PERCENT EXCEEDS	193		157		173	
50 PERCENT EXCEEDS	90		86		89	
90 PERCENT EXCEEDS	75		73		70	

(a) Result of regulation
(b) Ice affected
(e) Estimated due to ice effect or missing record

053674464 YELLOW RIVER AT BARRON, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: August 1991 to current year.

INSTRUMENTATION.--Continuous water temperature recorder since Aug. 30, 1991.

REMARKS.--Records represent water temperature at sensor within 0.5°C.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum temperature, 29.0°C, July 25, 30, 1999; minimum, 0.0°C, for many days.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum temperature, 25.5°C, July 16; minimum, 0.0°C, on many days.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.0	6.5	7.0	4.5	3.5	4.0	1.5	0.5	1.0	1.0	0.5	0.5
2	7.5	6.0	6.5	5.0	4.0	4.5	1.5	0.5	1.0	1.0	0.5	1.0
3	7.5	6.5	7.0	4.5	3.5	4.0	2.0	1.0	1.5	1.0	0.0	0.5
4	8.0	6.5	7.0	3.5	3.0	3.5	2.0	1.0	1.5	1.0	0.0	0.5
5	8.5	7.0	7.5	3.0	2.0	2.5	2.0	1.0	1.5	0.5	0.0	0.0
6	9.5	7.5	8.5	2.0	1.0	1.5	1.5	1.5	1.5	0.5	0.0	0.0
7	10.5	8.5	9.5	1.5	0.5	1.0	1.5	1.0	1.5	1.0	0.0	0.5
8	11.5	10.0	10.5	2.0	0.5	1.5	2.0	1.0	1.5	1.0	0.0	0.5
9	13.0	11.5	12.0	3.0	1.5	2.0	1.5	1.0	1.5	1.0	0.0	0.5
10	14.0	13.0	13.5	2.5	2.0	2.5	1.5	0.5	1.0	1.0	0.5	0.5
11	14.0	13.0	13.5	3.0	2.0	2.5	1.0	0.5	1.0	0.5	0.5	0.5
12	13.0	12.0	12.5	2.5	1.5	2.0	1.0	0.5	0.5	0.5	0.5	0.5
13	12.5	11.5	12.0	2.0	1.0	1.5	1.0	0.5	0.5	0.5	0.0	0.5
14	12.0	10.5	11.5	3.0	1.5	2.5	1.0	0.5	1.0	0.5	0.0	0.5
15	10.5	9.5	10.0	3.0	2.5	2.5	1.0	0.5	1.0	0.5	0.0	0.5
16	9.5	8.5	9.0	3.0	2.5	3.0	1.0	0.5	0.5	0.5	0.0	0.5
17	9.0	8.0	8.5	3.5	2.5	3.0	1.0	0.5	0.5	1.0	0.0	0.5
18	9.5	8.0	8.5	4.5	3.5	4.0	1.0	0.5	0.5	0.5	0.0	0.0
19	10.0	8.5	9.0	5.0	4.0	4.5	1.0	0.0	0.5	0.5	0.0	0.0
20	10.5	9.0	10.0	5.5	4.0	4.5	1.0	0.0	0.5	0.5	0.0	0.0
21	11.0	9.5	10.0	4.5	3.5	4.0	1.0	0.5	0.5	0.5	0.0	0.0
22	10.5	9.0	9.5	3.5	2.5	3.0	1.5	0.5	0.5	0.5	0.0	0.0
23	10.0	8.5	9.0	2.5	1.0	2.0	1.0	0.0	0.5	0.5	0.0	0.0
24	9.0	7.5	8.0	1.0	0.0	0.5	1.0	0.0	0.5	0.5	0.0	0.0
25	7.5	7.0	7.0	1.5	0.5	1.0	1.0	0.0	0.5	0.5	0.0	0.0
26	7.0	5.5	6.0	2.0	0.5	1.0	1.0	0.5	0.5	0.5	0.0	0.0
27	6.0	5.0	5.5	1.5	1.0	1.5	1.0	1.0	1.0	0.5	0.0	0.0
28	5.0	4.5	5.0	1.0	1.0	1.0	1.5	0.5	1.0	0.5	0.0	0.0
29	4.5	4.0	4.5	1.5	0.5	1.0	1.0	0.5	1.0	0.5	0.0	0.0
30	4.5	4.0	4.0	1.5	0.5	1.0	1.0	0.5	0.5	0.5	0.0	0.0
31	4.5	4.0	4.5	---	---	---	0.5	0.0	0.5	0.5	0.0	0.0
MONTH	14.0	4.0	8.6	5.5	0.0	2.4	2.0	0.0	0.9	1.0	0.0	0.3

053674464 YELLOW RIVER AT BARRON, WI—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	0.5	0.0	0.0	1.5	0.5	1.0	5.5	3.0	4.0	14.5	12.5	13.5
2	0.5	0.0	0.0	1.5	1.0	1.0	6.5	4.0	5.0	14.0	12.0	13.0
3	0.5	0.0	0.0	1.5	1.0	1.0	7.0	4.5	5.5	13.0	11.5	12.5
4	0.5	0.0	0.0	1.5	1.0	1.0	7.5	5.0	6.0	14.0	12.0	13.0
5	1.0	0.0	0.5	1.5	0.5	1.0	7.0	6.0	6.5	13.5	12.0	12.5
6	1.0	0.0	0.5	2.0	1.0	1.0	9.0	6.5	8.0	14.5	12.0	13.0
7	0.5	0.0	0.0	1.5	0.5	1.0	9.5	8.0	9.0	13.5	12.0	13.0
8	0.5	0.0	0.0	1.5	0.5	1.0	10.0	8.5	9.5	13.5	11.5	12.5
9	0.5	0.0	0.0	2.0	0.5	1.0	9.5	8.0	8.5	15.0	12.5	13.5
10	0.5	0.0	0.0	2.5	1.0	1.5	8.5	7.0	8.0	16.5	14.0	15.0
11	0.5	0.0	0.0	2.0	0.5	1.0	7.5	6.5	7.0	17.0	15.0	16.0
12	0.5	0.0	0.0	2.0	0.5	1.0	7.0	6.0	6.5	17.5	16.5	17.0
13	1.0	0.0	0.0	1.0	0.0	1.0	8.5	5.5	7.0	16.5	13.5	15.0
14	0.5	0.0	0.0	1.5	0.5	1.0	10.0	7.5	8.5	13.5	11.5	12.5
15	0.5	0.0	0.0	2.0	0.5	1.0	10.5	8.5	10.0	11.5	10.5	11.0
16	0.5	0.0	0.0	2.5	0.5	1.0	12.5	10.5	11.5	13.0	11.0	11.5
17	1.0	0.0	0.5	2.5	1.0	1.5	14.0	11.5	12.5	14.0	13.0	13.5
18	1.0	0.0	0.5	3.0	1.5	2.0	14.5	13.0	13.5	15.5	13.0	14.0
19	1.0	0.0	0.5	3.5	1.5	2.5	14.5	12.5	13.5	16.0	14.5	15.0
20	1.0	0.5	0.5	3.0	2.0	2.5	13.5	11.5	12.5	17.5	15.5	16.5
21	1.0	0.0	0.5	3.5	1.5	2.5	11.5	10.5	11.0	17.0	15.5	16.0
22	1.0	0.0	0.5	3.5	1.5	2.5	11.0	9.5	10.5	15.5	14.5	15.0
23	1.0	0.5	0.5	4.0	2.0	3.0	12.0	10.0	11.0	14.5	11.0	13.0
24	1.5	0.0	0.5	4.0	2.5	3.0	12.5	11.0	11.5	12.0	10.0	11.0
25	1.5	0.0	0.5	4.0	3.0	3.5	12.0	11.0	11.0	13.0	11.5	12.0
26	1.5	0.0	0.5	4.0	2.0	3.5	11.0	9.5	10.5	14.5	12.0	13.0
27	1.5	0.0	0.5	2.0	1.0	1.5	9.5	8.5	9.0	15.0	14.0	14.5
28	1.5	0.0	0.5	1.0	1.0	1.0	12.0	8.5	10.0	16.0	14.0	15.0
29	1.5	0.5	0.5	1.5	1.0	1.0	13.0	11.5	12.5	15.0	13.5	14.0
30	---	---	---	2.0	1.0	1.0	14.0	12.0	13.0	13.5	12.5	13.0
31	---	---	---	3.5	1.0	2.0	---	---	---	14.0	12.5	13.5
MONTH	1.5	0.0	0.3	4.0	0.0	1.6	14.5	3.0	9.4	17.5	10.0	13.7
		JUNE			JULY			AUGUST			SEPTEMBER	
1	15.5	14.0	14.5	23.5	20.5	22.0	22.0	20.0	21.0	18.5	16.5	17.5
2	17.0	14.5	16.0	24.0	21.5	22.5	22.5	21.0	21.5	19.5	17.5	18.5
3	18.0	15.5	16.5	23.0	22.0	22.5	22.5	21.5	22.0	20.0	18.5	19.5
4	18.5	16.5	17.5	23.0	22.0	22.0	23.0	21.0	21.5	21.0	19.5	20.0
5	18.5	17.5	18.0	22.5	21.5	22.0	22.0	20.5	21.0	21.0	20.0	20.5
6	19.0	17.5	18.5	21.5	20.0	21.0	21.5	20.0	20.5	20.5	19.0	20.0
7	21.0	18.5	19.5	20.0	19.0	19.5	20.5	19.0	20.0	19.0	17.0	18.0
8	23.5	21.0	22.0	20.5	18.5	19.5	19.5	19.0	19.0	17.0	16.0	16.5
9	22.5	20.5	21.5	20.5	19.0	19.5	20.0	19.0	19.5	16.5	15.5	16.0
10	20.5	18.5	19.5	21.0	19.5	20.0	19.0	17.0	18.0	16.5	15.5	16.0
11	18.5	16.0	17.0	22.5	20.5	21.5	17.0	15.5	16.0	17.5	16.5	17.0
12	18.0	15.5	17.0	23.5	21.5	22.5	16.5	15.0	15.5	18.0	16.5	17.0
13	20.0	17.5	19.0	24.5	22.5	23.5	16.5	15.0	15.5	18.5	17.0	17.5
14	21.5	19.5	20.5	25.0	22.5	23.5	17.0	15.5	16.5	18.5	18.0	18.0
15	22.0	20.0	20.5	25.0	22.5	23.5	18.0	16.5	17.0	18.5	17.5	18.0
16	21.5	20.5	21.0	25.5	23.5	24.0	17.5	17.0	17.5	17.5	16.5	17.0
17	22.5	20.5	21.0	24.5	23.0	23.5	18.0	17.0	17.5	16.5	16.0	16.0
18	21.5	20.0	21.0	24.0	22.5	23.0	18.5	17.0	17.5	16.5	15.5	16.0
19	20.5	19.0	19.5	23.5	21.5	22.5	17.5	16.5	17.0	17.0	16.0	16.5
20	20.0	18.5	19.5	24.0	22.5	23.0	18.0	16.0	17.0	17.5	16.5	17.0
21	20.5	19.0	19.5	24.0	23.0	23.5	17.5	15.5	16.5	17.0	17.0	17.0
22	20.0	18.5	19.0	24.5	22.5	23.5	18.0	16.0	17.0	18.0	16.5	17.0
23	20.0	18.5	19.0	24.0	22.0	23.0	18.0	17.0	17.5	18.0	17.0	17.5
24	19.5	18.0	18.5	23.5	21.5	22.0	18.0	17.0	17.5	17.0	15.5	16.5
25	18.5	17.5	18.0	22.5	21.0	21.5	18.5	17.5	18.0	16.0	14.5	15.0
26	18.5	17.5	18.0	22.5	20.5	21.5	18.5	18.0	18.0	15.5	14.5	15.0
27	18.5	17.0	17.5	22.5	20.5	21.5	19.0	18.0	18.5	15.5	14.5	15.0
28	19.0	16.5	18.0	22.0	20.5	21.0	18.0	17.0	17.5	15.0	13.5	14.0
29	20.5	17.5	19.0	22.5	21.0	21.5	17.0	16.0	16.5	14.0	12.5	13.0
30	21.5	19.0	20.0	22.0	21.0	21.0	17.5	16.0	16.5	13.0	12.5	12.5
31	---	---	---	21.0	20.0	20.5	18.0	16.5	17.0	---	---	---
MONTH	23.5	14.0	18.9	25.5	18.5	22.0	23.0	15.0	18.1	21.0	12.5	16.8
YEAR	25.5	0.0	9.4									

05368000 HAY RIVER AT WHEELER, WI

LOCATION.--Lat 45°02'52", long 91°54'39", in SW ¼ SW ¼ sec.25, T.30 N., R.13 W., Dunn County, Hydrologic Unit 07050007, on right bank 25 ft downstream from highway bridge in Wheeler, 1.8 mi upstream from Otter Creek, and 2.4 mi downstream from South Fork Hay River.

DRAINAGE AREA.--418 mi^2.

PERIOD OF RECORD.--October 1950 to current year.

REVISED RECORDS.--WDR WI-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 889.30 ft above NGVD of 1929. Prior to Mar. 25, 1951, nonrecording gage.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--Maximum stage since 1915, 16.6 ft April 1934, from floodmarks.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	229	246	e230	e270	e200	249	904	341	702	257	448	228
2	229	241	e210	e260	e190	263	755	325	687	252	372	233
3	230	240	e210	e250	e200	285	669	314	580	250	337	234
4	237	247	e210	e240	e210	296	608	309	474	800	310	225
5	235	262	e220	e220	e210	321	548	302	430	912	293	225
6	233	255	e220	e210	e220	319	511	295	416	407	279	339
7	231	244	e220	e210	e230	308	484	288	400	379	274	347
8	230	228	e220	e220	e230	296	460	282	380	345	292	290
9	229	250	e230	e230	e240	289	436	282	444	320	297	274
10	227	248	e220	e240	e240	288	412	309	609	307	291	262
11	230	240	e210	e240	e240	310	394	304	489	311	296	251
12	260	242	e200	e240	e240	298	379	299	489	338	282	238
13	262	242	e190	e240	e240	312	367	335	505	314	279	229
14	250	236	e190	e240	e240	309	358	489	434	304	270	231
15	243	236	e210	e240	e230	288	348	456	389	292	263	372
16	239	237	e230	e240	e220	281	334	376	366	285	271	645
17	237	238	e240	e240	e220	282	325	354	352	278	292	414
18	236	261	e250	e220	e220	282	322	359	339	272	274	342
19	235	277	e260	e220	e230	282	490	346	325	289	264	305
20	234	263	e270	e220	e230	282	626	343	318	545	254	285
21	234	264	e280	e210	e230	286	528	339	313	389	240	272
22	233	254	e280	e210	e230	281	603	336	306	346	237	260
23	233	249	e280	e210	e230	284	496	452	300	309	235	256
24	232	244	e270	e210	e230	313	423	733	298	291	233	261
25	233	238	e280	e200	e230	526	440	786	293	281	233	256
26	233	255	e290	e200	e230	1,510	533	565	287	275	234	248
27	233	245	e300	e190	e230	3,350	445	500	282	271	234	244
28	238	240	e310	e190	e240	3,750	400	519	277	264	233	239
29	245	236	e290	e180	247	3,700	380	492	269	310	231	236
30	247	e230	e270	e200	---	2,630	358	516	262	329	232	234
31	249	---	e260	e200	---	1,500	---	606	---	343	232	---
TOTAL	7,346	7,388	7,550	6,890	6,577	23,970	14,336	12,552	12,015	10,865	8,512	8,475
MEAN	237	246	244	222	227	773	478	405	400	350	275	282
MAX	262	277	310	270	247	3,750	904	786	702	912	448	645
MIN	227	228	190	180	190	249	322	282	262	250	231	225
CFSM	0.57	0.59	0.58	0.53	0.54	1.85	1.14	0.97	0.96	0.84	0.66	0.68
IN.	0.65	0.66	0.67	0.61	0.59	2.13	1.28	1.12	1.07	0.97	0.76	0.75

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2004, BY WATER YEAR (WY)

MEAN	268	264	229	203	230	487	641	375	354	277	270	285
MAX	637	704	470	412	657	1,021	2,054	792	778	667	568	762
(WY)	(2003)	(1971)	(1966)	(1981)	(1981)	(1983)	(1965)	(2003)	(1993)	(1979)	(2001)	(1986)
MIN	139	138	122	97.2	85.2	155	166	153	153	135	126	141
(WY)	(1959)	(1959)	(1959)	(1959)	(1959)	(1956)	(1959)	(1958)	(1959)	(1964)	(1964)	(1958)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1951 - 2004	
ANNUAL TOTAL	138,630		126,476			
ANNUAL MEAN	380		346		324	
HIGHEST ANNUAL MEAN					433	2002
LOWEST ANNUAL MEAN					152	1959
HIGHEST DAILY MEAN	2,680	Apr 18	3,750	Mar 28	13,000	Mar 31, 1967
LOWEST DAILY MEAN	(a)190	Dec 13	(a)180	Jan 29	80	Feb 20, 1959
ANNUAL SEVEN-DAY MINIMUM	(a)207	Dec 9	(a)193	Jan 27	82	Feb 16, 1959
MAXIMUM PEAK FLOW			4,020	Mar 27	(b)13,600	Mar 31, 1967
MAXIMUM PEAK STAGE			11.35	Mar 27	15.04	Mar 31, 1967
INSTANTANEOUS LOW FLOW			(a)		(c)55	Mar 13, 1954
ANNUAL RUNOFF (CFSM)	0.909		0.827		0.775	
ANNUAL RUNOFF (INCHES)	12.34		11.26		10.52	
10 PERCENT EXCEEDS	618		489		498	
50 PERCENT EXCEEDS	263		270		244	
90 PERCENT EXCEEDS	220		220		154	

(a) Ice affected
(b) From rating curve extended above 9,000 ft^3/s
(c) Result of freezeup
(e) Estimated due to ice effect or missing record

05369000 RED CEDAR RIVER AT MENOMONIE, WI

LOCATION.--Lat 44°53'02", long 91°55'57", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.26, T.28 N., R.13 W., Dunn County, Hydrologic Unit 07050007, on right bank at Menomonie, 900 ft downstream from powerplant of Northern States Power Co., and 1,000 ft downstream from Wilson Creek.

DRAINAGE AREA.--1,770 mi^2.

PERIOD OF RECORD.--June 1907 to September 1908, May 1913 to current year. Monthly discharge only for June 1907 to September 1908, published in WSP 1308. Unpublished daily discharge from June 1907 to September 1908 in District files.

REVISED RECORDS.--WDR WI-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 780.00 ft above NGVD of 1929 (Northern States Power Co. bench mark). Prior to Sept. 3, 1908, nonrecording gage at site 1 mi downstream at different datum. May 9, 1913, to Sept. 30, 1923, water-stage recorder at same site at datum 0.42 ft lower than present datum.

REMARKS.--Records good (see page 11). Flow regulated by powerplants at Menomonie and Cedar Falls. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	972	1,190	1,120	985	794	1,180	4,840	1,440	2,970	1,210	1,980	996
2	976	1,090	836	1,070	903	1,160	4,190	1,710	3,040	870	1,600	1,010
3	953	1,120	967	1,070	887	1,270	3,440	1,270	3,320	1,180	1,310	1,010
4	1,030	1,150	1,130	909	872	1,450	3,080	1,430	2,840	2,530	1,310	974
5	984	1,230	1,150	778	872	1,430	2,860	1,510	2,670	2,990	1,220	995
6	971	1,250	1,120	718	908	1,270	2,740	1,460	2,570	2,560	978	1,250
7	1,040	1,100	1,160	678	922	1,350	2,380	1,390	1,990	1,770	1,120	1,420
8	980	1,060	1,160	755	918	1,320	2,270	1,170	1,920	1,590	1,270	1,500
9	1,050	861	1,170	871	912	1,180	2,320	1,430	2,250	1,480	1,450	1,430
10	962	1,270	1,140	936	871	1,220	1,990	1,560	2,590	1,480	1,400	1,210
11	1,130	1,170	694	974	918	1,280	1,920	1,170	2,180	1,570	1,480	1,220
12	1,120	997	644	995	899	1,110	1,660	1,550	2,060	1,390	1,370	1,180
13	1,340	1,030	612	974	945	1,220	1,210	1,540	2,050	1,340	1,360	1,150
14	1,420	1,070	839	908	906	1,240	1,210	1,860	1,910	1,290	1,430	1,350
15	1,240	1,030	1,100	941	855	1,220	1,210	1,970	1,770	1,280	1,280	1,730
16	1,130	1,080	1,200	920	910	1,150	1,210	1,840	1,650	1,210	1,550	2,130
17	1,060	1,200	1,120	954	914	1,030	1,290	1,730	1,520	1,030	1,380	2,170
18	1,070	1,330	1,060	922	915	1,230	1,350	1,870	1,410	971	1,200	1,780
19	992	1,160	1,040	838	934	1,110	2,000	1,850	1,460	1,190	1,110	1,510
20	1,050	1,210	1,010	819	943	1,110	2,350	1,540	1,330	1,450	1,060	1,160
21	932	1,080	996	895	910	999	2,330	1,420	1,340	1,550	1,060	1,260
22	1,160	1,200	1,060	888	1,000	1,090	2,310	1,790	1,270	1,460	1,180	1,120
23	936	1,260	1,090	881	1,020	1,080	2,490	2,120	1,100	1,220	1,050	1,250
24	959	1,190	993	826	974	1,290	2,220	2,720	1,110	1,070	977	1,260
25	985	809	944	808	1,030	2,420	2,460	3,050	1,090	1,020	1,090	1,170
26	1,100	1,250	962	839	956	4,780	2,310	2,630	1,130	1,020	1,000	1,170
27	974	1,260	1,060	917	1,050	6,930	2,180	2,700	991	1,070	1,020	1,220
28	961	1,240	1,130	927	984	10,600	1,620	2,350	956	1,000	1,050	1,060
29	1,130	1,060	1,110	874	1,060	11,500	1,740	3,030	1,060	1,110	1,110	1,100
30	1,110	1,140	1,130	847	---	11,000	1,560	2,330	806	1,180	1,120	1,190
31	1,170	---	968	836	---	7,000	---	2,810	---	1,320	962	---
TOTAL	32,887	34,087	31,715	27,553	26,982	83,219	66,740	58,240	54,353	43,401	38,477	38,975
MEAN	1,061	1,136	1,023	889	930	2,684	2,225	1,879	1,812	1,400	1,241	1,299
MAX	1,420	1,330	1,200	1,070	1,060	11,500	4,840	3,050	3,320	2,990	1,980	2,170
MIN	932	809	612	678	794	999	1,210	1,170	806	870	962	974

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1907 - 2004, BY WATER YEAR (WY)

MEAN	1,159	1,174	990	906	974	1,925	2,355	1,536	1,496	1,142	1,003	1,206
MAX	2,806	2,521	2,316	1,317	2,047	4,142	6,819	3,423	3,702	2,926	2,237	3,091
(WY)	(1969)	(1992)	(1966)	(1973)	(1966)	(1973)	(1965)	(2003)	(1943)	(1968)	(1995)	(1938)
MIN	528	566	541	532	536	921	664	612	425	421	383	493
(WY)	(1933)	(1937)	(1933)	(1959)	(1959)	(1956)	(1930)	(1934)	(1934)	(1934)	(1934)	(1933)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1907 - 2004	
ANNUAL TOTAL	574,363		536,629			
ANNUAL MEAN	1,574		1,466		1,321	
HIGHEST ANNUAL MEAN					2,016	2002
LOWEST ANNUAL MEAN					711	1931
HIGHEST DAILY MEAN	9,830	May 13	11,500	Mar 29	29,000	Apr 4, 1934
LOWEST DAILY MEAN	612	Dec 13	612	Dec 13	100	Nov 8, 1907
ANNUAL SEVEN-DAY MINIMUM	827	Sep 4	806	Jan 4	310	Sep 8, 1934
MAXIMUM PEAK FLOW			13,000	Mar 29	(a)40,000	Apr 4, 1934
MAXIMUM PEAK STAGE			7.85	Mar 29	(b)16.00	Apr 4, 1934
10 PERCENT EXCEEDS	2,780		2,320		2,220	
50 PERCENT EXCEEDS	1,120		1,170		1,070	
90 PERCENT EXCEEDS	898		909		644	

(a) From rating curve extended above 27,000 ft^3/s on basis of computed flow over Cedar Falls Dam, 6 mi upstream
(b) From floodmarks

05369500 CHIPPEWA RIVER AT DURAND, WI

LOCATION.--Lat 44°37'42", long 91°58'08"(revised), in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.21, T.25 N., R.13 W., Pepin County, Hydrologic Unit 07050005, on left bank in Durand, 75 ft downstream from bridge on U.S. Highway 10, and 9.5 mi downstream from Red Cedar River.

DRAINAGE AREA.--9,010 mi^2.

PERIOD OF RECORD.--July 1928 to current year.

REVISED RECORDS.--WSP 785: 1930, 1934(M). WSP 875: 1930 (monthly and yearly runoff). WSP 925: 1938. WSP 1508: 1929(M), 1932. WDR WI-82-1: Drainage area. WDR WI-99-1: 1995(m).

GAGE.--Water-stage recorder. Datum of gage is 694.59 ft above NGVD of 1929. Prior to Dec. 9, 1930, nonrecording gage at bridge 400 ft downstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Flow regulated by powerplants, Moose Lake, Lake Chippewa, Rest Lake, Flambeau Flowage, and Lake Wissota on Chippewa and Flambeau Rivers. Gage-height telemeter and data-collection platform at station.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--A stage of 18.4 ft, from flood marks (levels by U.S. Army Corps of Engineers) occurred Sept. 12, 1884, and has not been exceeded since.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,170	4,070	4,140	e4,600	e3,300	e3,800	46,900	11,400	30,400	4,670	4,460	3,040
2	3,220	3,980	3,620	e4,700	e3,300	e4,500	34,000	11,400	40,200	4,520	5,230	3,050
3	3,110	4,240	3,380	e4,300	e3,300	e5,400	25,900	11,100	40,600	4,400	4,550	3,040
4	3,180	4,460	3,820	e4,300	e3,300	e5,800	23,600	11,000	32,400	6,170	4,330	3,040
5	3,290	4,150	4,000	e4,100	e3,400	e6,200	23,200	9,800	22,900	6,160	4,100	3,120
6	3,200	4,210	4,240	e3,600	e3,400	e6,500	21,700	9,590	18,900	6,540	3,620	3,410
7	3,240	4,110	4,660	e3,200	e3,600	e6,200	16,900	8,010	14,000	5,810	3,520	4,360
8	3,230	4,070	4,030	e2,700	e3,600	e5,400	16,300	7,450	15,700	5,220	3,770	5,650
9	3,230	3,850	4,070	e2,700	e3,600	e4,800	16,700	6,950	16,700	5,130	4,430	5,300
10	3,160	3,870	3,920	e2,700	e3,600	e5,400	16,100	7,680	17,700	5,030	4,760	4,680
11	3,090	3,890	e3,600	e2,800	e3,600	7,510	15,200	8,410	20,600	5,050	4,900	4,130
12	3,640	3,770	e2,900	e2,900	e3,600	6,620	14,200	9,390	22,000	4,970	4,920	3,980
13	3,970	3,720	e2,600	e2,900	e3,600	5,680	12,400	10,000	19,400	4,830	4,810	3,680
14	4,050	3,540	e2,700	e3,000	e3,600	5,500	9,250	12,200	15,300	4,670	5,110	4,140
15	3,610	3,510	e2,900	e3,100	e3,500	5,450	9,620	17,000	14,200	4,540	4,430	5,680
16	3,320	3,360	e3,300	e3,100	e3,500	7,210	10,300	18,200	13,200	4,430	4,460	6,650
17	3,160	3,560	e4,000	e3,200	e4,100	6,410	10,300	16,200	12,300	4,180	4,930	6,990
18	3,710	4,130	e4,100	e3,100	e4,800	6,150	9,890	11,600	9,090	3,760	4,350	6,350
19	3,650	4,590	e4,200	e3,000	e4,200	5,880	10,200	11,000	8,410	3,580	4,190	5,770
20	3,570	5,060	e4,300	e3,000	e4,300	5,930	12,600	10,300	7,740	4,020	4,050	4,620
21	3,440	6,100	e4,400	e3,000	e4,400	5,680	22,200	9,810	6,580	4,380	4,010	4,180
22	3,350	5,230	e3,800	e3,100	e4,200	5,420	24,100	9,160	5,760	3,970	4,130	4,050
23	3,150	5,120	e3,900	e3,100	e4,300	6,240	24,500	9,200	5,530	3,860	3,950	3,990
24	3,200	4,820	e4,000	e3,200	e5,300	7,280	24,500	12,500	5,630	3,540	3,720	3,980
25	3,140	4,810	e3,700	e3,200	e5,100	10,400	24,000	17,800	6,280	3,450	3,750	3,780
26	3,160	4,140	e3,700	e3,100	e5,500	16,700	21,500	20,100	5,630	3,380	3,780	3,790
27	3,210	4,160	e3,900	e3,200	e5,100	24,400	18,800	19,000	5,100	3,390	3,660	3,960
28	3,030	4,100	e4,300	e3,300	e3,700	33,000	19,000	13,400	4,680	3,340	3,380	3,750
29	3,220	4,090	e4,700	e3,200	e3,700	45,000	17,400	15,100	4,870	3,380	3,360	3,390
30	3,700	4,560	e4,600	e3,300	---	54,400	12,700	17,700	4,480	3,470	3,310	3,530
31	3,750	---	e4,600	e3,300	---	56,300	---	17,700	---	3,620	3,120	---
TOTAL	104,150	127,270	120,080	102,000	114,500	381,160	563,960	380,150	446,280	137,460	129,090	129,080
MEAN	3,360	4,242	3,874	3,290	3,948	12,300	18,800	12,260	14,880	4,434	4,164	4,303
MAX	4,050	6,100	4,700	4,700	5,500	56,300	46,900	20,100	40,600	6,540	5,230	6,990
MIN	3,030	3,360	2,600	2,700	3,300	3,800	9,250	6,950	4,480	3,340	3,120	3,040

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2004, BY WATER YEAR (WY)

MEAN	6,575	6,814	5,381	4,768	5,060	9,635	16,230	10,720	9,486	6,344	5,194	6,981
MAX	20,360	20,190	11,600	8,181	11,160	25,120	34,170	28,220	37,730	19,070	12,180	27,950
(WY)	(1986)	(1992)	(1966)	(1984)	(1984)	(1973)	(1967)	(1954)	(1943)	(1968)	(1995)	(1941)
MIN	2,103	2,209	2,335	2,289	2,404	3,645	4,718	3,336	2,699	2,271	2,026	1,954
(WY)	(1977)	(1977)	(1934)	(1934)	(1990)	(1931)	(1931)	(1931)	(1934)	(1934)	(1934)	(1948)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1928 - 2004	
ANNUAL TOTAL	2,762,250		2,735,180			
ANNUAL MEAN	7,568		7,473		7,758	
HIGHEST ANNUAL MEAN					11,550	1942
LOWEST ANNUAL MEAN					3,992	1931
HIGHEST DAILY MEAN	62,400	May 14	56,300	Mar 31	117,000	Apr 2, 1967
LOWEST DAILY MEAN	(a)2,600	Dec 13	(a)2,600	Dec 13	1,100	Nov 24, 1950
ANNUAL SEVEN-DAY MINIMUM	2,830	Sep 7	(a)2,810	Jan 8	1,580	Oct 28, 1948
MAXIMUM PEAK FLOW			58,000	Mar 31	123,000	Apr 2, 1967
MAXIMUM PEAK STAGE			12.85	Mar 31	16.93	Apr 2, 1967
INSTANTANEOUS LOW FLOW			(a)		1,020	Nov 24, 1950
10 PERCENT EXCEEDS	14,900		17,100		14,500	
50 PERCENT EXCEEDS	4,130		4,340		5,600	
90 PERCENT EXCEEDS	3,100		3,190		3,000	

(a) Ice affected
(e) Estimated due to ice effect or missing record

05370000 EAU GALLE RIVER AT SPRING VALLEY, WI

LOCATION.--Lat 44°51'10", long 92°14'17", in SE $^1/_4$ NE $^1/_4$ sec.6, T.27 N., R.15 W., Pierce County, Hydrologic Unit 07050005, on right bank 770 ft downstream from flood control dam, 1,500 ft upstream from Mines Creek, at Spring Valley.

DRAINAGE AREA.--64.0 mi^2.

PERIOD OF RECORD.--March 1944 to current year.

REVISED RECORDS.--WDR WI-67-1: 1966. WDR WI-81-1: Drainage area. WDR WI-92-1: 1975-79(M), 1977, 1978. WDR WI-01-1: Drainage area.

GAGE.--Water-stage recorder, crest-stage gage, and rock v-notch sharp-crested weir. Datum of gage is 900.00 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to July 31, 1957, nonrecording gage at site 850 ft downstream at datum of 912.45 ft above NGVD of 1929. Aug. 1, 1957, to June 6, 1966, nonrecording gage at downstream site at datum of 910.45 ft above NGVD of 1929. June 7, 1966, to Oct. 31, 1968, nonrecording gage at downstream site at datum of 909.45 ft above NGVD of 1929. Nov. 1, 1968 to Sept. 3, 2003, water-stage recorder, crest-stage gage, and metal v-notch sharp-crested weir at wite 400 ft downstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Low flow slightly regulated and high flow completely regulated by flood-control dam 770 ft upstream. Data-collection platform and gage-height telemeter at station.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--Maximum stage since at least 1894, that of Sept. 18, 1942, 19.98 ft, with datum at 909.45 ft above NGVD of 1929, from floodmarks, discharge, 33,000 ft^3/s estimated by U.S. Army Corps of Engineers on basis of slope-area measurement by Geological Survey of peak discharge of 39,000 ft^3/s at Elmwood, drainage area, 91.9 mi^2.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	17	16	15	15	18	30	20	86	19	25	e14
2	17	17	16	16	16	43	27	19	53	19	23	e14
3	18	18	16	16	16	102	25	18	30	20	22	e14
4	17	19	16	15	15	82	24	18	22	23	21	e14
5	17	18	16	15	15	65	23	17	20	20	20	e14
6	18	18	16	14	15	37	22	46	19	19	19	e19
7	18	18	17	15	16	35	21	22	19	20	20	e20
8	18	17	18	15	15	28	20	16	18	19	21	15
9	18	17	20	15	15	24	18	16	64	18	22	14
10	18	17	20	15	15	23	19	18	118	18	20	14
11	19	18	18	15	15	24	20	15	38	19	19	14
12	20	19	16	15	15	25	20	17	49	20	19	14
13	19	18	16	15	15	28	20	25	38	22	18	14
14	18	18	17	15	14	25	19	61	25	25	18	16
15	17	18	17	15	14	22	20	30	21	25	18	28
16	17	18	17	15	14	20	19	20	20	26	20	41
17	17	18	17	14	14	20	19	18	19	26	20	25
18	18	20	16	14	14	21	18	18	19	25	18	19
19	18	19	16	14	15	23	20	18	18	25	16	17
20	18	18	16	14	17	28	28	17	18	25	16	17
21	18	17	16	14	15	36	31	17	19	24	17	16
22	18	17	16	14	15	33	40	18	18	24	17	16
23	18	18	16	14	15	29	30	23	19	23	17	17
24	18	18	15	14	15	166	24	58	19	22	17	17
25	18	17	16	14	14	585	31	34	19	21	17	17
26	18	17	16	15	15	922	44	22	19	21	17	17
27	18	17	16	15	15	345	32	27	19	20	16	31
28	19	17	17	14	15	201	27	32	19	20	15	22
29	19	17	17	14	15	107	24	32	19	23	15	6.0
30	18	17	16	14	---	48	22	73	19	22	16	11
31	18	---	15	14	---	35	---	125	---	21	15	---
TOTAL	557	532	513	453	434	3,200	737	910	903	674	574	527.0
MEAN	18.0	17.7	16.5	14.6	15.0	103	24.6	29.4	30.1	21.7	18.5	17.6
MAX	20	20	20	16	17	922	44	125	118	26	25	41
MIN	17	17	15	14	14	18	18	15	18	18	15	6.0

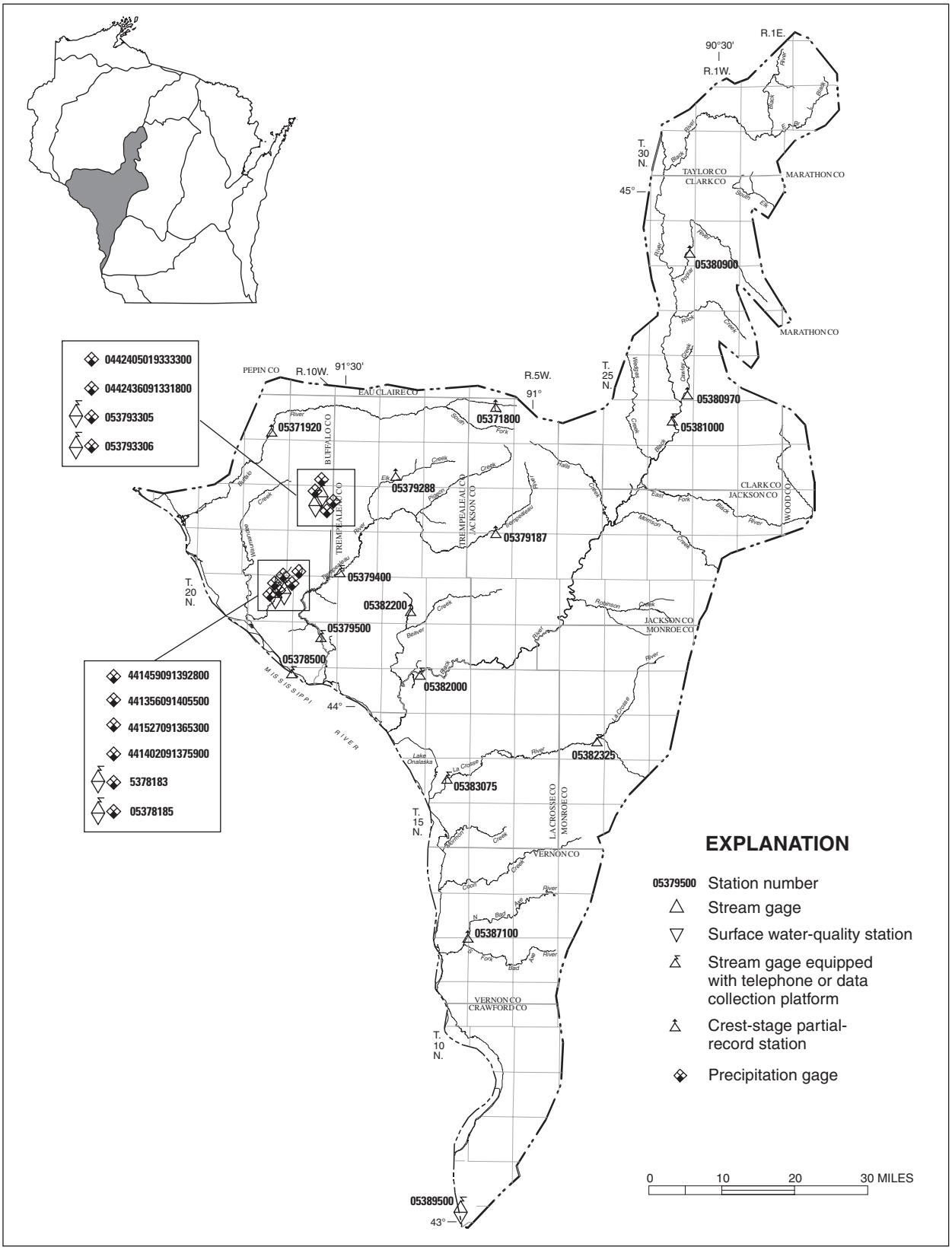
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2004, BY WATER YEAR (WY)

MEAN	27.1	26.9	18.8	15.5	22.1	74.3	68.6	40.0	44.3	27.7	28.8	30.3
MAX	104	86.2	39.7	23.0	71.6	164	258	104	148	94.1	90.1	153
(WY)	(2003)	(1971)	(1978)	(1997)	(1981)	(1989)	(2001)	(2003)	(1980)	(1978)	(1995)	(1986)
MIN	10.4	7.24	4.22	5.21	5.77	10.1	16.6	12.4	11.6	12.5	5.95	9.81
(WY)	(1970)	(1969)	(1969)	(1969)	(1969)	(1970)	(2000)	(1977)	(1969)	(1988)	(1969)	(1969)

05370000 EAU GALLE RIVER AT SPRING VALLEY, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1969 - 2004	
ANNUAL TOTAL	14,188		10,014.0			
ANNUAL MEAN	38.9		27.4		35.4	
HIGHEST ANNUAL MEAN					56.1	2001
LOWEST ANNUAL MEAN					21.2	1988
HIGHEST DAILY MEAN	898	May 11	922	Mar 26	2,190	Mar 28, 1989
LOWEST DAILY MEAN	13	Sep 17	6.0	Sep 29	(a)0.00	Aug 12-16, 1971
ANNUAL SEVEN-DAY MINIMUM	15	Sep 11	14	Jan 17	(b)0.91	Sep 15, 1969
MAXIMUM PEAK FLOW			1,420	Mar 26	(c)3,030	Jun 7, 1980
MAXIMUM PEAK STAGE			17.19	Mar 26	(c)19.90	Jun 7, 1980
INSTANTANEOUS LOW FLOW			3.8	Sep 28	(a)0.00	Aug 11-16, 1971
10 PERCENT EXCEEDS	52		31		49	
50 PERCENT EXCEEDS	19		18		19	
90 PERCENT EXCEEDS	17		15		12	

(a) Flow shut off at flood-control dam upstream due to request by Wisconsin Department of Natural Resources for eradication of rough fish to improve sport fishing
(b) Result of work at dam
(c) Peak discharge and stage prior to construction of flood-control reservoir occurred Apr. 15, 1954, and was 7,000 ft^3/s and 12.50 ft (datum then in use), respectively
(d) Unknown
(e) Estimated due to ice effect or missing record



Base from U.S. Geological Survey 1:100,000 digital data; modified by Wisconsin Department of Natural Resources. Wisconsin Transverse Mercator projection.

TREMPEALEAU-BLACK RIVER BASIN

441459091392800 EAGLE CREEK RAIN GAGE E3-1006 NEAR FOUNTAIN CITY, WI

LOCATION.--Lat44°14'59", long 91°39'28", in NE ¼ SE ¼ sec.36, T.21 N., R.11 W., Buffalo County, Hydrologic Unit 07040003, on Eagle Valley Road, 3.0 mi west of junction with Glencoe-Waumandee Road, near Fountain City.

PERIOD OF RECORD.-October 1990 to June 1996, October 2002 to current year (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Rainfall estimated to be 0.00 for Feb. 17, 19, 21 because recorded precipitation interpreted as collector snowmelt. Rainfall data missing for periods Oct. 25-Jan. 13 and June 9-July 1.

EXTREMES FOR PERIOD OF RECORD.-- Maximum daily rainfall, 6.71 in., Aug. 13, 1995.

EXTREMES FOR CURRENT YEAR.-- Maximum daily rainfall, 2.21 in., May 13.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	0.00	0.01	0.00	0.00	0.02	---	0.00	0.00
2	0.00	---	---	---	0.00	0.00	0.00	0.00	0.03	0.00	0.49	0.00
3	0.14	---	---	---	0.00	0.09	0.00	0.00	0.00	0.43	0.19	0.00
4	0.00	---	---	---	0.00	0.01	0.00	0.00	0.00	0.06	0.00	0.00
5	0.00	---	---	---	0.00	0.31	0.00	0.00	0.02	0.26	0.00	0.44
6	0.00	---	---	---	0.00	0.52	0.00	0.00	0.00	0.85	0.00	0.83
7	0.00	---	---	---	0.00	0.14	0.00	0.06	0.00	0.08	0.14	0.00
8	0.00	---	---	---	0.00	0.06	0.00	0.49	1.67	0.00	0.00	0.00
9	0.00	---	---	---	0.00	0.10	0.00	1.40	---	0.00	0.31	0.00
10	0.00	---	---	---	0.00	0.17	0.00	0.12	---	0.00	0.00	0.00
11	0.67	---	---	---	0.00	0.00	0.00	0.00	---	0.23	0.05	0.00
12	0.00	---	---	---	0.00	0.00	0.00	0.13	---	0.00	0.00	0.00
13	0.00	---	---	---	0.00	0.11	0.00	2.21	---	0.00	0.00	0.00
14	0.00	---	---	0.00	0.00	0.01	0.00	0.04	---	0.00	0.00	1.67
15	0.00	---	---	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00	1.98
16	0.00	---	---	0.00	0.00	0.00	0.12	0.00	---	0.00	1.09	0.00
17	0.00	---	---	0.00	0.00	0.20	0.01	0.01	---	0.00	0.01	0.00
18	0.00	---	---	0.00	0.00	0.31	0.58	0.00	---	0.00	0.28	0.00
19	0.00	---	---	0.00	0.00	0.00	0.10	0.64	---	0.01	0.00	0.00
20	0.00	---	---	0.00	0.07	0.00	0.53	1.66	---	0.00	0.00	0.00
21	0.00	---	---	0.00	0.00	0.00	0.10	0.63	---	0.35	0.00	0.00
22	0.00	---	---	0.00	0.26	0.00	0.00	0.66	---	0.00	0.02	0.00
23	0.00	---	---	0.00	0.00	0.00	0.00	0.78	---	0.00	0.00	0.21
24	0.00	---	---	0.00	0.00	0.00	0.11	0.01	---	0.00	0.00	0.00
25	---	---	---	0.00	0.00	0.49	0.36	0.06	---	0.00	0.00	0.00
26	---	---	---	0.00	0.00	0.01	0.00	0.00	---	0.00	0.24	0.00
27	---	---	---	0.00	0.00	0.13	0.00	0.32	---	0.00	0.01	0.00
28	---	---	---	0.00	0.00	0.07	0.00	0.00	---	0.00	0.08	0.00
29	---	---	---	0.00	0.18	0.00	0.00	1.08	---	0.29	0.06	0.00
30	---	---	---	0.00	---	0.00	0.00	0.92	---	0.01	0.28	0.00
31	---	---	---	0.00	---	0.00	---	0.01	---	0.00	0.00	---
TOTAL	---	---	---	---	0.51	2.74	1.91	11.23	---	---	3.25	5.13

441356091405500 EAGLE CREEK RAIN GAGE E2-1005 NEAR FOUNTAIN CITY, WI

LOCATION.--Lat44°13'56", long 91°40'55", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.3, T.20 N., R.11 W., Buffalo County, Hydrologic Unit 07040003, on Schaffner Valley Road, 1.7 mi north of junction with CTH G, near Fountain City.

PERIOD OF RECORD.-October 1990 to June 1996, October 2002 to current year (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Rainfall estimated to be 0.00 for Dec. 21 and Feb. 18, 19, 21 because recorded precipitation interpreted as collector snowmelt.

EXTREMES FOR PERIOD OF RECORD.-- Maximum daily rainfall, 5.46 in., Aug. 13, 1995.

EXTREMES FOR CURRENT YEAR.-- Maximum daily rainfall, 2.48 in., June 9.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
2	0.00	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.02	0.00	0.71	0.00
3	0.11	0.37	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.62	0.19	0.00
4	0.00	0.20	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.04	0.00	0.00
5	0.00	0.00	0.07	0.00	0.00	0.71	0.00	0.00	0.01	0.27	0.01	0.41
6	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.00	0.85	0.00	0.72
7	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.30	0.00	0.04	0.12	0.00
8	0.00	0.00	0.27	0.00	0.00	0.05	0.00	0.46	1.68	0.00	0.01	0.00
9	0.00	0.00	0.21	0.00	0.00	0.07	0.00	1.00	2.48	0.00	0.36	0.00
10	0.00	0.01	0.00	0.00	0.00	0.18	0.00	0.11	0.07	0.00	0.01	0.00
11	0.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.23	0.07	0.00
12	0.01	0.27	0.00	0.00	0.00	0.00	0.00	0.15	0.07	0.00	0.00	0.00
13	0.00	0.02	0.00	0.00	0.00	0.06	0.00	1.98	0.05	0.01	0.00	0.00
14	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	1.54
15	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	2.01
16	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	1.35	0.00	1.06	0.00
17	0.00	0.09	0.00	0.02	0.00	0.15	0.00	0.01	0.01	0.00	0.01	0.00
18	0.00	0.26	0.00	0.00	0.00	0.29	0.58	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.71	0.00	0.00	0.00	0.04
20	0.00	0.00	0.00	0.00	0.14	0.00	0.45	1.08	0.00	0.00	0.00	0.10
21	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.60	0.00	0.17	0.00	0.00
22	0.00	0.03	0.00	0.00	0.18	0.00	0.00	0.63	0.00	0.00	0.02	0.00
23	0.00	0.32	0.00	0.00	0.00	0.00	0.00	0.63	0.34	0.00	0.00	0.22
24	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.10	0.00	0.00	0.00
25	0.08	0.00	0.00	0.00	0.00	0.39	0.24	0.06	0.00	0.00	0.00	0.00
26	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00
27	0.06	0.00	0.12	0.00	0.00	0.11	0.00	0.27	0.25	0.00	0.00	0.00
28	0.18	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.05	0.00
29	0.07	0.00	0.00	0.00	0.17	0.00	0.00	0.93	0.00	0.26	0.06	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.79	0.00	0.01	0.43	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.05	---	0.00	0.01	---
TOTAL	1.20	1.64	0.67	0.04	0.49	2.44	1.66	9.81	6.97	2.50	3.37	5.04

CAL YR 2003 TOTAL 21.58
WTR YR 2004 TOTAL 35.83

441527091365300 JOOS VALLEY CREEK RAIN GAGE J3-1003 NEAR ARCADIA, WI

LOCATION.--Lat44°15'27", long 91°36'53", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.32, T.21 N., R.10 W., Buffalo County, Hydrologic Unit 07040003, on Hannon Road, 0.1 mi north of junction with Pausy Pass, near Arcadia.

PERIOD OF RECORD.-October 1990 to June 1996, October 2002 to current year (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Rainfall estimated to be 0.00 for Dec. 21, 22, Jan. 11, and Feb. 18, 19, 21, 23 because recorded precipitation interpreted as collector snowmelt.

EXTREMES FOR PERIOD OF RECORD.-- Maximum daily rainfall, 7.53 in., Aug. 13, 1995.

EXTREMES FOR CURRENT YEAR.-- Maximum daily rainfall, 2.77 in., June 9.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02	0.00	0.00	0.00
2	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.03	0.00	0.70	0.00
3	0.10	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.14	0.00
4	0.00	0.57	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.28	0.00	0.00
5	0.00	0.00	0.02	0.00	0.00	0.30	0.00	0.00	0.03	0.27	0.00	0.42
6	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.66	0.00	0.58
7	0.00	0.00	0.00	0.00	0.00	0.08	0.01	0.04	0.00	0.06	0.10	0.00
8	0.00	0.00	0.22	0.00	0.00	0.01	0.00	0.46	2.56	0.00	0.01	0.00
9	0.00	0.00	0.06	0.00	0.00	0.23	0.00	1.49	2.77	0.00	0.13	0.00
10	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.10	0.34	0.00	0.00	0.00
11	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63	0.16	0.06	0.00
12	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.25	0.14	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.08	0.00	1.71	0.04	0.00	0.00	0.00
14	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	1.28
15	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.06
16	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	1.79	0.00	0.88	0.00
17	0.00	0.11	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.01	0.00
18	0.00	0.25	0.00	0.00	0.00	0.21	0.48	0.00	0.00	0.00	0.27	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.49	0.00	0.02	0.00	0.00
20	0.00	0.00	0.00	0.00	0.01	0.00	0.36	1.86	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.68	0.00	0.32	0.00	0.00
22	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.59	0.00	0.00	0.01	0.00
23	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.65	0.25	0.00	0.00	0.20
24	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.08	0.00	0.00	0.00
25	0.05	0.01	0.00	0.00	0.00	0.41	0.36	0.03	0.00	0.00	0.00	0.00
26	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.44	0.00
27	0.04	0.00	0.08	0.00	0.00	0.09	0.00	0.37	0.23	0.00	0.00	0.00
28	0.10	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.01	0.00	0.11	0.00
29	0.09	0.00	0.00	0.00	0.17	0.00	0.00	0.97	0.00	0.26	0.04	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	1.76	0.00	0.00	0.24	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.02	---	0.00	0.00	---
TOTAL	1.04	1.45	0.38	0.04	0.31	1.93	1.51	11.50	8.92	2.39	3.14	4.54

CAL YR 2003 TOTAL 19.84
WTR YR 2004 TOTAL 37.15

441402091375900 JOOS VALLEY CREEK RAIN GAGE J2-1002 NEAR FOUNTAIN CITY, WI

LOCATION.--Lat44°14'02", long 91°37'59", in NE ¼ SE ¼ sec.1, T.20 N., R.11 W., Buffalo County, Hydrologic Unit 07040003, on Slaby Farm entrance road, just off Joos Valley road, and approximately 3.1 mi northeast of the junction of Joos Valley Road and CTH G, near Fountain City.

PERIOD OF RECORD.-October 1990 to June 1996, October 2002 to current year (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Rainfall estimated to be 0.00 for Dec. 17, 21, 22, Jan. 24, and Feb. 2, 18, 19, 21, 23 because recorded precipitation interpreted as collector snowmelt. Prior to October 1992, precipitation data published under number 441402091395900.

EXTREMES FOR PERIOD OF RECORD.-- Maximum daily rainfall, 6.36 in., Aug. 13, 1995.

EXTREMES FOR CURRENT YEAR.-- Maximum daily rainfall, 2.67 in., June 8.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.09	0.00	0.00	0.00
2	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.01	0.00	0.58	0.00
3	0.09	0.42	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.37	0.21	0.00
4	0.01	0.28	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.10	0.00	0.00
5	0.00	0.00	0.08	0.00	0.00	0.68	0.00	0.00	0.03	0.31	0.00	0.35
6	0.00	0.00	0.00	0.00	0.00	0.29	0.00	0.01	0.00	0.78	0.00	0.71
7	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.22	0.00	0.07	0.14	0.00
8	0.00	0.00	0.26	0.00	0.00	0.05	0.00	0.44	2.67	0.00	0.01	0.00
9	0.00	0.00	0.23	0.00	0.00	0.11	0.00	1.23	2.47	0.00	0.30	0.00
10	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.12	0.21	0.00	0.00	0.00
11	0.61	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.27	0.03	0.00
12	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.28	0.13	0.01	0.01	0.00
13	0.00	0.02	0.00	0.00	0.00	0.10	0.00	1.69	0.09	0.00	0.00	0.00
14	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	1.41
15	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	2.19
16	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	1.17	0.00	1.02	0.00
17	0.00	0.14	0.00	0.02	0.00	0.18	0.00	0.01	0.00	0.00	0.01	0.00
18	0.00	0.26	0.00	0.00	0.00	0.27	0.57	0.00	0.00	0.00	0.08	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.55	0.00	0.02	0.00	0.00
20	0.00	0.00	0.00	0.00	0.14	0.00	0.50	1.39	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.70	0.00	0.32	0.00	0.00
22	0.00	0.03	0.00	0.00	0.21	0.00	0.00	0.62	0.00	0.00	0.02	0.00
23	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.74	0.23	0.00	0.00	0.23
24	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.11	0.00	0.00	0.00
25	0.08	0.00	0.00	0.00	0.00	0.28	0.34	0.05	0.00	0.00	0.00	0.00
26	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.00
27	0.07	0.00	0.09	0.00	0.00	0.13	0.00	0.43	0.22	0.00	0.00	0.00
28	0.16	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.09	0.00
29	0.08	0.00	0.00	0.00	0.18	0.00	0.00	1.03	0.00	0.29	0.06	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.01	1.60	0.00	0.03	0.43	0.00
31	0.01	---	0.00	0.00	---	0.00	---	0.03	---	0.00	0.01	---
TOTAL	1.13	1.81	0.66	0.06	0.53	2.53	1.78	11.18	8.00	2.57	3.27	4.89

WTR YR 2004 TOTAL 38.41

05378183 JOOS VALLEY CREEK NEAR FOUNTAIN CITY, WI

LOCATION.--Lat 44°12'53", long 91°39'54" in NE ¼ NE ¼ sec.14, T.20 N., R.11 W., Buffalo County, Hydrologic Unit 07040003, on left bank at bridge on private road, 6.3 mi northeast of Fountain City.

DRAINAGE AREA.--5.89 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1990 to July 1996, October 2002 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 810 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	2.4	2.1	2.5	2.1	34	3.5	1.9	6.6	4.8	3.7	3.4
2	2.1	2.5	2.0	2.6	2.2	20	3.4	1.7	5.6	4.6	4.4	3.4
3	2.5	2.8	2.1	e2.1	1.9	5.7	3.2	1.7	4.6	4.9	3.9	3.2
4	2.2	4.1	2.1	e2.0	1.9	5.4	3.2	1.9	4.2	5.0	3.8	3.1
5	2.2	2.9	2.3	e1.6	2.1	9.1	3.3	1.8	4.1	4.5	3.6	3.3
6	2.1	2.6	2.2	1.6	2.2	6.9	3.3	1.8	3.8	7.1	3.6	4.8
7	2.2	2.6	2.3	1.9	2.1	7.9	3.2	1.5	3.4	5.6	3.6	3.4
8	2.2	2.3	2.6	2.0	2.0	3.1	3.0	2.4	4.4	4.8	3.7	3.5
9	2.2	2.5	2.9	2.0	2.1	4.6	2.8	2.1	81	4.6	3.8	3.5
10	2.2	2.8	2.7	2.2	2.1	14	2.8	6.2	17	4.6	3.6	3.5
11	2.9	2.8	2.1	2.3	2.1	7.5	2.8	2.5	16	4.8	3.6	3.4
12	2.8	2.8	2.0	2.2	2.1	2.7	2.7	2.6	14	4.6	3.6	3.3
13	2.3	2.5	2.1	2.2	2.1	3.2	2.7	13	11	4.5	3.5	3.3
14	2.5	2.5	2.4	2.3	2.0	3.2	2.7	5.1	8.7	4.2	3.5	4.2
15	2.5	2.8	2.5	2.1	1.9	2.0	2.5	3.8	7.7	4.1	3.5	19
16	2.3	2.6	2.4	2.2	2.0	3.1	2.5	3.4	14	4.1	4.5	4.3
17	2.4	2.7	2.1	2.3	2.0	5.6	2.4	3.0	10	4.0	3.9	3.7
18	2.5	3.6	2.2	e1.8	2.1	8.8	2.6	2.6	7.4	3.9	3.8	3.5
19	2.4	2.8	2.0	1.9	2.3	6.9	3.5	2.5	6.8	3.9	3.5	3.4
20	2.3	2.7	2.2	2.0	2.5	22	3.1	25	6.5	4.0	3.4	3.0
21	2.3	2.3	2.3	2.1	2.3	3.9	3.6	6.5	6.4	4.1	3.3	2.8
22	2.2	2.3	2.1	1.7	2.3	3.1	2.8	9.8	5.9	3.9	3.6	2.9
23	2.3	3.1	2.0	2.1	2.3	6.7	2.6	8.7	6.0	3.7	3.5	3.0
24	2.3	2.5	1.8	2.2	2.3	9.8	2.4	6.0	5.8	3.6	3.4	2.9
25	2.4	2.7	1.9	2.3	2.4	7.0	3.4	5.0	5.4	3.6	3.3	3.1
26	2.5	2.6	2.0	2.3	2.6	7.1	2.8	4.3	5.2	3.6	3.3	2.8
27	2.4	2.4	2.8	2.2	2.8	5.0	2.4	5.1	5.3	3.6	3.0	2.8
28	2.9	2.2	3.6	2.0	4.2	5.2	2.5	3.7	5.2	3.6	2.9	2.6
29	2.8	2.3	2.8	2.0	5.7	4.4	2.0	8.8	5.0	3.9	3.2	2.7
30	2.8	2.4	2.5	1.9	---	4.0	2.0	24	4.8	3.7	3.7	2.9
31	2.5	---	2.2	2.0	---	3.7	---	11	---	3.7	3.2	---
TOTAL	74.4	80.1	71.3	64.6	68.7	235.6	85.7	179.4	291.8	133.6	110.9	114.7
MEAN	2.40	2.67	2.30	2.08	2.37	7.60	2.86	5.79	9.73	4.31	3.58	3.82
MAX	2.9	4.1	3.6	2.6	5.7	34	3.6	25	81	7.1	4.5	19
MIN	2.1	2.2	1.8	1.6	1.9	2.0	2.0	1.5	3.4	3.6	2.9	2.6
CFSM	0.41	0.45	0.39	0.35	0.40	1.29	0.49	0.98	1.65	0.73	0.61	0.65
IN.	0.47	0.51	0.45	0.41	0.43	1.49	0.54	1.13	1.84	0.84	0.70	0.72

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2004, BY WATER YEAR (WY)

MEAN	3.52	3.93	3.26	2.94	3.45	6.33	5.16	4.92	4.76	3.82	4.56	4.04
MAX	5.01	6.24	4.65	4.15	6.85	8.25	10.0	7.26	9.73	7.99	7.06	5.89
(WY)	(1994)	(1992)	(1994)	(1994)	(1994)	(1995)	(1993)	(1993)	(2004)	(1993)	(1993)	(1993)
MIN	2.40	2.09	1.92	1.89	2.05	3.66	2.86	2.95	2.88	2.66	2.65	2.49
(WY)	(1991)	(1991)	(1991)	(1991)	(1991)	(1991)	(2004)	(1996)	(1995)	(1990)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1990 - 2004	
ANNUAL TOTAL	1,287.5		1,510.8			
ANNUAL MEAN	3.53		4.13		4.31	
HIGHEST ANNUAL MEAN					5.81	1993
LOWEST ANNUAL MEAN					3.03	1991
HIGHEST DAILY MEAN	34	Mar 14	81	Jun 9	90	Aug 14, 1995
LOWEST DAILY MEAN	1.8	Dec 24	1.5	May 7	1.5	Dec 27, 1990
ANNUAL SEVEN-DAY MINIMUM	2.0	Dec 19	1.8	May 1	1.6	Dec 22, 1990
MAXIMUM PEAK FLOW			439	Jun 9	(a)1,480	Aug 14, 1995
MAXIMUM PEAK STAGE			10.36	Jun 9	12.14	Aug 14, 1995
INSTANTANEOUS LOW FLOW			(b)0.42	Dec 19	(b)0.42	Dec 19, 2003
ANNUAL RUNOFF (CFSM)	0.599		0.701		0.732	
ANNUAL RUNOFF (INCHES)	8.13		9.54		9.95	
10 PERCENT EXCEEDS	4.9		6.5		6.1	
50 PERCENT EXCEEDS	2.7		2.9		3.6	
90 PERCENT EXCEEDS	2.2		2.0		2.3	

(a) From rating curve extended above 86 ft^3/s on basis of step-backwater method
(b) Result of freezeup
(e) Estimated due to ice effect or missing record

05378183 JOOS VALLEY CREEK NEAR FOUNTAIN CITY, WI—Continued

PRECIPITATION QUANTITY

PERIOD OF RECORD.-October 1990 to June 1996, October 2002 to current year (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Rainfall estimated to be 0.00 for Dec. 28, 30, Jan. 11, 24, and Feb. 2, 6, 7, 12, 15, 16, 17, 19, 21 because recorded precipitation interpreted as collector snowmelt. Rainfall data missing for period May 23-June 1.

EXTREMES FOR PERIOD OF RECORD.-- Maximum daily rainfall, 4.26 in., Aug. 13, 1995.

EXTREMES FOR CURRENT YEAR.-- Maximum daily rainfall, 2.50 in., June 9.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.01	0.00	0.66	0.00
3	0.10	0.55	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.47	0.25	0.00
4	0.00	0.26	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.04	0.01	0.00
5	0.00	0.00	0.11	0.00	0.00	0.89	0.00	0.00	0.06	0.40	0.00	0.39
6	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.92	0.00	0.75
7	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.17	0.00	0.08	0.12	0.00
8	0.00	0.00	0.24	0.00	0.00	0.06	0.00	0.42	1.83	0.00	0.00	0.00
9	0.00	0.00	0.21	0.00	0.00	0.05	0.00	0.87	2.50	0.01	0.18	0.00
10	0.00	0.01	0.00	0.00	0.00	0.17	0.00	0.12	0.14	0.00	0.01	0.00
11	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59	0.28	0.06	0.00
12	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.23	0.10	0.02	0.01	0.00
13	0.00	0.01	0.00	0.00	0.00	0.09	0.00	1.64	0.11	0.00	0.00	0.00
14	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	1.63
15	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	2.20
16	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.01	1.16	0.00	1.05	0.00
17	0.00	0.12	0.00	0.01	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.26	0.00	0.00	0.00	0.26	0.49	0.01	0.00	0.00	0.01	0.00
19	0.00	0.00	0.00	0.00	0.00	0.01	0.09	0.54	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.21	0.00	0.44	0.73	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.68	0.00	0.21	0.00	0.00
22	0.00	0.06	0.00	0.00	0.07	0.00	0.00	0.65	0.00	0.01	0.03	0.00
23	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.17
24	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.11	0.00	0.00	0.01
25	0.09	0.00	0.00	0.00	0.00	0.27	0.30	0.00	0.00	0.00	0.01	0.00
26	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.16	0.00
27	0.09	0.00	0.10	0.00	0.00	0.12	0.00	0.00	0.23	0.00	0.01	0.00
28	0.15	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.08	0.00
29	0.09	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.33	0.07	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.01	0.00	0.00	0.10	0.59	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.01	---
TOTAL	1.25	2.03	0.66	0.05	0.45	2.67	1.60	6.11	6.95	2.87	3.32	5.15

WTR YR 2004 TOTAL 33.11

05378183 JOOS VALLEY CREEK NEAR FOUNTAIN CITY, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1990 to June 1996, October 2002 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: July 1990 to June 1996, October 2002 to current year.
SUSPENDED-SOLIDS DISCHARGE: July 1990 to June 1996, October 2002 to current year.
TOTAL-PHOSPHORUS DISCHARGE: July 1990 to June 1996, October 2002 to current year.
DISSOLVED OXYGEN: July 1990 to September 1992.

INSTRUMENTATION.--Water-quality sampler July 1990 to June 1996 and October 2002 to current year; continuous water-temperature recorder July 1990 to June 1996 and October 2002 to current year; dissolved-oxygen recorder July 1990 to September 1992.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Chemical analyses by the Wisconsin State Laboratory of Hygiene. Samples are point samples unless otherwise indicated.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum observed, 31.0°C, June 27-28, 1991 and July 13, 1995; minimum observed, 0.0°C on many days during 1991, 1992, 1993, 1995, 1996, 2003, and 2004 winter periods.
SUSPENDED-SOLIDS DISCHARGE; Maximum daily, 4,570 tons, Aug. 14, 1995; minimum daily, 0.02 ton, many days during 2004 water year.
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 7,350 lb, Aug. 14, 1995; minimum daily, 0.22 lb, Nov. 9, 1990, Jan. 5-6, 2004.
DISSOLVED OXYGEN: Maximum observed, 15.8 mg/L, Apr. 26, 1991; minimum observed, 4.3 mg/L, June 28, 1991.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum observed, 23.5°C, June 7, 5; minimum observed, 0.0°C on many days.
SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 945 tons, June 9; minimum daily, 0.02 ton, many days.
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 2,020 lb, June 9; minimum daily, 0.22 lb, Jan. 5-6.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	10.0	5.5	7.5	7.5	5.5	6.5	2.5	0.5	1.5	1.0	0.5	0.5
2	9.5	4.0	6.5	8.5	6.0	7.0	1.0	0.5	0.5	3.5	1.0	2.0
3	11.0	8.0	9.5	6.5	3.5	4.5	3.0	1.0	1.5	3.0	0.0	0.5
4	11.0	6.0	8.5	6.0	4.5	5.0	3.0	1.0	2.0	0.5	0.0	0.5
5	12.5	7.0	9.5	5.5	3.5	4.5	4.5	2.0	3.0	0.5	0.0	0.5
6	13.0	7.5	10.0	4.0	1.0	2.5	3.5	3.0	3.5	0.5	0.0	0.5
7	15.0	8.0	11.5	3.5	0.5	2.0	4.5	2.5	3.5	0.5	0.0	0.5
8	16.5	10.5	13.0	2.5	0.5	1.0	4.0	2.5	3.5	0.5	0.0	0.5
9	16.0	11.5	13.5	2.5	0.5	1.0	4.0	2.5	3.5	0.5	0.5	0.5
10	16.5	12.0	13.5	5.0	2.0	3.5	2.5	0.0	1.5	0.5	0.5	0.5
11	14.0	11.5	12.5	9.0	5.0	6.5	0.5	0.0	0.0	0.5	0.5	0.5
12	13.5	9.0	11.5	5.5	2.0	4.0	0.5	0.0	0.5	1.0	0.5	0.5
13	11.0	9.0	10.0	4.0	1.0	2.0	0.5	0.5	0.5	1.0	0.5	0.5
14	12.5	9.0	10.5	4.5	1.0	2.5	0.5	0.5	0.5	1.0	0.5	0.5
15	11.0	6.5	8.5	6.0	4.5	5.5	0.5	0.5	0.5	0.5	0.5	0.5
16	9.0	5.0	7.0	7.5	6.0	7.0	0.5	0.5	0.5	1.0	0.5	0.5
17	10.0	5.0	7.5	8.0	5.5	7.0	0.5	0.5	0.5	1.5	0.5	1.0
18	13.0	8.0	10.0	10.0	6.5	8.5	1.0	0.5	0.5	1.0	0.0	0.5
19	13.0	7.5	10.0	7.5	4.5	5.5	0.5	0.0	0.5	0.5	0.0	0.5
20	14.0	9.0	11.0	8.0	4.0	5.5	0.5	0.0	0.5	0.5	0.5	0.5
21	13.0	9.5	11.0	6.0	4.0	5.0	1.0	0.5	0.5	0.5	0.0	0.5
22	10.5	6.5	8.5	4.0	3.5	3.5	2.0	0.5	1.0	0.5	0.0	0.0
23	10.0	6.0	8.0	4.5	2.0	3.5	2.0	0.0	1.5	0.5	0.0	0.5
24	8.5	6.0	7.0	2.0	0.5	0.5	0.5	0.0	0.5	0.5	0.0	0.5
25	8.5	5.0	7.0	1.5	0.5	1.0	0.5	0.0	0.5	0.5	0.5	0.5
26	7.5	5.0	6.5	3.0	0.5	1.5	0.5	0.5	0.5	0.5	0.5	0.5
27	7.5	3.5	5.5	4.0	2.5	3.0	2.5	0.5	1.5	0.5	0.5	0.5
28	6.5	6.0	6.5	2.5	1.5	2.0	4.0	2.0	3.0	0.5	0.5	0.5
29	7.0	6.0	6.5	3.0	1.0	2.0	3.0	1.0	2.5	0.5	0.5	0.5
30	8.0	6.0	7.0	5.0	1.5	3.0	1.5	0.0	0.5	0.5	0.0	0.5
31	8.5	6.5	8.0	---	---	---	1.5	0.0	0.5	0.5	0.5	0.5
MONTH	16.5	3.5	9.1	10.0	0.5	3.9	4.5	0.0	1.3	3.5	0.0	0.5

05378183 JOOS VALLEY CREEK NEAR FOUNTAIN CITY, WI—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	0.5	0.5	0.5	2.0	0.5	1.0	12.5	3.0	7.5	16.0	7.0	11.5
2	0.5	0.5	0.5	2.0	0.5	1.5	13.0	3.5	8.0	14.5	7.5	11.0
3	0.5	0.0	0.5	3.5	1.5	2.5	11.5	5.0	8.0	15.5	5.5	10.5
4	0.5	0.0	0.5	4.0	2.5	3.0	12.5	3.5	7.5	18.5	9.0	13.5
5	1.0	0.5	0.5	2.5	0.0	1.5	12.5	4.0	8.0	15.5	8.0	11.5
6	1.0	0.5	0.5	5.5	1.5	3.0	16.0	8.0	11.5	17.5	11.5	14.0
7	1.5	0.5	0.5	3.0	1.5	2.0	13.5	6.5	10.0	17.0	9.0	13.0
8	0.5	0.0	0.5	3.5	0.0	2.0	13.0	7.5	10.0	15.0	10.0	12.0
9	1.0	0.5	0.5	8.0	2.0	4.0	11.0	5.0	8.5	21.0	12.0	15.5
10	1.0	0.0	0.5	5.5	0.5	2.5	8.5	5.0	7.0	20.0	13.0	16.0
11	1.0	0.5	0.5	2.5	0.0	0.5	8.5	2.0	5.5	18.0	11.0	14.5
12	1.5	0.0	1.0	3.5	0.0	1.5	9.0	3.0	6.0	17.5	14.0	15.5
13	0.5	0.0	0.5	2.5	0.5	1.5	13.5	2.5	7.5	14.5	10.0	11.5
14	1.0	0.0	0.5	3.0	1.0	2.0	15.0	5.0	10.0	11.5	8.5	10.0
15	0.5	0.0	0.5	4.0	0.0	2.0	15.0	7.0	10.5	15.5	6.5	11.0
16	1.0	0.0	0.5	6.5	0.5	3.5	16.5	8.5	12.5	16.5	9.5	13.0
17	1.5	0.5	0.5	7.0	2.5	4.0	18.5	9.5	14.0	17.0	13.0	15.0
18	2.5	0.5	1.5	5.0	1.5	3.0	17.0	12.5	14.5	19.0	10.0	14.5
19	3.5	2.0	2.5	4.5	0.5	2.5	16.0	11.0	13.0	19.5	10.5	15.0
20	2.5	1.5	2.0	4.5	0.0	2.0	11.0	7.5	9.0	21.0	16.0	17.5
21	4.5	2.0	2.5	5.5	0.0	2.5	11.5	8.0	9.5	16.0	12.0	13.0
22	2.5	1.5	2.0	7.0	0.0	3.5	15.5	7.5	11.5	16.5	11.5	13.5
23	3.5	2.5	3.0	10.5	2.0	5.5	17.0	9.5	13.0	15.0	11.5	13.5
24	4.0	2.5	3.0	11.5	2.5	6.0	12.5	7.5	10.5	13.5	10.0	11.5
25	5.5	2.0	3.5	8.5	3.5	6.5	11.0	7.5	9.0	16.0	11.0	13.0
26	5.5	0.5	2.5	11.0	5.0	7.5	12.0	6.5	9.0	17.5	10.0	13.5
27	5.5	1.0	3.0	9.5	7.0	8.5	11.0	4.5	8.0	18.0	12.5	15.0
28	5.5	1.5	3.0	10.0	7.0	9.0	20.0	7.5	13.0	19.0	10.5	15.0
29	5.0	1.5	3.0	11.0	5.5	8.0	19.5	13.0	15.5	15.5	12.0	13.0
30	---	---	---	7.5	4.0	6.0	14.0	10.0	11.5	16.0	11.5	13.0
31	---	---	---	11.5	2.0	6.5	---	---	---	17.0	12.0	14.5
MONTH	5.5	0.0	1.4	11.5	0.0	3.7	20.0	2.0	10.0	21.0	5.5	13.4
		JUNE			JULY			AUGUST			SEPTEMBER	
1	15.0	12.0	13.5	21.5	15.5	18.5	21.0	16.5	19.0	20.0	14.5	17.0
2	19.5	12.0	15.5	22.5	17.0	19.5	21.5	17.5	19.0	21.0	16.0	18.5
3	20.0	11.0	15.5	19.5	16.5	17.5	19.5	17.0	18.5	20.0	15.5	18.0
4	19.0	12.0	15.5	22.0	16.0	18.5	19.5	16.0	18.0	20.0	15.0	17.5
5	15.5	13.5	14.5	19.0	16.5	17.5	20.0	14.0	17.0	20.0	16.0	18.0
6	20.5	12.5	16.0	16.5	15.0	16.0	20.0	14.0	17.0	20.0	16.0	18.0
7	23.5	15.0	19.0	15.5	13.5	14.5	17.0	15.0	15.5	17.5	13.5	15.5
8	22.0	17.5	20.0	19.0	12.0	15.5	20.0	15.0	17.0	16.0	12.0	14.0
9	20.5	16.0	18.0	16.5	14.5	15.0	18.0	16.0	17.0	17.5	12.0	14.5
10	16.0	13.0	14.0	20.5	14.0	17.0	16.0	13.5	15.0	18.0	13.0	15.5
11	15.0	12.5	13.5	19.5	16.0	17.5	14.5	12.5	13.5	20.0	15.5	17.5
12	20.5	12.5	16.0	22.0	16.0	18.5	17.0	12.0	14.5	20.0	15.0	17.5
13	20.5	13.5	17.0	22.5	17.0	19.5	18.0	12.0	15.0	19.5	15.0	17.0
14	19.5	13.0	16.5	22.0	16.0	19.0	18.0	12.0	15.0	17.5	16.5	16.5
15	20.0	13.0	16.5	20.5	16.0	18.5	18.0	12.5	15.0	19.0	15.5	17.0
16	18.5	14.5	16.5	22.0	16.0	19.0	15.5	14.0	14.5	17.0	13.0	15.0
17	20.0	14.5	17.0	20.5	16.0	18.5	18.0	13.5	15.5	17.0	12.5	14.5
18	17.0	13.0	15.0	20.0	15.5	18.0	17.5	14.0	16.0	16.5	13.0	15.0
19	18.0	11.0	14.5	20.5	16.0	18.0	17.0	12.0	14.5	18.0	13.5	15.5
20	16.5	12.0	14.5	21.0	17.0	19.0	17.0	12.5	14.5	18.0	14.0	16.0
21	18.0	13.0	15.0	21.5	17.5	19.5	16.5	10.5	13.5	18.0	13.5	15.5
22	18.5	12.0	15.5	20.5	17.5	19.0	19.0	13.5	16.0	18.5	14.0	16.0
23	19.0	13.5	16.0	21.0	16.5	18.5	17.0	15.0	16.0	18.0	13.5	15.5
24	17.0	12.5	15.0	20.0	15.0	17.5	16.0	14.5	15.0	15.0	13.0	13.5
25	16.0	11.5	14.0	20.0	14.0	17.0	18.0	14.5	16.0	16.0	12.0	13.5
26	17.5	11.5	14.5	20.5	14.0	17.0	21.0	15.5	18.0	16.0	11.0	13.5
27	15.0	12.5	13.5	20.5	14.5	17.5	20.5	16.5	18.5	15.5	11.5	13.5
28	18.5	11.5	15.0	20.5	15.0	17.5	17.5	15.0	16.0	15.0	11.0	13.0
29	20.5	13.0	16.5	21.0	17.0	19.0	18.0	14.0	15.5	14.0	9.0	11.5
30	21.0	14.5	17.5	20.5	16.5	18.5	19.0	15.0	16.5	12.5	9.0	11.0
31	---	---	---	20.5	16.0	18.0	18.0	14.0	15.5	---	---	---
MONTH	23.5	11.0	15.7	22.5	12.0	17.9	21.5	10.5	16.0	21.0	9.0	15.5
YEAR	23.5	0.0	9.1									

05378183 JOOS VALLEY CREEK NEAR FOUNTAIN CITY, WI—Continued

SUSPENDED SOLIDS, DRIED AT 105 DEGREES CELSIUS, WATER, UNFILTERED, TONS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.04	0.05	0.02	0.03	0.03	99	0.05	0.03	0.78	0.15	0.31	0.13
2	0.03	0.05	0.02	0.03	0.04	16	0.05	0.02	0.42	0.14	0.40	0.12
3	0.04	0.07	0.02	e0.03	0.03	0.87	0.04	0.02	0.29	0.16	0.39	0.10
4	0.04	0.11	0.02	e0.02	0.03	0.76	0.04	0.03	0.23	0.18	0.42	0.09
5	0.04	0.09	0.02	e0.02	0.04	2.8	0.03	0.02	0.19	0.17	0.44	0.09
6	0.03	0.08	0.02	0.02	0.04	1.4	0.03	0.02	0.15	0.91	0.49	0.30
7	0.04	0.08	0.02	0.02	0.04	2.0	0.03	0.02	0.11	0.47	0.54	0.08
8	0.04	0.06	0.03	0.03	0.04	0.19	0.02	0.03	10	0.22	0.62	0.07
9	0.04	0.06	0.03	0.03	0.04	0.51	0.02	0.03	945	0.22	0.69	0.07
10	0.04	0.07	0.03	0.03	0.04	7.3	0.02	8.7	9.4	0.24	0.73	0.06
11	0.04	0.06	0.02	0.03	0.04	1.4	0.03	0.14	9.1	0.27	0.77	0.06
12	0.04	0.06	0.02	0.03	0.04	0.19	0.03	0.06	6.2	0.27	0.73	0.05
13	0.03	0.05	0.02	0.03	0.04	0.19	0.03	39	3.2	0.28	0.65	0.05
14	0.03	0.04	0.03	0.03	0.04	0.17	0.03	0.57	0.43	0.28	0.61	0.33
15	0.03	0.04	0.03	0.03	0.04	0.09	0.03	0.22	0.23	0.29	0.57	31
16	0.03	0.04	0.03	0.03	0.04	0.11	0.03	0.15	43	0.28	0.67	0.22
17	0.03	0.04	0.02	0.03	0.04	0.83	0.03	0.10	11	0.27	0.55	0.10
18	0.03	0.04	0.02	e0.03	0.04	2.6	0.03	0.07	1.6	0.26	0.49	0.10
19	0.02	0.03	0.02	0.03	0.05	1.4	0.18	0.05	1.2	0.26	0.42	0.09
20	0.02	0.03	0.02	0.03	0.05	25	0.11	462	1.0	0.26	0.39	0.08
21	0.02	0.03	0.03	0.03	0.05	0.34	0.21	2.2	0.86	0.26	0.35	0.07
22	0.02	0.03	0.02	0.03	0.05	0.19	0.04	11	0.68	0.24	0.35	0.07
23	0.02	0.03	0.02	0.03	0.05	1.3	0.04	6.9	0.60	0.22	0.31	0.07
24	0.02	0.03	0.02	0.03	0.05	3.4	0.03	1.6	0.49	0.22	0.28	0.06
25	0.02	0.03	0.02	0.03	0.06	1.4	0.05	0.76	0.39	0.21	0.26	0.06
26	0.02	0.03	0.02	0.04	0.06	1.5	0.04	0.20	0.33	0.21	0.23	0.06
27	0.03	0.03	0.03	0.03	0.07	0.11	0.03	0.19	0.29	0.21	0.19	0.05
28	0.04	0.02	0.04	0.03	0.11	0.11	0.03	0.11	0.24	0.21	0.17	0.05
29	0.04	0.02	0.03	0.03	0.87	0.09	0.03	7.2	0.20	0.25	0.17	0.05
30	0.04	0.03	0.03	0.03	---	0.07	0.03	284	0.17	0.26	0.18	0.05
31	0.04	---	0.03	0.03	---	0.06	---	12	---	0.28	0.14	---
TOTAL	0.99	1.43	0.75	0.90	2.16	171.38	1.39	837.44	1,047.78	8.15	13.51	33.78
MEAN	0.03	0.05	0.02	0.03	0.07	5.5	0.05	27	35	0.26	0.44	1.1
MAX	0.04	0.11	0.04	0.04	0.87	99	0.21	462	945	0.91	0.77	31
MIN	0.02	0.02	0.02	0.02	0.03	0.06	0.02	0.02	0.11	0.14	0.14	0.05

CAL YR 2003 TOTAL 508.60 MEAN 1.4 MAX 235 MIN 0.02
WTR YR 2004 TOTAL 2,119.66 MEAN 5.8 MAX 945 MIN 0.02

e Estimated

05378183 JOOS VALLEY CREEK NEAR FOUNTAIN CITY, WI—Continued

PHOSPHORUS, WATER, UNFILTERED, POUNDS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.52	0.41	0.44	0.34	0.40	458	1.5	0.48	4.9	0.92	1.4	0.89
2	0.49	0.42	0.40	0.36	0.43	189	1.3	0.45	2.9	0.92	2.5	0.90
3	0.56	0.48	0.42	e0.29	0.38	25	1.1	0.46	2.1	2.2	1.3	0.86
4	0.50	0.70	0.41	e0.27	0.37	12	0.92	0.52	1.6	2.4	1.3	0.86
5	0.48	0.50	0.42	e0.22	0.43	36	0.83	0.50	1.4	1.1	1.2	0.94
6	0.46	0.44	0.41	0.22	0.46	20	0.73	0.53	1.1	5.5	1.1	3.2
7	0.46	0.44	0.40	0.26	0.44	26	0.62	0.46	0.89	3.1	1.1	1.0
8	0.45	0.42	0.45	0.28	0.43	3.6	0.52	0.71	18	1.4	1.1	1.0
9	0.46	0.46	0.49	0.28	0.46	8.3	0.48	0.71	2,020	1.4	1.1	1.1
10	0.44	0.55	0.43	0.31	0.46	71	0.49	44	50	1.5	1.1	1.1
11	0.57	0.56	0.33	0.32	0.48	31	0.49	5.6	40	1.7	1.0	1.0
12	0.55	0.59	0.30	0.31	0.48	2.3	0.49	1.6	29	1.7	1.0	1.0
13	0.45	0.54	0.32	0.31	0.48	2.4	0.49	235	16	1.8	0.95	1.0
14	0.48	0.57	0.34	0.33	0.47	2.5	0.50	4.6	4.3	1.8	0.95	1.5
15	0.47	0.66	0.35	0.31	0.45	1.6	0.47	1.9	2.6	1.8	0.94	104
16	0.44	0.64	0.33	0.32	0.48	3.6	0.48	1.3	98	1.8	2.7	2.5
17	0.45	0.68	0.28	0.35	0.48	13	0.47	0.89	49	1.7	1.0	1.8
18	0.48	0.93	0.29	e0.27	0.51	33	0.51	0.60	7.6	1.7	0.96	1.6
19	0.44	0.77	0.26	0.30	0.56	20	1.9	0.45	4.4	1.6	0.87	1.5
20	0.42	0.77	0.29	0.32	0.60	234	1.3	1,650	3.5	1.7	0.85	1.2
21	0.41	0.64	0.30	0.34	0.56	5.9	2.1	17	2.8	1.7	0.81	1.1
22	0.40	0.62	0.28	0.28	0.55	3.6	0.60	71	2.2	1.6	0.87	1.1
23	0.41	0.81	0.26	0.34	0.55	19	0.56	47	2.1	1.4	0.83	1.0
24	0.42	0.64	0.24	0.36	0.56	42	0.53	13	1.9	1.4	0.79	0.98
25	0.42	0.66	0.25	0.39	0.58	20	0.77	6.7	1.6	1.4	0.77	0.96
26	0.44	0.61	0.27	0.40	0.62	21	0.65	4.0	1.4	1.4	0.77	0.84
27	0.42	0.56	0.37	0.41	0.68	4.2	0.57	7.2	1.4	1.4	0.73	0.79
28	0.51	0.50	0.48	0.36	1.0	4.0	0.60	2.4	1.2	1.4	0.70	0.70
29	0.48	0.50	0.39	0.36	8.9	3.0	0.50	48	1.1	1.6	0.81	0.69
30	0.48	0.50	0.35	0.36	---	2.4	0.50	633	0.98	1.4	0.95	0.68
31	0.44	---	0.31	0.37	---	1.9	---	52	---	1.4	0.84	---
TOTAL	14.40	17.57	10.86	9.94	23.25	1,319.3	22.97	2,852.06	2,373.97	53.84	33.29	137.79
MEAN	0.46	0.59	0.35	0.32	0.80	43	0.77	92	79	1.7	1.1	4.6
MAX	0.57	0.93	0.49	0.41	8.9	458	2.1	1,650	2,020	5.5	2.7	104
MIN	0.40	0.41	0.24	0.22	0.37	1.6	0.47	0.45	0.89	0.92	0.70	0.68

CAL YR 2003 TOTAL 2,417.45 MEAN 6.6 MAX 775 MIN 0.24
WTR YR 2004 TOTAL 6,869.24 MEAN 19 MAX 2020 MIN 0.22

e Estimated

05378183 JOOS VALLEY CREEK NEAR FOUNTAIN CITY, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia water, fltrd, mg/L as N (00608)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)
OCT							
10...	1010	2.1	10	6	<.013	.018	.037
24...	1508	2.4	10	3	<.013	.019	.033
NOV							
06...	1031	2.5	10	12	.023	.023	.031
20...	1002	2.8	10	4	.025	.021	.052
DEC							
18...	1155	2.1	10	4	<.015	.015	.024
JAN							
13...	1118	2.2	10	5	.023	.015	.026
FEB							
16...	1148	2.1	10	7	.024	.015	.045
MAR							
01...	0005	11	50	108	.772	--	1.24
01...	0550	23	50	528	.668	--	1.68
01...	1500	54	50	1,950	2.25	--	3.42
02...	0045	29	50	740	1.85	--	2.19
03...	0045	11	50	32	.997	--	1.23
03...	1158	3.5	10	17	.604	.589	.680
03...	1200	3.5	50	16	.596	--	.655
10...	1420	15	50	209	.598	--	1.09
10...	1725	28	50	314	.355	--	1.07
11...	1204	4.8	10	31	.604	--	.672
18...	1535	28	50	540	--	--	--
20...	1355	35	50	502	--	--	--
24...	1640	26	50	467	.117	.254	.717
25...	1052	4.8	10	8	.080	.135	.176
APR							
08...	1012	3.0	10	3	.013	.014	.031
22...	1256	3.0	10	5	<.015	.020	.039
MAY							
10...	0150	13	50	446	.209	--	.698
10...	1058	4.7	10	1,170	.386	--	2.91
10...	1059	4.7	50	1,090	.393	--	3.13
13...	0955	12	50	463	.204	.183	.897
13...	1050	27	50	1,310	2.49	2.02	7.66
13...	1240	44	50	1,520	.187	.151	1.90
13...	1540	20	50	1,610	.341	1.08	3.95
14...	1356	5.0	10	26	.121	.056	.112
14...	1400	5.0	50	55	.090	.067	.186
20...	0055	11	50	382	.168	.106	.635
20...	0135	27	50	1,110	.189	.302	1.81
20...	0210	92	50	5,370	.124	.109	5.17
20...	0220	230	50	16,300	.420	.059	15.4
20...	0225	267	50	22,300	.463	.106	20.9
20...	0315	184	50	3,730	.306	.476	19.2
20...	0325	122	50	7,340	.270	.482	17.6
20...	0410	54	50	8,020	.215	.550	12.7
20...	1125	8.7	50	928	.161	.445	2.02
20...	1126	8.7	10	783	.140	.163	1.90
30...	1740	27	50	1,110	.229	--	2.07
30...	1835	74	50	2,840	.176	--	3.25
30...	1900	212	50	6,180	.292	--	5.10
30...	1915	237	50	7,780	.683	--	6.55
30...	1940	170	50	8,500	1.57	--	8.65
30...	1950	132	50	7,700	1.86	--	8.87
30...	2045	62	50	5,480	1.88	--	7.72
31...	0305	14	50	725	.756	--	1.58

05378183 JOOS VALLEY CREEK NEAR FOUNTAIN CITY, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia water, fltrd, mg/L as N (00608)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)
JUN							
01...	1248	6.6	10	32	.051	.049	.109
08...	2325	19	50	888	.050	--	.887
08...	2350	78	50	3,270	.110	--	2.77
09...	0030	172	50	3,780	.574	--	3.88
09...	0045	306	50	8,020	.819	--	6.63
09...	0050	354	50	9,160	.790	--	10.3
09...	0100	429	50	4,560	.926	--	11.8
09...	0140	325	50	9,480	.841	--	6.52
09...	1250	22	50	1,480	.137	--	1.73
09...	1505	38	50	1,210	.184	--	1.66
09...	1625	74	50	1,640	.238	--	2.10
09...	1655	183	50	5,160	.180	--	3.85
09...	1720	127	50	12,200	.253	--	5.55
09...	1900	190	50	3,760	.309	--	4.09
09...	1945	138	50	3,070	.391	--	3.65
09...	2240	40	50	1,370	.246	--	2.43
10...	0834	16	10	145	.126	.426	.437
10...	0835	16	50	149	.130	--	.438
16...	1915	55	50	2,040	.173	--	1.69
16...	1925	70	50	2,750	.167	--	2.43
17...	0035	20	50	1,470	.206	--	2.32
17...	1232	9.4	10	91	.044	.366	.358
JUL							
01...	1056	5.0	10	11	<.015	.016	.035
15...	1148	4.3	10	26	.021	.035	.083
28...	1118	3.6	10	105	.022	.032	.068
28...	1119	3.6	70	21	.017	.030	.076
AUG							
11...	1008	3.6	10	81	<.015	.027	.052
25...	0926	3.1	10	29	.016	.023	.043
SEP							
09...	1018	3.4	10	7	<.015	.024	.056
15...	0400	19	50	126	.103	--	.549
15...	0625	47	50	750	.080	--	.990
15...	0650	67	50	1,430	.108	--	1.50
15...	0840	38	50	1,060	.495	--	2.17
16...	1134	4.3	10	11	.031	--	.096

05378185 EAGLE CREEK AT COUNTY HIGHWAY G NEAR FOUNTAIN CITY, WI

LOCATION.--Lat 44°12'34", long 91°40'42" in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.15, T.20 N., R.11 W., Buffalo County, Hydrologic Unit 07040003, on right bank at CTH "G" and 5.7 mi north of Fountain City.

DRAINAGE AREA.--14.3 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1990 to July 1996, October 2002 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 770 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	5.3	5.7	5.8	e5.6	72	9.8	4.9	18	9.2	7.0	6.3
2	4.8	5.3	5.5	5.9	e5.8	35	9.3	4.8	16	8.9	8.3	6.3
3	5.2	5.7	5.6	5.5	e5.6	12	8.7	4.6	14	9.8	7.4	6.1
4	5.1	7.5	5.5	e5.2	e5.4	11	8.3	4.6	13	10	7.2	6.0
5	5.0	6.1	5.6	e5.1	e5.6	18	8.0	4.6	13	9.6	6.6	6.1
6	5.2	5.5	5.6	e4.9	e5.5	13	7.9	4.7	12	14	6.4	10
7	5.2	5.3	5.7	e5.0	e5.4	15	7.4	4.7	11	12	6.6	6.9
8	5.0	5.0	6.1	e5.1	e5.3	7.2	7.2	6.3	12	11	6.7	6.7
9	5.1	4.9	6.5	e5.2	e5.2	9.2	7.0	5.5	140	10	6.9	6.5
10	5.8	5.2	6.5	5.2	e5.2	30	6.8	13	33	9.9	6.8	6.4
11	e6.6	5.4	5.9	5.4	e5.2	19	6.7	7.2	29	10	6.8	6.2
12	e6.8	5.7	5.3	5.3	e5.1	7.6	6.5	6.9	25	10	6.6	6.2
13	e6.2	5.5	5.0	5.2	e5.0	7.4	6.3	33	20	9.6	6.3	6.1
14	e6.0	5.4	5.5	5.2	e5.0	8.3	6.3	12	17	9.5	6.2	7.4
15	e5.8	5.7	5.8	5.1	e5.0	6.3	6.1	9.1	15	8.8	6.1	49
16	e5.7	5.5	6.1	5.0	e5.0	8.8	6.1	7.8	25	8.3	8.6	11
17	e5.6	5.5	5.8	5.2	e5.1	15	6.0	7.1	20	8.1	7.4	9.0
18	e5.8	6.6	6.0	e5.1	e5.2	22	6.1	6.5	15	8.0	6.9	8.2
19	e5.7	6.2	6.1	e5.0	e5.3	17	9.1	6.0	14	8.0	6.7	7.8
20	e5.6	6.0	e6.0	e4.9	e5.4	45	8.1	52	13	7.9	6.5	7.4
21	5.8	5.8	6.1	5.3	e5.3	11	9.4	19	12	8.5	6.3	7.1
22	5.9	5.8	6.1	e5.2	e5.2	8.4	7.1	25	12	7.9	6.4	7.0
23	6.2	7.0	6.1	5.1	e5.2	14	5.9	23	12	7.7	6.3	7.1
24	5.8	6.5	e6.0	5.5	e5.3	21	5.7	18	12	7.4	6.3	7.2
25	5.4	6.4	e6.0	5.5	e5.4	18	7.1	16	11	7.3	6.3	7.0
26	5.6	6.3	6.4	5.7	e5.6	20	6.2	14	10	7.2	6.2	6.8
27	5.5	6.2	7.2	5.8	e5.8	14	5.9	15	11	7.2	6.4	6.8
28	5.9	5.9	7.8	5.8	e9.0	16	5.8	13	10	7.1	6.1	6.8
29	6.2	5.8	6.6	e5.7	14	13	5.3	22	9.8	7.5	6.2	6.8
30	5.8	5.9	6.2	e5.6	---	12	5.1	37	9.5	7.2	7.2	6.8
31	5.4	---	5.6	e5.5	---	10	---	25	---	7.1	6.4	---
TOTAL	174.7	174.9	185.9	165.0	166.7	536.2	211.2	432.3	584.3	274.7	208.1	255.0
MEAN	5.64	5.83	6.00	5.32	5.75	17.3	7.04	13.9	19.5	8.86	6.71	8.50
MAX	6.8	7.5	7.8	5.9	14	72	9.8	52	140	14	8.6	49
MIN	4.8	4.9	5.0	4.9	5.0	6.3	5.1	4.6	9.5	7.1	6.1	6.0
CFSM	0.39	0.41	0.42	0.37	0.40	1.21	0.49	0.98	1.36	0.62	0.47	0.59
IN.	0.45	0.45	0.48	0.43	0.43	1.39	0.55	1.12	1.52	0.71	0.54	0.66

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2004, BY WATER YEAR (WY)

MEAN	8.24	8.80	7.65	6.82	7.93	13.4	12.1	12.1	11.5	9.46	10.0	9.53
MAX	11.9	13.0	10.9	9.65	14.3	17.3	21.2	16.4	21.4	19.7	17.8	14.2
(WY)	(1994)	(1992)	(1994)	(1994)	(1994)	(2004)	(1993)	(1991)	(1993)	(1993)	(1993)	(1993)
MIN	5.64	5.58	4.90	4.70	5.09	7.98	7.04	8.82	7.48	6.05	4.94	4.82
(WY)	(2004)	(1991)	(1991)	(1991)	(1991)	(1991)	(2004)	(1992)	(1995)	(2003)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1991 - 2004	
ANNUAL TOTAL	2,896.7		3,369.0			
ANNUAL MEAN	7.94		9.20		9.93	
HIGHEST ANNUAL MEAN					13.5	1993
LOWEST ANNUAL MEAN					7.75	1991
HIGHEST DAILY MEAN	75	Mar 14	140	Jun 9	192	Aug 14, 1995
LOWEST DAILY MEAN	3.9	Sep 11	4.6	May 3-5	3.9	(a)Dec 3, 1990
ANNUAL SEVEN-DAY MINIMUM	4.2	Sep 5	4.7	May 1	4.2	Sep 5, 2003
MAXIMUM PEAK FLOW			484	Jun 9	(b)2,400	Aug 14, 1995
MAXIMUM PEAK STAGE			8.54	Jun 9	11.61	Aug 14, 1995
INSTANTANEOUS LOW FLOW			3.8	May 3	(c)1.7	Dec 3, 1990
ANNUAL RUNOFF (CFSM)	0.555		0.644		0.695	
ANNUAL RUNOFF (INCHES)	7.54		8.76		9.44	
10 PERCENT EXCEEDS	12		15		14	
50 PERCENT EXCEEDS	6.3		6.4		8.1	
90 PERCENT EXCEEDS	4.8		5.2		5.6	

(a) Also occurred Sept. 11, 2003
(b) From rating curve extended above 380 ft^3/s on basis of step-backwater method
(c) Result of freezeup
(e) Estimated due to ice effect or missing record

05378185 EAGLE CREEK, AT COUNTY HIGHWAY G, NEAR FOUNTAIN CITY, WI—Continued

PRECIPITATION QUANTITY

PERIOD OF RECORD.-October 1990 to June 1996, October 2002 to current year (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Rainfall estimated to be 0.00 for Dec. 18, Jan. 23, 26, 27, and Feb. 1, 2, 6 because recorded precipitation interpreted as collector snowmelt.

EXTREMES FOR PERIOD OF RECORD.-- Maximum daily rainfall, 4.85 in., Aug. 13, 1995.

EXTREMES FOR CURRENT YEAR.-- Maximum daily rainfall, 2.68 in., June 9.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.03	0.00	0.01	0.00
2	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.83	0.00
3	0.10	0.53	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.69	0.22	0.00
4	0.00	0.35	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.03	0.00	0.00
5	0.00	0.00	0.12	0.00	0.00	0.82	0.00	0.00	0.07	0.46	0.00	0.45
6	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	1.00	0.00	0.86
7	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.15	0.00	0.08	0.10	0.00
8	0.00	0.00	0.25	0.00	0.00	0.06	0.00	0.47	1.81	0.00	0.00	0.00
9	0.00	0.00	0.29	0.00	0.00	0.00	0.00	0.75	2.68	0.00	0.17	0.00
10	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.14	0.13	0.00	0.00	0.00
11	0.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61	0.31	0.05	0.00
12	0.00	0.30	0.00	0.00	0.00	0.00	0.00	0.23	0.07	0.00	0.00	0.00
13	0.01	0.01	0.00	0.00	0.00	0.05	0.00	1.66	0.10	0.01	0.00	0.00
14	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	1.67
15	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	2.29
16	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	1.64	0.00	1.08	0.00
17	0.00	0.12	0.00	0.00	0.00	0.10	0.00	0.01	0.00	0.00	0.00	0.00
18	0.00	0.26	0.00	0.00	0.00	0.21	0.52	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.67	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.16	0.00	0.46	0.69	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.72	0.00	0.23	0.00	0.00
22	0.00	0.03	0.00	0.00	0.15	0.00	0.00	0.73	0.00	0.00	0.03	0.00
23	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.72	0.11	0.00	0.00	0.18
24	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.10	0.00	0.00	0.00
25	0.08	0.00	0.00	0.00	0.00	0.23	0.32	0.05	0.00	0.00	0.00	0.00
26	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00
27	0.10	0.00	0.08	0.00	0.00	0.07	0.00	0.41	0.20	0.00	0.00	0.00
28	0.17	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.01	0.00	0.07	0.00
29	0.06	0.00	0.00	0.00	0.16	0.00	0.00	1.03	0.00	0.34	0.06	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.01	1.07	0.00	0.11	0.63	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.07	---	0.00	0.01	---
TOTAL	1.31	2.04	0.74	0.01	0.47	1.83	1.67	9.61	7.57	3.26	3.43	5.45

CAL YR 2003 TOTAL 23.45
WTR YR 2004 TOTAL 37.39

05378185 EAGLE CREEK, AT COUNTY HIGHWAY G, NEAR FOUNTAIN CITY, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1990 to June 1996, October 2002 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: July 1990 to June 1996, October 2002 to current year.
SUSPENDED-SOLIDS DISCHARGE: July 1990 to June 1996, October 2002 to current year.
TOTAL-PHOSPHORUS DISCHARGE: JulY 1990 to June 1996, October 2002 to current year.
DISSOLVED OXYGEN: July 1990 to September 1992.

INSTRUMENTATION.--Water-quality sampler July 1990 to June 1996 and October 2002 to current year; continuous water-temperature recorder July 1990 to June 1996 and October 2002 to current year; dissolved-oxygen recorder July 1990 to September 1992.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Chemical analyses by the Wisconsin State Laboratory of Hygiene. Samples are point samples unless otherwise indicated.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum observed, 28.0°C, July 14, 1995; minimum observed, 0.0°C on many days during 1991, 1992, 1993, 1994, 1995, 1996, 2003, and 2004 winter periods.
SUSPENDED-SOLIDS DISCHARGE; Maximum daily, 4,750 tons, Aug. 14, 1995; minimum daily, 0.07 ton, Sept. 11, 2003.
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 9,370 lb, Aug. 14, 1995; minimum daily, 0.65 lb, Feb. 16, 2004.
DISSOLVED OXYGEN: Maximum observed, 14.9 mg/L, Apr. 12, 1992; minimum observed, 4.2 mg/L, July 21, 1991.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum observed, 21.5°C, July 2, 13; minimum observed, 0.0°C on many days.
SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 1,590 tons, June 9; minimum daily 0.08 ton, Apr. 8-13.
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 3,550 lb, June 9; minimum daily, 0.65 lb, Feb. 16.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	9.5	6.0	7.5	7.0	6.0	6.5	3.0	1.0	2.5	3.0	0.0	1.5
2	9.0	4.5	7.0	8.0	6.5	7.0	1.5	0.5	1.0	4.0	2.0	3.0
3	11.0	8.5	9.5	7.0	4.5	5.5	3.0	1.5	2.0	4.0	1.0	2.0
4	10.5	6.5	8.5	6.0	5.0	5.5	3.0	1.5	2.5	1.5	0.0	1.0
5	11.5	7.0	9.5	6.0	4.0	5.0	4.0	2.5	3.5	1.0	0.0	0.5
6	12.0	7.5	10.0	4.0	2.0	3.5	4.0	3.5	3.5	1.0	0.0	0.5
7	---	---	---	3.0	1.5	2.5	4.0	2.5	3.5	1.5	0.0	0.5
8	---	---	---	2.5	0.5	1.5	4.5	3.0	3.5	1.0	0.0	0.5
9	---	---	---	3.0	0.5	1.5	5.0	3.0	4.0	1.0	0.0	0.5
10	---	---	---	5.0	2.5	3.5	3.5	0.0	2.0	1.0	0.5	1.0
11	14.0	11.5	12.5	7.5	5.0	6.5	1.5	0.0	0.5	1.5	1.0	1.5
12	12.5	10.0	11.5	5.5	3.0	4.5	1.5	0.0	0.5	2.0	1.0	1.5
13	11.0	9.5	10.0	4.0	2.0	3.0	1.5	0.0	0.5	2.0	1.5	1.5
14	11.5	9.5	10.5	4.5	1.5	3.0	1.5	0.0	0.5	2.0	1.0	1.5
15	10.0	7.0	8.5	6.0	4.5	5.5	2.0	0.0	1.0	1.5	0.5	1.0
16	8.5	6.0	7.5	7.5	6.0	6.5	2.5	0.5	1.5	2.0	1.0	1.5
17	9.5	5.5	7.5	8.0	6.0	6.5	2.5	0.0	1.0	3.0	1.5	2.0
18	11.5	8.0	10.0	9.5	7.0	8.5	2.5	0.0	1.0	2.0	0.0	0.5
19	11.5	8.0	10.0	7.0	5.0	6.0	2.5	0.0	1.5	1.0	0.0	0.5
20	12.5	9.0	10.5	7.5	4.5	6.0	2.5	0.0	1.0	1.0	0.0	0.5
21	12.0	10.0	11.0	6.5	5.0	5.5	3.5	0.5	2.0	1.5	0.5	1.0
22	10.0	7.0	8.5	5.0	3.5	4.5	3.5	1.0	2.0	0.5	0.0	0.5
23	9.0	6.5	8.0	5.0	3.0	4.0	3.0	1.0	2.0	0.5	0.0	0.5
24	8.5	6.0	7.0	4.0	1.0	2.0	1.5	0.0	1.0	0.5	0.0	0.5
25	8.0	5.5	7.0	2.5	0.5	1.5	1.5	0.0	1.0	1.5	0.5	1.0
26	7.5	6.0	7.0	3.0	1.0	2.0	2.5	0.5	1.5	1.5	0.5	1.0
27	7.0	4.0	5.5	4.0	3.0	3.5	4.0	1.5	2.5	1.5	0.0	1.0
28	7.0	6.5	6.5	3.0	2.0	2.5	5.0	2.0	3.5	0.5	0.0	0.0
29	7.0	6.0	6.5	3.0	1.5	2.5	4.5	1.0	3.5	0.5	0.0	0.0
30	8.5	6.5	7.5	4.5	2.0	3.5	3.5	0.0	1.5	0.5	0.0	0.0
31	8.0	7.0	8.0	---	---	---	3.5	0.0	1.5	0.5	0.0	0.0
MONTH	14.0	4.0	8.6	9.5	0.5	4.3	5.0	0.0	1.9	4.0	0.0	0.9

05378185 EAGLE CREEK, AT COUNTY HIGHWAY G, NEAR FOUNTAIN CITY, WI—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.0	0.0	0.5	3.5	1.5	2.5	9.0	4.0	6.5	12.5	8.0	10.0
2	1.5	0.0	1.0	3.0	1.5	2.5	9.5	5.0	7.0	11.5	8.5	10.0
3	1.5	0.5	1.0	3.0	2.0	2.5	9.5	5.5	7.5	11.5	7.0	9.5
4	1.0	0.0	0.5	4.0	2.5	3.5	9.0	4.5	7.0	14.0	9.0	11.5
5	2.0	0.5	1.5	3.5	1.5	2.5	9.0	5.0	7.0	12.5	9.0	10.5
6	2.5	1.0	1.5	4.0	2.5	3.0	12.0	7.5	9.5	13.5	11.0	12.0
7	2.5	1.0	1.5	3.5	2.5	3.0	11.0	7.0	9.0	13.5	10.0	11.5
8	1.5	0.0	0.5	3.5	1.5	2.5	11.0	7.5	9.0	12.5	10.0	11.0
9	2.0	1.0	1.5	5.5	3.0	4.0	9.0	6.0	8.0	17.0	11.0	13.0
10	2.0	0.5	1.5	4.5	2.0	3.5	8.0	6.0	7.0	16.5	12.5	14.5
11	2.0	1.0	1.5	2.5	0.5	1.5	7.0	4.0	5.5	15.0	11.5	13.5
12	2.5	0.5	1.5	4.0	0.5	2.0	7.5	4.0	5.5	15.5	13.0	14.0
13	1.5	0.0	1.0	3.0	1.5	2.0	9.5	4.0	6.5	14.0	10.0	11.5
14	1.5	0.0	0.5	3.5	2.0	2.5	11.0	6.0	8.5	10.5	9.0	9.5
15	0.5	0.0	0.5	4.0	1.0	2.5	11.5	7.5	9.0	12.5	7.0	10.0
16	1.5	0.0	0.5	5.5	1.5	3.5	13.0	9.0	10.5	14.0	9.5	12.0
17	3.0	1.0	1.5	6.0	3.0	4.0	14.0	9.0	11.5	14.5	12.0	13.0
18	3.0	1.0	2.0	4.5	2.0	3.5	14.0	11.0	12.5	15.0	10.5	12.5
19	4.0	2.5	3.0	4.5	1.5	3.0	13.5	11.0	12.0	15.5	11.0	13.0
20	3.5	2.5	3.0	4.5	1.0	3.0	11.0	8.5	9.0	---	---	---
21	4.5	2.5	3.0	4.5	1.0	2.5	9.5	8.0	8.5	---	---	---
22	3.0	2.0	2.5	5.5	1.5	3.5	11.5	8.0	9.5	---	---	---
23	4.0	3.0	3.5	7.5	3.0	5.0	13.0	9.0	11.0	---	---	---
24	4.0	3.0	3.5	8.5	4.0	6.0	11.5	8.5	10.0	---	---	---
25	4.5	3.0	4.0	7.5	4.5	6.0	9.5	8.0	9.0	---	---	---
26	4.5	1.5	3.0	8.0	5.5	6.5	10.0	7.5	8.5	---	---	---
27	5.0	2.0	3.5	8.5	6.0	7.5	9.0	6.0	7.5	---	---	---
28	5.0	2.5	3.5	8.5	7.5	8.0	14.5	8.0	10.5	---	---	---
29	5.0	2.5	3.5	9.0	6.0	7.5	15.0	12.0	13.5	---	---	---
30	---	---	---	7.5	5.0	6.0	13.0	10.5	11.0	---	---	---
31	---	---	---	8.5	3.5	5.5	---	---	---	---	---	---
MONTH	5.0	0.0	1.9	9.0	0.5	3.9	15.0	4.0	8.9	17.0	7.0	11.7
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	20.0	14.5	17.5	20.0	15.5	17.5	18.5	13.5	15.5
2	---	---	---	21.5	15.5	18.0	20.5	16.0	18.0	19.5	15.0	17.0
3	---	---	---	18.0	15.5	16.5	18.0	16.0	17.0	19.0	14.5	16.5
4	---	---	---	20.5	15.0	17.5	18.0	15.0	16.5	19.0	14.0	16.0
5	---	---	---	18.0	15.5	16.5	18.5	13.0	15.5	18.5	15.0	16.5
6	---	---	---	15.5	14.5	15.0	18.5	13.0	15.5	18.5	15.5	17.0
7	---	---	---	14.5	13.0	14.0	16.0	13.5	14.5	16.0	12.5	14.5
8	---	---	---	17.5	11.5	14.5	19.0	14.0	16.0	14.5	11.5	13.0
9	---	---	---	15.5	13.5	14.5	17.0	15.0	16.0	16.0	11.5	13.5
10	---	---	---	19.5	13.5	16.0	15.5	13.0	14.0	17.0	12.0	14.5
11	---	---	---	18.5	15.0	16.5	14.0	12.0	13.0	18.5	14.5	16.0
12	---	---	---	21.0	15.0	17.5	16.0	11.5	13.5	18.5	14.0	16.0
13	---	---	---	21.5	16.0	18.0	16.5	11.5	14.0	18.5	14.0	16.0
14	---	---	---	20.5	15.0	17.5	16.5	11.0	14.0	16.5	15.0	15.5
15	---	---	---	19.5	14.5	17.0	17.0	11.5	14.0	17.5	15.0	16.5
16	---	---	---	21.0	15.0	17.5	14.5	13.0	13.5	16.0	12.5	14.5
17	---	---	---	19.5	15.0	17.0	17.0	13.0	14.5	16.0	12.0	13.5
18	15.5	13.0	14.0	19.0	14.5	16.5	16.5	13.0	14.5	15.5	12.5	14.0
19	17.0	11.0	14.0	19.5	14.5	16.5	16.0	11.0	13.5	17.0	13.0	15.0
20	15.5	11.5	13.5	20.0	15.5	17.5	16.0	11.5	13.5	17.0	13.0	15.0
21	16.5	13.0	14.5	20.0	16.5	18.0	15.0	10.0	12.5	17.0	12.5	14.5
22	17.5	11.5	14.5	19.5	16.0	17.5	17.0	12.5	14.5	17.5	13.5	15.0
23	18.0	13.0	15.5	20.0	15.0	17.0	15.5	13.5	14.5	16.5	12.5	14.5
24	16.0	12.0	14.0	19.0	14.0	16.0	15.0	13.5	14.0	14.5	12.5	13.0
25	15.0	10.5	13.0	18.5	13.0	15.5	16.5	13.5	14.5	15.0	11.0	13.0
26	17.0	11.0	14.0	19.0	13.0	16.0	19.5	14.5	16.5	15.0	10.0	12.5
27	14.0	12.0	13.0	19.0	13.5	16.0	19.0	15.0	17.0	14.5	11.0	12.5
28	17.5	11.0	14.0	19.5	13.5	16.5	16.5	14.5	15.0	14.0	10.0	12.0
29	19.0	12.0	15.5	20.5	16.0	18.0	16.5	13.0	14.5	13.0	8.5	10.5
30	19.5	13.5	16.5	19.5	15.0	17.0	18.0	14.0	15.5	11.5	8.5	10.0
31	---	---	---	19.5	15.0	17.0	16.0	12.5	14.5	---	---	---
MONTH	19.5	10.5	14.3	21.5	11.5	16.6	20.5	10.0	14.9	19.5	8.5	14.4
YEAR	21.5	0.0	8.1									

05378185 EAGLE CREEK, AT COUNTY HIGHWAY G, NEAR FOUNTAIN CITY, WI—Continued

SUSPENDED SOLIDS, DRIED AT 105 DEGREES CELSIUS, WATER, UNFILTERED, TONS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.09	0.25	0.18	0.31	e0.53	450	0.31	0.09	6.3	0.20	0.42	0.14
2	0.10	0.25	0.17	0.33	e0.55	46	0.26	0.09	3.4	0.21	0.49	0.14
3	0.12	0.26	0.17	0.33	e0.53	3.6	0.20	0.09	2.0	0.58	0.43	0.13
4	0.14	0.35	0.17	e0.33	e0.51	2.2	0.17	0.09	1.3	0.62	0.42	0.13
5	0.16	0.28	0.17	e0.34	e0.52	7.7	0.14	0.09	0.95	0.29	0.38	0.13
6	0.19	0.25	0.17	e0.34	e0.51	2.9	0.12	0.09	0.69	1.8	0.36	0.82
7	0.22	0.24	0.17	e0.36	e0.50	4.5	0.09	0.09	0.47	1.1	0.37	0.15
8	0.26	0.22	0.18	e0.39	e0.49	0.51	0.08	0.12	8.2	0.42	0.37	0.15
9	0.30	0.21	0.19	e0.42	e0.48	1.0	0.08	0.11	1,590	0.44	0.38	0.14
10	0.39	0.22	0.19	0.44	e0.48	60	0.08	27	32	0.46	0.37	0.14
11	e0.43	0.23	0.17	0.47	e0.48	11	0.08	0.40	17	0.53	0.36	0.13
12	e0.44	0.23	0.15	0.49	e0.47	0.60	0.08	0.33	11	0.55	0.33	0.13
13	e0.39	0.22	0.14	0.50	e0.46	0.55	0.08	187	5.3	0.57	0.30	0.13
14	e0.37	0.21	0.15	0.51	e0.46	0.78	0.09	4.1	1.3	0.62	0.27	0.61
15	e0.35	0.22	0.16	0.49	e0.46	0.34	0.09	2.0	0.71	0.61	0.25	112
16	e0.33	0.21	0.17	0.48	e0.46	0.92	0.09	1.2	78	0.58	0.51	0.81
17	e0.32	0.20	0.16	0.50	e0.45	4.5	0.09	0.84	15	0.56	0.32	0.52
18	e0.32	0.24	0.16	e0.89	e0.44	23	0.10	0.56	3.1	0.55	0.23	0.44
19	e0.31	0.22	0.17	e0.64	e0.43	5.0	1.0	0.38	1.6	0.54	0.21	0.39
20	e0.30	0.21	e0.18	e0.48	e0.42	69	0.72	965	0.99	0.53	0.19	0.34
21	0.30	0.20	0.19	0.51	e0.40	1.1	1.1	25	0.86	0.56	0.18	0.31
22	0.30	0.20	0.20	e1.1	e0.37	0.54	0.13	69	0.72	0.52	0.17	0.28
23	0.31	0.24	0.21	0.49	e0.36	3.7	0.11	50	0.63	0.50	0.15	0.26
24	0.28	0.22	e0.22	0.52	e0.35	12	0.11	20	0.57	0.48	0.14	0.25
25	0.26	0.21	e0.23	0.53	e0.34	7.7	0.14	13	0.46	0.47	0.14	0.23
26	0.27	0.21	0.26	0.54	e0.34	11	0.12	8.0	0.40	0.46	0.13	0.20
27	0.26	0.20	0.30	0.55	e0.34	1.0	0.11	10	0.37	0.45	0.14	0.19
28	0.28	0.19	0.35	0.55	e0.51	0.94	0.11	6.1	0.32	0.44	0.13	0.18
29	0.30	0.19	0.31	e0.54	1.5	0.67	0.10	43	0.27	0.46	0.13	0.16
30	0.27	0.19	0.30	e0.53	---	0.51	0.10	349	0.23	0.44	0.16	0.15
31	0.26	---	0.29	e0.52	---	0.39	---	41	---	0.43	0.14	---
TOTAL	8.62	6.77	6.23	15.42	14.14	733.65	6.08	1,823.77	1,784.14	16.97	8.57	119.78
MEAN	0.28	0.23	0.20	0.50	0.49	24	0.20	59	59	0.55	0.28	4.0
MAX	0.44	0.35	0.35	1.1	1.5	450	1.1	965	1,590	1.8	0.51	112
MIN	0.09	0.19	0.14	0.31	0.34	0.34	0.08	0.09	0.23	0.20	0.13	0.13

CAL YR 2003 TOTAL 2,097.35 MEAN 5.7 MAX 721 MIN 0.07
WTR YR 2004 TOTAL 4,544.14 MEAN 12 MAX 1590 MIN 0.08

e Estimated

05378185 EAGLE CREEK, AT COUNTY HIGHWAY G, NEAR FOUNTAIN CITY, WI—Continued

PHOSPHORUS, WATER, UNFILTERED, POUNDS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.2	1.0	0.99	e0.85	1,170	6.0	1.2	17	1.8	2.1	1.6
2	1.1	1.2	0.98	1.0	e0.87	308	4.8	1.1	6.8	1.9	3.5	1.6
3	1.3	1.3	0.98	0.95	e0.83	53	3.7	1.1	4.4	2.2	2.2	1.5
4	1.3	1.7	0.96	e0.90	e0.79	18	3.0	1.1	3.8	2.4	2.1	1.4
5	1.3	1.4	0.97	e0.89	e0.81	62	2.4	1.1	3.5	2.4	1.9	1.4
6	1.5	1.2	0.96	e0.86	e0.79	28	2.0	1.1	3.1	5.6	1.8	5.6
7	1.5	1.2	0.97	e0.89	e0.77	40	1.6	1.1	2.7	3.6	1.8	1.6
8	1.6	1.1	1.0	e0.91	e0.75	6.4	1.3	1.5	16	3.1	1.8	1.5
9	1.7	1.1	1.1	e0.93	e0.73	12	1.3	1.4	3,350	3.2	1.9	1.4
10	2.0	1.1	1.1	0.94	e0.72	198	1.3	116	122	3.3	1.8	1.4
11	e2.2	1.2	0.98	0.97	e0.71	97	1.3	18	47	3.7	1.8	1.3
12	e2.2	1.2	0.86	0.96	e0.68	7.2	1.2	4.7	31	3.7	1.7	1.3
13	e1.9	1.2	0.82	0.95	e0.67	4.9	1.2	368	16	3.8	1.7	1.3
14	e1.8	1.1	0.88	0.95	e0.66	4.7	1.3	13	4.2	4.0	1.7	2.6
15	e1.7	1.2	0.93	0.91	e0.66	2.9	1.3	6.5	3.5	3.8	1.6	287
16	e1.6	1.1	0.96	0.89	e0.65	11	1.3	4.3	164	3.5	3.8	7.0
17	e1.6	1.1	0.91	0.92	e0.69	40	1.3	3.0	70	3.4	2.6	4.8
18	e1.6	1.3	0.94	e1.6	e0.73	103	1.3	2.1	18	3.3	1.9	4.1
19	e1.5	1.2	0.96	e1.1	e0.77	54	7.0	1.5	10	3.2	1.9	3.6
20	e1.4	1.2	e0.95	e0.86	e0.82	611	4.8	2,440	7.5	3.1	1.8	3.2
21	1.4	1.1	0.97	0.90	e0.84	18	7.8	77	5.8	3.2	1.8	2.9
22	1.4	1.1	0.98	e2.0	e0.85	9.4	1.7	187	4.8	3.0	1.8	2.6
23	1.4	1.3	0.98	0.85	e0.89	33	1.4	143	4.3	2.8	1.8	2.5
24	1.3	1.2	e0.98	0.90	e0.94	92	1.4	64	4.0	2.7	1.9	2.4
25	1.2	1.2	e0.98	0.90	e1.0	62	1.7	44	3.4	2.6	1.9	2.1
26	1.3	1.2	1.1	0.91	e1.1	81	1.5	29	3.0	2.5	1.8	1.9
27	1.2	1.1	1.2	0.92	e1.2	16	1.4	36	2.9	2.4	1.8	1.8
28	1.4	1.1	1.3	0.92	e1.9	16	1.4	22	2.6	2.3	1.7	1.7
29	1.4	1.1	1.1	e0.89	11	13	1.2	124	2.2	2.4	1.7	1.6
30	1.3	1.1	1.0	e0.86	---	10	1.2	720	2.0	2.2	1.9	0.81
31	1.2	---	0.95	e0.84	---	7.6	---	163	---	2.2	1.7	---
TOTAL	46.4	35.8	30.75	30.26	34.67	3,189.1	70.1	4,596.8	3,935.5	93.3	61.2	355.51
MEAN	1.5	1.2	0.99	0.98	1.2	103	2.3	148	131	3.0	2.0	12
MAX	2.2	1.7	1.3	2.0	11	1,170	7.8	2,440	3,350	5.6	3.8	287
MIN	1.1	1.1	0.82	0.84	0.65	2.9	1.2	1.1	2.0	1.8	1.6	0.81

CAL YR 2003 TOTAL 6,542.95 MEAN 18 MAX 1800 MIN 0.82
WTR YR 2004 TOTAL 12,479.39 MEAN 34 MAX 3350 MIN 0.65

e Estimated

05378185 EAGLE CREEK, AT COUNTY HIGHWAY G, NEAR FOUNTAIN CITY, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Dis-charge, cfs (00060)	Instan-taneous dis-charge, cfs (00061)	Sam-pling method, code (82398)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia water, fltrd, mg/L as N (00608)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)
OCT								
10...	0955	--	6.4	10	25	<.013	.028	.063
24...	1336	--	6.1	10	18	<.013	.024	.042
NOV								
06...	0947	--	5.5	10	17	.032	.027	.042
20...	0938	--	6.0	10	13	.032	.022	.036
DEC								
18...	1025	--	5.9	10	10	.015	.017	.029
JAN								
13...	0944	--	5.1	10	36	.026	.019	.034
FEB								
16...	1014	5.0	--	10	34	.024	.014	.024
MAR								
01...	0420	--	42	50	1,840	1.05	--	2.31
01...	1300	--	55	50	1,170	1.99	--	2.28
01...	1400	--	82	50	2,360	1.89	--	3.31
01...	1515	--	124	50	7,220	1.75	--	6.14
01...	1550	--	136	50	4,180	1.76	--	4.16
01...	2155	--	96	50	1,370	1.66	--	2.51
02...	0940	--	34	50	374	1.27	--	1.54
03...	0958	--	9.5	10	84	.640	.599	.814
03...	1000	--	9.4	50	82	.617	--	.765
10...	1515	--	32	50	666	.357	--	.680
10...	1820	--	64	50	992	.330	--	1.58
10...	2000	--	87	50	1,310	.366	--	1.79
11...	0005	--	54	50	508	.900	--	1.47
11...	1136	--	16	10	85	.538	--	.691
17...	1950	--	31	50	408	--	--	--
18...	1620	--	54	50	1,060	--	--	--
20...	0715	--	40	50	308	--	--	--
20...	1405	--	52	50	716	--	--	--
20...	1500	--	76	50	1,530	--	--	--
20...	2015	--	42	50	508	--	--	--
25...	0944	--	12	10	26	.104	.156	.220
APR								
08...	1038	--	7.4	10	4	.020	.017	.033
22...	1036	--	7.1	10	7	.022	.020	.044
MAY								
10...	1132	--	11	10	1,090	.242	--	2.17
10...	1133	--	11	50	1,090	.240	--	2.17
13...	1015	--	32	50	1,490	.285	.128	1.42
13...	1125	--	70	50	2,010	.875	.456	2.89
13...	1250	--	82	50	2,350	.345	.190	2.35
13...	1310	--	98	50	2,810	.269	.113	2.63
13...	1330	--	110	50	3,030	.250	.075	2.73
13...	1530	--	87	50	3,560	.283	.234	3.92
13...	1605	--	64	50	3,650	.266	.357	3.55
13...	1640	--	47	50	--	.254	.308	1.68
14...	1312	--	12	10	91	.100	.059	.169
14...	1315	--	12	50	107	.096	.060	.219
20...	0145	--	32	50	1,440	.115	.089	1.44
20...	0205	--	46	50	1,780	.202	--	1.95
20...	0220	--	66	50	2,020	.214	--	1.84
20...	0235	--	139	50	5,940	.259	.261	5.75
20...	0245	--	244	50	11,900	.655	--	13.1
20...	0250	--	270	50	9,140	.363	.108	16.0
20...	0255	--	297	50	17,400	.391	.140	19.0
20...	0410	--	263	50	10,100	.444	.186	12.3
20...	0425	--	228	50	9,160	.873	--	11.9
20...	0435	--	204	50	8,900	.841	--	11.6
20...	0520	--	120	50	6,020	.767	--	8.85
20...	0600	--	76	50	3,590	.669	--	8.11
20...	0948	--	27	10	1,700	.283	.271	2.82
20...	0950	--	27	50	1,610	.286	.308	3.22
30...	1815	--	44	50	1,840	.086	--	1.38
30...	1905	--	97	50	5,740	.179	--	3.81
30...	1930	--	190	50	8,120	.307	--	5.92
30...	1940	--	200	50	7,880	.506	--	6.42
30...	2005	--	169	50	7,200	1.18	--	7.00
30...	2045	--	98	50	5,080	1.57	--	7.01
30...	2245	--	70	50	3,800	.873	--	5.05
31...	0205	--	40	50	1,310	.669	--	2.36

05378185 EAGLE CREEK, AT COUNTY HIGHWAY G, NEAR FOUNTAIN CITY, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia water, fltrd, mg/L as N (00608)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)
JUN							
01...	1128	18	10	124	.051	.048	.178
08...	2335	39	50	2,460	.504	--	2.09
09...	0020	116	50	3,820	.253	--	3.01
09...	0055	191	50	4,000	.527	--	3.72
09...	0110	356	50	12,200	.769	--	16.6
09...	0120	453	50	24,500	.846	--	11.6
09...	0130	469	50	12,000	.923	--	10.9
09...	0155	428	50	9,340	.818	--	9.22
09...	0230	280	50	6,920	.632	--	7.12
09...	0405	177	50	3,620	.462	--	5.02
09...	1250	43	50	498	.139	--	.796
09...	1252	42	10	535	.356	.772	.849
09...	1530	83	50	1,030	.218	--	1.25
09...	1655	148	50	2,040	.250	--	2.21
09...	1715	211	50	2,990	.187	--	2.77
09...	1750	191	50	3,140	.217	--	2.36
09...	1752	193	10	3,120	.588	3.26	3.29
09...	1910	253	50	2,790	.241	--	3.21
09...	2110	202	50	2,980	.238	--	3.62
09...	2145	152	50	2,300	.214	--	3.07
10...	0145	47	50	782	.146	--	1.31
10...	1004	30	10	211	.105	--	.434
10...	1005	30	50	229	.092	--	.432
16...	1945	69	50	2,210	.127	--	1.87
16...	2000	91	50	2,830	.141	--	2.30
16...	2205	54	50	2,360	.234	--	2.99
17...	1052	19	10	135	.064	.414	.402
JUL							
01...	1028	9.4	10	8	<.015	.015	.036
15...	1008	8.5	10	26	.026	.036	.081
28...	1042	7.4	10	55	.023	.028	.061
28...	1043	7.4	70	23	.033	.028	.060
AUG							
11...	0946	6.8	10	20	<.015	.028	.048
25...	0832	6.3	10	8	.024	.019	.055
SEP							
09...	0958	6.8	10	8	<.015	.023	.040
15...	0325	37	50	626	.118	--	.752
15...	0430	90	50	1,280	.079	--	1.21
15...	0720	146	50	1,330	.100	--	1.34
15...	1100	67	50	690	.182	--	1.55
16...	1212	11	10	23	.039	--	.106

05378500 MISSISSIPPI RIVER AT WINONA, MN

LOCATION.--Lat 44°03'21", long 91°38'16", in sec. 23, T.107 N., R.7 W., Winona County, Hydrologic Unit 07040003, on right bank at Winona pumping station in Winona, 9.5 mi upstream from Trempealeau River, and at mile 725.7 upstream from the Ohio River.

DRAINAGE AREA.--59,200 mi^2 (approximately).

PERIOD OF RECORD.--June 1928 to current year. Gage-height records collected in this vicinity since 1878 are contained in reports of Mississippi River Commission.

GAGE.--Water-stage recorder. Datum of gage is 639.64 ft above sea level (NGVD of 1929). June 10,1928 to Apr. 15, 1931, nonrecording gage at site 800 ft upstream. Prior to Oct. 1, 1929, at datum 0.20 ft higher and Oct. 1, 1929 to Apr. 15, 1931, at datum 0.12 ft lower. Apr. 16, 1931 to Nov. 12, 1934, nonrecording gage at present site and datum. Since Mar. 31, 1937, auxiliary water-stage recorder 2.7 mi upstream at tailwater of navigation dam 5A.

REMARKS.-- Records are good to fair except those for estimated daily discharges, which are fair to poor. Some regulation by reservoirs, navigation dams, and power plants at low and medium stages. Daily discharges for some days were based in part on instantaneous discharges obtained from the U.S. Army Corps of Engineers for Lock and Dam 5A.

EXTREMES FOR PERIOD OF RECORD.--Minimum gage height, -3.38 ft, Aug. 31, 1934 (prior to dam construction in 1936); minimum gage height since 1938, after completion of dam, 1.95 ft, Jan. 27, 1944.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10,600	15,100	12,000	13,200	e11,500	17,800	71,900	42,600	59,200	34,200	16,500	14,100
2	10,000	14,900	12,800	13,000	e11,500	24,800	76,500	37,200	64,000	31,100	14,800	13,800
3	9,530	14,800	13,200	12,400	e11,600	27,800	75,400	33,500	69,600	27,500	24,500	13,500
4	11,200	14,500	13,600	e12,200	e11,700	26,400	69,700	31,800	77,600	28,900	22,600	14,700
5	11,100	13,900	14,000	e11,700	e11,200	26,500	65,200	29,400	84,200	29,200	17,200	15,400
6	11,600	13,400	14,500	e11,300	e11,300	27,000	59,700	27,700	86,900	27,700	17,100	14,900
7	11,100	14,100	14,700	e11,000	e12,000	25,000	57,000	26,100	85,100	28,200	19,000	15,400
8	11,000	14,900	14,100	e10,800	e12,400	22,200	53,900	26,100	81,600	28,400	17,900	17,200
9	11,300	15,200	14,700	e10,800	e12,300	20,700	48,400	26,000	82,000	28,700	17,300	19,200
10	11,100	13,600	14,800	e10,800	e12,300	21,000	46,200	26,600	84,500	28,400	18,300	19,600
11	11,100	12,000	13,700	e10,800	e12,300	20,100	43,900	27,500	86,400	28,200	19,100	19,300
12	12,700	11,400	12,800	e10,900	e12,300	21,300	39,800	26,000	91,200	29,300	19,000	19,000
13	14,600	12,300	e10,000	e11,000	e12,300	23,300	38,300	25,000	97,100	31,700	18,800	18,200
14	13,600	13,400	e9,300	e11,100	e12,300	24,900	36,200	26,600	99,100	33,500	18,500	17,000
15	12,900	13,900	e10,000	e11,300	e12,300	25,200	33,100	27,500	96,900	34,200	18,500	26,100
16	12,500	14,200	e10,500	e11,200	e12,100	23,800	29,900	27,800	91,100	33,900	19,200	30,700
17	12,200	15,600	e12,400	e11,300	e12,000	23,200	29,800	30,200	88,600	34,000	20,100	33,200
18	11,200	15,600	e13,400	e11,600	e12,000	23,700	28,900	32,800	84,400	34,000	19,900	38,500
19	11,100	16,000	e14,900	e11,100	e12,100	25,000	28,900	28,600	80,200	33,900	18,300	36,900
20	10,900	15,800	e15,600	e11,200	e12,400	27,500	29,800	29,700	76,000	32,500	15,700	34,200
21	11,100	16,000	e15,300	e11,300	e13,700	27,300	31,400	33,600	72,700	29,500	15,200	35,400
22	12,100	16,200	e15,200	e10,900	e14,100	26,000	37,000	34,300	70,000	27,200	15,300	35,500
23	13,300	16,000	e15,100	e10,800	e13,900	25,600	40,300	34,800	67,400	26,700	15,900	36,200
24	14,400	15,900	14,800	e10,100	e14,000	25,700	43,700	36,100	64,100	25,200	16,100	37,800
25	13,800	15,200	14,600	e10,100	e14,200	26,100	46,900	36,100	59,000	23,900	16,100	37,900
26	12,400	14,100	14,600	e10,100	e14,200	30,500	49,500	40,400	57,000	21,900	16,400	37,600
27	11,200	12,700	14,300	e10,200	e14,300	34,800	49,100	46,700	51,700	20,300	16,000	37,600
28	11,400	12,400	13,200	e11,200	e14,200	39,300	47,000	50,200	47,700	17,600	15,700	37,700
29	11,400	13,200	12,700	e12,100	e14,400	47,600	46,600	50,400	41,400	17,100	15,100	36,100
30	11,700	12,100	13,000	e12,000	---	54,500	44,800	51,300	38,400	20,300	14,700	36,100
31	13,300	---	12,500	e11,800	---	63,400	---	57,900	---	20,200	14,900	---
TOTAL	367,430	428,400	416,300	349,300	366,900	878,000	1,398,800	1,060,500	2,235,100	867,400	543,700	798,800
MEAN	11,850	14,280	13,430	11,270	12,650	28,320	46,630	34,210	74,500	27,980	17,540	26,630
MAX	14,600	16,200	15,600	13,200	14,400	63,400	76,500	57,900	99,100	34,200	24,500	38,500
MIN	9,530	11,400	9,300	10,100	11,200	17,800	28,900	25,000	38,400	17,100	14,700	13,500
AC-FT	728,800	849,700	825,700	692,800	727,700	1,742,000	2,775,000	2,104,000	4,433,000	1,720,000	1,078,000	1,584,000
CFSM	0.20	0.24	0.23	0.19	0.21	0.48	0.79	0.58	1.26	0.47	0.30	0.45
IN.	0.23	0.27	0.26	0.22	0.23	0.55	0.88	0.67	1.40	0.55	0.34	0.50

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2004, BY WATER YEAR (WY)

MEAN	22,660	23,070	17,860	15,410	15,690	30,400	62,240	49,770	40,530	32,460	21,860	22,550
MAX	85,950	50,040	40,440	30,480	35,900	86,420	152,600	119,800	100,200	118,800	67,560	69,490
(WY)	(1987)	(1972)	(1992)	(1983)	(1984)	(1983)	(1965)	(2001)	(1993)	(1993)	(1993)	(1986)
MIN	6,774	7,367	6,286	6,742	7,874	9,023	12,810	11,930	8,450	7,063	5,391	6,790
(WY)	(1934)	(1934)	(1934)	(1940)	(1977)	(1934)	(1931)	(1931)	(1934)	(1934)	(1934)	(1933)

05378500 MISSISSIPPI RIVER AT WINONA, MN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1928 - 2004	
ANNUAL TOTAL	10,136,360		9,710,630			
ANNUAL MEAN	27,770		26,530		29,570	
HIGHEST ANNUAL MEAN					56,850	1986
LOWEST ANNUAL MEAN					9,742	1934
HIGHEST DAILY MEAN	119,000	May 17	99,100	Jun 14	264,000	Apr 20, 1965
LOWEST DAILY MEAN	9,200	Sep 5	9,300	Dec 14	2,250	Dec 29, 1933
ANNUAL SEVEN-DAY MINIMUM	9,900	Sep 3	10,500	Jan 22	3,210	Dec 27, 1933
MAXIMUM PEAK FLOW			99,500	Jun 14	268,000	Apr 19, 1965
MAXIMUM PEAK STAGE			11.54	Jun 14	a20.77	Apr 19, 1965
INSTANTANEOUS LOW FLOW			b9,300	Dec 14	c1,940	Dec 12, 1980
ANNUAL RUNOFF (AC-FT)	20,110,000		19,260,000		21,420,000	
ANNUAL RUNOFF (CFSM)	0.469		0.448		0.500	
ANNUAL RUNOFF (INCHES)	6.37		6.10		6.79	
10 PERCENT EXCEEDS	62,000		54,100		60,700	
50 PERCENT EXCEEDS	15,300		18,200		21,300	
90 PERCENT EXCEEDS	11,400		11,200		10,100	

(a) From highwater mark
(b) Due in part to freezeup
(c) Result of ice jam upstream
(e) Estimated

053793305 TRAVERSE VALLEY CREEK, NORTH TRIBUTARY, NEAR INDEPENDENCE, WI

LOCATION.--Lat 44°23'55", long 91°33'05" in NE ¼ SE ¼ sec.11, T.22 N., R.10 W., Buffalo County, Hydrologic Unit 07040005, 100 ft upstream of culvert crossing at County Highway X at Bragger family farm, 6.7 mi west-northwest of Independence.

DRAINAGE AREA.--0.65 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 2001 to current year.

GAGE.--Water-stage recorder. Water levels are controlled by a 4.5 ft H flume. Elevation of gage is 970 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for estimated days which are fair (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.102	0.092	0.092	0.089	e0.066	1.71	0.113	0.069	0.284	0.154	0.125	0.104
2	0.098	0.092	0.090	0.090	e0.070	1.06	0.109	0.067	0.233	0.151	0.266	0.102
3	0.101	0.100	0.090	0.088	e0.070	0.280	0.103	0.068	0.205	0.164	0.332	0.101
4	0.098	0.115	0.091	0.085	e0.066	0.398	0.102	0.066	0.187	0.162	0.180	0.099
5	0.097	0.096	0.091	e0.070	e0.070	0.187	0.100	0.069	0.180	0.155	0.131	0.103
6	0.098	0.091	0.090	e0.070	e0.072	0.128	0.093	0.061	0.169	0.186	0.123	0.163
7	0.099	0.090	0.091	e0.068	e0.074	0.153	0.092	0.064	0.160	0.165	0.127	0.109
8	0.100	0.088	0.094	e0.068	e0.074	0.121	0.090	0.111	2.29	0.154	0.120	0.108
9	0.101	0.088	0.099	e0.068	e0.072	0.120	0.084	0.148	2.59	0.151	0.122	0.105
10	0.101	0.091	0.099	e0.066	e0.072	1.13	0.083	0.192	0.565	0.142	0.120	0.102
11	0.117	0.093	e0.091	e0.078	e0.070	0.338	0.082	0.102	0.624	0.148	0.123	0.098
12	0.104	0.098	e0.086	e0.074	e0.070	0.111	0.081	0.102	0.387	0.139	0.115	0.099
13	0.101	0.092	e0.086	e0.070	e0.068	0.109	0.078	0.731	0.324	0.136	0.111	0.095
14	0.100	0.091	e0.086	e0.068	e0.068	0.185	0.077	0.209	0.283	0.133	0.109	0.136
15	0.097	0.091	e0.088	e0.066	e0.068	0.106	0.077	0.152	0.263	0.133	0.106	0.496
16	0.095	0.091	e0.088	e0.066	e0.074	0.305	0.079	0.132	0.273	0.130	0.139	0.149
17	0.096	0.096	0.089	e0.066	0.080	0.226	0.077	0.122	0.250	0.129	0.119	0.131
18	0.098	0.109	0.086	e0.064	0.082	0.489	0.081	0.108	0.225	0.128	0.114	0.126
19	0.097	0.098	0.086	e0.062	0.086	0.532	0.093	0.184	0.210	0.131	0.109	0.115
20	0.099	0.096	0.086	e0.062	0.087	1.08	0.095	0.188	0.206	0.127	0.107	0.100
21	0.098	0.094	0.087	e0.066	0.082	0.235	0.092	0.178	0.199	0.133	0.105	0.102
22	0.096	0.094	0.087	e0.062	0.083	0.306	0.079	0.285	0.190	0.125	0.103	0.100
23	0.096	0.109	0.086	e0.062	0.082	0.721	0.072	0.280	0.188	0.119	0.105	0.110
24	0.096	0.101	0.085	e0.062	0.081	1.31	0.074	0.240	0.180	0.117	0.107	0.110
25	0.095	0.097	0.085	e0.060	0.081	1.63	0.087	0.189	0.174	0.115	0.106	0.102
26	0.095	0.094	0.085	e0.060	0.079	0.217	0.079	0.165	0.169	0.114	0.101	0.100
27	0.094	0.093	0.098	e0.060	0.080	0.145	0.078	0.329	0.174	0.113	0.104	0.099
28	0.099	0.093	0.114	e0.058	0.091	0.148	0.074	0.192	0.166	0.112	0.111	0.102
29	0.097	0.093	0.101	e0.058	0.217	0.127	0.071	0.491	0.159	0.127	0.109	0.104
30	0.095	0.093	0.095	e0.058	---	0.118	0.072	0.475	0.157	0.118	0.109	0.106
31	0.094	---	0.091	e0.058	---	0.115	---	0.391	---	0.123	0.107	---
TOTAL	3.054	2.859	2.813	2.102	2.335	13.840	2.567	6.160	11.664	4.234	3.965	3.676
MEAN	0.10	0.10	0.09	0.07	0.08	0.45	0.09	0.20	0.39	0.14	0.13	0.12
MAX	0.117	0.115	0.114	0.090	0.217	1.71	0.113	0.731	2.59	0.186	0.332	0.496
MIN	0.094	0.088	0.085	0.058	0.066	0.106	0.071	0.061	0.157	0.112	0.101	0.095
CFSM	0.15	0.15	0.14	0.10	0.12	0.69	0.13	0.31	0.60	0.21	0.20	0.19
IN.	0.17	0.16	0.16	0.12	0.13	0.79	0.15	0.35	0.67	0.24	0.23	0.21

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2004, BY WATER YEAR (WY)

MEAN	0.15	0.14	0.14	0.12	0.14	0.35	0.16	0.20	0.33	0.16	0.14	0.16
MAX	0.18	0.18	0.18	0.17	0.21	0.45	0.21	0.21	0.45	0.22	0.19	0.21
(WY)	(2003)	(2002)	(2002)	(2002)	(2002)	(2004)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)
MIN	0.10	0.10	0.09	0.07	0.08	0.25	0.09	0.20	0.15	0.13	0.12	0.11
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2002)	(2004)	(2004)	(2003)	(2003)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2001 - 2004	
ANNUAL TOTAL	55.010		59.320			
ANNUAL MEAN	0.15		0.16		0.18	
HIGHEST ANNUAL MEAN					0.22	2002
LOWEST ANNUAL MEAN					0.16	2004
HIGHEST DAILY MEAN	2.49	Mar 15	2.59	Jun 9	4.52	Jun 3, 2002
LOWEST DAILY MEAN	0.080	Dec 24	0.058	Jan 28-31	0.058	Jan 28-31, 2004
ANNUAL SEVEN-DAY MINIMUM	0.09	Dec 19	0.06	Jan 22	0.06	Jan 22, 2004
MAXIMUM PEAK FLOW			158	Jun 8	158	Jun 8, 2004
MAXIMUM PEAK STAGE			5.33	Jun 8	5.33	Jun 8, 2004
INSTANTANEOUS LOW FLOW			0.05	May 6	0.05	May 6, 2004
ANNUAL RUNOFF (CFSM)	0.232		0.249		0.281	
ANNUAL RUNOFF (INCHES)	3.15		3.39		3.82	
10 PERCENT EXCEEDS	0.18		0.23		0.24	
50 PERCENT EXCEEDS	0.12		0.10		0.15	
90 PERCENT EXCEEDS	0.09		0.07		0.09	

(e) Estimated due to ice effect or missing record

053793305 TRAVERSE VALLEY CREEK, NORTH TRIBUTARY, NEAR INDEPENDENCE, WI—Continued

PRECIPITATION QUANTITY

PERIOD OF RECORD.--September 2001 to current year.

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Rainfall estimated to be 0.00 Dec. 30, Feb. 2, 7, 12-13, 17-22, and Mar. 3-9 because recorded precipitation was interpreted as collector snowmelt.

EXTREMES FOR PERIOD OF RECORD.-- Maximum daily rainfall, 2.55 in., June 8, 2004.

EXTREMES FOR CURRENT YEAR.-- Maximum daily rainfall, 2.55 in., June 8.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.01	0.00
2	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	1.26	0.00
3	0.16	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	1.39	0.00
4	0.00	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.01
5	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.09	0.13	0.00	0.20
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.00	1.13
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.15	0.00
8	0.00	0.00	0.14	0.00	0.00	0.00	0.00	1.15	2.55	0.00	0.00	0.00
9	0.00	0.00	0.26	0.00	0.00	0.00	0.00	1.67	1.76	0.00	0.17	0.00
10	0.00	0.01	0.00	0.00	0.00	0.19	0.00	0.09	0.18	0.00	0.00	0.00
11	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.18	0.06	0.00
12	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.35	0.04	0.00	0.00	0.00
13	0.00	0.01	0.00	0.00	0.00	0.17	0.00	1.74	0.08	0.05	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	1.45
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.64
16	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.68	0.00	0.72	0.00
17	0.00	0.16	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.01	0.00
18	0.00	0.33	0.00	0.00	0.00	0.32	0.40	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.79	0.00	0.05	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.40	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.58	0.01	0.14	0.00	0.00
22	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.53	0.00	0.00	0.01	0.00
23	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.94	0.29	0.00	0.00	0.36
24	0.01	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00
25	0.03	0.00	0.00	0.00	0.00	0.76	0.29	0.05	0.00	0.00	0.00	0.00
26	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.03	0.01
27	0.04	0.00	0.12	0.00	0.00	0.16	0.00	0.94	0.14	0.00	0.01	0.00
28	0.12	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.19	0.00
29	0.04	0.00	0.00	0.00	0.13	0.00	0.00	1.12	0.00	0.45	0.09	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.01	1.05	0.00	0.00	0.10	0.01
31	0.00	---	0.00	0.00	---	0.00	---	0.12	---	0.28	0.00	---
TOTAL	1.03	1.96	0.53	0.04	0.13	1.82	1.63	11.59	6.59	2.39	4.20	4.81

CAL YR 2003 TOTAL 25.13
WTR YR 2004 TOTAL 36.72

053793305 TRAVERSE VALLEY CREEK, NORTH TRIBUTARY, NEAR INDEPENDENCE, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 2001 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: September 2001 to current year.

INSTRUMENTATION.--Continuous water temperature recorder and water-quality sampler September 2001 to current year.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Mean water termperature estimated May 14-20, 25-28, June 1-8, 14-15, Aug. 2-6, 17-31, and Sept. 3-28. Chemical analyses by the Wisconsin State Laboratory of Hygiene. Samples collected during periods of non-stormflow are grab samples. Samples during storms are composite samples collected by an automatic point sampler. The sample runoff volume is the total flow that occurs between the first and last subsample of each flow-composite sample. The storm runoff volume is the total flow that occurs between the start of the storm and the end of the storm. In most cases, the sample runoff volume is slightly different than the storm runoff volume. If the sample runoff volume and the storm runoff volume are comparable, a storm load (in pounds) can be computed by multiplying the storm volume (in thousands of cubic feet) by the constituent concentration (in mg/L) by a factor of 0.0624.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum temperature, 19.5°C, June 26, 30, and July 21, 2002; minimum, 0.0°C, many days.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum temperature, 18.5°C, Apr. 28 and June 9; minimum, 0.0°C, Jan. 30-31, Feb. 29, Mar. 1-2, 10-11, 18, 20, 24-25.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	10.0	7.5	8.5	8.5	7.0	7.5	5.0	3.5	4.5	4.5	2.0	3.0
2	10.0	6.5	8.0	9.0	7.0	8.0	4.5	3.0	4.0	5.0	4.0	4.5
3	10.5	8.0	9.5	7.0	6.0	6.5	5.5	4.0	4.5	4.5	2.0	3.0
4	10.5	7.5	8.5	8.0	6.5	7.0	5.5	3.5	4.5	2.5	1.5	2.0
5	11.5	7.5	9.0	7.0	5.5	6.5	6.0	4.5	5.0	2.0	1.0	1.5
6	11.5	7.5	9.5	6.5	4.0	5.5	5.5	5.0	5.0	2.0	1.0	1.5
7	13.0	8.0	10.0	6.0	3.5	4.5	5.5	4.5	5.0	2.0	1.5	1.5
8	13.5	9.5	11.0	5.5	3.0	4.0	5.5	4.0	5.0	3.0	1.5	2.0
9	13.5	9.5	11.0	6.0	3.0	4.5	6.0	4.5	5.5	3.0	1.5	2.5
10	13.5	10.0	11.5	6.5	5.0	6.0	4.5	2.5	3.5	3.5	2.5	3.0
11	12.5	10.0	11.0	8.5	6.0	7.0	2.5	1.5	2.0	4.0	3.0	3.5
12	12.0	9.0	10.5	7.0	5.0	6.0	2.5	1.5	2.0	4.0	3.5	3.5
13	11.0	9.0	10.0	6.5	4.5	5.0	3.0	1.5	2.0	3.5	2.5	3.0
14	11.5	8.5	10.0	7.0	4.5	5.5	4.0	3.0	3.5	3.5	2.0	3.0
15	11.0	8.0	9.0	7.5	6.5	7.0	4.5	3.5	4.0	3.0	1.5	2.5
16	10.0	7.0	8.0	8.0	7.0	7.5	4.5	3.0	4.0	3.0	2.0	2.5
17	10.5	7.5	9.0	8.0	6.5	7.5	4.0	2.5	3.5	4.0	2.5	3.5
18	12.0	9.0	10.0	9.5	6.5	8.0	4.0	3.0	3.5	2.5	1.0	1.5
19	12.0	8.5	10.0	8.0	6.0	7.0	3.5	1.5	2.5	2.5	1.0	1.0
20	12.5	9.0	10.0	8.5	5.5	7.0	4.0	1.5	2.5	2.0	1.0	1.5
21	11.5	8.5	10.0	7.0	5.5	6.0	5.0	3.0	4.0	3.0	0.5	2.0
22	10.5	7.5	9.0	6.0	5.5	6.0	5.0	3.0	4.0	1.5	0.5	1.0
23	10.0	7.5	8.5	6.5	4.5	6.0	4.5	2.0	3.5	1.5	1.0	1.0
24	9.5	7.0	8.0	4.5	3.0	4.0	3.0	1.5	2.0	2.5	1.0	1.5
25	10.0	6.5	8.0	5.5	3.0	4.5	3.0	1.5	2.0	2.5	1.5	2.0
26	8.5	6.5	7.5	5.5	3.5	4.5	4.5	2.0	3.0	3.0	2.0	2.5
27	9.0	6.0	7.5	6.0	4.5	5.5	5.5	4.0	4.5	3.0	1.5	2.0
28	8.0	7.5	8.0	4.5	4.0	4.5	6.0	4.5	5.0	2.0	0.5	1.0
29	8.0	7.5	7.5	5.0	3.5	4.5	4.5	3.5	4.5	1.5	0.5	1.0
30	9.0	7.5	8.0	6.5	4.0	5.0	4.0	2.0	3.0	1.5	0.5	1.0
31	9.0	7.5	8.5	---	---	---	4.0	2.0	2.5	1.5	0.5	1.0
MONTH	13.5	6.0	9.2	9.5	3.0	5.9	6.0	1.5	3.7	5.0	0.5	2.1

053793305 TRAVERSE VALLEY CREEK, NORTH TRIBUTARY, NEAR INDEPENDENCE, WI—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	2.5	1.5	2.0	2.0	0.0	1.0	11.0	3.0	6.0	15.0	5.5	9.0
2	3.0	2.0	2.5	2.0	1.0	1.5	11.5	3.0	6.5	13.0	5.5	8.5
3	2.5	0.5	1.5	4.0	1.5	2.5	10.5	4.0	6.5	14.5	4.5	8.5
4	2.0	0.5	1.5	4.5	1.5	3.0	11.0	3.0	6.0	16.5	7.0	10.5
5	3.5	2.0	2.5	4.5	0.5	2.0	10.5	3.0	6.5	13.0	5.5	9.0
6	3.5	2.0	2.5	6.0	3.0	4.0	13.0	5.5	8.5	15.5	8.5	11.0
7	3.5	1.0	2.5	4.0	2.0	3.0	13.0	4.5	8.0	14.5	6.5	9.5
8	2.5	1.0	2.0	5.0	1.5	3.0	11.5	5.0	7.5	13.0	7.0	9.5
9	3.0	2.0	2.5	8.5	2.5	4.5	11.5	4.0	7.0	18.0	9.0	12.5
10	3.5	1.5	2.0	5.5	0.5	2.5	8.0	3.5	5.5	16.5	9.5	12.0
11	3.0	2.0	2.5	4.0	0.5	1.5	9.0	2.5	5.0	15.0	8.0	11.5
12	4.0	1.5	2.5	5.5	0.5	2.0	9.5	3.0	5.5	14.5	10.0	12.0
13	3.5	1.0	2.0	3.0	1.0	2.0	13.0	2.5	7.0	10.5	8.5	9.5
14	3.5	0.5	2.0	4.0	1.5	2.5	14.0	4.5	8.0	10.0	7.5	8.5
15	2.5	0.5	1.0	6.0	1.0	3.0	13.5	5.0	8.5	13.5	6.5	9.5
16	3.5	0.5	2.0	8.0	1.5	2.5	15.0	6.0	9.5	14.5	7.5	10.5
17	4.5	2.0	2.5	7.0	1.5	3.0	15.5	6.5	10.5	13.0	9.5	11.0
18	6.0	2.0	3.5	6.5	1.0	2.5	14.5	8.5	11.5	16.0	7.5	11.0
19	5.5	3.0	4.0	5.0	1.0	2.0	14.0	7.0	10.0	16.0	8.0	11.5
20	4.5	2.0	3.0	2.5	1.0	1.5	9.5	5.5	7.5	17.0	10.5	13.0
21	6.0	2.5	3.5	6.0	1.0	2.0	10.5	7.0	8.0	11.5	9.5	10.5
22	3.5	2.0	3.0	6.0	1.0	2.5	14.5	6.5	9.5	14.0	9.5	11.0
23	5.0	3.5	4.0	6.5	1.5	3.0	15.0	7.0	10.0	12.0	9.0	10.5
24	4.5	3.5	4.0	6.5	1.5	3.0	11.5	5.5	8.0	12.0	8.5	10.0
25	6.5	2.0	4.0	6.0	1.5	3.5	10.5	6.5	7.5	14.0	9.0	10.5
26	6.0	1.5	3.0	7.0	3.0	5.0	9.5	5.5	7.0	15.0	8.0	10.5
27	6.0	1.5	3.5	7.0	5.0	6.0	10.0	3.5	7.0	13.5	9.0	11.0
28	7.0	2.5	4.0	8.0	5.5	7.0	17.5	6.0	11.0	15.0	8.0	11.0
29	5.5	2.0	3.5	9.5	4.5	6.5	16.5	9.0	12.0	10.5	9.5	10.0
30	---	---	---	6.0	3.5	5.0	11.0	7.5	9.0	11.5	9.5	10.0
31	---	---	---	10.5	2.5	5.5	---	---	---	12.5	9.5	11.0
MONTH	7.0	0.5	2.7	10.5	0.0	3.2	17.5	2.5	8.0	18.0	4.5	10.5
		JUNE			JULY			AUGUST			SEPTEMBER	
1	11.0	9.5	10.0	18.5	11.0	14.0	16.5	12.5	14.5	15.5	11.5	13.5
2	14.5	9.5	11.5	20.0	11.5	14.5	18.0	12.5	14.5	16.0	12.0	14.0
3	15.5	8.5	11.0	15.0	11.5	13.0	17.5	12.5	14.0	15.5	12.0	13.5
4	15.0	9.0	11.5	17.5	12.5	14.0	17.0	12.5	14.5	16.0	12.0	13.5
5	13.0	9.5	10.5	16.5	12.0	13.5	16.5	11.5	13.5	15.5	12.5	14.0
6	15.5	9.5	12.0	14.5	12.0	13.0	17.0	11.0	13.5	15.5	12.5	14.5
7	18.5	10.0	14.0	14.0	10.5	12.0	14.5	11.5	12.5	14.5	11.0	12.5
8	19.5	12.0	13.5	18.0	10.0	13.0	16.5	12.0	14.0	13.5	11.0	12.0
9	19.0	10.5	13.0	14.5	11.0	12.5	14.5	12.0	13.5	14.5	11.0	12.5
10	12.0	11.0	11.5	19.5	11.0	14.5	13.0	11.5	12.5	15.0	11.0	13.0
11	12.0	10.5	11.5	18.5	12.0	14.0	13.0	11.0	12.0	16.0	12.5	14.0
12	17.0	10.5	13.0	20.0	11.5	15.0	15.0	10.5	12.5	15.5	12.0	13.5
13	17.0	10.5	13.0	19.5	12.0	15.0	15.0	10.5	12.5	15.5	12.0	13.5
14	16.5	10.5	13.0	19.0	11.5	14.5	14.5	10.5	12.0	14.0	13.0	13.5
15	18.5	10.0	13.5	18.0	12.0	14.5	15.0	10.5	12.5	15.5	12.5	14.5
16	17.0	10.5	13.0	19.0	12.0	15.0	12.5	11.5	12.0	14.5	11.0	12.5
17	17.5	11.0	13.5	17.5	12.0	14.0	14.5	11.5	12.5	14.0	11.0	12.5
18	15.5	10.0	12.0	17.0	11.5	14.0	14.0	11.0	12.5	14.5	11.0	12.5
19	17.0	9.0	12.0	17.0	12.0	13.5	14.0	10.0	12.0	15.5	11.5	13.0
20	17.0	9.5	12.0	18.0	12.0	14.5	14.0	10.5	12.0	15.0	12.0	13.0
21	16.5	10.5	12.5	17.5	13.0	14.5	14.0	9.5	11.5	15.0	11.5	13.0
22	17.0	9.5	12.5	16.5	12.5	14.0	15.5	11.5	13.0	15.5	11.5	13.0
23	17.0	10.0	13.0	17.5	12.0	14.0	13.5	11.5	12.5	15.0	11.0	13.0
24	14.5	10.0	11.5	17.0	11.5	13.5	13.5	12.0	12.5	12.5	12.0	12.0
25	15.5	9.0	11.5	17.0	11.0	13.5	14.5	12.0	13.0	14.0	10.5	12.0
26	15.0	9.0	11.5	17.5	11.0	13.5	16.5	12.5	14.0	14.0	10.0	11.5
27	12.5	9.5	11.0	17.0	11.0	13.5	15.5	12.0	13.5	14.0	10.5	12.0
28	17.0	9.0	12.5	17.0	11.5	14.0	13.0	12.0	12.5	13.5	9.5	11.0
29	18.5	10.0	13.5	18.0	13.0	14.5	14.5	11.5	12.5	13.0	8.5	10.5
30	19.0	10.5	14.0	17.0	12.0	14.0	15.0	12.0	13.0	12.0	8.5	10.5
31	---	---	---	17.5	12.0	14.0	14.5	11.0	12.5	---	---	---
MONTH	19.5	8.5	12.3	20.0	10.0	13.9	18.0	9.5	12.9	16.0	8.5	12.8
YEAR	20.0	0.0	8.1									

053793305 TRAVERSE VALLEY CREEK, NORTH TRIBUTARY, NEAR INDEPENDENCE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DISCRETE SAMPLES

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unf lab, uS/cm 25 degC (90095)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (00417)	Chloride, water, fltrd, mg/L (00940)	Residue on evap. at 105degC wat unf mg/L (00500)	Residue total at 105 deg. C, suspended, mg/L (00530)	Residue volatile, suspended, mg/L (00535)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)
OCT													
24...	1755	.10	70	--	--	--	5.2	338	21	4	.19	.23	<.013
NOV													
20...	1108	.10	70	8.2	498	243	5.5	314	15	4	.20	.31	.016
DEC													
17...	1000	.09	70	8.1	495	242	5.4	324	9	<2	.27	.38	<.015
JAN													
19...	0835	.06	70	8.1	508	247	5.4	334	20	5	<.14	.16	.006
FEB													
16...	0705	.08	70	8.2	495	241	5.1	348	26	7	<.14	.25	<.015
MAR													
16...	1045	.09	70	8.3	483	235	4.9	300	3	<2	<.14	<.14	.055
APR													
08...	1400	.09	70	8.1	484	239	4.8	304	7	2	<.14	<.14	.017
MAY													
21...	1250	.17	70	8.2	491	240	5.0	322	23	3	.28	.33	<.015
JUN													
15...	0920	.26	70	8.2	510	250	4.8	338	4	<2	.14	.26	<.015
JUL													
12...	1405	.14	70	8.1	488	242	5.3	310	4	<2	.20	.17	.018
AUG													
17...	1115	.12	70	8.1	497	244	5.3	314	5	<2	<.14	<.14	<.015
SEP													
28...	1025	.10	70	8.3	483	246	5.3	324	13	3	<.14	<.14	<.015

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)
OCT			
24...	2.12	.018	.044
NOV			
20...	2.16	.018	.034
DEC			
17...	2.27	.015	.029
JAN			
19...	2.30	.019	.037
FEB			
16...	2.21	.011	.036
MAR			
16...	2.15	.026	.032
APR			
08...	2.02	.019	.027
MAY			
21...	1.87	.023	.050
JUN			
15...	1.81	.026	.031
JUL			
12...	1.59	.014	.019
AUG			
17...	1.76	.016	.022
SEP			
28...	1.87	.015	.029

053793305 TRAVERSE VALLEY CREEK, NORTH TRIBUTARY, NEAR INDEPENDENCE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
COMPOSITE SAMPLES

Date	Time	End date	End time	Sampling method, code (82398)	pH, water, unfltrd lab, std units (00403)	Specif. conduc-tance, wat unf lab, uS/cm 25 degC (90095)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (00417)	Alka-linity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Chlor-ide, water, fltrd, mg/L (00940)	Residue on evap. at 105degC wat unf mg/L (00500)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Residue vola-tile, sus-pended, mg/L (00535)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
FEB 29-MAR 01	0613	20040301	0901	50	7.3	435	175	--	15.1	410	99	27	12
MAR 01-02	0935	20040302	1208	50	7.3	248	98	--	6.6	328	158	33	6.7
MAR 02-07	1403	20040307	2010	50	7.9	324	145	--	5.1	236	26	6	3.2
MAR 09-11	2242	20040311	0510	50	7.7	206	87	--	3.0	328	196	32	3.0
MAR 16-17	1100	20040317	2257	50	7.8	291	131	--	3.6	228	30	10	3.6
MAR 18-19	1405	20040319	0247	50	7.8	202	88	--	2.4	208	68	16	3.3
MAR 19-20	1535	20040320	2151	50	7.7	210	93	--	2.7	222	74	16	2.9
MAR 23-24	1144	20040324	0131	50	7.6	193	86	--	2.4	386	260	42	2.2
MAR 24-25	1043	20040325	0812	50	7.3	161	72	--	2.1	750	618	80	1.6
MAR 25-25	1126	20040325	1642	50	7.8	224	100	--	2.7	278	121	20	1.3
MAR 25-25	1740	20040325	1832	50	7.2	135	73	53	1.9	4,060	4,090	508	1.6
MAR 25-26	1837	20040326	0100	50	7.3	149	62	56	2.1	1,400	1,310	184	1.2
MAY 09-10	2137	20040510	0719	50	7.8	365	167	--	5.1	798	568	104	1.2
MAY 13-13	0831	20040513	1918	50	7.5	252	110	--	3.5	1,370	1,490	192	1.4
MAY 19-20	2159	20040520	0537	50	7.4	309	151	--	3.6	5,490	5,130	630	1.2
MAY 22-22	0253	20040522	0800	50	8.1	374	175	--	4.1	910	685	100	.62
MAY 27-27	0350	20040527	0807	50	7.8	282	133	--	3.1	1,230	1,050	150	.63
MAY 30-31	1738	20040531	0411	50	7.9	355	168	--	4.6	774	535	83	.56
JUN 09-10	1542	20040610	0207	50	8.0	334	159	--	3.3	892	684	84	.49
AUG 02-02	0936	20040802	1321	50	7.7	264	122	--	3.1	988	762	104	.67
AUG 03-04	2230	20040804	0307	50	7.7	222	101	--	2.6	684	538	68	.78
SEP 06-06	0036	20040906	0429	50	8.2	381	182	--	5.2	326	71	7	.28
SEP 14-15	2218	20040915	0752	50	7.8	255	118	--	3.2	550	350	54	.58

053793305 TRAVERSE VALLEY CREEK, NORTH TRIBUTARY, NEAR INDEPENDENCE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Sus-pended sedi-ment concen-tration mg/L (80154)	Runoff volume, thousands of cubic feet (99904)
FEB 29-MAR 01	13	7.02	1.29	.098	.411	102	47
MAR 01-02	8.2	4.32	1.10	.302	.554	162	160
MAR 02-07	3.6	2.11	1.53	.261	.326	28	130
MAR 09-11	4.2	1.91	1.27	.240	.462	201	110
MAR 16-17	4.0	1.99	1.18	.174	.278	31	41
MAR 18-19	4.0	1.80	.950	.170	.309	71	37
MAR 19-20	4.1	1.71	.771	.220	.408	79	120
MAR 23-24	4.3	1.30	.712	.280	.594	259	56
MAR 24-25	5.0	.875	.604	.275	.814	645	110
MAR 25-25	2.3	.654	.994	.261	.427	--	18
MAR 25-25	20	.830	.501	.243	3.26	4,030	33
MAR 25-26	7.0	.505	1.09	.257	1.36	1,300	74
MAY 09-10	4.3	.150	2.20	.155	.880	498	15
MAY 13-13	8.0	.161	2.71	.430	2.18	1,290	54
MAY 19-20	21	.232	3.09	.269	5.50	5,170	14
MAY 22-22	5.2	.056	1.89	.247	1.09	693	9.2
MAY 27-27	5.0	.064	1.45	.249	1.42	1,080	12
MAY 30-31	3.0	<.015	1.72	.201	.893	556	30
JUN 09-10	3.3	.037	1.14	.932	.934	707	61
AUG 02-02	4.2	<.015	1.45	.232	1.09	793	13
AUG 03-04	3.3	.067	1.25	.389	.963	546	21
SEP 06-06	.92	<.015	1.24	.074	.192	73	5.1
SEP 14-15	2.3	<.015	1.12	.347	.781	362	29

Traverse Valley Creek - North Trib. Storm Volumes

Station ID: 053793305

Storm Beginning Date/Time	Storm Ending Date/Time	Storm Volume Thousands of Cubic Feet	Peak Discharge (CFS)	Number of Subsamples
02/29/2004 12:45	03/01/2004 09:05	44.168	1.22	28
03/01/2004 09:05	03/02/2004 11:35	161.724	4.05	35
03/02/2004 11:35	03/07/2004 21:00	142.957	1.53	19
03/09/2004 14:20	03/11/2004 21:50	130.784	5.05	38
03/16/2004 12:05	03/17/2004 22:45	40.815	1.18	11
03/18/2004 11:10	03/19/2004 03:50	39.960	1.80	12
03/19/2004 12:50	03/20/2004 23:10	129.954	3.36	36
03/23/2004 10:00	03/24/2004 01:20	58.389	3.10	17
03/24/2004 09:15	03/25/2004 06:40	112.000	4.97	31
03/25/2004 08:55	03/25/2004 16:55	21.488	1.21	6
03/25/2004 16:55	03/25/2004 18:35	38.284	13.06	10
03/25/2004 18:35	03/26/2004 09:40	84.110	11.01	24
05/09/2004 20:30	05/10/2004 08:00	16.502	2.00	22
05/13/2004 05:05	05/13/2004 21:20	58.458	7.17	46
05/19/2004 21:25	05/20/2004 05:45	14.498	3.62	16
05/22/2004 01:00	05/22/2004 08:05	10.740	1.57	8
05/27/2004 03:07	05/27/2004 07:50	12.813	2.39	10
05/30/2004 16:50	05/31/2004 03:30	29.678	2.97	22
06/09/2004 14:50	06/10/2004 02:00	63.435	8.34	16
08/02/2004 09:10	08/02/2004 14:00	13.651	3.90	44
08/03/2004 22:30	08/04/2004 02:30	20.762	14.24	38
09/05/2004 23:58	09/06/2004 04:20	5.365	0.84	10
09/14/2004 21:21	09/15/2004 10:50	36.487	3.62	23

053793306 TRAVERSE VALLEY CREEK, SOUTH TRIBUTARY, NEAR INDEPENDENCE, WI

LOCATION.--Lat 44°23'44", long 91°33'13" in SE ¼ SE ¼ sec.11, T.22 N., R.10 W., Buffalo County, Hydrologic Unit 07040005, 1,300 ft upstream of confluence with north unnamed tributary at Bragger family farm, 6.7 mi west-northwest of Independence.

DRAINAGE AREA.--0.35 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 2001 to current year.

GAGE.--Water-stage recorder. Water levels are controlled by a 3.0 ft H flume. Elevation of gage is 965 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.014	0.014	0.016	0.015	e0.009	0.571	0.029	0.013	0.052	0.034	0.023	0.021
2	0.013	0.014	0.015	0.016	e0.010	0.465	0.026	0.012	0.045	0.033	0.043	0.021
3	0.014	0.015	0.015	0.015	0.011	0.098	0.024	0.012	0.042	0.035	0.096	0.022
4	0.014	0.018	0.015	0.014	0.010	0.178	0.022	0.013	0.040	0.032	0.045	0.022
5	0.014	0.015	0.015	0.013	0.010	0.057	0.020	0.012	0.038	0.031	0.024	0.023
6	0.014	0.014	0.016	0.013	0.011	0.032	0.020	0.013	0.036	0.036	0.023	0.044
7	0.015	0.013	0.016	0.013	0.012	0.057	0.020	0.012	0.034	0.032	0.026	0.026
8	0.016	e0.013	0.016	0.013	0.011	0.023	0.018	0.018	0.143	0.030	0.026	0.023
9	0.017	e0.013	0.017	0.013	0.010	0.056	0.016	0.028	0.649	0.029	0.025	0.023
10	0.016	0.015	0.016	0.013	0.010	0.502	0.014	0.056	0.181	0.029	0.024	0.024
11	0.019	0.016	e0.015	0.014	0.009	0.088	0.014	0.023	0.153	0.029	0.024	0.024
12	0.017	0.016	e0.014	0.015	0.009	0.024	0.014	0.025	0.118	0.028	0.023	0.023
13	0.016	0.014	e0.014	0.014	0.009	0.021	0.014	0.166	0.082	0.029	0.022	0.023
14	0.016	0.015	0.015	0.013	0.008	0.045	0.016	0.037	0.062	0.028	0.022	0.035
15	0.015	0.015	0.016	0.013	0.008	0.020	0.016	0.026	0.055	0.027	0.024	0.102
16	0.014	0.015	0.016	0.013	0.008	0.097	0.016	0.022	0.068	0.027	0.027	0.028
17	0.014	0.016	0.015	0.013	0.008	0.119	0.016	0.021	0.057	0.027	0.025	0.026
18	0.015	0.018	0.016	0.012	0.009	0.231	0.017	0.022	0.052	0.027	0.025	0.025
19	0.016	0.016	0.016	e0.011	0.010	0.095	0.019	0.021	0.049	0.027	0.023	0.025
20	0.016	0.017	0.016	e0.011	0.010	0.362	0.019	0.036	0.048	0.027	0.023	0.025
21	0.016	0.016	0.017	e0.011	0.010	0.031	0.018	0.029	0.046	0.029	0.022	0.024
22	0.015	0.016	0.017	e0.012	0.009	0.047	0.016	0.044	0.043	0.029	0.023	0.024
23	0.015	0.017	0.016	e0.011	0.010	0.262	0.017	0.049	0.044	0.026	0.024	0.025
24	0.014	0.015	0.015	e0.010	0.009	0.751	0.015	0.043	0.039	0.025	0.023	0.023
25	0.014	0.015	0.015	e0.010	0.010	1.53	0.015	0.036	0.036	0.024	0.024	0.022
26	0.013	0.015	0.016	e0.011	0.012	0.200	0.013	0.034	0.036	0.023	0.024	0.022
27	0.013	0.015	0.020	e0.011	0.017	0.066	0.012	0.053	0.036	0.023	0.023	0.022
28	0.014	0.015	0.020	e0.009	0.065	0.058	0.015	0.036	0.035	0.023	0.023	0.021
29	0.014	0.015	0.018	e0.008	0.123	0.044	0.015	0.080	0.035	0.026	0.022	0.021
30	0.014	0.016	0.016	e0.008	---	0.037	0.013	0.075	0.036	0.024	0.022	0.020
31	0.014	---	0.016	e0.009	---	0.031	---	0.077	---	0.024	0.021	---
TOTAL	0.461	0.457	0.496	0.377	0.457	6.198	0.519	1.144	2.390	0.873	0.844	0.809
MEAN	0.01	0.02	0.02	0.01	0.02	0.20	0.02	0.04	0.08	0.03	0.03	0.03
MAX	0.019	0.018	0.020	0.016	0.123	1.53	0.029	0.166	0.649	0.036	0.096	0.102
MIN	0.013	0.013	0.014	0.008	0.008	0.020	0.012	0.012	0.034	0.023	0.021	0.020
CFSM	0.04	0.04	0.05	0.03	0.05	0.57	0.05	0.11	0.23	0.08	0.08	0.08
IN.	0.05	0.05	0.05	0.04	0.05	0.66	0.06	0.12	0.25	0.09	0.09	0.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2004, BY WATER YEAR (WY)

MEAN	0.04	0.04	0.03	0.02	0.03	0.15	0.04	0.04	0.08	0.04	0.03	0.04
MAX	0.06	0.05	0.04	0.03	0.05	0.20	0.06	0.06	0.13	0.06	0.05	0.05
(WY)	(2003)	(2002)	(2002)	(2002)	(2002)	(2004)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)
MIN	0.01	0.02	0.02	0.01	0.02	0.06	0.02	0.04	0.03	0.02	0.02	0.02
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2002)	(2004)	(2003)	(2003)	(2003)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 2001 - 2004
ANNUAL TOTAL	14.160	15.020	
ANNUAL MEAN	0.04	0.04	0.05
HIGHEST ANNUAL MEAN			0.06 2002
LOWEST ANNUAL MEAN			0.04 2004
HIGHEST DAILY MEAN	1.72 Mar 15	1.53 Mar 25	1.72 Mar 15, 2003
LOWEST DAILY MEAN	0.010 Sep 26	0.008 Jan 29-30, Feb 14-17	0.008 Jan 29-30, Feb 14-17, 2004
ANNUAL SEVEN-DAY MINIMUM	0.01 Sep 26	0.01 Oct 1	0.01 Sep 26, 2003
MAXIMUM PEAK FLOW		15 Jun 9	32 Jun 3, 2002
MAXIMUM PEAK STAGE		2.22 Jun 9	3.04 Jun 3, 2002
INSTANTANEOUS LOW FLOW		0.01 Jan 30	0.01 Jan 30, 2004
ANNUAL RUNOFF (CFSM)	0.111	0.117	0.137
ANNUAL RUNOFF (INCHES)	1.51	1.60	1.86
10 PERCENT EXCEEDS	0.04	0.06	0.07
50 PERCENT EXCEEDS	0.02	0.02	0.03
90 PERCENT EXCEEDS	0.01	0.01	0.01

(e) Estimated due to ice effect or missing record

053793306 TRAVERSE VALLEY CREEK, SOUTH TRIBUTARY, NEAR INDEPENDENCE, WI—Continued

PRECIPITATION QUANTITY

PERIOD OF RECORD.--September 2001 to current year.

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Rainfall for May 30-Sept. 28 estimated from Traverse Valley Creek Rain Gage #1 near Independence, WI (442405091333300) due to equipment malfunction. Rainfall estimated to be 0.00 for Dec. 21, Feb. 6-7, 12, 19-23, and Mar. 3-9, 11 because recorded precipitation was interpreted as collector snowmelt.

EXTREMES FOR PERIOD OF RECORD.-- Maximum daily rainfall, 2.69 in. (estimated), June 8, 2004.

EXTREMES FOR CURRENT YEAR.-- Maximum daily rainfall, 2.69 in. (estimated), June 8.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	e0.02	e0.00	e0.06	e0.00
2	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	e0.00	e0.00	e1.01	e0.00
3	0.16	0.35	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.33	e0.20	e0.00
4	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.05	e0.63	e0.00
5	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	e0.05	e0.11	e0.22	e0.20
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.65	e0.12	e1.38
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.08	e0.14	e0.00
8	0.00	0.00	0.13	0.00	0.00	0.00	0.00	1.09	e2.69	e0.00	e0.00	e0.00
9	0.00	0.00	0.21	0.00	0.00	0.00	0.00	1.66	e1.67	e0.00	e0.15	e0.00
10	0.00	0.01	0.00	0.00	0.00	0.18	0.00	0.10	e0.20	e0.00	e0.00	e0.00
11	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.85	e0.19	e0.06	e0.00
12	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.37	e0.04	e0.00	e0.00	e0.00
13	0.00	0.00	0.00	0.00	0.00	0.15	0.00	1.77	e0.08	e0.01	e0.00	e0.00
14	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.05	e0.00	e0.00	e0.00	e1.52
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	e0.00	e1.80
16	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	e0.72	e0.00	e0.78	e0.00
17	0.00	0.13	0.00	0.00	0.00	0.10	0.00	0.00	e0.00	e0.00	e0.01	e0.00
18	0.00	0.31	0.00	0.00	0.00	0.28	0.48	0.00	e0.00	e0.00	e0.00	e0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.71	e0.00	e0.04	e0.00	e0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.51	e0.00	e0.00	e0.00	e0.00
21	0.00	0.00	0.00	0.01	0.00	0.00	0.11	0.50	e0.01	e0.14	e0.00	e0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	e0.00	e0.00	e0.01	e0.00
23	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.92	e0.26	e0.00	e0.00	e0.33
24	0.02	0.00	0.00	0.00	0.00	0.00	0.10	0.00	e0.00	e0.00	e0.00	e0.00
25	0.02	0.01	0.00	0.00	0.00	0.72	0.27	0.04	e0.00	e0.00	e0.00	e0.00
26	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	e0.00	e0.00
27	0.04	0.00	0.11	0.00	0.00	0.16	0.00	0.93	e0.11	e0.00	e0.00	e0.00
28	0.11	0.00	0.00	0.00	0.00	0.07	0.00	0.00	e0.01	e0.00	e0.15	e0.00
29	0.04	0.00	0.00	0.00	0.11	0.00	0.00	1.15	e0.00	e0.47	e0.06	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	e1.02	e0.00	e0.00	e0.12	0.00
31	0.02	---	0.00	0.00	---	0.00	---	e0.11	---	e0.36	e0.00	---
TOTAL	1.07	1.66	0.48	0.05	0.11	1.72	1.58	11.45	6.71	2.43	3.72	5.23

CAL YR 2003 TOTAL 24.55
WTR YR 2004 TOTAL 36.21

e Estimated

053793306 TRAVERSE VALLEY CREEK, SOUTH TRIBUTARY, NEAR INDEPENDENCE, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 2001 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: October 2001 to current year.

INSTRUMENTATION.--Continuous water temperature recorder and water-quality sampler September 2001 to current year.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Chemical analyses by the Wisconsin State Laboratory of Hygiene. Samples collected during periods of non-stormflow are grab samples. Samples during storms are composite samples collected by an automatic point sampler. The sample runoff volume is the total flow that occurs between the first and last subsample of each flow-composite sample. The storm runoff volume is the total flow that occurs between the start of the storm and the end of the storm. In most cases, the sample runoff volume is slightly different than the storm runoff volume. If the sample runoff volume and the storm runoff volume are comparable, a storm load (in pounds) can be computed by multiplying the storm volume (in thousands of cubic feet) by the constituent concentration (in mg/L) by a factor of 0.0624.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum temperature, 20.0°C, July 2, 12, 2004; minimum, 0.0°C, many days.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum temperature, 20.0°C, July 2, 12; minimum, 0.0°C, Mar. 1.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	9.0	7.0	8.0	8.0	7.0	7.5	5.5	4.0	5.0	5.5	3.5	4.5
2	9.0	6.5	8.0	8.5	7.0	8.0	6.0	4.0	5.0	6.0	5.0	5.5
3	10.0	8.0	9.0	7.5	6.5	7.0	6.0	4.5	5.0	5.0	3.0	4.0
4	9.5	7.5	8.5	8.0	6.5	7.5	6.5	4.5	5.5	4.0	2.5	3.5
5	10.0	7.5	8.5	7.0	6.0	7.0	6.5	5.0	6.0	3.0	1.5	2.0
6	10.0	7.5	8.5	6.5	5.0	6.0	6.0	5.5	6.0	3.0	1.5	2.5
7	11.0	8.0	9.0	6.0	4.5	5.5	6.5	5.5	6.0	4.0	2.5	3.0
8	11.0	9.0	10.0	6.0	4.0	5.0	6.5	5.0	6.0	4.5	2.5	3.5
9	11.5	9.0	10.0	6.5	4.0	5.5	6.5	5.5	6.0	4.5	2.5	3.5
10	11.0	9.0	10.0	7.0	6.0	6.5	5.5	3.0	4.5	4.5	3.5	4.0
11	11.0	9.5	10.0	8.0	6.0	7.0	4.0	2.5	3.0	5.0	4.0	4.5
12	10.5	8.5	9.5	7.5	5.5	6.5	4.0	2.5	3.0	5.0	3.5	4.0
13	10.0	8.5	9.5	6.5	5.0	5.5	4.5	2.5	3.5	4.0	2.5	3.5
14	10.0	8.0	9.5	7.0	5.0	6.5	5.5	4.5	5.0	4.5	2.5	3.5
15	9.5	7.5	8.5	7.5	7.0	7.5	5.5	5.0	5.0	4.5	2.5	3.5
16	9.0	7.0	8.0	8.0	7.0	7.5	5.5	4.5	4.5	4.5	3.0	4.0
17	9.5	7.5	8.5	8.5	6.5	7.5	5.5	4.0	4.5	5.0	3.0	4.5
18	10.5	8.5	9.5	9.0	7.0	8.0	5.5	4.5	5.0	3.0	1.0	1.5
19	10.0	8.0	9.0	8.0	6.5	7.0	5.0	3.0	4.0	3.0	1.0	2.0
20	11.0	8.5	9.5	8.5	6.0	7.0	5.0	3.0	4.5	3.5	2.0	3.0
21	10.5	8.0	9.5	7.0	6.0	6.5	5.5	4.5	5.0	4.5	1.0	3.0
22	9.5	7.5	8.5	6.5	6.5	6.5	6.0	4.5	5.0	2.0	0.5	1.0
23	9.5	7.5	8.5	7.0	5.0	6.5	5.5	3.0	4.5	3.0	1.5	2.5
24	9.5	7.0	8.0	5.0	4.0	4.5	4.5	3.0	3.5	3.0	1.5	2.5
25	9.0	7.5	8.0	6.5	4.0	5.5	4.5	3.0	3.5	3.5	2.0	2.5
26	8.0	6.5	7.5	6.5	4.5	5.5	5.5	3.5	4.5	4.0	2.5	3.5
27	8.5	6.0	7.5	6.5	5.5	6.0	6.0	5.5	5.5	3.5	2.0	3.0
28	8.5	8.0	8.0	5.5	5.0	5.5	6.0	5.0	5.5	2.0	1.0	1.5
29	8.0	7.5	8.0	6.0	5.0	5.5	5.5	4.5	5.0	2.0	1.0	1.5
30	9.0	8.0	8.5	7.0	5.0	6.0	5.5	3.5	4.5	1.5	0.0	1.0
31	8.5	7.5	8.5	---	---	---	5.0	3.0	3.5	2.5	0.0	1.5
MONTH	11.5	6.0	8.8	9.0	4.0	6.5	6.5	2.5	4.7	6.0	0.0	3.0

053793306 TRAVERSE VALLEY CREEK, SOUTH TRIBUTARY, NEAR INDEPENDENCE, WI—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	3.5	2.5	3.0	1.0	0.0	0.5	11.5	3.0	6.5	14.0	5.5	9.0
2	4.5	3.0	3.5	0.5	0.0	0.0	12.5	3.0	6.5	12.5	5.5	8.0
3	3.0	1.0	2.0	2.5	0.5	1.5	12.0	3.5	6.5	14.0	4.5	8.5
4	3.5	1.0	2.0	3.5	0.0	1.5	12.0	3.0	6.5	15.5	6.0	10.0
5	4.0	3.5	3.5	4.0	0.0	2.0	12.5	2.5	6.5	13.0	5.5	8.5
6	4.5	3.5	3.5	5.5	2.0	3.5	14.5	5.5	8.5	14.5	7.0	10.0
7	4.0	2.0	3.0	3.5	1.5	2.0	14.0	3.5	8.0	13.5	6.5	9.0
8	4.0	1.5	3.0	6.0	2.0	4.0	13.0	5.0	7.5	12.0	6.5	9.0
9	4.0	3.0	3.5	7.5	0.5	3.5	11.5	4.0	7.0	17.5	8.5	11.5
10	3.5	2.0	3.0	5.0	0.0	1.5	8.0	4.0	6.0	17.0	8.5	12.0
11	4.5	3.0	3.5	3.0	0.0	1.5	9.0	3.0	5.5	15.5	7.5	11.0
12	4.0	2.0	3.0	5.5	1.0	3.0	11.0	3.5	6.0	13.5	9.0	10.5
13	4.0	2.0	3.0	4.5	1.0	3.5	12.5	3.5	7.0	10.5	7.5	9.0
14	3.5	1.5	2.5	4.0	1.0	2.5	14.0	4.5	8.0	---	---	8.5
15	3.5	1.0	2.0	6.0	2.5	4.0	14.5	5.0	8.5	---	---	9.5
16	4.0	1.5	3.0	7.0	0.5	2.5	14.5	6.0	9.0	---	---	10.5
17	4.5	2.5	3.5	7.0	0.5	2.5	16.0	6.5	10.0	---	---	11.0
18	5.5	3.0	4.0	6.5	0.0	2.0	13.5	8.0	11.0	---	---	11.0
19	5.5	3.5	4.5	5.5	0.5	2.5	14.5	6.0	9.5	---	---	11.5
20	5.0	3.0	4.0	1.0	0.0	0.5	9.5	5.0	7.0	---	---	11.0
21	5.5	3.0	4.0	6.0	1.0	3.0	11.5	7.0	8.5	13.0	9.5	11.0
22	4.5	3.0	4.0	6.5	1.0	3.0	15.5	6.0	9.5	14.5	9.5	10.5
23	5.5	4.0	4.5	8.0	0.5	3.0	16.5	6.0	10.0	12.5	9.0	10.0
24	5.5	4.0	4.5	6.5	0.0	2.0	12.0	5.0	7.5	12.5	8.5	10.0
25	6.5	2.5	4.5	2.0	0.0	1.0	13.5	6.0	8.0	---	---	10.5
26	6.0	2.0	3.5	5.0	1.0	3.0	10.5	4.5	7.5	---	---	10.5
27	6.0	2.0	3.0	7.5	4.0	6.5	11.0	3.0	7.0	---	---	11.0
28	6.5	0.5	2.5	8.0	6.0	7.0	18.5	6.0	11.0	---	---	11.0
29	5.0	0.0	2.0	10.0	4.5	6.5	14.5	8.0	10.5	10.5	9.0	9.5
30	---	---	---	6.5	4.0	5.0	10.5	7.0	8.5	11.5	9.0	10.0
31	---	---	---	11.0	3.5	6.0	---	---	---	---	---	10.5
MONTH	6.5	0.0	3.3	11.0	0.0	2.9	18.5	2.5	8.0	17.5	4.5	10.1
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	8.5	13.5	9.5	11.0	12.5	10.5	11.0	12.0	10.0	11.0
2	---	---	10.0	13.5	9.5	11.0	---	---	12.5	13.0	10.5	11.5
3	---	---	9.5	11.5	9.5	10.5	---	---	11.5	---	---	12.0
4	---	---	10.0	12.5	10.0	11.0	---	---	12.0	---	---	12.0
5	---	---	9.0	12.0	10.0	10.5	---	---	11.0	---	---	12.0
6	---	---	10.5	11.0	10.0	10.5	---	---	11.5	---	---	12.5
7	---	---	12.0	11.0	9.5	10.0	11.5	10.0	10.5	---	---	11.0
8	---	---	12.0	13.0	9.5	10.5	12.5	10.5	11.0	---	---	10.5
9	18.5	12.5	14.0	12.0	9.5	10.5	11.5	10.5	11.0	---	---	10.5
10	12.5	11.0	12.0	15.0	9.5	11.5	11.0	10.5	10.5	---	---	11.0
11	12.0	10.5	11.5	14.0	10.0	11.0	11.0	10.0	10.5	---	---	12.0
12	15.5	10.5	12.5	14.0	10.0	11.5	11.0	9.5	10.5	---	---	11.5
13	17.0	10.5	12.5	15.0	10.0	11.5	11.5	9.0	10.0	---	---	12.0
14	---	---	11.0	13.0	10.0	11.0	11.0	9.0	10.0	---	---	12.0
15	---	---	12.0	13.0	10.0	11.0	11.5	9.0	10.0	---	---	12.5
16	13.5	9.5	11.5	13.5	10.0	11.5	10.5	9.5	10.5	---	---	11.0
17	14.0	9.5	11.5	12.5	10.0	11.0	---	---	10.5	---	---	10.5
18	12.5	9.0	10.0	12.5	9.5	11.0	---	---	10.5	---	---	11.0
19	13.0	8.5	10.0	12.5	10.0	10.5	---	---	9.5	---	---	11.5
20	13.0	9.0	10.0	12.5	10.0	11.0	---	---	9.5	---	---	11.5
21	12.0	9.0	10.5	13.0	10.5	11.0	---	---	9.5	---	---	11.5
22	12.5	8.5	10.0	12.5	10.5	11.0	---	---	11.0	---	---	11.5
23	13.0	9.0	10.5	12.5	9.5	11.0	---	---	10.5	---	---	11.0
24	11.5	8.5	10.0	12.0	9.5	10.5	---	---	10.5	---	---	10.5
25	12.0	8.5	9.5	12.0	9.5	10.5	---	---	10.5	---	---	10.5
26	11.5	8.5	10.0	12.5	9.5	10.5	---	---	12.0	---	---	10.0
27	11.0	8.5	9.5	12.0	9.5	10.5	---	---	11.5	---	---	10.5
28	12.5	8.5	10.0	12.5	9.5	11.0	---	---	10.5	---	---	9.5
29	13.5	9.0	10.5	---	---	11.5	---	---	10.5	10.5	8.5	9.5
30	13.5	9.0	10.5	12.0	10.0	11.0	---	---	11.0	10.5	8.5	9.5
31	---	---	---	12.0	10.0	11.0	---	---	10.5	---	---	---
MONTH	18.5	8.5	10.7	15.0	9.5	10.9	12.5	9.0	10.7	13.0	8.5	11.1
YEAR	18.5	0.0	7.6									

053793306 TRAVERSE VALLEY CREEK, SOUTH TRIBUTARY, NEAR INDEPENDENCE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DISCRETE SAMPLES

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unf lab, uS/cm 25 degC (90095)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (00417)	Chloride, water, fltrd, mg/L (00940)	Residue on evap. at 105degC wat unf mg/L (00500)	Residue total at 105 deg. C, suspended, mg/L (00530)	Residue volatile, suspended, mg/L (00535)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)
OCT													
24...	1810	.01	70	8.2	519	260	4.9	334	8	<2	<.14	<.14	<.013
NOV													
20...	1058	.02	70	8.1	519	258	5.8	360	34	6	.32	.60	.028
DEC													
17...	1100	.01	70	8.1	516	257	5.4	328	15	<2	.26	.28	.012
JAN													
19...	0936	.01	70	8.1	517	257	4.9	330	11	2	<.14	<.14	.018
FEB													
16...	0810	.01	70	8.3	513	255	5.0	342	5	3	.15	<.14	.019
MAR													
16...	1115	.02	70	8.2	519	256	5.8	310	<2	<2	<.14	<.14	.028
APR													
08...	1200	.02	70	7.9	516	256	6.3	312	<2	<2	<.14	<.14	.017
MAY													
21...	1240	.03	70	8.2	528	262	6.9	336	5	<2	.20	.26	<.015
JUN													
15...	1035	.05	70	8.2	557	271	7.9	348	4	<2	.17	.26	<.015
JUL													
12...	1435	.03	70	7.9	531	267	6.2	350	5	<2	.17	.14	<.015
AUG													
17...	1155	.02	70	8.0	527	265	5.9	314	<2	<2	<.14	<.14	<.015
SEP													
28...	1205	.02	70	8.2	505	262	5.5	324	3	<2	<.14	<.14	<.015

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)
OCT			
24...	1.48	.024	.062
NOV			
20...	1.54	.030	.128
DEC			
17...	1.52	.022	.039
JAN			
19...	1.46	.022	.058
FEB			
16...	1.46	.021	.028
MAR			
16...	1.37	.049	.062
APR			
08...	1.35	.027	.038
MAY			
21...	1.17	.028	.052
JUN			
15...	1.85	.049	.053
JUL			
12...	1.43	.026	.041
AUG			
17...	1.31	.021	.032
SEP			
28...	1.30	.022	.033

053793306 TRAVERSE VALLEY CREEK, SOUTH TRIBUTARY, NEAR INDEPENDENCE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
COMPOSITE SAMPLES

Date	Time	End date	End time	Sampling method, code (82398)	pH, water, unfltrd lab, std units (00403)	Specif. conduc-tance, wat unf lab, uS/cm 25 degC (90095)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (00417)	Alka-linity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Chlor-ide, water, fltrd, mg/L (00940)	Residue on evap. at 105degC wat unf mg/L (00500)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Residue vola-tile, sus-pended, mg/L (00535)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
FEB 28-29	1459	20040229	0321	50	7.5	293	110	--	10.6	292	68	17	3.4
FEB 29-MAR 01	1449	20040301	0852	50	7.5	246	97	--	6.9	270	66	12	2.8
MAR 01-02	1102	20040302	1009	50	7.4	184	70	--	4.8	196	45	9	2.7
MAR 02-07	1237	20040307	1559	50	7.8	261	114	--	4.5	200	13	3	2.0
MAR 09-11	1726	20040311	0750	50	7.7	177	75	--	2.9	230	93	17	1.5
MAR 16-17	1130	20040317	2204	50	7.9	197	88	--	2.8	178	32	8	1.2
MAR 18-18	1353	20040318	2355	50	7.7	161	69	--	2.5	240	107	15	1.5
MAR 19-20	1808	20040320	2222	50	7.7	191	84	--	2.5	182	33	7	1.9
MAR 23-23	1241	20040323	2246	50	7.4	168	73	--	2.5	228	179	32	1.9
MAR 24-25	1028	20040325	0232	50	7.6	141	60	--	2.1	312	157	24	1.5
MAR 25-25	0501	20040325	1617	50	7.8	199	87	--	2.5	184	57	10	1.1
MAR 25-25	1700	20040325	1812	50	7.2	127	55	51	2.0	1,570	727	85	1.7
MAY 09-10	2204	20040510	0450	50	7.9	343	156	--	5.4	526	238	35	.91
MAY 13-13	0917	20040513	2042	50	7.9	330	147	--	7.6	840	634	82	.86
MAY 19-20	2220	20040520	0313	50	8.2	437	213	--	5.7	338	52	8	.58
MAY 27-27	0338	20040527	0705	50	8.2	397	192	--	5.7	338	86	13	.49
MAY 30-31	1739	20040531	0357	50	8.2	508	239	--	10.6	350	19	4	.41
JUN 08-09	2328	20040609	0047	50	7.2	162	77	--	2.8	4,720	4,450	490	1.2
JUN 09-10	1528	20040610	0249	50	8.2	431	204	--	6.0	484	197	27	.46
AUG 02-02	0929	20040802	1234	50	7.8	226	101	--	3.2	596	434	64	.79
AUG 03-04	2223	20040804	0306	50	8.1	351	164	--	7.5	380	129	21	.70
SEP 06-06	0027	20040906	0343	50	8.3	401	183	--	10.9	324	37	7	.64
SEP 14-15	2205	20040915	1235	50	8.0	355	174	--	5.7	288	43	9	.47

053793306 TRAVERSE VALLEY CREEK, SOUTH TRIBUTARY, NEAR INDEPENDENCE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Sus-pended sedi-ment concen-tration mg/L (80154)	Runoff volume, thousands of cubic feet (99904)
FEB 28-29	4.2	1.43	1.39	1.76	2.04	66	5.3
FEB 29-MAR 01	3.4	1.12	1.01	1.33	1.55	70	19
MAR 01-02	3.2	1.34	.811	1.15	1.28	48	56
MAR 02-07	2.2	.857	.796	.808	.855	14	54
MAR 09-11	2.2	.500	.595	.534	.672	93	52
MAR 16-17	1.7	.263	.522	.391	.490	33	17
MAR 18-18	2.2	.320	.554	.464	.638	98	18
MAR 19-20	2.6	.707	.511	.410	.567	39	36
MAR 23-23	3.1	.897	.532	.461	.674	98	21
MAR 24-25	3.0	.846	.521	.451	.757	179	65
MAR 25-25	1.6	.546	.750	.382	.480	46	20
MAR 25-25	7.1	.582	.539	.361	1.93	1,550	22
MAY 09-10	2.0	.082	1.98	.199	.622	273	4.2
MAY 13-13	4.2	.043	1.89	.179	.884	821	13
MAY 19-20	1.0	.058	.874	.088	.191	--	.90
MAY 27-27	.99	.032	.876	.097	.260	94	1.5
MAY 30-31	.51	.030	1.39	.065	.112	23	4.5
JUN 08-09	17	.283	1.93	5.94	5.86	4,560	34
JUN 09-10	1.3	<.015	1.26	.434	.425	221	16
AUG 02-02	2.9	.067	1.07	.394	1.21	440	1.8
AUG 03-04	1.5	.054	.744	.158	.509	147	7.9
SEP 06-06	1.1	.054	.808	.228	.384	51	1.5
SEP 14-15	.85	<.015	.689	.327	.475	42	8.3

Traverse Valley Creek - South Trib. Storm Volumes

Station ID: 053793306

Storm Beginning Date/Time	Storm Ending Date/Time	Storm Volume Thousands of Cubic Feet	Peak Discharge (CFS)	Number of Subsamples
02/28/2004 13:45	02/29/2004 12:50	6.463	0.26	12
02/29/2004 12:50	03/01/2004 09:00	19.241	0.70	36
03/01/2004 09:00	03/02/2004 11:50	59.409	1.13	29
03/02/2004 11:50	03/07/2004 21:00	55.884	0.70	18
03/09/2004 14:20	03/11/2004 19:00	54.622	2.05	38
03/16/2004 12:00	03/18/2004 03:01	18.516	0.43	11
03/18/2004 12:05	03/19/2004 05:10	19.518	1.21	14
03/19/2004 14:02	03/21/2004 03:10	37.878	1.10	27
03/23/2004 11:59	03/24/2004 04:35	22.481	1.28	17
03/24/2004 09:50	03/25/2004 03:55	65.940	3.15	25
03/25/2004 04:59	03/25/2004 16:55	20.676	1.01	16
03/25/2004 16:55	03/25/2004 23:50	108.251	14.19	16
05/09/2004 20:30	05/10/2004 05:15	4.476	0.45	19
05/13/2004 05:15	05/13/2004 22:00	13.470	1.37	47
05/19/2004 21:25	05/20/2004 04:34	1.348	0.10	4
05/27/2004 03:07	05/27/2004 06:47	1.555	0.21	8
05/30/2004 17:01	05/31/2004 04:50	5.089	0.19	22
06/08/2004 23:15	06/09/2004 02:45	43.485	15.11	48
06/09/2004 14:50	06/10/2004 02:00	15.768	1.11	10
08/02/2004 09:10	08/02/2004 12:30	1.840	0.40	12
08/03/2004 22:30	08/04/2004 03:10	7.862	3.73	48
09/06/2004 00:00	09/06/2004 03:55	1.633	0.23	10
09/14/2004 21:21	09/15/2004 10:50	8.096	0.62	25

442405091333300 TRAVERSE VALLEY CREEK TRIBUTARY, RAIN GAGE #1, NEAR INDEPENDENCE, WI

LOCATION.--Lat 44°24'05", long 91°33'33", in NE $^1/_4$ NW $^1/_4$ sec.11, T.22 N., R.10 W., Buffalo County, Hydrologic Unit 07040005, at hilltop of point 0.5 mi northwest of Bragger family farm and 7.0 mi west-northwest of Independence.

PERIOD OF RECORD.--May 2002 to current year.

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Rainfall estimated to be 0.00 for Feb. 19-23 and Mar. 3-9 because recorded precipitation interpreted as collector snowmelt.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 2.69 in., June 8, 2004.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.69 in., June 8.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.02	0.00	0.06	0.00
2	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	1.01	0.00
3	0.15	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.20	0.00
4	0.00	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.63	0.00
5	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.05	0.11	0.22	0.20
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.12	1.38
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.14	0.00
8	0.00	0.00	0.13	0.00	0.00	0.00	0.00	1.14	2.69	0.00	0.00	0.00
9	0.00	0.00	0.08	0.00	0.00	0.00	0.00	1.75	1.67	0.00	0.15	0.00
10	0.00	0.02	0.00	0.00	0.00	0.16	0.00	0.09	0.20	0.00	0.00	0.00
11	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85	0.19	0.06	0.00
12	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.38	0.04	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.14	0.00	1.77	0.08	0.01	0.00	0.00
14	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	1.52
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.80
16	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.72	0.00	0.78	0.00
17	0.00	0.21	0.00	0.00	0.00	0.15	0.01	0.00	0.00	0.00	0.01	0.00
18	0.00	0.38	0.00	0.00	0.00	0.34	0.47	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.97	0.00	0.04	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.45	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.56	0.01	0.14	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.01	0.00
23	0.00	0.35	0.00	0.00	0.00	0.00	0.00	0.87	0.26	0.00	0.00	0.33
24	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00
25	0.02	0.04	0.00	0.00	0.00	0.89	0.26	0.05	0.00	0.00	0.00	0.00
26	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.06	0.00	0.14	0.00	0.00	0.20	0.00	0.95	0.11	0.00	0.00	0.00
28	0.08	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.01	0.00	0.15	0.00
29	0.05	0.00	0.00	0.00	0.12	0.00	0.00	1.27	0.00	0.47	0.06	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.01	1.02	0.00	0.00	0.12	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.11	---	0.36	0.00	---
TOTAL	0.89	1.76	0.36	0.07	0.12	2.02	1.74	12.04	6.71	2.43	3.72	5.23

CAL YR 2003 TOTAL 24.48
WTR YR 2004 TOTAL 37.09

442436091331800 TRAVERSE VALLEY CREEK TRIBUTARY, RAIN GAGE #2, NEAR INDEPENDENCE, WI

LOCATION.--Lat 44°24'36", long 91°33'18", in NE ¼ SE ¼ sec.2, T.22 N., R.10 W., Buffalo County, Hydrologic Unit 07040005, in hillside rock quarry at end of small gravel road intersecting with Schneider Road, 1.0 mi north-northwest of Bragger family farm and 7.1 mi west-northwest of Independence.

PERIOD OF RECORD.--May 2002 current year.

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Rainfall estimated to be 0.00 for Dec. 19-22, 25-26, 30, Feb. 7, 12, 17-26, and Mar. 3-9 because recorded precipitation interpreted as collector snowmelt.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 2.73 in., June 8, 2004.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.73 in., June 8.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.02	0.00	0.01	0.00
2	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	1.38	0.00
3	0.16	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.79	0.00
4	0.00	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.00
5	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.03	0.13	0.00	0.20
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.78	0.00	1.24
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.14	0.00
8	0.00	0.00	0.14	0.00	0.00	0.00	0.00	1.19	2.73	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.80	1.69	0.00	0.07	0.00
10	0.00	0.01	0.00	0.00	0.00	0.33	0.00	0.09	0.28	0.00	0.00	0.00
11	0.65	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.91	0.20	0.11	0.00
12	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.46	0.04	0.00	0.00	0.00
13	0.00	0.01	0.00	0.00	0.00	0.20	0.00	1.87	0.09	0.01	0.00	0.00
14	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	1.51
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.76
16	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.78	0.00	0.82	0.00
17	0.00	0.20	0.00	0.00	0.00	0.18	0.01	0.00	0.00	0.00	0.00	0.00
18	0.00	0.39	0.00	0.00	0.00	0.35	0.57	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.17	1.24	0.00	0.04	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.32	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.61	0.00	0.16	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.66	0.00	0.00	0.03	0.00
23	0.00	0.26	0.00	0.00	0.00	0.00	0.00	1.04	0.22	0.00	0.00	0.38
24	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.01	0.00	0.00	0.01
25	0.02	0.05	0.00	0.00	0.00	0.82	0.30	0.07	0.00	0.00	0.00	0.00
26	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
27	0.06	0.02	0.14	0.00	0.00	0.22	0.00	0.98	0.13	0.00	0.00	0.00
28	0.13	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.01	0.00	0.21	0.00
29	0.05	0.00	0.00	0.00	0.12	0.00	0.00	1.35	0.00	0.46	0.09	0.00
30	0.00	0.01	0.00	0.00	---	0.00	0.01	1.19	0.00	0.00	0.09	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.24	---	0.28	0.00	---
TOTAL	1.07	2.00	0.33	0.07	0.12	2.24	1.99	13.18	6.94	2.54	3.76	5.10

WTR YR 2004 TOTAL 39.34

05379400 TREMPEALEAU RIVER AT ARCADIA, WI

LOCATION.--Lat 44°15'15", long 91°30'19" in SW $^1/_4$ sec.32, T.21 N., R.9 W., Trempealeau County, Hydrologic Unit 07040005, on upstream side of River Street bridge, 300 ft north of State Highwasy 95 and 93 bridge, on left bank in village of Arcadia.

DRAINAGE AREA.--552 mi^2.

PERIOD OF RECORD.--July 1960 to September 1977, July 2001 to current year.

REVISED RECORDS.--WDR WI-70-1: 1968-69: 1975-77(M).

GAGE.--Water-stage recorder. Datum of gage is 719.59 ft above NGVD of 1929. July 1960 to September 1977, non-recording gage at site 300 ft downstream at datum 0.02 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	228	249	274	e260	e220	e1,500	423	327	2,930	411	351	316
2	230	248	e240	e260	e230	e2,200	396	322	1,970	402	396	314
3	238	253	e250	e260	e230	2,200	377	315	1,100	408	431	309
4	243	299	e250	e250	e220	1,300	365	310	719	624	389	302
5	243	333	e250	e240	e220	1,020	358	304	619	791	360	297
6	240	318	254	e190	e220	773	361	299	589	689	348	328
7	239	290	251	e200	e220	690	365	292	572	865	345	319
8	236	254	256	e200	e220	581	360	330	537	773	346	293
9	232	250	e260	e200	e220	473	362	377	1,620	588	340	284
10	230	267	e250	e200	e230	660	358	671	2,470	521	339	278
11	231	262	262	e200	e230	1,620	354	539	2,300	496	341	273
12	248	268	e200	e200	e230	792	348	421	2,080	478	345	269
13	260	275	e230	e200	e230	622	344	939	1,840	460	332	266
14	252	272	e250	e210	e230	583	343	1,200	1,280	437	326	271
15	241	269	e260	e210	e220	496	341	685	891	419	316	815
16	236	266	e270	e210	e230	461	340	512	741	405	329	1,070
17	237	268	e260	e210	e230	643	340	439	785	394	351	657
18	237	320	e260	e210	e230	868	346	394	741	384	350	514
19	239	366	e250	e210	e230	980	383	360	648	381	328	412
20	241	344	e250	e220	e240	877	406	757	591	679	316	374
21	237	303	e250	e220	e240	882	437	776	559	529	310	356
22	237	286	e250	e220	e240	608	421	863	530	443	308	345
23	237	289	e250	e220	e240	547	387	962	508	407	307	339
24	238	286	e240	e220	e250	703	353	1,160	521	381	308	333
25	239	270	e240	e230	e260	901	362	928	505	366	315	324
26	239	278	e250	e230	e280	1,080	373	706	471	357	316	316
27	242	284	e260	e220	e300	770	362	702	451	351	317	309
28	248	273	e280	e220	e350	655	347	697	447	345	326	305
29	251	267	e280	e210	e600	592	340	802	443	344	329	304
30	251	286	e270	e220	---	519	332	1,150	426	339	325	303
31	249	---	e260	e220	---	457	---	2,340	---	340	321	---
TOTAL	7,449	8,493	7,857	6,770	7,290	27,053	10,984	20,879	29,884	14,807	10,461	11,195
MEAN	240	283	253	218	251	873	366	674	996	478	337	373
MAX	260	366	280	260	600	2,200	437	2,340	2,930	865	431	1,070
MIN	228	248	200	190	220	457	332	292	426	339	307	266
CFSM	0.44	0.51	0.46	0.40	0.46	1.58	0.66	1.22	1.80	0.87	0.61	0.68
IN.	0.50	0.57	0.53	0.46	0.49	1.82	0.74	1.41	2.01	1.00	0.70	0.75

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2004, BY WATER YEAR (WY)

MEAN	317	317	277	252	295	711	644	465	433	338	325	357
MAX	634	625	402	565	663	1,437	1,839	1,203	996	654	1,060	817
(WY)	(1973)	(1973)	(1973)	(1973)	(1976)	(1973)	(1965)	(1973)	(2004)	(1968)	(1975)	(1972)
MIN	175	190	148	157	153	250	259	228	165	139	124	190
(WY)	(1965)	(1965)	(1968)	(1968)	(1968)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)	(1977)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1960 - 2004	
ANNUAL TOTAL	129,808		163,122			
ANNUAL MEAN	356		446		393	
HIGHEST ANNUAL MEAN					703	1973
LOWEST ANNUAL MEAN					206	1964
HIGHEST DAILY MEAN	(a)1,500	Mar 17	2,930	Jun 1	8,010	Apr 7, 1965
LOWEST DAILY MEAN	(a)200	(b)Jan 13	(a)190	Jan 6	112	Aug 9, 1964
ANNUAL SEVEN-DAY MINIMUM	(a)211	Jan 12	(a)199	Jan 6	115	Aug 4, 1964
MAXIMUM PEAK FLOW			(c)3,080	Jun 1	(d)12,000	Aug 23, 1975
MAXIMUM PEAK STAGE			(f)8.27	Mar 2	8.64	Aug 23, 1975
INSTANTANEOUS LOW FLOW			(a)190	Jan 6	110	(g)Aug 8, 1964
ANNUAL RUNOFF (CFSM)	0.644		0.807		0.712	
ANNUAL RUNOFF (INCHES)	8.75		10.99		9.68	
10 PERCENT EXCEEDS	581		787		623	
50 PERCENT EXCEEDS	270		326		299	
90 PERCENT EXCEEDS	229		230		190	

(a) Ice affected
(b) Also occurred Dec. 12
(c) Gage height, 7.86 ft
(d) Based on calculation by USACE
(e) Estimated due to ice effect or missing record
(f) Result of ice jam
(g) Also occurred Aug. 9, 19, 1964

05379500 TREMPEALEAU RIVER AT DODGE, WI

LOCATION.--Lat 44°07'54", long 91°33'10" (revised) in NE ¼ SE ¼ sec.10, T.19 N., R.10 W., Trempealeau County, Hydrologic Unit 07040005, near left bank on downstream side of County Trunk Highways J and P bridge in Dodge, 9.0 mi upstream from mouth.

DRAINAGE AREA.--643 mi^2.

PERIOD OF RECORD.--December 1913 to September 1919, April 1934 to current year.

REVISED RECORDS.--WSP 1238: Drainage area. WSP 1388: 1919(M). WSP 1438: 1914, 1915-18(M), 1934-44(M), 1946-49(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 661.42 ft above NGVD of 1929. Prior to July 14, 1977, nonrecording gage at same site and datum. Prior to Sept. 16, 1966, datum 2.00 ft higher.

REMARKS.--Records fair except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter and data-collection platform at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	296	302	319	e330	e280	e1,000	551	383	1,720	540	416	385
2	293	302	e270	e330	e290	e1,400	512	376	2,280	524	430	377
3	302	307	e300	e330	e280	e1,800	485	370	2,820	518	523	372
4	315	343	e290	e310	e280	2,910	465	364	1,960	563	503	360
5	314	369	e310	e300	e280	2,260	452	362	1,080	894	454	364
6	311	365	313	e240	e280	1,580	447	360	865	852	425	398
7	307	345	314	e250	e280	1,210	441	354	806	912	414	403
8	301	319	317	e250	e280	968	435	378	747	921	412	376
9	295	316	e310	e250	e280	770	432	433	1,540	778	409	361
10	292	317	e300	e250	e290	769	426	710	2,100	645	407	355
11	294	321	318	e250	e290	1,330	420	763	2,370	607	405	351
12	311	322	e260	e250	e290	1,460	413	616	2,720	582	403	343
13	314	338	e290	e250	e290	1,000	406	753	2,540	553	401	336
14	313	330	e310	e260	e290	851	400	1,340	2,250	525	388	343
15	303	328	e330	e260	e270	738	396	1,220	1,950	502	380	931
16	297	321	e340	e260	e280	642	395	793	1,340	486	397	1,270
17	295	322	e320	e260	e290	737	396	637	1,170	472	431	1,040
18	295	352	e320	e260	e290	923	396	554	1,040	464	428	728
19	293	388	e310	e260	e290	1,180	442	507	890	457	411	566
20	292	389	e320	e270	e300	1,080	469	868	790	589	392	476
21	290	360	e310	e280	e300	1,090	516	1,020	736	699	381	445
22	288	342	e310	e280	e300	889	512	1,100	698	548	375	419
23	289	346	e310	e280	e300	718	476	1,170	663	501	372	402
24	290	353	e310	e280	e300	758	432	1,250	671	470	372	401
25	292	336	e310	e280	e300	948	433	1,260	678	450	373	393
26	293	364	e310	e290	e320	1,090	446	1,020	635	437	377	386
27	294	342	e320	e270	e360	1,130	441	857	606	429	378	380
28	301	330	e350	e270	e430	861	419	903	600	423	379	373
29	304	330	e350	e260	e700	781	400	909	580	423	388	369
30	309	327	e340	e270	---	700	391	1,240	560	419	398	368
31	305	---	e330	e270	---	617	---	1,540	---	416	390	---
TOTAL	9,288	10,126	9,711	8,450	9,010	34,190	13,245	24,410	39,405	17,599	12,612	14,071
MEAN	300	338	313	273	311	1,103	442	787	1,314	568	407	469
MAX	315	389	350	330	700	2,910	551	1,540	2,820	921	523	1,270
MIN	288	302	260	240	270	617	391	354	560	416	372	336
CFSM	0.47	0.52	0.49	0.42	0.48	1.72	0.69	1.22	2.04	0.88	0.63	0.73
IN.	0.54	0.59	0.56	0.49	0.52	1.98	0.77	1.41	2.28	1.02	0.73	0.81

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2004, BY WATER YEAR (WY)

MEAN	380	393	327	284	340	808	684	499	522	429	371	413
MAX	1,314	856	953	679	878	2,325	2,146	1,320	1,516	1,332	1,050	1,239
(WY)	(1955)	(1992)	(1983)	(1973)	(1981)	(1936)	(1965)	(1973)	(1993)	(1993)	(1975)	(1992)
MIN	169	180	139	117	119	289	301	195	183	163	138	153
(WY)	(1951)	(1950)	(1959)	(1959)	(1959)	(1968)	(1964)	(1934)	(1964)	(1964)	(1964)	(1948)

05379500 TREMPEALEAU RIVER AT DODGE, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1914 - 2004	
ANNUAL TOTAL	152,453		202,117			
ANNUAL MEAN	418		552		455	
HIGHEST ANNUAL MEAN					813	1973
LOWEST ANNUAL MEAN					237	1964
HIGHEST DAILY MEAN	2,000	Mar 18	2,910	Mar 4	12,900	Apr 4, 1956
LOWEST DAILY MEAN	(a)230	Feb 9-16	(a)240	Jan 6	(a)98	Jan 10, 1938
ANNUAL SEVEN-DAY MINIMUM	(a)230	Feb 9	(a)249	Jan 6	(a)106	Jan 7, 1938
MAXIMUM PEAK FLOW			3,130	Mar 4	17,400	Apr 4, 1956
MAXIMUM PEAK STAGE			10.19	Mar 4	(b)10.35	Apr 4, 1956
ANNUAL RUNOFF (CFSM)	0.650		0.859		0.708	
ANNUAL RUNOFF (INCHES)	8.82		11.69		9.62	
10 PERCENT EXCEEDS	687		1,050		741	
50 PERCENT EXCEEDS	321		388		350	
90 PERCENT EXCEEDS	258		280		200	

(a) Ice affected
(b) Datum then in use
(e) Estimated due to ice effect or missing record

05381000 BLACK RIVER AT NEILLSVILLE, WI

LOCATION.--Lat 44°33'35", long 90°36'54", in NW $^1/_4$ SW $^1/_4$ sec.15, T.24 N., R.2 W., Clark County, Hydrologic Unit 07040007, on right bank at downstream side of bridge on Business U.S. Highway 10 in Neillsville, 1.0 mi downstream from O'Neill Creek, and 2.6 mi upstream from Cunningham Creek.

DRAINAGE AREA.--749 mi^2.

PERIOD OF RECORD.--April 1905 to March 1909, October 1913 to September 1999, October 2000 to current year. Monthly discharge for some periods published in WSP 1308. Unfinalized 2000 water year records in District data files.

REVISED RECORDS.--WSP 1308: 1914. WSP 1438: 1905, 1906-8(M), 1914-17(M), 1918-19, 1920-25(M), 1926-27, 1928-29(M), 1930, 1931(M), 1932, 1933(M), 1934, 1935(M), 1936. WSP 1508: 1950. WDR WI-81-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 962.34 ft above NGVD of 1929. Prior to Oct. 24, 1934, nonrecording gage; Oct. 24, 1934, to June 16, 1977, water-stage recorder; June 17, 1977, to Nov. 19, 1977, nonrecording gage at site 150 ft downstream at datum 1.58 ft lower.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	70	e120	e60	e32	e210	3,390	462	4,940	103	49	47
2	55	76	e120	e54	e32	e280	2,630	399	3,470	100	55	46
3	61	79	116	e50	e32	e350	2,110	346	2,390	93	69	45
4	59	103	106	e47	e32	e340	1,720	304	1,640	94	57	40
5	56	112	90	e38	e32	e1,200	1,450	271	1,190	92	55	39
6	54	105	87	e29	e32	e1,100	1,240	247	803	110	54	44
7	55	97	83	e28	e32	e950	1,080	229	571	109	54	44
8	52	e95	82	e29	e32	e820	984	386	442	106	57	45
9	55	e90	e70	e29	e32	e760	899	435	3,120	109	55	45
10	54	87	e55	e29	e32	e780	789	867	3,640	108	53	47
11	55	92	e47	e29	e32	e760	685	715	3,560	101	60	47
12	66	92	e44	e30	e32	e1,000	589	748	3,660	96	163	48
13	64	90	e52	e30	e32	e960	505	1,000	2,790	91	124	43
14	62	88	e60	e30	e26	e800	442	1,100	1,850	88	97	43
15	56	88	e65	e30	e27	e700	394	1,180	1,150	84	80	324
16	58	93	e65	e30	e29	e700	366	1,000	764	76	72	597
17	73	100	e67	e30	e31	e670	368	787	1,230	70	71	613
18	69	123	e68	e30	e32	e640	392	606	641	67	69	399
19	63	149	e67	e30	e32	e600	571	491	422	64	63	240
20	60	158	e66	e30	e32	e580	822	499	319	60	65	197
21	58	187	e66	e31	e32	e570	958	438	261	58	61	162
22	56	175	e65	e32	e33	e580	938	470	219	55	56	118
23	54	160	e63	e32	e33	e660	856	1,660	197	52	52	98
24	54	140	e62	e32	e34	e1,500	708	2,220	219	50	49	84
25	54	148	e62	e32	e38	e2,900	619	1,990	171	50	49	73
26	54	145	e63	e33	e42	7,260	678	1,530	147	47	57	66
27	54	128	e65	e33	e44	7,380	761	1,180	137	46	67	59
28	57	136	e65	e32	e53	8,070	697	1,110	130	41	56	55
29	59	140	e63	e32	e150	11,200	599	1,380	120	39	52	53
30	61	123	e60	e30	---	8,690	526	3,290	111	37	51	50
31	65	---	e60	e30	---	5,010	---	7,110	---	39	48	---
TOTAL	1,805	3,469	2,224	1,041	1,084	68,020	28,766	34,450	40,304	2,335	2,020	3,811
MEAN	58.2	116	71.7	33.6	37.4	2,194	959	1,111	1,343	75.3	65.2	127
MAX	73	187	120	60	150	11,200	3,390	7,110	4,940	110	163	613
MIN	52	70	44	28	26	210	366	229	111	37	48	39
CFSM	0.08	0.15	0.10	0.04	0.05	2.93	1.28	1.48	1.79	0.10	0.09	0.17
IN.	0.09	0.17	0.11	0.05	0.05	3.38	1.43	1.71	2.00	0.12	0.10	0.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1905 - 2004, BY WATER YEAR (WY)

MEAN	396	452	192	107	133	1,246	1,987	876	830	306	255	518
MAX	2,101	2,345	1,133	615	1,348	3,960	5,025	3,538	4,689	1,538	1,293	4,304
(WY)	(1983)	(1992)	(1966)	(1973)	(1984)	(1973)	(1951)	(1973)	(1905)	(1978)	(1928)	(1938)
MIN	20.7	27.1	35.9	10.0	5.00	56.7	270	77.4	43.0	14.9	10.5	5.77
(WY)	(1934)	(1977)	(1934)	(1918)	(1918)	(1940)	(1946)	(1934)	(1964)	(1933)	(1933)	(1933)

05381000 BLACK RIVER AT NEILLSVILLE, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1905 - 2004	
ANNUAL TOTAL	176,561		189,329			
ANNUAL MEAN	484		517		605	
HIGHEST ANNUAL MEAN					1,213	1942
LOWEST ANNUAL MEAN					160	1931
HIGHEST DAILY MEAN	11,800	Apr 17	11,200	Mar 29	38,200	Sep 10, 1938
LOWEST DAILY MEAN	(a)13	Feb 3-9	(a)26	Feb 14	0.70	(b)Aug 10, 1936
ANNUAL SEVEN-DAY MINIMUM	(a)13	Feb 3	(a)29	Jan 6	1.0	Aug 10, 1936
MAXIMUM PEAK FLOW			11,800	Mar 29	48,800	Sep 10, 1938
MAXIMUM PEAK STAGE			12.84	Mar 29	23.80	Sep 10, 1938
INSTANTANEOUS LOW FLOW			(a)		0.60	Aug 15, 1936
ANNUAL RUNOFF (CFSM)	0.646		0.691		0.812	
ANNUAL RUNOFF (INCHES)	8.77		9.40		11.03	
10 PERCENT EXCEEDS	1,030		1,160		1,500	
50 PERCENT EXCEEDS	74		84		150	
90 PERCENT EXCEEDS	21		32		36	

(a) Ice affected
(b) Also occured Aug. 11, 14-16, 1936
(e) Estimated due to ice effect or missing record

05382000 BLACK RIVER NEAR GALESVILLE, WI

LOCATION.--Lat 44°03'37", long 91°17'14" in NW ¼ SW ¼ sec.1, T.18 N., R.8 W., LaCrosse County, Hydrologic Unit 07040007, on left bank 1,000 ft upstream from bridge on U.S. Highway 53, 3.5 mi southeast of Galesville, and 4.8 mi downstream from Fleming Creek.

DRAINAGE AREA.--2,080 mi^2.

PERIOD OF RECORD.--December 1931 to current year.

REVISED RECORDS.--WSP 1438: 1932-34, 1935-36(M). WDR WI-81-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 658.43 ft above NGVD of 1929. Prior to Apr. 2, 1941, nonrecording gage on bridge 1,000 ft downstream at same datum. Apr. 3, 1941, to Oct. 1, 1971, water- stage recorder at site 1,030 ft downstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Flow partly regulated by Hatfield Dam Powerplant where drainage area is 1,290 mi^2 and storage capacity is 272,000,000 ft^3. Water diverted periodically from basin into Lemonweir River basin for cranberry culture. Gage-height telemeter and data-collection platform at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	379	422	525	e520	e420	e1,500	12,900	1,390	9,670	1,500	694	523
2	370	421	e500	e510	e440	e1,900	8,850	1,270	19,400	1,430	650	506
3	379	431	e480	e490	e420	e2,700	5,980	1,190	16,500	1,390	675	495
4	393	486	e500	e490	e420	e3,400	4,630	1,070	11,600	1,430	747	489
5	386	516	e500	e430	e420	e3,800	3,830	1,020	7,880	1,410	677	491
6	375	547	509	e310	e420	e4,000	3,240	984	5,390	1,890	625	501
7	378	563	487	e340	e420	2,480	2,690	897	4,120	2,180	581	495
8	380	583	457	e360	e420	2,070	2,520	e860	3,300	2,200	577	486
9	378	524	421	e370	e420	1,880	2,230	e820	3,340	2,070	581	480
10	373	516	e380	e380	e420	1,660	2,130	e1,400	5,800	1,880	580	474
11	378	542	e350	e390	e400	1,640	2,010	1,930	9,210	1,690	583	457
12	401	541	e330	e390	e400	2,180	1,760	2,740	15,800	1,480	578	444
13	401	498	e390	e390	e400	2,340	1,650	2,950	22,400	1,380	566	438
14	408	505	e440	e390	e320	1,970	1,510	3,790	20,300	1,300	550	471
15	411	522	e480	e390	e350	1,680	1,410	4,530	15,900	1,170	542	995
16	405	520	e490	e390	e380	1,450	1,350	4,850	10,600	1,040	572	1,200
17	405	490	e500	e390	e400	1,320	1,260	4,640	7,200	1,020	620	1,290
18	405	500	e500	e390	e400	1,360	1,160	3,850	6,690	997	650	1,590
19	401	513	e500	e390	e400	1,470	1,230	2,910	7,730	1,020	590	1,360
20	407	612	e500	e410	e400	1,280	1,310	2,620	6,490	1,030	564	1,010
21	409	656	e490	e420	e420	1,170	1,730	3,050	4,720	1,030	555	811
22	401	659	e490	e420	e430	1,380	1,870	3,840	3,630	934	540	710
23	398	608	e480	e420	e440	1,490	1,960	4,580	2,880	849	537	668
24	394	614	e460	e420	e440	1,330	1,940	5,560	2,500	805	541	667
25	387	672	e460	e440	e470	1,710	1,890	7,420	2,420	780	538	658
26	393	635	e480	e440	e510	3,260	1,660	9,720	2,370	756	538	654
27	406	549	e520	e420	e580	5,000	1,610	9,050	2,090	743	560	602
28	423	535	e570	e420	e700	7,100	1,630	6,730	1,890	734	554	559
29	428	524	e560	e400	e900	9,590	1,690	5,300	1,770	716	574	539
30	427	530	e540	e420	---	10,700	1,600	5,150	1,620	705	574	509
31	430	---	e520	e420	---	13,300	---	6,440	---	702	551	---
TOTAL	12,309	16,234	14,809	12,760	12,960	98,110	81,230	112,551	235,210	38,261	18,264	20,572
MEAN	397	541	478	412	447	3,165	2,708	3,631	7,840	1,234	589	686
MAX	430	672	570	520	900	13,300	12,900	9,720	22,400	2,200	747	1,590
MIN	370	421	330	310	320	1,170	1,160	820	1,620	702	537	438
CFSM	0.19	0.26	0.23	0.20	0.21	1.52	1.30	1.75	3.77	0.59	0.28	0.33
IN.	0.22	0.29	0.26	0.23	0.23	1.75	1.45	2.01	4.21	0.68	0.33	0.37

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2004, BY WATER YEAR (WY)

MEAN	1,273	1,390	976	721	769	2,971	4,662	2,561	2,397	1,268	941	1,490
MAX	5,231	4,401	3,468	2,661	3,664	9,521	12,210	7,993	11,880	4,361	4,421	9,373
(WY)	(1987)	(1935)	(1992)	(1932)	(1984)	(1973)	(1967)	(1960)	(1993)	(1978)	(1995)	(1938)
MIN	277	337	320	268	263	406	1,269	591	427	322	293	306
(WY)	(1959)	(1949)	(1959)	(1959)	(1959)	(1934)	(2000)	(1934)	(1988)	(1933)	(1964)	(1948)

05382000 BLACK RIVER NEAR GALESVILLE, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1932 - 2004	
ANNUAL TOTAL	493,217		673,270			
ANNUAL MEAN	1,351		1,840		1,787	
HIGHEST ANNUAL MEAN					3,456	1993
LOWEST ANNUAL MEAN					699	1977
HIGHEST DAILY MEAN	16,500	Apr 20	22,400	Jun 13	62,000	Apr 1, 1967
LOWEST DAILY MEAN	329	Sep 11	(a)310	Jan 6	180	Dec 20, 1932
ANNUAL SEVEN-DAY MINIMUM	(a)340	Feb 9	(a)363	Jan 6	218	Aug 10, 1933
MAXIMUM PEAK FLOW			23,600	Jun 13	(b)65,500	Apr 1, 1967
MAXIMUM PEAK STAGE			13.86	Jun 13	16.64	Jun 21, 1993
INSTANTANEOUS LOW FLOW					180	Dec 20, 1931
ANNUAL RUNOFF (CFSM)	0.650		0.884		0.859	
ANNUAL RUNOFF (INCHES)	8.82		12.04		11.67	
10 PERCENT EXCEEDS	3,240		4,630		3,960	
50 PERCENT EXCEEDS	490		596		882	
90 PERCENT EXCEEDS	378		399		390	

(a) Ice affected
(b) Gage height, 14.63 ft, at location 1,000 ft downstream
(e) Estimated due to ice effect or missing record

05382325 LA CROSSE RIVER AT SPARTA, WI

LOCATION.--Lat 43°56'15", long 90°48'38", in SE ¼ NE ¼ sec.23, T.17 N., R.4 W., Monroe County, Hydrologic Unit 07040006, on left bank, 800 ft dowmstream from bridge on South Water Street, in Sparta, 0.35 mi downstream from Beaver Creek.

DRAINAGE AREA.--167 mi^2.

PERIOD OF RECORD.--July 1992 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 760.73 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Gage-height telemeter at station. Occasional regulation from two dams upstream from gage.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101	111	115	111	96	276	137	119	363	202	155	143
2	101	111	112	113	101	247	131	114	242	199	163	140
3	108	123	114	113	e98	150	129	111	190	199	178	138
4	107	163	114	109	e88	135	128	111	180	210	188	136
5	106	142	115	102	e94	306	126	109	175	207	163	135
6	105	127	115	81	e100	283	127	109	180	255	156	141
7	105	121	115	100	e98	175	125	106	173	239	155	138
8	105	115	115	107	e96	149	124	153	165	225	155	137
9	105	113	116	104	e100	140	123	138	324	224	152	136
10	104	116	122	104	e100	139	119	179	693	230	151	135
11	113	118	114	109	e100	145	118	153	966	210	152	134
12	120	122	93	109	102	133	118	146	605	203	152	134
13	113	124	105	108	100	132	120	227	379	197	150	132
14	110	119	109	107	99	151	118	216	279	192	147	134
15	110	121	117	103	91	135	117	180	235	187	146	200
16	112	122	124	106	98	131	117	156	327	184	152	160
17	109	119	117	108	105	132	117	146	1,480	183	162	136
18	110	138	113	101	102	137	117	141	712	180	153	129
19	108	132	112	90	104	147	140	134	374	182	148	126
20	108	125	106	103	109	138	136	145	286	183	145	123
21	107	120	114	102	106	135	143	195	251	205	143	122
22	107	119	113	85	105	130	133	312	237	196	142	121
23	108	123	112	99	113	131	125	360	228	182	142	122
24	109	121	108	e100	111	133	121	311	245	177	142	124
25	110	118	104	100	112	141	125	219	233	165	144	124
26	110	118	109	e98	122	155	126	186	221	162	145	122
27	111	118	113	e94	134	151	121	171	217	159	162	122
28	113	117	124	e92	158	157	121	164	221	157	151	121
29	114	116	123	e90	194	154	118	202	215	157	146	121
30	114	116	117	e94	---	145	118	261	206	156	152	122
31	113	---	114	e96	---	139	---	516	---	155	147	---
TOTAL	3,376	3,668	3,514	3,138	3,136	4,952	3,738	5,790	10,602	5,962	4,739	4,008
MEAN	109	122	113	101	108	160	125	187	353	192	153	134
MAX	120	163	124	113	194	306	143	516	1,480	255	188	200
MIN	101	111	93	81	88	130	117	106	165	155	142	121
CFSM	0.65	0.73	0.68	0.61	0.65	0.96	0.75	1.12	2.12	1.15	0.92	0.80
IN.	0.75	0.82	0.78	0.70	0.70	1.10	0.83	1.29	2.36	1.33	1.06	0.89

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2004, BY WATER YEAR (WY)

MEAN	146	145	134	126	137	167	186	180	218	170	152	150
MAX	184	179	160	142	168	213	324	279	353	288	205	216
(WY)	(1996)	(1996)	(1995)	(1995)	(1994)	(1996)	(1993)	(1993)	(2004)	(1993)	(1998)	(1994)
MIN	109	122	113	101	108	133	125	153	129	110	97.5	100
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2000)	(2004)	(2000)	(2003)	(2003)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1992 - 2004	
ANNUAL TOTAL	43,957		56,623			
ANNUAL MEAN	120		155		159	
HIGHEST ANNUAL MEAN					211	1993
LOWEST ANNUAL MEAN					126	2003
HIGHEST DAILY MEAN	291	Mar 17	1,480	Jun 17	1,480	Jun 17, 2004
LOWEST DAILY MEAN	85	(a)Aug 21	81	Jan 6	(b)72	May 10, 2000
ANNUAL SEVEN-DAY MINIMUM	87	Aug 18	(c)94	Jan 26	(b)84	May 4, 2000
MAXIMUM PEAK FLOW			2,260	Jun 17	2,260	Jun 17, 2004
MAXIMUM PEAK STAGE			11.01	Jun 17	11.01	Jun 17, 2004
ANNUAL RUNOFF (CFSM)	0.721		0.926		0.954	
ANNUAL RUNOFF (INCHES)	9.79		12.61		12.96	
10 PERCENT EXCEEDS	152		220		207	
50 PERCENT EXCEEDS	114		126		146	
90 PERCENT EXCEEDS	97		103		116	

(a) Also occurred Aug. 24
(b) Regulation at dam upstream
(c) Ice affected
(e) Estimated due to ice effect or missing record

05383075 LA CROSSE RIVER NEAR LA CROSSE WI

LOCATION.--Lat 43°51'39", long 91°12'37", in NE ¼ SE ¼ sec.16, T.16 N., R.7 W., La Crosse County, Hydrologic Unit 07040006, on left bank just downstream from Great River State Trail, 3.9 mi northeast of post office in La Crosse.

DRAINAGE AREA.--471 mi^2.

PERIOD OF RECORD.--October 1999 to current year. Published as "at La Crosse" prior to October 2000.

GAGE.--Water-stage recorder. Elevation of gage is 650 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	228	229	227	269	e200	934	300	269	813	515	304	321
2	229	247	251	248	e210	1,160	324	242	1,050	509	326	302
3	227	325	241	e250	e200	964	275	243	827	530	530	264
4	218	454	296	246	e200	761	260	245	676	425	718	268
5	218	313	248	231	e210	1,030	293	230	587	524	622	267
6	229	353	227	e200	e210	1,000	299	253	527	641	432	233
7	220	349	238	e210	e210	991	292	250	504	675	376	388
8	229	296	271	e220	e210	842	242	277	500	590	430	269
9	221	240	290	e220	e210	549	254	421	658	606	240	229
10	228	307	243	e220	e210	525	252	397	773	577	348	285
11	233	250	e240	e230	e210	408	248	483	1,310	531	340	284
12	226	323	e210	223	e210	445	282	492	1,560	552	267	264
13	236	259	e220	220	e210	348	240	584	1,670	504	327	249
14	243	312	226	222	e210	372	283	532	1,230	490	322	230
15	246	265	225	e220	e200	378	288	620	856	368	311	578
16	244	299	226	220	e210	493	234	602	886	457	301	372
17	230	319	225	223	e210	286	231	485	978	287	321	554
18	237	367	e230	e220	e220	339	224	367	1,150	343	311	378
19	237	336	e230	e200	e220	378	319	431	1,690	507	345	302
20	234	326	e230	e210	e220	376	343	291	1,210	354	301	350
21	224	268	e240	e210	e220	318	463	417	951	423	282	219
22	232	285	e240	e200	e220	349	298	806	633	504	301	319
23	231	287	234	e200	e230	361	320	881	706	356	300	258
24	231	250	e230	e210	e240	360	282	1,020	586	340	268	242
25	229	280	e230	e210	e240	283	258	858	595	442	291	307
26	229	279	242	e210	e270	372	312	752	596	338	310	303
27	230	279	291	e210	358	494	316	716	550	351	282	223
28	232	281	253	e210	436	378	252	517	543	344	384	233
29	230	280	288	e210	598	480	244	555	530	355	308	283
30	228	267	280	e210	---	319	295	625	521	299	344	281
31	230	---	227	e210	---	465	---	754	---	317	316	---
TOTAL	7,139	8,925	7,549	6,792	7,002	16,758	8,523	15,615	25,666	14,054	10,858	9,055
MEAN	230	298	244	219	241	541	284	504	856	453	350	302
MAX	246	454	296	269	598	1,160	463	1,020	1,690	675	718	578
MIN	218	229	210	200	200	283	224	230	500	287	240	219

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2004, BY WATER YEAR (WY)

MEAN	313	318	290	269	303	424	395	434	571	364	310	307
MAX	365	330	321	308	356	541	561	504	856	463	354	385
(WY)	(2003)	(2000)	(2002)	(2001)	(2002)	(2004)	(2001)	(2004)	(2004)	(2000)	(2000)	(2001)
MIN	230	298	244	219	241	356	284	344	336	289	225	230
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2000)	(2004)	(2002)	(2003)	(2003)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2000 - 2004	
ANNUAL TOTAL	110,412		137,936			
ANNUAL MEAN	302		377		358	
HIGHEST ANNUAL MEAN					377	2004
LOWEST ANNUAL MEAN					320	2003
HIGHEST DAILY MEAN	900	Mar 17	1,690	Jun 19	1,690	Jun 19, 2004
LOWEST DAILY MEAN	196	Sep 10	(a)200	(b)Jan 6	196	Sep 10, 2003
ANNUAL SEVEN-DAY MINIMUM	205	Aug 18	(a)206	Jan 19	205	Aug 18, 2003
MAXIMUM PEAK FLOW			1,870	Jun 13	2,070	Jun 29, 1998
MAXIMUM PEAK STAGE			8.67	Jun 13	9.18	Jun 29, 1998
INSTANTANEOUS LOW FLOW			135	Oct 21	124	Oct 28, 1999
10 PERCENT EXCEEDS	411		635		515	
50 PERCENT EXCEEDS	270		289		316	
90 PERCENT EXCEEDS	226		220		240	

(a) Ice affected
(b) Also occurred Jan. 19, 22, 23, Feb. 1, 3, 4, 15
(e) Estimated due to ice effect or missing record

05389500 MISSISSIPPI RIVER AT MCGREGOR, IA

LOCATION.--Lat 43°01'37"(revised), long 91°10'21", in SE¼ SE¼ sec.22, T.95 N., R.3 W., Clayton County, Hydrologic Unit 07060001, on right bank in city park at east end of Main Street in McGregor, 2.6 mi upstream from Wisconsin River, 4.3 mi downstream from Yellow River, and at mile 633.4 upstream from Ohio River.

DRAINAGE AREA.--67,500 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1936 to current year.

REVISED RECORDS.--WDR IA-75-1: 1974.

GAGE.--Water-stage recorder. Datum of gage is 604.84 ft above NGVD of 1929. Prior to June 1, 1937, and since June 2, 1939, auxiliary water-stage recorder; June 1, 1937 to June 1, 1939, auxiliary nonrecording gage 14.1 mi upstream in tailwater of dam 9, at datum 5.30 ft lower.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Minor flow regulation caused by navigation dams. U.S. Geological Survey satellite and telephone modem data collection platform at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1828, that of Apr. 24, 1965.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17,800	18,000	16,600	16,600	e13,500	e20,700	69,000	53,400	72,800	50,400	26,400	17,300
2	12,900	19,500	15,900	16,900	e13,600	e29,700	74,700	50,500	75,300	44,200	25,100	17,900
3	e13,400	21,500	15,000	16,800	e14,200	43,200	80,400	43,900	77,700	39,000	19,700	16,800
4	12,500	22,600	15,600	e15,100	e15,500	45,800	83,500	37,400	81,700	37,100	31,500	16,500
5	13,200	21,100	17,200	e14,300	e15,600	48,000	83,400	36,300	87,100	34,500	34,300	16,900
6	15,700	16,900	18,300	e13,900	e15,600	49,200	82,300	34,000	91,200	37,400	23,600	17,500
7	16,100	16,200	18,300	e14,600	e15,400	49,300	79,400	32,200	94,000	41,700	22,400	19,400
8	16,100	17,000	18,400	e14,600	e15,100	45,700	75,000	30,800	95,300	42,200	25,500	19,800
9	13,500	17,500	19,800	e14,500	e14,800	36,100	69,500	37,300	96,600	42,300	25,000	20,000
10	12,500	17,400	20,600	e13,700	e14,800	29,500	62,700	38,200	97,600	43,400	23,500	23,200
11	12,400	17,600	18,500	e13,300	e15,000	26,900	56,300	35,900	101,000	44,100	23,000	24,500
12	13,100	16,100	19,000	e13,100	e15,000	26,200	51,300	34,200	102,000	41,800	23,700	24,600
13	16,300	17,100	16,900	e13,100	e14,800	28,100	47,200	36,300	103,000	39,800	24,400	23,300
14	18,500	17,400	13,900	e13,100	e14,800	31,000	44,100	38,600	106,000	42,600	24,800	21,300
15	20,400	18,700	9,590	e13,100	e14,900	35,400	43,600	37,400	110,000	43,700	24,800	25,700
16	17,200	19,000	9,620	e13,200	e14,800	35,300	40,600	37,900	113,000	43,700	23,800	38,400
17	13,100	19,100	11,900	e13,300	e15,000	32,200	37,900	40,600	114,000	43,500	22,800	44,500
18	11,500	22,300	14,500	e13,500	e15,300	30,700	35,100	45,400	114,000	42,600	24,400	48,500
19	13,800	23,900	19,600	e13,400	e15,200	30,500	33,800	44,900	110,000	41,800	25,800	51,600
20	9,990	e22,200	22,300	e13,300	e15,300	33,200	36,400	41,200	106,000	41,300	23,300	50,900
21	12,700	e19,200	22,200	e13,400	e15,600	36,100	40,000	42,800	101,000	42,700	20,300	48,500
22	12,900	e18,600	21,100	e13,400	e15,800	35,600	40,800	55,500	96,300	42,700	17,400	45,700
23	14,000	e19,600	19,400	e13,400	e16,700	34,400	44,300	63,200	91,200	38,100	17,600	43,800
24	15,900	e21,100	19,500	e13,300	e20,100	33,400	46,900	65,700	87,500	31,700	18,400	42,700
25	18,700	e17,900	19,400	e13,200	e20,100	32,900	50,500	59,900	83,500	28,800	19,500	43,300
26	18,700	17,900	19,000	e13,100	e18,700	35,500	52,800	58,600	79,300	29,900	20,400	44,900
27	16,600	18,400	18,500	e13,100	e18,800	37,600	53,500	59,500	75,200	28,700	23,500	45,100
28	11,900	18,500	18,100	e13,000	e18,000	42,800	53,800	61,300	71,800	24,000	24,300	44,800
29	10,900	17,300	17,500	e13,100	e18,400	52,800	54,100	66,300	65,300	19,400	21,100	43,900
30	12,900	15,800	17,200	e13,100	---	58,800	54,000	69,000	57,400	16,900	17,700	42,700
31	16,800	---	16,500	e13,300	---	63,800	---	71,100	---	22,900	17,000	---
TOTAL	451,990	565,400	539,910	428,800	460,400	1,170,400	1,676,900	1,459,300	2,756,800	1,162,900	715,000	984,000
MEAN	14,580	18,850	17,420	13,830	15,880	37,750	55,900	47,070	91,890	37,510	23,060	32,800
MAX	20,400	23,900	22,300	16,900	20,100	63,800	83,500	71,100	114,000	50,400	34,300	51,600
MIN	9,990	15,800	9,590	13,000	13,500	20,700	33,800	30,800	57,400	16,900	17,000	16,500
AC-FT	896,500	1,121,000	1,071,000	850,500	913,200	2,321,000	3,326,000	2,895,000	5,468,000	2,307,000	1,418,000	1,952,000
CFSM	0.22	0.28	0.26	0.20	0.24	0.56	0.83	0.70	1.36	0.56	0.34	0.49
IN.	0.25	0.31	0.30	0.24	0.25	0.65	0.92	0.80	1.52	0.64	0.39	0.54

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 2004, BY WATER YEAR (WY)

MEAN	28,700	29,290	22,420	19,400	20,170	39,220	75,590	62,390	50,650	41,690	28,310	28,800
MAX	114,600	64,840	59,200	35,700	48,540	103,800	164,800	138,700	112,600	142,200	84,430	72,890
(WY)	(1987)	(1983)	(1992)	(1983)	(1984)	(1983)	(1965)	(2001)	(1993)	(1993)	(1993)	(1986)
MIN	9,874	10,870	9,506	7,665	9,934	13,190	27,780	18,240	13,420	11,220	10,330	10,650
(WY)	(1937)	(1938)	(1937)	(1940)	(1940)	(1940)	(1990)	(1977)	(1988)	(1988)	(1964)	(1940)

05389500 MISSISSIPPI RIVER AT MCGREGOR, IA—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1936 - 2004	
ANNUAL TOTAL	11,940,440		12,371,800			
ANNUAL MEAN	32,710		33,800		37,270	
HIGHEST ANNUAL MEAN					64,720	1993
LOWEST ANNUAL MEAN					17,400	1977
HIGHEST DAILY MEAN	113,000	May 20	114,000	Jun 17	276,000	Apr 24, 1965
LOWEST DAILY MEAN	9,510	Sep 7	9,590	Dec 15	6,200	Dec 9, 1936
ANNUAL SEVEN-DAY MINIMUM	11,500	Aug 25	12,600	Oct 17	6,490	Dec 7, 1936
MAXIMUM PEAK FLOW			115,000	Jun 16	276,000	Apr 24, 1965
MAXIMUM PEAK STAGE			17.30	Jun 18	25.38	Apr 24, 1965
ANNUAL RUNOFF (AC-FT)	23,680,000		24,540,000		27,000,000	
ANNUAL RUNOFF (CFSM)	0.485		0.501		0.552	
ANNUAL RUNOFF (INCHES)	6.58		6.82		7.50	
10 PERCENT EXCEEDS	68,500		70,000		75,800	
50 PERCENT EXCEEDS	20,400		23,600		27,800	
90 PERCENT EXCEEDS	13,700		13,400		13,400	

(a) Also June 18
(e) Estimated

MISSISSIPPI RIVER BASIN

05389500 MISSISSIPPI RIVER AT MCGREGOR, IA—Continued

WATER-QUALITY RECORDS

LOCATION.--Samples collected from right bank dock 1.2 mi upstream from discharge station. Prior to April 1981, and March 7 to Sept. 30, 1997, samples collected at bridge on U.S. Highway 18, 1.2 mi upstream from gage. April 1981 to March 6, 1997, samples collected from right bank dock, 0.3 mi downstream from discharge station.

PERIOD OF RECORD.--July 1975 to September 30, 2004 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1975 to September 30, 2004 (discontinued).
WATER TEMPERATURES: July 1975 to September 30, 2004 (discontinued).
SUSPENDED-SEDIMENT DISCHARGE: July 1975 to September 30, 2004 (discontinued).

REMARKS.--Records of specific conductance are obtained from suspended-sediment samples at time of analysis.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 633 microsiemens Nov. 3, 1996; minimum daily, 190 microsiemens Sept. 29, 1980.
WATER TEMPERATURES: Maximum daily, 31.0×C June 28, 2002; minimum daily, 0.0×C on many days during winter periods.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,350 mg/L Mar. 19, 1986; minimum daily mean, 1 mg/L on many days in 1977-92 and 1999.
SEDIMENT LOADS: Maximum daily, 363,000 tons Mar. 19, 1986; minimum daily, 31 tons Dec. 25, 1976.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 504 microsiemens July 25; minimum daily, 246 microsiemens May 22.
WATER TEMPERATURES: Maximum daily, 29.0×C, July 20; minimum daily, 0.0×C many days Dec.- Feb.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 445 mg/L May 22; minimum daily mean, 2 mg/L Feb. 15, 16, 25.
SEDIMENT LOADS: Maximum daily, 66,700 tons May. 22; minimum daily, 84 tons Feb 16.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instan-taneous dis-charge, cfs (00061)	Suspnd. sedi-ment, sieve diametr percent <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)	Sus-pended sedi-ment dis-charge, tons/d (80155)
OCT					
22...	1230	20,800	97	17	955
NOV					
25...	1200	21,700	100	44	2,580
MAR					
10...	1300	35,300	100	29	2,760
APR					
20...	1250	38,300	98	29	3,000
MAY					
19...	1150	53,900	94	34	4,950
JUN					
21...	1200	147,000	97	27	10,700
AUG					
03...	1230	21,700	99	11	644

05389500 MISSISSIPPI RIVER AT MCGREGOR, IA—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, LABORATORY, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	427	---	---	404	---	---	328	467	484	434
2	---	---	430	---	474	397	---	275	348	---	470	---
3	---	400	428	---	390	404	---	285	---	---	470	---
4	---	405	---	---	373	---	---	288	---	---	449	---
5	---	402	---	416	---	---	254	---	---	472	---	---
6	407	408	---	442	---	351	280	---	---	480	---	430
7	410	---	---	452	---	---	306	---	316	470	---	430
8	409	---	---	---	418	---	---	---	318	---	450	---
9	---	---	423	---	514	364	---	296	350	---	452	428
10	---	342	---	---	452	374	---	287	---	---	---	---
11	---	372	416	---	---	---	356	---	349	471	---	---
12	---	414	422	446	---	---	362	302	---	---	---	428
13	406	---	---	443	---	394	364	---	352	466	---	426
14	---	---	435	444	---	---	---	---	363	478	---	426
15	360	---	440	---	426	404	---	---	358	---	456	---
16	391	---	438	---	434	413	---	304	---	---	460	---
17	---	416	366	---	463	---	---	---	---	---	462	---
18	---	416	---	---	---	---	---	310	---	486	---	---
19	384	419	---	459	---	---	318	287	---	488	---	380
20	382	---	---	468	---	430	320	301	388	486	---	378
21	383	---	---	467	---	394	318	---	416	---	---	---
22	392	---	424	---	---	440	321	246	405	---	442	396
23	---	---	449	---	456	---	---	256	---	---	444	---
24	---	416	---	---	---	---	---	292	---	---	---	---
25	---	413	440	472	455	---	308	314	---	504	---	---
26	388	419	---	474	456	---	294	333	---	---	436	432
27	390	---	---	465	---	---	266	---	---	---	---	444
28	---	---	---	441	---	---	---	---	448	---	---	---
29	400	---	448	---	---	440	---	348	454	498	---	---
30	408	---	444	---	---	439	---	---	---	---	437	---
31	---	---	354	---	---	406	---	319	---	488	434	---

05389500 MISSISSIPPI RIVER AT MCGREGOR, IA—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	1.0	---	---	1.0	---	---	19.0	25.0	26.0	26.0
2	---	---	1.0	---	0.0	1.0	---	15.0	20.0	---	28.0	---
3	---	8.0	1.0	---	0.0	1.0	---	15.0	---	---	29.0	---
4	---	7.0	---	---	0.0	---	---	16.0	---	---	27.0	---
5	---	6.0	---	0.0	---	---	10.0	---	---	27.0	---	---
6	12.0	6.0	---	0.0	---	1.0	12.0	---	---	26.0	---	25.0
7	14.0	---	---	0.0	---	---	12.0	---	24.0	24.0	---	25.0
8	15.0	---	---	---	0.0	---	---	---	25.0	---	26.0	---
9	---	---	1.0	---	0.0	1.0	---	18.0	25.0	---	26.0	25.0
10	---	4.0	---	---	0.0	2.0	---	19.0	---	---	---	---
11	---	4.0	0.0	---	---	---	12.0	---	23.0	25.0	---	---
12	---	4.0	0.0	0.0	---	---	12.0	21.0	---	---	---	25.0
13	15.0	---	---	0.0	---	1.0	12.0	---	23.0	27.0	---	25.0
14	---	---	0.0	0.0	---	---	---	---	24.0	27.0	---	26.0
15	14.0	---	1.0	---	0.0	1.0	---	---	24.0	---	23.0	---
16	12.0	---	1.0	---	0.0	1.0	---	19.0	---	---	23.0	---
17	---	5.0	1.0	---	0.0	---	---	---	---	---	23.0	---
18	---	6.0	---	---	---	---	---	20.0	---	27.0	---	---
19	14.0	5.0	---	0.0	---	---	17.0	17.6	---	28.0	---	22.0
20	14.0	---	---	0.0	---	7.0	14.3	22.0	23.0	29.0	---	22.0
21	13.0	---	---	0.0	---	6.0	15.0	---	21.1	---	---	---
22	13.0	---	1.0	---	---	6.0	15.0	20.0	22.0	---	23.0	22.0
23	---	---	1.0	---	0.0	---	---	21.0	---	---	24.0	---
24	---	3.0	---	---	---	---	---	19.0	---	---	---	---
25	---	3.0	0.0	0.0	0.0	---	15.0	20.0	---	26.0	---	---
26	10.0	2.0	---	0.0	0.0	---	14.0	19.0	---	---	25.0	21.0
27	9.0	---	---	0.0	---	---	14.0	---	---	---	---	20.0
28	---	---	---	0.0	---	---	---	---	22.0	---	---	---
29	9.0	---	0.0	---	---	12.0	---	20.0	23.0	28.0	---	---
30	9.0	---	1.0	---	---	11.0	---	---	---	---	25.0	---
31	---	---	1.0	---	---	11.0	---	20.0	---	27.0	25.0	---

05389500 MISSISSIPPI RIVER AT MCGREGOR, IA—Continued

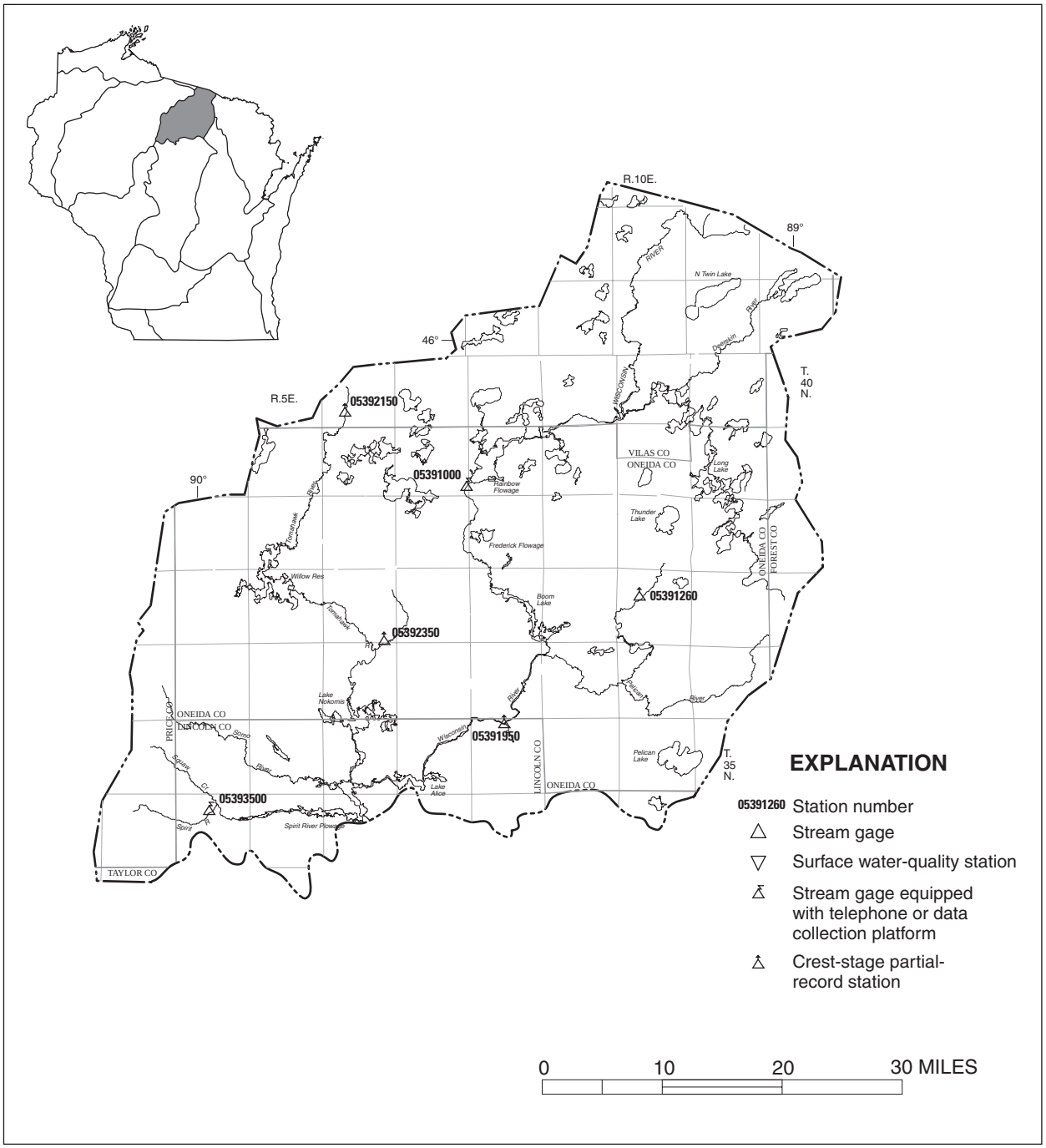
SUSPENDED-SEDIMENT
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Day	Mean concentration (mg/l)	Load (tons/day)	Mean concentration (mg/l)	Load (tons/day)	Mean concentration (mg/l)	Load (tons/day)	Mean concentration (mg/l)	Load (tons/day)	Mean concentration (mg/l)	Load (tons/day)	Mean concentration (mg/l)	Load (tons/day)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	21	1,010	23	1,100	18	828	6	278	6	230	50	2,790
2	24	836	25	1,300	21	894	6	291	4	165	42	3,370
3	28	1,010	26	1,520	20	797	7	298	6	222	38	4,390
4	28	932	22	1,370	18	752	7	277	9	381	51	6,320
5	24	859	19	1,080	17	765	7	270	10	404	69	8,990
6	21	881	16	709	15	747	7	259	9	383	85	11,300
7	21	893	21	935	14	679	6	248	9	358	76	10,100
8	19	814	29	1,310	12	617	7	264	8	326	60	7,380
9	20	713	36	1,710	12	625	8	294	7	288	43	4,290
10	22	701	43	2,010	15	835	8	307	6	248	29	2,310
11	24	790	42	1,990	19	935	9	327	5	215	22	1,600
12	26	914	26	1,100	17	853	10	354	4	182	20	1,390
13	28	1,250	20	920	11	516	12	424	4	148	18	1,360
14	39	1,960	19	880	7	253	10	347	3	116	23	1,890
15	50	2,770	18	885	7	173	8	283	2	89	28	2,640
16	40	1,900	16	842	6	156	7	242	2	84	18	1,730
17	30	1,060	16	804	12	397	6	201	3	113	15	1,320
18	27	829	20	1,210	16	623	4	160	3	124	15	1,290
19	32	1,200	24	1,540	18	960	3	116	3	123	16	1,300
20	29	786	23	1,370	19	1,150	3	111	3	124	17	1,490
21	24	806	22	1,110	17	1,040	4	137	3	126	20	1,960
22	21	723	21	1,050	15	842	4	159	3	128	29	2,800
23	26	986	20	1,060	6	308	5	177	3	135	33	3,050
24	30	1,280	20	1,140	6	328	5	194	3	141	34	3,040
25	27	1,350	33	1,720	9	488	6	210	2	119	35	3,090
26	22	1,110	25	1,210	8	427	6	216	4	212	36	3,440
27	19	866	23	1,140	7	332	8	283	14	711	37	3,740
28	17	556	22	1,090	5	242	13	456	27	1,310	38	4,380
29	16	463	21	963	3	160	12	424	39	1,940	39	5,600
30	18	643	19	831	3	149	10	354	---	---	47	7,510
31	21	938	---	---	5	242	8	298	---	---	61	10,500
TOTAL	---	31,829	---	35,899	---	18,113	---	8,259	---	9,145	---	126,360

05389500 MISSISSIPPI RIVER AT MCGREGOR, IA—Continued

SUSPENDED-SEDIMENT—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Day	Mean concentration (mg/l)	Load (tons/day)	Mean concentration (mg/l)	Load (tons/day)	Mean concentration (mg/l)	Load (tons/day)	Mean concentration (mg/l)	Load (tons/day)	Mean concentration (mg/l)	Load (tons/day)	Mean concentration (mg/l)	Load (tons/day)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	58	10,800	27	3,920	78	15,400	34	4,580	20	1,430	13	598
2	50	10,000	26	3,580	49	9,960	33	3,990	18	1,230	13	622
3	42	9,000	27	3,190	42	8,840	34	3,570	15	823	12	563
4	33	7,510	29	2,940	40	8,820	34	3,450	29	2,460	11	492
5	26	5,870	30	2,970	38	8,880	35	3,270	41	3,830	12	566
6	29	6,360	31	2,820	36	8,760	38	3,810	27	1,790	15	708
7	28	6,100	31	2,710	34	8,580	39	4,440	17	1,040	19	994
8	28	5,710	32	2,620	37	9,590	37	4,240	19	1,320	19	1,000
9	28	5,340	32	3,250	36	9,430	34	3,880	26	1,760	18	952
10	29	4,860	35	3,600	71	18,700	31	3,590	27	1,720	21	1,350
11	29	4,420	33	3,220	110	29,900	28	3,340	26	1,620	22	1,460
12	32	4,380	29	2,700	91	25,100	28	3,100	25	1,610	19	1,260
13	27	3,510	27	2,650	60	16,800	27	2,930	24	1,590	17	1,050
14	25	3,030	26	2,670	41	11,800	29	3,380	23	1,540	17	968
15	25	2,910	24	2,450	38	11,300	31	3,610	22	1,470	19	1,320
16	24	2,630	24	2,420	37	11,100	31	3,700	20	1,310	21	2,220
17	23	2,380	26	2,870	35	10,700	32	3,780	21	1,290	24	2,850
18	23	2,210	29	3,580	33	10,000	32	3,730	23	1,530	26	3,420
19	33	3,040	33	3,980	31	9,160	28	3,190	24	1,670	28	3,940
20	34	3,290	35	3,930	29	8,250	37	4,120	21	1,320	28	3,780
21	38	4,080	227	26,800	31	8,420	40	4,630	19	1,060	27	3,490
22	37	4,120	445	66,700	31	7,990	40	4,660	19	871	26	3,220
23	37	4,440	235	39,600	30	7,490	41	4,170	21	1,010	25	2,950
24	39	4,890	117	20,800	32	7,600	41	3,490	22	1,080	24	2,720
25	39	5,290	72	11,600	34	7,650	42	3,250	21	1,130	22	2,600
26	33	4,740	57	9,090	36	7,630	52	4,220	21	1,170	22	2,600
27	31	4,500	52	8,400	37	7,590	56	4,330	22	1,410	23	2,800
28	30	4,380	48	7,910	39	7,520	54	3,470	21	1,370	23	2,830
29	29	4,260	47	8,430	39	6,800	50	2,640	18	1,010	23	2,760
30	28	4,110	76	14,100	36	5,610	34	1,530	15	697	22	2,480
31	---	---	107	20,600	---	---	18	1,080	12	572	---	---
TOTAL	---	148,160	---	296,100	---	325,370	---	111,170	---	43,733	---	58,563
YEAR	1,212,701											



Base from U.S. Geological Survey 1:100,000 digital data; modified by Wisconsin Department of Natural Resources. Wisconsin Transverse Mercator projection.

UPPER WISCONSIN RIVER BASIN

05391000 WISCONSIN RIVER AT RAINBOW LAKE, NEAR LAKE TOMAHAWK, WI

LOCATION.--Lat 45°49'50", long 89°33'08", in NE ¼ NE ¼ sec.36, T.39 N., R.7 E., Oneida County, Hydrologic Unit 07070001, on right bank 500 ft downstream from Gilmore Creek, 0.4 mi downstream from Rainbow Lake, and 2.3 mi northeast of Lake Tomahawk.

DRAINAGE AREA.--757 mi^2.

PERIOD OF RECORD.--July 1936 to current year. Prior to October 1955, published as "at Rainbow Reservoir, near Lake Tomahawk."

REVISED RECORDS.--WSP 895: 1937(M). WSP 1508: 1944. WDR WI-83-1: Drainage area. WDR WI-80-1: Datum.

GAGE.--Water-stage recorder. Datum of gage is 1,569.05 ft above NGVD of 1929 (levels by Wisconsin Valley Improvement Co.).

REMARKS.--Records good (see page 11). Flow regulated by Rainbow Lake and 12 smaller reservoirs upstream from station. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	407	416	481	627	655	557	318	1,190	762	529	495	549
2	406	424	483	628	634	556	309	1,170	892	530	504	547
3	404	426	484	630	632	557	299	1,100	929	542	509	536
4	402	432	484	630	647	556	303	1,020	868	547	510	528
5	401	437	558	630	643	557	309	917	832	543	513	524
6	399	446	611	630	640	562	310	854	840	539	516	525
7	397	441	613	631	640	560	331	849	845	492	519	523
8	396	440	613	627	641	560	357	825	831	464	525	517
9	394	440	613	627	632	557	351	738	819	467	533	516
10	393	440	617	627	627	560	348	693	807	480	539	513
11	396	440	620	624	624	557	348	692	737	488	543	507
12	418	439	620	620	620	560	350	670	695	487	543	503
13	423	440	621	620	620	566	344	672	698	486	543	496
14	395	440	621	616	613	565	341	681	654	484	542	486
15	377	441	623	616	613	567	351	676	629	486	542	494
16	e372	447	622	612	610	567	366	685	586	491	542	436
17	368	450	623	607	602	567	383	655	557	491	543	402
18	357	459	623	606	600	566	399	631	553	496	545	398
19	349	460	620	604	596	565	417	636	547	495	549	454
20	347	462	620	607	588	558	433	635	543	497	557	483
21	346	464	620	645	587	556	446	741	542	495	562	480
22	346	465	620	687	587	561	455	810	536	491	560	477
23	371	468	620	683	583	556	612	817	529	493	555	477
24	388	471	625	679	580	549	710	817	528	494	545	473
25	396	474	626	677	578	535	715	813	528	497	538	466
26	402	475	633	673	573	533	842	719	526	496	537	463
27	402	476	637	670	569	526	959	660	526	497	540	460
28	406	475	637	667	567	529	1,060	650	528	491	550	457
29	408	479	635	664	558	419	1,110	639	529	489	556	484
30	411	481	635	661	---	314	1,160	632	529	489	565	501
31	411	---	630	658	---	315	---	629	---	493	556	---
TOTAL	12,088	13,548	18,688	19,783	17,659	16,613	15,036	23,916	19,925	15,459	16,676	14,675
MEAN	390	452	603	638	609	536	501	771	664	499	538	489
MAX	423	481	637	687	655	567	1,160	1,190	929	547	565	549
MIN	346	416	481	604	558	314	299	629	526	464	495	398

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 2004, BY WATER YEAR (WY)

MEAN	650	691	773	819	809	641	415	716	724	666	585	594
MAX	1,445	1,250	1,178	1,108	1,161	1,044	1,330	1,798	1,863	1,387	1,472	1,282
(WY)	(1952)	(1939)	(1955)	(1943)	(1952)	(1939)	(1973)	(1973)	(1939)	(1968)	(1938)	(1980)
MIN	263	170	330	371	417	316	138	173	228	237	243	268
(WY)	(1988)	(1949)	(1949)	(1990)	(1977)	(2000)	(1949)	(1949)	(1987)	(1988)	(1988)	(1948)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1936 - 2004	
ANNUAL TOTAL	198,879		204,066			
ANNUAL MEAN	545		558		674	
HIGHEST ANNUAL MEAN					1,062	1939
LOWEST ANNUAL MEAN					359	1990
HIGHEST DAILY MEAN	1,670	May 18	1,190	May 1	2,820	Sep 5, 1941
LOWEST DAILY MEAN	267	Mar 20	299	Apr 3	35	Apr 6, 1955
ANNUAL SEVEN-DAY MINIMUM	281	Mar 19	309	Mar 31	107	Apr 12, 1965
MAXIMUM PEAK FLOW			1,190	(a)Apr 30	3,570	Sep 5, 1941
MAXIMUM PEAK STAGE			3.56	(a)Apr 30	7.59	Sep 5, 1941
10 PERCENT EXCEEDS	772		692		1,030	
50 PERCENT EXCEEDS	496		544		644	
90 PERCENT EXCEEDS	333		398		314	

(a)Also occurred May 1, 2
(e)Estimated due to missing record

05393500 SPIRIT RIVER AT SPIRIT FALLS, WI

LOCATION.--Lat 45°26'57", long 89°58'45", in SW $^1/_4$ NW $^1/_4$ sec.10, T.34 N., R.4 E., Lincoln County, Hydrologic Unit 07070001, on right bank 40 ft downstream of bridge 0.2 mi south of Spirit Falls, 0.6 mi upstream from Squaw Creek, and 2.0 mi downstream from Richie Creek.

DRAINAGE AREA.--81.6 mi^2.

PERIOD OF RECORD.--April 1942 to current year.

REVISED RECORDS.--WSP 1308: 1943(M), 1948-50(M). WDR WI-77-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,461.63 ft above NGVD of 1929. Prior to Oct. 4, 1982, nonrecording gage 40 ft upstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

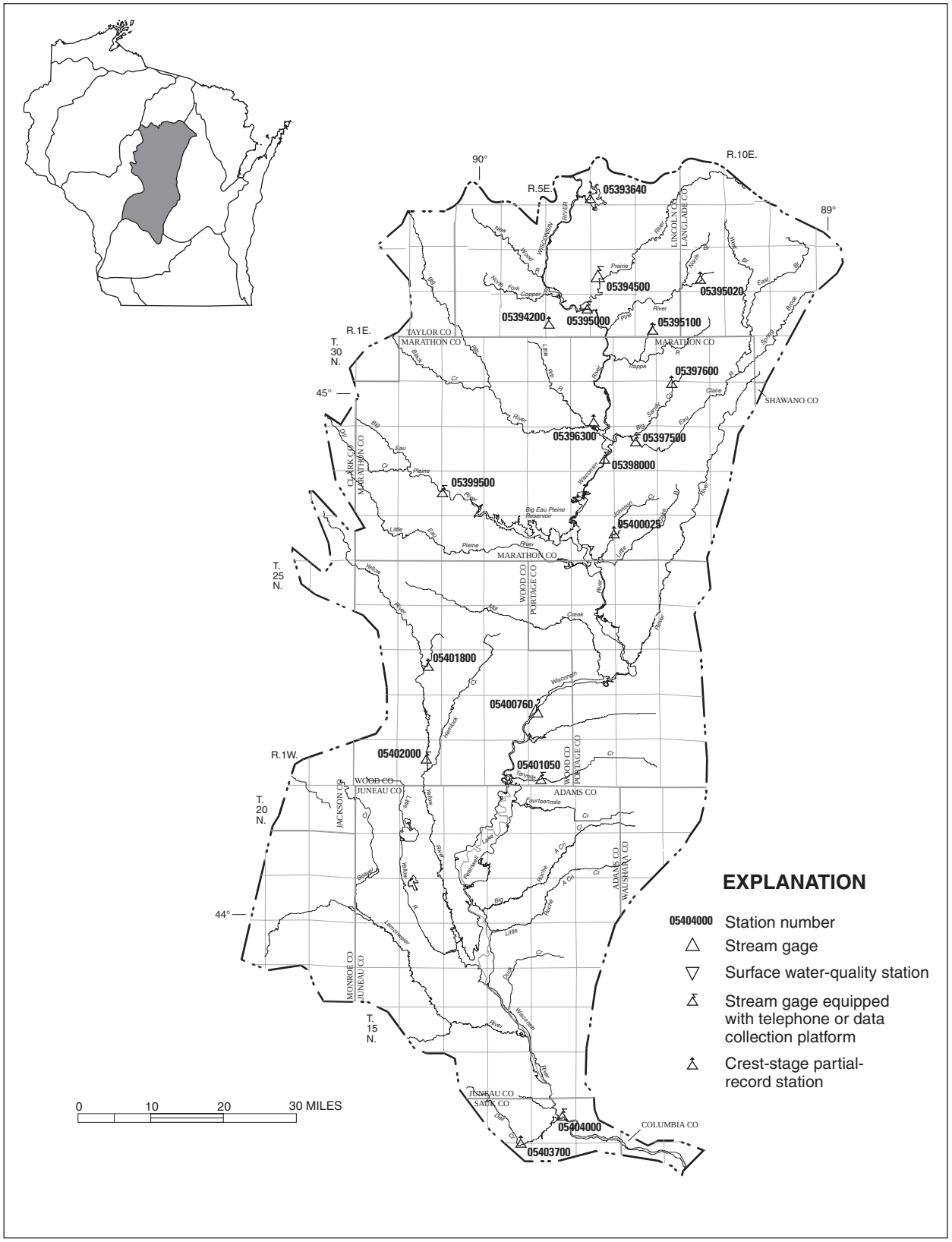
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	24	e26	e24	e9.2	e17	e740	109	293	12	5.4	8.0
2	14	24	e23	e23	e8.6	e18	e720	93	225	11	9.2	8.5
3	13	22	e20	e21	e8.2	e18	719	78	161	9.6	7.7	9.0
4	15	27	e20	e20	e8.6	e18	629	68	121	9.9	5.7	8.3
5	16	45	e21	e18	e9.2	e19	554	60	101	11	4.6	9.6
6	15	37	e20	e17	e9.2	e20	563	54	117	11	3.9	15
7	13	30	e20	e16	e9.2	e20	625	49	98	12	3.6	19
8	14	24	e19	e15	e9.2	e22	568	74	77	12	4.7	17
9	12	20	e18	e14	e9.2	e22	470	90	178	10	6.5	16
10	12	20	e16	e14	e9.2	e22	368	145	334	9.6	9.7	17
11	11	23	e16	e13	e8.8	e20	292	145	212	9.5	10	20
12	19	27	e18	e13	e8.4	e20	232	122	237	11	8.9	19
13	25	25	e18	e13	e8.0	e20	187	298	223	9.6	7.4	21
14	21	25	e18	e12	e7.6	e22	166	343	163	8.2	6.1	24
15	22	25	e19	e12	e7.6	e22	150	315	124	7.2	5.3	43
16	18	24	e19	e12	e8.4	e23	146	223	95	6.7	5.9	54
17	16	25	e19	e12	e8.8	e24	158	163	80	6.0	9.2	39
18	15	65	e20	e12	e9.6	e25	157	130	65	5.7	10	31
19	14	103	e20	e11	e10	e23	286	103	51	6.0	9.9	27
20	14	71	e20	e10	e11	e26	375	96	42	6.1	8.9	26
21	14	56	e20	e10	e11	e23	311	84	35	7.2	7.4	24
22	14	47	e20	e9.6	e12	e24	277	139	30	7.7	6.8	24
23	14	e44	e20	e9.6	e12	e28	218	298	26	7.2	6.2	21
24	14	e38	e19	e9.6	e12	e35	172	620	23	6.4	6.1	25
25	15	e36	e17	e9.8	e13	e74	175	439	21	5.9	6.9	27
26	15	e38	e17	e9.8	e15	e107	225	254	19	5.7	7.7	27
27	14	e35	e19	e9.8	e16	e280	192	186	17	5.5	7.9	24
28	17	e33	e23	e9.2	e16	e760	163	167	15	5.0	7.5	22
29	22	e30	e26	e8.8	e16	e1,500	144	126	14	5.0	7.7	22
30	25	e28	e25	e8.8	---	e880	125	130	14	4.7	7.8	27
31	25	---	e24	e9.2	---	e800	---	279	---	4.8	8.1	---
TOTAL	504	1,071	620	406.2	301.0	4,932	10,107	5,480	3,211	249.2	222.7	674.4
MEAN	16.3	35.7	20.0	13.1	10.4	159	337	177	107	8.04	7.18	22.5
MAX	25	103	26	24	16	1,500	740	620	334	12	10	54
MIN	11	20	16	8.8	7.6	17	125	49	14	4.7	3.6	8.0
CFSM	0.20	0.44	0.25	0.16	0.13	1.95	4.13	2.17	1.31	0.10	0.09	0.28
IN.	0.23	0.49	0.28	0.19	0.14	2.25	4.61	2.50	1.46	0.11	0.10	0.31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2004, BY WATER YEAR (WY)

MEAN	74.4	73.7	38.4	20.3	19.8	109	330	152	99.2	46.3	37.4	73.7
MAX	306	338	293	71.8	69.8	467	697	408	398	209	359	396
(WY)	(1986)	(1992)	(1976)	(1960)	(1984)	(1946)	(1951)	(1973)	(1943)	(1968)	(1995)	(1942)
MIN	4.05	5.31	4.07	3.00	3.61	14.6	55.6	23.0	6.01	4.09	3.13	3.05
(WY)	(1977)	(1977)	(1977)	(1977)	(1977)	(1956)	(1946)	(1987)	(1988)	(1964)	(1944)	(1976)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1942 - 2004	
ANNUAL TOTAL	30,964.0		27,778.5			
ANNUAL MEAN	84.8		75.9		88.8	
HIGHEST ANNUAL MEAN					140	1973
LOWEST ANNUAL MEAN					36.3	1957
HIGHEST DAILY MEAN	1,710	May 12	(a)1,500	Mar 29	3,290	Sep 18, 1942
LOWEST DAILY MEAN	4.6	Sep 11	3.6	Aug 7	1.0	Aug 11, 1964
ANNUAL SEVEN-DAY MINIMUM	5.1	Sep 5	5.2	(b)Jul 26	1.4	Aug 5, 1964
MAXIMUM PEAK FLOW			(a)	Mar 29	(c)4,180	Sep 18, 1942
MAXIMUM PEAK STAGE			(a)7.86	Mar 29	10.00	Sep 18, 1942
INSTANTANEOUS LOW FLOW			3.3	Aug 7	1.0	Aug 11, 1964
ANNUAL RUNOFF (CFSM)	1.04		0.930		1.09	
ANNUAL RUNOFF (INCHES)	14.12		12.66		14.79	
10 PERCENT EXCEEDS	200		220		216	
50 PERCENT EXCEEDS	20		20		28	
90 PERCENT EXCEEDS	9.1		7.7		8.5	

(a) Ice affected
(b) Also occurred Aug. 3
(b) From rating curve extended above 2,500 ft^3/s
(e) Estimated due to ice effect or missing record



Base from U.S. Geological Survey 1:100,000 digital data; modified by Wisconsin Department of Natural Resources. Wisconsin Transverse Mercator projection.

CENTRAL WISCONSIN RIVER BASIN

05394500 PRAIRIE RIVER NEAR MERRILL, WI

LOCATION.--Lat 45°14'09", long 89°38'59", in SW ¼ SW ¼ sec. 20, T.32 N., R.7 E., Lincoln County, Hydrologic Unit 07070002, on left bank 40 ft upstream from bridge on County Trunk Highway C, 1.5 mi upstream from Meadow Creek, 4.5 mi northeast of Merrill, and 8.0 mi upstream from mouth.

DRAINAGE AREA.--184 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1914 to September 1931, August 1939 to current year. Monthly discharge for some periods published in WSP 1308.

REVISED RECORDS.--WSP 1308: 1915-17(M), 1919-21(M), 1923-31(M), 1942-43(M), 1945(M), 1948-50(M). WDR WI-77-1: Drainage area. WDR WI-79-1: 1972.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,297.22 ft above NGVD of 1929. Prior to Oct. 9, 1968, nonrecording gage 40 ft downstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	107	e89	e84	e68	99	896	200	576	97	102	79
2	102	106	e75	e98	e70	113	842	182	503	95	123	79
3	104	105	e87	e85	e70	112	781	165	386	97	111	77
4	106	116	e90	e70	e68	103	665	154	274	127	115	76
5	104	131	e90	e72	e70	e100	542	145	219	127	101	76
6	101	131	e90	e62	e70	e92	503	138	212	133	92	79
7	100	110	e85	e66	e70	e94	521	132	194	171	88	80
8	98	100	e84	e68	e68	e90	544	172	175	158	88	80
9	97	109	e84	e66	e70	e94	515	210	232	135	106	78
10	96	108	e86	e64	e70	e90	453	285	307	122	106	77
11	97	106	e63	e66	e68	e96	386	278	275	113	106	76
12	112	108	e94	e68	e66	e100	323	230	346	111	109	76
13	118	104	e92	e68	e64	e98	275	258	480	107	104	75
14	113	104	e91	e66	e64	e90	249	334	657	104	99	75
15	106	109	e88	e64	e64	e100	236	350	528	95	91	170
16	102	103	e86	e62	e66	100	234	295	360	93	89	235
17	100	105	e91	e64	e68	98	282	242	289	92	92	191
18	100	152	e93	e62	e70	97	323	210	264	91	92	143
19	98	197	e96	e64	e70	97	401	181	209	89	91	119
20	98	178	94	e66	e68	96	445	161	172	120	88	106
21	97	153	100	e66	e70	95	434	148	155	104	85	98
22	97	139	100	e64	82	93	398	145	146	97	83	92
23	99	133	100	e64	83	99	339	285	134	92	82	88
24	98	132	87	e66	85	100	281	545	128	89	81	89
25	97	e106	86	e66	87	111	267	460	126	85	82	88
26	97	e123	92	e66	85	208	280	344	120	84	84	86
27	96	e110	100	e68	83	455	262	294	119	83	86	87
28	103	e106	112	e68	85	1,060	239	289	118	81	83	86
29	111	e103	113	e66	91	1,500	218	238	108	80	81	83
30	113	e97	103	e68	---	1,260	208	245	101	81	81	83
31	110	---	93	e68	---	992	---	456	---	96	80	---
TOTAL	3,176	3,591	2,834	2,115	2,113	7,932	12,342	7,771	7,913	3,249	2,901	2,927
MEAN	102	120	91.4	68.2	72.9	256	411	251	264	105	93.6	97.6
MAX	118	197	113	98	91	1,500	896	545	657	171	123	235
MIN	96	97	63	62	64	90	208	132	101	80	80	75
CFSM	0.56	0.65	0.50	0.37	0.40	1.39	2.24	1.36	1.43	0.57	0.51	0.53
IN.	0.64	0.73	0.57	0.43	0.43	1.60	2.50	1.57	1.60	0.66	0.59	0.59

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2004, BY WATER YEAR (WY)

MEAN	166	167	112	91.5	89.8	188	434	259	209	136	131	170
MAX	527	388	199	169	158	676	899	723	598	401	494	656
(WY)	(1942)	(1920)	(1992)	(1960)	(1930)	(1973)	(1916)	(1960)	(1993)	(1978)	(1926)	(1941)
MIN	70.8	76.7	66.1	60.5	63.0	68.2	106	98.8	70.6	68.3	68.1	65.1
(WY)	(1990)	(1951)	(1990)	(1925)	(2003)	(1956)	(1990)	(1931)	(1988)	(1989)	(1957)	(1989)

05394500 PRAIRIE RIVER NEAR MERRILL, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1914 - 2004	
ANNUAL TOTAL	59,171		58,864			
ANNUAL MEAN	162		161		179	
HIGHEST ANNUAL MEAN					272	1942
LOWEST ANNUAL MEAN					108	1931
HIGHEST DAILY MEAN	1,360	Apr 17	1,500	Mar 29	4,200	Aug 31, 1941
LOWEST DAILY MEAN	(a)54	Jan 20-24	(a)62	(b)Jan 6	35	Oct 26, 1947
ANNUAL SEVEN-DAY MINIMUM	(a)55	Jan 18	(a)64	Jan 14	52	Dec 28, 1948
MAXIMUM PEAK FLOW			1,580	Mar 29	(c)5,800	Aug 31, 1941
MAXIMUM PEAK STAGE			6.02	Mar 29	(d)9.45	Aug 31, 1941
INSTANTANEOUS LOW FLOW			59	Jan 6	34	Oct 26, 1947
ANNUAL RUNOFF (CFSM)	0.881		0.874		0.974	
ANNUAL RUNOFF (INCHES)	11.96		11.90		13.24	
10 PERCENT EXCEEDS	308		323		344	
50 PERCENT EXCEEDS	100		100		115	
90 PERCENT EXCEEDS	62		68		76	

(a) Ice affected
(b) Also occurred Jan. 16, 18
(c) Based on rating curve extended above 2,200 ft^3/s
(d) From floodmarks
(e) Estimated due to ice effect or missing record

LOCATION (revised).--Lat 45°10'42", long 89°40'54", SW ¼ SE ¼ sec 12, T.31 N., R.6 E., Lincoln County, Hydrologic Unit 07070002, on left bank 300 ft downstream from U.S. Highway 51 bridge at east end of Merrill, and 0.5 mi downstream from Prairie River.

DRAINAGE AREA.--2,760 mi^2.

PERIOD OF RECORD.--December 1902 to current year. Monthly discharge data for some periods from December 1902 to September 1909 published in WSP 1308. Mostly seasonal unpublished daily discharge records from December 1902 to September 1905 in District files.

REVISED RECORDS.--WSP 1308: 1904-7, 1909-11, 1913. WSP 1508: 1908, 1915-16(M), 1917, 1920-21(M), 1925(M), 1930, 1935-36. WDR WI-77-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,228.85 ft above NGVD of 1929. Prior to June 18, 1903, nonrecording gage at different datum. June 18, 1903, to Sept. 10, 1914, non recording gage at present datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Flow regulated by 20 reservoirs and 9 powerplants upstream from station. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,560	1,330	1,270	1,780	e1,600	e1,800	7,230	3,850	5,100	1,530	1,290	1,300
2	1,110	1,250	1,420	1,700	e1,700	e1,500	7,790	3,240	5,610	1,800	1,660	1,270
3	1,070	1,270	1,350	1,670	e1,700	e1,400	8,090	2,930	4,250	1,680	1,600	1,190
4	1,320	1,710	1,430	1,680	e1,700	e1,800	7,800	2,490	4,460	1,720	1,590	1,150
5	1,370	1,610	1,420	1,310	e1,600	e2,000	6,390	2,430	3,650	1,880	1,430	1,360
6	1,040	1,430	1,580	1,420	e1,600	e2,000	5,790	2,460	3,610	1,920	1,290	1,320
7	1,240	1,200	1,360	1,440	e1,400	e1,700	5,880	2,450	3,160	2,120	1,480	1,350
8	1,230	1,180	1,570	1,760	e1,500	e1,800	5,980	2,570	3,060	1,760	1,610	1,220
9	1,340	1,340	1,730	1,780	e1,700	e1,600	5,190	2,670	3,960	1,900	1,680	1,240
10	1,260	1,250	1,870	1,550	e1,600	e1,800	4,460	3,270	4,800	1,670	1,480	1,280
11	1,180	1,440	1,580	1,440	e1,600	e1,600	4,280	3,300	4,270	1,860	1,490	1,170
12	1,570	1,320	1,630	1,470	e1,700	e1,600	3,660	2,890	4,880	1,910	1,640	1,210
13	1,260	1,560	1,420	1,500	e1,800	e1,600	2,980	3,920	4,860	1,580	1,500	1,220
14	1,330	1,280	1,710	1,750	e1,700	e1,600	3,050	5,200	5,230	1,800	1,430	1,200
15	958	1,250	1,670	1,670	e1,600	e1,500	2,710	4,870	4,140	1,610	1,450	2,160
16	941	1,270	1,930	1,770	e1,600	e1,600	2,680	4,490	3,730	1,550	1,430	2,120
17	1,190	1,290	1,480	1,680	e1,600	e1,500	3,010	3,990	3,440	1,350	1,610	1,510
18	1,170	1,680	1,730	1,730	e1,600	e1,700	2,760	3,300	2,560	1,480	1,400	1,500
19	1,270	2,030	1,580	1,770	e1,600	e1,600	3,970	3,050	2,760	1,370	1,570	1,300
20	1,280	1,730	1,800	e1,800	e1,900	e1,700	4,530	2,950	2,110	1,600	1,330	984
21	1,360	1,780	1,730	e1,600	e1,800	e1,700	4,410	2,450	1,670	1,460	1,210	1,250
22	1,270	1,560	1,350	e1,700	e1,800	1,540	4,630	2,660	1,980	1,610	1,520	1,280
23	1,160	1,730	1,910	e1,700	e1,700	1,940	4,130	3,760	2,120	1,320	1,270	1,300
24	1,140	1,710	1,560	e1,700	e1,700	2,200	3,620	6,650	1,910	1,370	1,480	1,200
25	1,300	1,610	1,460	e1,800	e1,600	2,000	3,590	6,410	1,920	1,440	1,190	1,200
26	1,050	1,520	1,670	e1,700	e1,800	2,930	4,000	5,190	1,820	1,540	1,350	1,180
27	1,260	1,450	1,660	e1,700	e1,700	4,350	4,230	4,160	1,860	1,470	1,530	1,100
28	1,320	1,490	1,730	e1,800	e1,600	7,120	3,930	4,090	1,880	1,360	1,320	1,210
29	1,530	1,340	1,730	e1,600	e1,700	9,120	3,950	3,830	1,820	1,180	1,220	1,120
30	1,330	1,280	1,700	e1,700	---	9,650	4,030	3,570	1,810	1,450	1,220	1,030
31	1,370	---	1,600	e1,700	---	8,240	---	4,820	---	1,480	1,430	---
TOTAL	38,779	43,890	49,630	51,370	48,200	84,190	138,750	113,910	98,430	49,770	44,700	38,924
MEAN	1,251	1,463	1,601	1,657	1,662	2,716	4,625	3,675	3,281	1,605	1,442	1,297
MAX	1,570	2,030	1,930	1,800	1,900	9,650	8,090	6,650	5,610	2,120	1,680	2,160
MIN	941	1,180	1,270	1,310	1,400	1,400	2,680	2,430	1,670	1,180	1,190	984

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 2004, BY WATER YEAR (WY)

MEAN	2,534	2,386	2,086	1,982	1,928	2,580	4,750	3,682	3,091	2,335	2,072	2,510
MAX	8,654	4,632	3,887	3,138	3,063	6,275	11,500	8,931	9,923	5,862	5,451	9,069
(WY)	(1912)	(1939)	(1992)	(1939)	(1932)	(1935)	(1916)	(1904)	(1905)	(1968)	(1912)	(1903)
MIN	760	775	913	957	961	1,071	1,348	1,082	810	724	719	873
(WY)	(1977)	(1977)	(1977)	(1990)	(1990)	(1908)	(1990)	(1987)	(1988)	(1988)	(1934)	(1987)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1903 - 2004	
ANNUAL TOTAL	848,879		800,543			
ANNUAL MEAN	2,326		2,187		2,648	
HIGHEST ANNUAL MEAN					4,558	1905
LOWEST ANNUAL MEAN					1,348	1977
HIGHEST DAILY MEAN	17,500	May 12	9,650	Mar 30	36,400	Sep 1, 1941
LOWEST DAILY MEAN	941	Oct 16	941	Oct 16	90	Sep 26, 1908
ANNUAL SEVEN-DAY MINIMUM	1,160	Oct 13	1,150	(a)Sep 24	194	Sep 21, 1908
MAXIMUM PEAK FLOW			10,000	Apr 4	(b)49,400	Aug 31, 1941
MAXIMUM PEAK STAGE			9.04	Apr 4	18.26	Aug 31, 1941
10 PERCENT EXCEEDS	3,600		4,180		4,430	
50 PERCENT EXCEEDS	1,730		1,660		2,100	
90 PERCENT EXCEEDS	1,270		1,250		1,280	

(a) Also occurred Sept. 24
(b) From rating curve extended above 20,000 ft^3/s
(e) Estimated due to ice effect or missing record

05397500 EAU CLAIRE RIVER AT KELLY, WI

LOCATION (revised).--Lat 44°55'08", long 89°33'07", SE ¼ NE ¼ SE ¼ of sec. 9, T.28 N., R.8 E., Marathon County, Hydrologic Unit 07070002, directly under County Highway SS bridge on right edge of water, 0.7 mi northeast of Kelly, 1.3 mi upstream from Big Sandy Creek, 4.5 mi upstream from mouth, and 5.0 mi southeast of Wausau.

DRAINAGE AREA.--375 mi^2.

PERIOD OF RECORD.--January 1914 to November 1926, August 1939 to current year.

REVISED RECORDS.--WSP 1508: 1915, 1916-17(M), 1919-26(M), 1940(M), 1945(M), 1950(M). WDR WI-76-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,177.88 ft above NGVD of 1929. Prior to Sept. 17, 1953, nonrecording gage at site 50 ft upstream at datum 1.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	86	e130	e110	e51	e68	2,160	270	1,010	131	89	e93
2	78	84	e150	e110	e51	e73	1,660	254	958	121	122	e91
3	78	84	e140	e110	e49	e79	1,360	226	665	118	191	e87
4	79	96	e120	e110	e50	e82	1,130	206	409	160	149	e84
5	79	119	e110	e100	e50	e84	889	189	293	180	114	e81
6	78	122	e100	e90	e50	e84	744	177	240	216	96	e78
7	75	e110	e93	e85	e49	e84	672	166	211	308	90	e75
8	74	e100	e90	e83	e49	e86	652	171	186	273	92	e72
9	81	e94	e87	e79	e49	e86	607	246	279	219	105	e69
10	80	e92	e86	e78	e48	e89	537	393	409	185	98	e66
11	76	e90	e87	e76	e50	e90	458	480	404	161	96	e66
12	85	e90	e86	e75	e50	e90	402	438	610	154	91	e63
13	87	e94	e85	e73	e51	e90	355	382	745	141	88	e63
14	90	e97	e85	e68	e52	e92	321	400	1,080	128	86	64
15	84	e95	e88	e64	e51	e93	297	442	1,010	117	86	87
16	84	93	e90	e63	e51	e95	284	399	1,110	109	86	84
17	78	86	e90	e62	e51	e95	296	328	1,860	106	86	95
18	76	95	e87	e58	e51	e95	335	275	1,280	102	86	91
19	75	118	e86	e56	e52	e97	454	235	930	98	89	82
20	74	140	e89	e56	e53	e100	548	217	516	95	91	77
21	74	130	e91	e56	e54	e100	572	195	327	96	93	72
22	74	118	e91	e55	e54	e100	571	179	286	98	95	70
23	78	115	e90	e55	e54	e120	497	271	242	92	95	69
24	78	104	e87	e54	e55	e160	405	980	223	90	95	70
25	76	e120	e91	e53	e55	e240	348	1,150	204	91	95	70
26	76	e130	e91	e53	e56	e800	344	955	185	93	95	70
27	74	e140	e94	e52	e58	e2,600	336	551	171	95	95	69
28	80	e130	e110	e52	e59	e3,600	309	454	164	95	96	67
29	82	e120	e130	e52	e63	5,100	282	394	155	90	92	65
30	86	e110	e140	e52	---	5,020	258	374	143	88	86	65
31	88	---	e130	e52	---	3,180	---	744	---	88	91	---
TOTAL	2,458	3,202	3,124	2,192	1,516	22,772	18,083	12,141	16,305	4,138	3,059	2,255
MEAN	79.3	107	101	70.7	52.3	735	603	392	544	133	98.7	75.2
MAX	90	140	150	110	63	5,100	2,160	1,150	1,860	308	191	95
MIN	74	84	85	52	48	68	258	166	143	88	86	63
CFSM	0.21	0.28	0.27	0.19	0.14	1.96	1.61	1.04	1.45	0.36	0.26	0.20
IN.	0.24	0.32	0.31	0.22	0.15	2.26	1.79	1.20	1.62	0.41	0.30	0.22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2004, BY WATER YEAR (WY)

MEAN	206	229	138	89.9	89.5	351	740	367	302	160	150	203
MAX	900	784	650	217	227	1,456	1,672	1,146	1,119	691	789	1,095
(WY)	(1942)	(1920)	(1966)	(1946)	(1981)	(1973)	(1922)	(1960)	(1943)	(1978)	(1926)	(1941)
MIN	46.9	68.6	48.2	31.5	41.0	51.1	149	94.4	52.8	64.6	51.9	48.5
(WY)	(1949)	(1977)	(1926)	(1926)	(1957)	(1956)	(1990)	(1977)	(1988)	(1989)	(1948)	(1989)

05397500 EAU CLAIRE RIVER AT KELLY, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1914 - 2004	
ANNUAL TOTAL	75,521		91,245			
ANNUAL MEAN	207		249		251	
HIGHEST ANNUAL MEAN					440	1942
LOWEST ANNUAL MEAN					131	1925
HIGHEST DAILY MEAN	2,590	Apr 17	5,100	Mar 29	7,180	Aug 21, 1926
LOWEST DAILY MEAN	54	Sep 7-11	(a)48	Feb 10	(a)25	(b)Jan 6, 1926
ANNUAL SEVEN-DAY MINIMUM	54	Sep 5	(a)49	Feb 4	(a)26	Jan 10, 1926
MAXIMUM PEAK FLOW			5,820	Mar 29	(c)8,300	Aug 21, 1926
MAXIMUM PEAK STAGE			8.72	Mar 29	(d)10.14	Mar 24, 1991
INSTANTANEOUS LOW FLOW			(a)		(f)8.0	Jul 17, 1944
ANNUAL RUNOFF (CFSM)	0.552		0.665		0.670	
ANNUAL RUNOFF (INCHES)	7.49		9.05		9.11	
10 PERCENT EXCEEDS	452		503		528	
50 PERCENT EXCEEDS	90		94		129	
90 PERCENT EXCEEDS	67		56		60	

(a) Ice affected
(b) Also occurred Jan. 10-15, 17, 18, 1926, ice affected, and Oct. 3, 1948
(c) From rating curve extended above 6,000 ft^3/s, gage height, 8.4 ft, from graph based on gage readings
(d) Ice jam
(e) Estimated due to ice effect or missing record
(f) Probably result of temporary regulation

05398000 WISCONSIN RIVER AT ROTHSCHILD, WI

LOCATION.--Lat 44°53'09", long 89°38'05", in sec.26, T.28 N., R.7 E., Marathon County, Hydrologic Unit 07070002, on left bank at Rothschild, 0.5 mi downstream from Rothschild Dam, 1.7 mi north of bridge on U.S. Highway 51, 2.0 mi downstream from Eau Claire River, and 5.0 mi upstream from Black Creek.

DRAINAGE AREA.--4,020 mi^2.

PERIOD OF RECORD.--October 1944 to current year.

REVISED RECORDS.--WDR WI-77-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,125.86 ft above NGVD of 1929. Prior to Oct. 1, 1975, at datum 10.00 ft higher. Auxiliary water-stage recorder in Mosinee Pond 8 mi downstream. Prior to July 23, 1964, nonrecording auxiliary gage at same site and datum, read hourly.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Flow regulated by 20 reservoirs and 12 powerplants upstream from station. Gage-height telemeter at station.

EXTREMES OUTSIDE THE PERIOD OF RECORD.--Flood of Sept. 1, 1941, reached stage of 22.3 ft, datum then in use, from tailwater data at Rothschild dam, discharge, 75,000 ft^3/s from rating curve extended above 45,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,800	1,940	1,610	1,780	e1,800	e1,800	13,800	5,250	9,620	2,100	1,680	1,690
2	1,570	1,610	1,690	2,210	e1,700	e1,900	12,700	4,620	9,520	2,200	1,840	1,660
3	1,340	1,550	1,740	2,090	e1,700	e1,700	12,400	4,090	8,080	2,420	2,250	1,490
4	1,520	1,920	1,680	e1,700	e1,900	e1,900	11,800	3,700	6,080	2,440	1,970	1,480
5	1,660	2,230	1,620	e1,600	e1,800	e2,300	9,730	3,260	5,160	2,590	1,740	1,570
6	1,460	1,910	2,060	e1,400	e1,600	e2,200	8,660	3,270	4,900	2,790	1,830	1,760
7	1,310	1,620	1,760	e1,400	e1,700	e2,200	8,490	2,970	4,470	3,370	1,700	1,560
8	1,690	1,610	1,790	e1,600	e1,600	e2,200	8,250	3,350	4,050	2,960	1,970	1,460
9	1,470	1,620	2,080	e1,700	e1,800	e2,100	7,580	3,780	6,630	2,530	2,610	1,460
10	1,720	1,660	2,050	e1,500	e1,700	e2,200	6,760	4,800	8,770	2,650	2,280	1,640
11	1,580	1,850	2,030	e1,300	e1,600	e1,900	6,300	5,540	7,810	2,490	1,870	1,480
12	1,710	1,600	1,740	e1,500	e1,800	e2,100	5,600	4,900	9,350	2,880	2,100	1,450
13	1,570	1,960	1,520	e1,600	e1,600	e2,200	4,720	5,540	10,800	2,610	1,880	1,570
14	1,620	1,670	1,960	e1,600	e1,700	e2,100	4,380	7,870	13,300	2,180	1,840	1,520
15	1,370	1,600	1,790	e1,700	e1,700	e2,000	4,100	7,850	8,900	2,230	1,790	2,350
16	1,270	1,640	2,120	e1,500	e1,700	e2,100	4,010	6,690	7,230	1,890	1,760	3,380
17	1,390	1,570	1,980	e1,500	e1,600	e2,000	4,330	5,840	8,780	1,800	1,850	2,460
18	1,520	2,080	1,820	e1,800	e1,600	e2,000	4,480	4,910	6,620	1,820	2,160	1,930
19	1,460	2,590	1,890	e1,700	e1,700	e2,100	e6,000	4,330	5,320	1,790	2,090	1,950
20	1,650	2,410	1,820	e1,700	e1,600	e2,000	e7,100	4,110	4,100	1,890	1,750	1,450
21	1,510	2,270	e2,000	e1,800	e1,800	e2,100	e6,900	3,510	3,300	1,980	1,550	1,510
22	1,500	2,070	1,870	e1,800	e1,700	e2,100	e7,200	3,590	2,980	1,780	1,820	1,720
23	1,490	2,090	1,920	e1,900	e1,700	2,110	e6,300	5,180	3,360	1,770	1,540	1,590
24	1,400	2,220	1,870	e1,800	e1,800	2,560	e5,300	12,000	3,080	1,570	1,740	1,530
25	1,650	1,970	1,590	e1,800	e1,700	2,810	e5,200	11,300	2,720	1,850	1,600	1,470
26	1,420	1,800	1,690	e1,900	e1,600	7,520	e5,700	8,560	2,830	1,880	1,650	1,510
27	1,490	1,930	1,860	e1,800	e1,800	17,100	6,090	6,640	2,520	1,690	2,070	1,400
28	1,610	1,780	2,290	e2,000	e1,700	19,800	5,720	6,740	2,570	1,870	1,620	1,490
29	1,830	2,000	2,080	e1,700	e1,700	30,300	5,440	5,910	2,490	1,480	1,640	1,460
30	1,700	1,570	2,080	e1,500	---	27,400	5,460	5,340	2,460	1,780	1,570	1,480
31	1,590	---	2,200	e1,900	---	18,700	---	8,090	---	1,780	1,690	---
TOTAL	47,870	56,340	58,200	52,780	49,400	173,500	210,500	173,530	177,800	67,060	57,450	50,470
MEAN	1,544	1,878	1,877	1,703	1,703	5,597	7,017	5,598	5,927	2,163	1,853	1,682
MAX	1,830	2,590	2,290	2,210	1,900	30,300	13,800	12,000	13,300	3,370	2,610	3,380
MIN	1,270	1,550	1,520	1,300	1,600	1,700	4,010	2,970	2,460	1,480	1,540	1,400

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2004, BY WATER YEAR (WY)

MEAN	3,237	3,242	2,699	2,424	2,366	4,172	7,570	4,727	3,882	2,796	2,450	3,107
MAX	10,020	7,262	5,484	3,787	4,051	13,300	14,640	13,930	11,920	7,219	6,973	9,079
(WY)	(1986)	(1986)	(1992)	(1973)	(1984)	(1973)	(1967)	(1960)	(1993)	(1978)	(1995)	(1980)
MIN	837	863	973	1,025	1,024	1,613	2,081	1,515	924	933	932	1,000
(WY)	(1949)	(1977)	(1977)	(1990)	(1977)	(1956)	(1990)	(1987)	(1988)	(1988)	(1988)	(1989)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1945 - 2004	
ANNUAL TOTAL	1,158,560		1,162,950			
ANNUAL MEAN	3,174		3,177		3,555	
HIGHEST ANNUAL MEAN					5,953	1973
LOWEST ANNUAL MEAN					1,686	1977
HIGHEST DAILY MEAN	32,500	May 12	30,300	Mar 29	44,500	Mar 31, 1967
LOWEST DAILY MEAN	1,110	Aug 31	1,240	Oct 16	575	Jun 16, 1988
ANNUAL SEVEN-DAY MINIMUM	1,220	Sep 4	1,410	Oct 15	757	Nov 28, 1976
MAXIMUM PEAK FLOW			34,000	Mar 29	49,200	(a)Apr 12, 1965
MAXIMUM PEAK STAGE			25.21	Mar 29	(b)18.46	(a)Apr 12, 1965
10 PERCENT EXCEEDS	5,950		6,710		6,550	
50 PERCENT EXCEEDS	1,900		1,870		2,600	
90 PERCENT EXCEEDS	1,400		1,490		1,500	

(a) Also occurred Mar. 31, 1967
(b) Datum then in use
(e) Estimated due to ice effect or missing record

05399500 BIG EAU PLEINE RIVER AT STRATFORD, WI

LOCATION.--Lat 44°49'19", long 90°04'46", NE ¼ NE ¼ SE ¼ sec.13, T.27 N., R.4 E., Marathon County, Hydrologic Unit 07070002, on left bank 15 ft upstream from bridge on State Highway 97, 1.0 mi north of Stratford, and 1.4 mi downstream from small tributary.

DRAINAGE AREA.--224 mi^2.

PERIOD OF RECORD.--July 1914 to December 1925, April 1937 to current year. Monthly discharge for some periods published in WSP 1308. Published as "near Stratford, WI" prior to October 2002.

REVISED RECORDS.--WSP 1308: 1917, 1920-22, 1926, 1946, 1948, 1950. WSP 1508: 1915-25(M), 1937, 1946(M), 1948(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,154.24 ft above NGVD of 1929. July 24, 1914, to Dec. 31, 1925, nonrecording gage at site 0.5 mi upstream at different datum. Apr. 30, 1937, to Sept. 15, 1938, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--Flood of June 5, 1914, reached a stage of 20.7 ft, from floodmarks; discharge, 40,000 ft^3/s, former site and datum.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.3	7.4	11	e40	e3.4	e20	392	75	1,010	32	3.7	5.1
2	5.8	7.4	9.4	e34	e3.4	e62	290	65	703	20	3.7	4.5
3	5.8	7.8	8.5	e30	e3.2	e280	234	57	352	16	4.2	3.9
4	6.0	14	7.8	e20	e3.0	e460	187	46	208	15	4.8	4.2
5	5.8	19	7.8	e16	e3.0	e460	150	39	140	13	4.7	4.2
6	5.7	24	7.9	e9.2	e3.0	e340	134	36	107	24	4.1	4.6
7	6.7	20	8.0	e6.6	e3.0	e260	123	32	84	23	3.9	4.6
8	5.9	14	8.4	e6.2	e3.0	e180	111	36	68	14	4.2	4.1
9	5.3	11	e9.2	e6.0	e3.0	e140	98	39	507	10	62	3.8
10	5.3	9.1	e12	e6.0	e3.0	e100	84	274	1,270	9.0	229	3.7
11	5.9	8.9	e12	e6.4	e3.0	e94	74	223	911	9.7	77	3.7
12	8.5	9.3	e9.0	e6.4	e3.2	e86	66	132	1,910	12	41	3.7
13	6.8	9.6	e7.4	e6.2	e3.2	e78	59	363	1,040	9.2	24	3.6
14	20	9.2	e5.8	e5.9	e3.2	e72	53	396	619	8.0	14	3.9
15	11	9.2	e6.0	e5.5	e3.2	e66	49	327	294	6.2	9.7	15
16	7.4	9.4	e6.6	e5.5	e3.2	e60	50	207	199	5.4	8.2	615
17	5.9	9.3	e8.0	e5.1	e3.2	e56	62	145	690	4.9	7.8	261
18	5.4	19	e8.8	e4.9	e3.6	e54	66	110	283	4.6	7.3	110
19	5.4	34	e8.0	e4.7	e3.6	e52	103	89	152	4.3	7.0	71
20	5.8	41	e7.8	e4.7	e3.6	e52	142	111	102	4.2	7.5	51
21	6.2	32	e7.6	e4.7	e3.6	e52	137	88	78	4.2	8.2	36
22	13	25	e8.0	e4.6	e3.8	e52	161	76	62	18	6.7	25
23	6.4	21	e8.0	e4.5	e3.8	e60	130	597	51	14	5.7	19
24	5.6	20	e7.8	e4.4	e3.8	e90	99	1,080	52	7.5	5.2	16
25	7.4	17	e7.2	e4.3	e4.0	e800	101	494	56	5.8	5.1	12
26	6.6	15	e7.0	e4.3	e4.2	e6,000	136	308	45	4.9	5.3	9.8
27	5.8	13	e8.0	e4.0	e4.8	5,500	127	227	37	4.4	8.6	9.5
28	6.1	13	e18	e3.8	e5.6	6,390	105	365	36	4.0	7.5	8.3
29	6.3	12	e30	e3.6	e9.0	3,470	88	273	33	3.7	6.1	7.3
30	6.7	11	e40	e3.4	---	1,280	79	595	38	3.4	6.4	6.6
31	6.8	---	e42	e3.4	---	595	---	2,080	---	3.4	5.8	---
TOTAL	218.6	471.6	353.0	274.3	106.6	27,261	3,690	8,985	11,137	317.8	598.4	1,330.1
MEAN	7.05	15.7	11.4	8.85	3.68	879	123	290	371	10.3	19.3	44.3
MAX	20	41	42	40	9.0	6,390	392	2,080	1,910	32	229	615
MIN	5.3	7.4	5.8	3.4	3.0	20	49	32	33	3.4	3.7	3.6
CFSM	0.03	0.07	0.05	0.04	0.02	3.93	0.55	1.29	1.66	0.05	0.09	0.20
IN.	0.04	0.08	0.06	0.05	0.02	4.53	0.61	1.49	1.85	0.05	0.10	0.22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2004, BY WATER YEAR (WY)

MEAN	109	127	47.6	19.5	34.2	412	594	235	217	75.3	79.9	160
MAX	728	695	446	138	372	1,202	1,551	1,016	1,203	642	691	1,572
(WY)	(1942)	(1992)	(1966)	(1973)	(1984)	(1976)	(1951)	(1973)	(1980)	(1978)	(2002)	(1938)
MIN	2.26	4.34	2.50	0.40	0.52	8.77	51.7	15.8	5.16	2.71	2.58	1.50
(WY)	(1954)	(1954)	(1990)	(1977)	(1977)	(1956)	(1946)	(1977)	(1988)	(1988)	(1937)	(1953)

05399500 BIG EAU PLEINE RIVER AT STRATFORD, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1914 - 2004	
ANNUAL TOTAL	47,658.8		54,743.4			
ANNUAL MEAN	131		150		176	
HIGHEST ANNUAL MEAN					355	1980
LOWEST ANNUAL MEAN					47.6	1977
HIGHEST DAILY MEAN	7,400	Apr 16	6,390	Mar 28	26,100	Sep 9, 1938
LOWEST DAILY MEAN	1.1	Sep 10	(a)3.0	Feb 4	(a)0.00	(b)Jan 22, 1961
ANNUAL SEVEN-DAY MINIMUM	1.3	Sep 5	(a)3.0	Feb 4	(a)0.00	Jan 22, 1961
MAXIMUM PEAK FLOW			(c)7,690	Mar 26	(d)41,000	Sep 9, 1938
MAXIMUM PEAK STAGE			(a)15.28	Mar 26	(f)24.50	Sep 9, 1938
INSTANTANEOUS LOW FLOW			(a)		0.00	(g)Aug 17, 1947
ANNUAL RUNOFF (CFSM)	0.583		0.668		0.788	
ANNUAL RUNOFF (INCHES)	7.91		9.09		10.70	
10 PERCENT EXCEEDS	238		276		372	
50 PERCENT EXCEEDS	9.2		11		25	
90 PERCENT EXCEEDS	2.4		3.8		4.8	

(a) Ice affected
(b) Also occurred Jan. 23 to Feb. 5, 1961
(c) Gage height, 14.55 ft
(d) Based on rating curve extended above 24,000 ft^3/s
(e) Estimated due to ice effect or missing record
(f) From floodmarks
(g) Also occurred Jan. 22 to Feb. 5, 1961, ice-affected period

05400760 WISCONSIN RIVER AT WISCONSIN RAPIDS, WI

LOCATION.--Lat 44°23'41", long 89°49'31", in SW $\frac{1}{4}$ sec.8, T.22 N., R.6 E., Wood County, Hydrologic Unit 07070003, at Consolidated Water Power Company, 0.2 mi upstream from U.S. Highway 13 bridge in Wisconsin Rapids.

DRAINAGE AREA.--5,420 mi^2.

PERIOD OF RECORD.--May 1914 to March 1950 published as Wisconsin River near Nekoosa (05400980), October 1957 to current year. October 1957 to September 1981, published under station number 05400800 with same name.

REVISED RECORDS.--WSP 1308: 1915(M).

GAGE.--Water-stage recorders on headwater and tailwater. Elevation of powerplant pond is 1,010 ft and datum of powerplant gages is 0.00 ft above NGVD of 1929 (levels by Wisconsin Valley Improvement Co.). May 1914 to March 1950, at site 9.6 mi downstream at different datum. March 1950 to Sept. 30, 1981, at Centralia Powerplant at Nekoosa Papers, Inc., 2.6 mi downstream. March 1950 to Dec. 31, 1973, datum was 887.83 ft above NGVD of 1929. Jan. 1, 1974, changed to present datum.

REMARKS.--Discharge computed from powerplant records on basis of load-discharge rating of hydroelectric units as developed by manufacturer and tainter-gate ratings based on theoretical formulas. Flow regulated by 22 reservoirs and many powerplants upstream from station. Water diverted periodically from pond on Wisconsin Rapids powerplant into Cranberry Creek, a tributary of Yellow River, for cranberry culture.

COOPERATION.--Figures of daily discharges were provided by Consolidated Water Power Company and Wisconsin Valley Improvement Company. Records were reviewed by the Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,250	1,500	1,970	2,260	1,900	2,250	20,400	5,400	15,900	2,090	2,340	1,940
2	1,820	1,860	1,790	2,280	2,080	2,500	17,500	4,910	12,800	2,270	2,580	2,050
3	1,400	2,020	1,310	2,540	2,600	2,390	17,000	4,350	11,500	3,150	2,520	2,230
4	1,400	1,930	1,470	2,520	2,390	2,640	15,000	3,460	8,480	4,100	2,510	2,090
5	1,410	2,020	1,710	1,970	2,040	3,420	11,200	3,350	7,170	3,460	2,460	1,410
6	1,410	2,060	1,840	1,590	2,360	3,410	9,790	3,720	6,240	4,400	1,740	1,380
7	1,350	2,000	1,690	1,510	2,020	3,010	8,960	2,670	5,780	4,000	1,810	2,180
8	1,300	1,430	2,380	1,570	1,980	2,870	12,600	3,440	5,720	4,030	1,690	1,500
9	1,300	1,320	2,270	2,320	1,960	2,940	8,720	4,230	9,590	3,540	2,780	1,930
10	1,320	1,450	2,690	2,230	2,220	2,930	8,460	7,340	14,300	3,170	2,920	1,530
11	1,820	2,150	1,870	1,980	2,260	3,940	6,770	7,710	16,200	3,020	2,260	1,410
12	1,950	1,770	1,970	1,930	1,820	2,970	6,430	7,520	17,300	2,870	2,200	1,690
13	1,980	2,690	1,900	1,520	2,240	2,850	5,150	8,410	20,300	2,960	2,090	1,930
14	1,650	1,890	1,700	2,000	2,340	3,080	5,160	11,500	19,600	3,380	2,050	1,940
15	1,580	1,890	2,270	2,230	2,130	3,150	3,910	11,000	16,000	2,660	1,900	2,980
16	1,580	1,430	2,800	2,240	1,970	2,730	3,370	9,060	11,600	2,440	1,840	3,060
17	1,390	1,360	2,240	2,510	1,980	2,770	3,570	8,280	13,100	2,470	1,850	2,480
18	1,310	1,520	2,360	2,040	2,200	2,850	3,420	5,660	11,400	2,230	1,900	2,210
19	1,130	2,640	2,000	2,060	2,160	2,380	6,850	5,060	7,200	2,420	1,950	2,290
20	925	2,620	1,620	2,280	2,210	2,900	6,570	6,220	6,360	2,460	2,250	1,920
21	1,360	2,750	1,690	2,290	2,490	2,580	8,290	5,570	4,000	2,290	1,740	1,460
22	1,580	2,400	2,770	2,370	2,440	2,660	7,580	4,530	4,240	2,280	1,520	1,670
23	1,780	2,510	2,440	1,840	1,790	3,000	7,960	9,000	3,630	2,010	1,510	1,680
24	1,280	2,740	2,000	2,490	1,780	3,200	5,970	17,300	3,790	2,060	1,640	1,750
25	1,180	2,210	2,020	2,320	2,190	4,160	5,140	17,700	4,020	1,840	2,750	1,830
26	1,240	2,110	2,070	1,860	2,210	9,280	4,840	12,700	3,230	1,840	1,940	1,590
27	1,250	1,900	1,760	2,190	2,580	20,700	4,390	10,700	2,940	2,110	1,960	1,610
28	1,200	2,040	2,500	1,830	2,390	25,300	5,780	7,780	3,100	2,140	2,410	1,650
29	1,520	2,140	2,700	2,340	1,780	32,400	6,400	8,990	3,100	2,490	2,190	1,590
30	1,470	1,950	2,890	2,140	---	37,900	5,440	7,420	2,850	1,890	2,030	1,540
31	1,270	---	2,610	1,830	---	29,900	---	12,700	---	1,850	1,960	---
TOTAL	45,405	60,300	65,300	65,080	62,510	229,060	242,620	237,680	271,440	83,920	65,290	56,520
MEAN	1,465	2,010	2,106	2,099	2,156	7,389	8,087	7,667	9,048	2,707	2,106	1,884
MAX	2,250	2,750	2,890	2,540	2,600	37,900	20,400	17,700	20,300	4,400	2,920	3,060
MIN	925	1,320	1,310	1,510	1,780	2,250	3,370	2,670	2,850	1,840	1,510	1,380

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2004, BY WATER YEAR (WY)

MEAN	4,106	4,315	3,288	3,019	3,136	6,309	11,030	6,960	6,114	3,528	3,134	4,255
MAX	13,070	10,270	7,928	5,589	6,368	19,180	25,940	19,730	19,560	10,820	9,199	17,670
(WY)	(1987)	(1920)	(1966)	(1973)	(1984)	(1973)	(1922)	(1960)	(1943)	(1978)	(1926)	(1938)
MIN	1,075	1,072	1,141	1,272	1,333	1,547	2,579	1,669	1,308	1,123	1,173	1,227
(WY)	(1977)	(1977)	(1990)	(1990)	(1977)	(1924)	(1990)	(1987)	(1988)	(1988)	(1934)	(1976)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1914 - 2004	
ANNUAL TOTAL	1,458,615		1,485,125			
ANNUAL MEAN	3,996		4,058		4,925	
HIGHEST ANNUAL MEAN					8,499	1973
LOWEST ANNUAL MEAN					2,107	1977
HIGHEST DAILY MEAN	41,100	May 13	37,900	Mar 30	63,600	Jun 21, 1993
LOWEST DAILY MEAN	925	Oct 20	925	Oct 20	165	Aug 12, 1934
ANNUAL SEVEN-DAY MINIMUM	1,300	Oct 25	1,300	Oct 25	790	Jun 18, 1988
MAXIMUM PEAK FLOW			38,000	Mar 30	(a)70,400	Sep 12, 1938
10 PERCENT EXCEEDS	7,670		8,970		9,560	
50 PERCENT EXCEEDS	2,420		2,320		3,340	
90 PERCENT EXCEEDS	1,470		1,520		1,790	

(a) From rating curve extended above 58,000 ft^3/s

05401050 TENMILE CREEK NEAR NEKOOSA, WI

LOCATION.--Lat 44°15'45", long 89°48'37" in NE ¼ NE ¼ sec.32, T.21 N., R.6 E., Wood County, Hydrologic Unit 07070003, on left bank upstream from bridge on State Highway 13, 5.8 mi southeast of Nekoosa.

DRAINAGE AREA.--73.3 mi^2.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1962-63. October 1963 to September 1979, October 1987 to September 1994, February 1998 to current year.

REVISED RECORDS.--WDR WI-77-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 967.39 ft above NGVD of 1929. Prior to May 13, 1964, and June 2, 1988 to May 2, 1989, non-recording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Approximately 40 mi of drainage ditches and 22 check dams are used to control the water table in the basin. Sprinkler irrigation from ground-water sources affects natural flow of creek. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	18	25	e23	17	20	93	51	136	130	79	64
2	18	18	21	e23	17	29	85	48	138	125	77	63
3	20	20	21	e23	16	37	72	46	133	121	76	61
4	19	24	22	22	e16	45	70	60	124	133	75	59
5	18	21	20	e21	16	56	67	59	118	139	73	58
6	18	20	21	e16	16	75	65	59	115	144	71	58
7	18	19	21	20	16	75	80	57	111	149	69	57
8	18	19	24	20	15	72	87	61	107	141	69	55
9	18	19	29	20	e15	73	78	67	105	133	68	53
10	18	19	e24	20	15	76	73	74	108	127	67	53
11	18	20	e21	20	15	78	55	77	154	123	66	52
12	18	21	e17	22	15	63	52	78	219	119	65	51
13	18	19	e20	23	15	65	65	85	240	117	63	50
14	18	18	e23	22	15	72	75	92	269	114	62	50
15	17	22	25	20	e15	70	68	95	269	110	60	57
16	17	22	25	20	e15	70	66	95	241	107	61	56
17	17	22	24	20	e15	69	63	93	293	105	62	55
18	17	24	25	e19	16	68	63	89	410	102	60	53
19	17	29	24	e18	16	66	65	83	363	99	59	52
20	16	24	24	e19	16	67	62	92	304	97	57	50
21	16	22	23	19	16	67	66	102	255	95	55	49
22	16	24	24	e17	16	61	67	109	230	92	55	49
23	16	27	24	e18	16	64	63	121	215	89	55	48
24	17	26	23	e18	16	54	61	134	196	87	58	49
25	18	22	22	17	15	55	63	134	179	86	65	48
26	19	27	23	17	16	73	61	125	169	84	65	47
27	18	28	23	17	16	89	59	120	159	82	73	46
28	19	29	26	e17	16	93	60	114	151	80	72	46
29	19	27	26	e16	17	99	61	112	142	79	69	44
30	19	29	e25	e16	---	102	60	116	137	77	67	42
31	19	---	e24	e17	---	96	---	127	---	79	66	---
TOTAL	553	679	719	600	456	2,099	2,025	2,775	5,790	3,365	2,039	1,575
MEAN	17.8	22.6	23.2	19.4	15.7	67.7	67.5	89.5	193	109	65.8	52.5
MAX	20	29	29	23	17	102	93	134	410	149	79	64
MIN	16	18	17	16	15	20	52	46	105	77	55	42
CFSM	0.24	0.31	0.32	0.26	0.21	0.92	0.92	1.22	2.63	1.48	0.90	0.72
IN.	0.28	0.34	0.36	0.30	0.23	1.07	1.03	1.41	2.94	1.71	1.03	0.80

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2004, BY WATER YEAR (WY)

MEAN	50.0	51.1	47.0	34.8	34.0	65.9	101	89.7	83.5	63.7	48.2	51.0
MAX	129	100	107	79.8	90.5	192	170	205	193	139	98.1	100
(WY)	(1973)	(1973)	(1966)	(1973)	(1966)	(1973)	(1979)	(1973)	(2004)	(1993)	(1990)	(1965)
MIN	17.8	19.5	14.6	12.6	11.2	16.1	47.3	44.7	37.4	23.6	17.4	20.3
(WY)	(2004)	(1977)	(1965)	(1965)	(1965)	(1964)	(1964)	(1977)	(1964)	(1988)	(1964)	(2003)

05401050 TENMILE CREEK NEAR NEKOOSA, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1964 - 2004	
ANNUAL TOTAL	13,549		22,675			
ANNUAL MEAN	37.1		62.0		60.2	
HIGHEST ANNUAL MEAN					113	1973
LOWEST ANNUAL MEAN					30.2	1964
HIGHEST DAILY MEAN	101	May 13	410	Jun 18	427	Mar 31, 1979
LOWEST DAILY MEAN	16	Oct 20-23	15	(a)Feb 8	10	(b)Feb 13, 1964
ANNUAL SEVEN-DAY MINIMUM	16	Oct 17	(c)15	Feb 8	10	Feb 22, 1964
MAXIMUM PEAK FLOW			420	Jun 18	456	Mar 31, 1979
MAXIMUM PEAK STAGE			7.20	Jun 18	7.20	Jun 18, 2004
INSTANTANEOUS LOW FLOW			12	(d)Feb 8	9.5	Dec 16, 1964
ANNUAL RUNOFF (CFSM)	0.506		0.845		0.821	
ANNUAL RUNOFF (INCHES)	6.88		11.51		11.15	
10 PERCENT EXCEEDS	71		124		106	
50 PERCENT EXCEEDS	24		55		52	
90 PERCENT EXCEEDS	19		17		23	

(a) Also occurred Feb. 9-17, 25 (Feb. 9, 15-17 ice affected)
(b) Also occurred Feb. 14, 15, Feb. 22 to Mar. 2, 1964, and Feb. 2-4, 11, 12, 1965
(c) Ice affected
(d) Also occurred Feb. 14 and 15
(e) Estimated due to ice effect or missing record

05402000 YELLOW RIVER AT BABCOCK, WI

LOCATION.--Lat 44°18'08", long 90°07'19" in SE $^1/_4$ NE $^1/_4$ sec.15, T.21 N., R.3 E., Wood County, Hydrologic Unit 07070003, on right bank, 600 ft upstream of bridge on State Highway 80 at Babcock, 2.0 mi upstream from Hemlock Creek.

DRAINAGE AREA.--215 mi^2.

PERIOD OF RECORD.--March 1944 to September 1996, September 1997 to current year.

REVISED RECORDS.--WSP 1308: 1944(M), 1946-47(M), 1949(M). WDR WI-77-1: Drainage area. WDR WI-82-1: 1981 (P).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 954.75 ft above NGVD of 1929. Prior to Oct. 28, 1948, nonrecording gage at site 600 ft downstream at same datum. Oct. 28, 1948 to Apr. 9, 1996, water-stage recorder at site 600 ft downstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). There is a large recreation dam about 5.0 mi upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	8.9	16	e9.0	e6.0	e18	491	66	1,650	57	13	11
2	3.9	14	e16	e8.0	e6.0	e32	321	67	1,230	50	15	11
3	5.2	14	15	e7.0	e7.0	e70	252	62	733	44	18	11
4	5.2	18	14	e6.0	e7.0	e160	206	57	381	49	19	10
5	5.0	24	14	e5.0	e8.0	e260	169	62	266	64	17	10
6	4.8	18	13	e6.0	e8.0	e230	145	59	174	85	14	11
7	4.5	11	13	e7.0	e9.0	e200	129	50	155	171	12	11
8	4.6	8.1	13	e7.0	e9.0	e180	116	53	125	190	11	12
9	4.5	7.9	13	e7.0	e8.0	e160	107	104	696	135	12	11
10	4.7	13	e13	e7.0	e8.0	e160	96	465	1,380	96	13	9.9
11	4.6	23	e11	e7.0	e7.0	e170	88	909	2,400	74	13	9.3
12	5.9	27	e12	e7.0	e7.0	e210	80	513	3,250	62	13	9.1
13	6.6	25	e12	e7.0	e7.0	e250	75	710	2,480	52	11	8.7
14	8.7	19	e12	e8.0	e7.0	245	70	1,120	1,940	46	9.9	9.6
15	7.6	15	e12	e8.0	e7.0	196	65	847	1,020	38	9.0	17
16	7.6	15	e11	e8.0	e7.0	148	62	621	556	33	8.9	24
17	7.4	15	e11	e8.0	e8.0	98	61	373	680	30	9.6	20
18	6.6	16	e11	e8.0	e8.0	111	58	226	1,220	27	10	16
19	6.2	19	e11	e7.0	e7.0	104	61	186	691	24	12	14
20	5.9	20	e11	e7.0	e7.0	97	67	182	336	22	11	13
21	6.0	23	e10	e7.0	e7.0	142	79	251	224	21	9.7	13
22	6.3	27	e10	e7.0	e8.0	154	102	344	182	20	8.9	13
23	6.7	27	e9.0	e8.0	e8.0	170	115	626	139	19	8.3	13
24	6.8	26	e9.0	e7.0	e8.0	182	111	1,900	135	17	8.7	13
25	6.8	33	e9.0	e7.0	e8.0	431	102	1,690	226	15	9.9	13
26	6.6	21	e9.0	e6.0	e8.0	2,180	102	1,060	161	14	12	13
27	6.3	19	e9.0	e6.0	e7.0	3,710	107	610	114	13	13	13
28	6.3	18	e9.0	e6.0	e7.0	2,120	104	358	93	12	13	12
29	6.4	17	e9.0	e5.0	e8.0	1,860	90	286	76	12	12	13
30	6.4	17	e9.0	e6.0	---	1,340	68	342	65	11	12	12
31	6.5	---	e9.0	e6.0	---	786	---	1,450	---	11	11	---
TOTAL	184.7	558.9	355.0	215.0	217.0	16,174	3,699	15,649	22,778	1,514	369.9	376.6
MEAN	5.96	18.6	11.5	6.94	7.48	522	123	505	759	48.8	11.9	12.6
MAX	8.7	33	16	9.0	9.0	3,710	491	1,900	3,250	190	19	24
MIN	3.9	7.9	9.0	5.0	6.0	18	58	50	65	11	8.3	8.7
CFSM	0.03	0.09	0.05	0.03	0.03	2.43	0.57	2.35	3.53	0.23	0.06	0.06
IN.	0.03	0.10	0.06	0.04	0.04	2.80	0.64	2.71	3.94	0.26	0.06	0.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2004, BY WATER YEAR (WY)

MEAN	106	110	61.5	25.7	45.4	379	544	240	202	66.7	51.3	122
MAX	561	508	374	132	373	1,353	1,319	1,183	1,516	453	371	1,169
(WY)	(1987)	(1983)	(1966)	(1973)	(1966)	(1973)	(1952)	(1973)	(1993)	(1978)	(1980)	(1986)
MIN	3.68	4.62	7.35	5.03	4.56	8.13	85.9	28.0	8.56	4.68	4.01	2.23
(WY)	(1949)	(1977)	(1951)	(1945)	(2003)	(1956)	(1946)	(1977)	(1988)	(1988)	(1988)	(1948)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1944 - 2004	
ANNUAL TOTAL	34,193.4		62,091.1			
ANNUAL MEAN	93.7		170		163	
HIGHEST ANNUAL MEAN					376	1973
LOWEST ANNUAL MEAN					37.4	1977
HIGHEST DAILY MEAN	2,040	Apr 18	3,710	Mar 27	10,300	Apr 2, 1952
LOWEST DAILY MEAN	(b)3.2	Sep 7	3.9	Oct 2	1.4	(a)Sep 14, 1948
ANNUAL SEVEN-DAY MINIMUM	3.3	Sep 5	4.7	Oct 1	1.4	Sep 13, 1948
MAXIMUM PEAK FLOW			3,950	Mar 27	11,600	Apr 2, 1952
MAXIMUM PEAK STAGE			12.81	Mar 27	17.38	Apr 2, 1952
INSTANTANEOUS LOW FLOW			3.7	Oct 1, 2	0.94	Aug 11, 1985
ANNUAL RUNOFF (CFSM)	0.436		0.789		0.756	
ANNUAL RUNOFF (INCHES)	5.92		10.74		10.27	
10 PERCENT EXCEEDS	205		375		364	
50 PERCENT EXCEEDS	12		14		31	
90 PERCENT EXCEEDS	4.3		6.8		8.0	

(a) Also occurred Sept. 15-19, 25, 26, 1948
(b) Also occurred Sept. 8-11
(e) Estimated due to ice effect or missing record

05404000 WISCONSIN RIVER NEAR WISCONSIN DELLS, WI

LOCATION.--Lat 43°36'22", long 89°45'25" in NW $^1/_4$ sec.14, T.13 N., R.6 E., Sauk County, Hydrologic Unit 07070003, on right bank 0.5 mi downstream from Dell Creek and 1.8 mi southeast of Wisconsin Dells.

DRAINAGE AREA.--8,090 mi^2.

PERIOD OF RECORD.--October 1934 to current year.

REVISED RECORDS.--WSP 1728: 1936(M). WSP 1914: 1951, 1953-55. WDR WI-77-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 801.48 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1963, water-stage recorder at same site at datum 5.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Flow regulated by 24 reservoirs above station. In 1938, when the maximum of record occurred, there were 21 reservoirs above station, the two large reservoirs, Petenwell and Castle Rock, were not in existence. Diurnal fluctuation is caused by powerplant of Alliant Energy Company at Wisconsin Dells. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

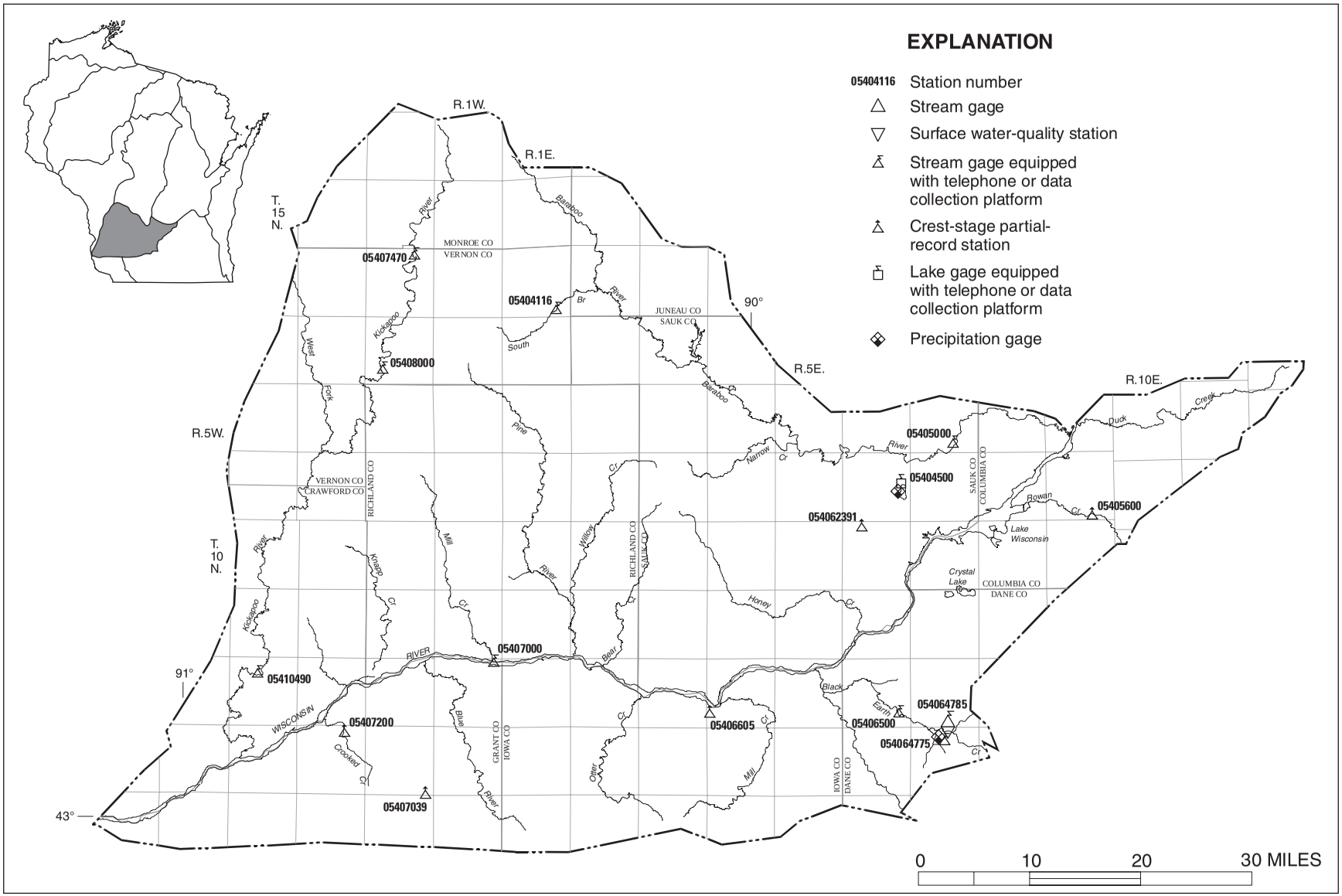
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,660	2,320	3,030	3,070	e4,200	4,110	29,200	10,200	16,600	6,560	4,020	3,670
2	2,770	2,390	3,280	3,170	e3,800	4,520	19,100	7,620	21,900	4,630	4,470	3,590
3	2,610	2,700	3,090	3,120	e4,300	5,840	8,250	6,110	21,200	4,810	5,540	3,330
4	2,640	3,370	3,340	3,040	e4,300	4,930	10,400	5,290	16,700	6,130	5,330	3,070
5	2,650	3,290	3,300	3,360	e5,800	6,640	14,700	4,330	16,200	9,400	5,310	2,790
6	2,690	3,150	3,270	4,540	e4,900	8,060	14,200	4,940	15,800	9,230	3,580	2,820
7	2,640	2,960	2,820	4,010	e4,700	7,540	11,500	5,080	11,300	8,450	3,230	2,550
8	2,370	2,930	2,810	3,560	e4,100	7,070	9,680	5,170	10,900	8,680	3,010	2,820
9	1,790	2,900	2,810	3,600	e4,300	7,380	9,980	5,100	11,000	6,540	3,100	2,740
10	2,010	2,870	2,910	3,970	e4,800	6,500	10,900	6,390	16,000	8,550	3,340	2,630
11	2,210	2,860	e2,200	3,860	e5,700	6,980	11,400	9,260	24,100	8,110	4,550	2,830
12	2,210	2,970	e2,300	4,890	6,310	6,560	9,710	9,890	30,000	6,310	4,190	2,660
13	2,600	2,770	2,960	3,690	5,530	6,900	6,970	10,100	32,800	5,800	3,010	2,770
14	2,700	2,840	3,160	3,960	4,180	6,890	6,300	12,800	33,600	5,740	2,960	2,800
15	2,760	2,870	3,150	3,620	4,160	6,180	5,920	15,500	35,300	6,660	2,980	3,080
16	2,600	2,890	3,270	4,620	3,830	6,080	6,340	15,900	35,700	6,460	2,950	5,330
17	2,650	2,890	3,480	4,860	3,420	5,930	5,670	15,500	27,100	4,460	2,960	4,020
18	2,490	3,080	3,590	4,190	3,520	5,610	5,510	12,800	22,400	5,530	3,220	4,890
19	2,310	3,020	3,530	3,950	3,540	5,230	5,950	10,800	24,800	3,820	3,880	3,630
20	2,120	2,920	3,200	3,690	3,540	5,450	8,690	10,400	15,100	3,320	3,850	3,240
21	2,200	3,310	3,130	4,180	3,940	5,190	7,190	11,700	12,900	4,040	2,890	2,880
22	2,120	3,450	3,060	e2,800	4,410	6,160	8,720	13,400	12,500	3,880	3,310	2,800
23	2,130	3,620	2,920	e3,600	3,880	4,400	9,490	14,200	12,900	4,030	2,910	2,670
24	2,490	3,550	2,750	e4,400	4,060	4,620	9,840	15,300	11,000	4,060	3,100	2,750
25	2,400	3,350	2,910	e4,800	3,290	5,910	9,590	22,600	9,780	4,160	3,440	2,710
26	2,440	3,370	2,960	e3,300	3,370	6,870	6,590	23,500	9,840	3,610	3,330	2,810
27	2,390	3,210	2,890	e3,500	3,900	8,210	6,570	23,600	8,500	3,060	4,100	2,630
28	1,980	3,180	2,940	e3,700	3,540	8,580	6,590	22,600	6,360	3,450	5,210	2,630
29	2,390	3,450	2,900	e3,500	3,930	15,500	6,300	14,600	6,800	3,250	4,900	2,640
30	2,170	3,090	2,930	e2,900	---	27,900	8,930	15,900	7,170	3,390	4,100	2,530
31	2,280	---	2,960	e4,400	---	31,000	---	15,300	---	3,350	3,930	---
TOTAL	74,470	91,570	93,850	117,850	123,250	248,740	290,180	375,880	536,250	169,470	116,700	92,310
MEAN	2,402	3,052	3,027	3,802	4,250	8,024	9,673	12,130	17,880	5,467	3,765	3,077
MAX	2,770	3,620	3,590	4,890	6,310	31,000	29,200	23,600	35,700	9,400	5,540	5,330
MIN	1,790	2,320	2,200	2,800	3,290	4,110	5,510	4,330	6,360	3,060	2,890	2,530

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 2004, BY WATER YEAR (WY)

MEAN	5,859	6,160	5,054	4,768	5,028	8,051	12,990	9,598	8,822	5,377	4,366	5,811
MAX	19,120	13,900	10,740	7,831	9,614	25,620	25,050	26,990	27,090	13,350	10,700	25,900
(WY)	(1987)	(1983)	(1966)	(1992)	(1984)	(1973)	(1951)	(1960)	(1993)	(1978)	(1995)	(1938)
MIN	1,683	1,688	1,746	2,434	2,432	2,945	2,939	3,361	1,826	1,713	1,634	1,754
(WY)	(1977)	(1977)	(1990)	(1945)	(1945)	(1940)	(1964)	(1977)	(1988)	(1988)	(1988)	(1976)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1935 - 2004	
ANNUAL TOTAL	1,967,190		2,330,520			
ANNUAL MEAN	5,390		6,368		6,819	
HIGHEST ANNUAL MEAN					12,420	1973
LOWEST ANNUAL MEAN					2,993	1977
HIGHEST DAILY MEAN	40,300	May 15	35,700	Jun 16	71,200	Sep 14, 1938
LOWEST DAILY MEAN	(e)1,400	(a)Sep 7, 8	1,790	Oct 9	1,060	Aug 19, 1936
ANNUAL SEVEN-DAY MINIMUM	(e)1,950	(a)Sep 5	2,250	Oct 19	1,210	Aug 10, 1988
MAXIMUM PEAK FLOW			36,500	Jun 16	72,200	Sep 14, 1938
MAXIMUM PEAK STAGE			13.74	Jun 16	(b)23.83	Sep 14, 1938
10 PERCENT EXCEEDS	9,690		13,600		12,200	
50 PERCENT EXCEEDS	3,450		4,020		5,180	
90 PERCENT EXCEEDS	2,600		2,660		2,900	

(a) Regulation at dam upstream
(c) Present datum
(e) Estimated due to ice effect or missing record



Base from U.S. Geological Survey 1:100,000 digital data; modified by Wisconsin Department of Natural Resources. Wisconsin Transverse Mercator projection.

LOWER WISCONSIN RIVER BASIN

05404116 SOUTH BRANCH BARABOO RIVER AT HILLSBORO, WI

LOCATION.--Lat 43°39'10", long 90°20'09", in NE ¼ NE ¼ sec.35, T.14 N., R.1 E., Vernon County, Hydrologic Unit 07070004, on left bank 220 ft upstream from County Highway FF at Hillsboro, and 6.3 mi upstream from mouth.

DRAINAGE AREA.--39.1 mi^2.

PERIOD OF RECORD.--July 1988 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 927.28 ft above NGVD of 1929 (levels by Mid-State Associates, Baraboo, WI).

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Flows are occasionally regulated by dam 0.35 mi upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	9.6	11	12	e7.5	316	20	15	81	20	15	15
2	9.5	11	10	14	8.6	187	19	12	59	19	15	15
3	12	17	11	14	9.0	37	18	12	41	23	17	14
4	12	93	11	11	8.8	32	17	12	35	33	28	14
5	11	20	12	e9.5	9.0	596	17	11	33	24	16	14
6	11	15	11	e8.4	9.8	54	17	12	40	29	15	15
7	11	14	12	e8.4	9.4	28	17	11	32	27	15	14
8	10	12	12	e8.5	9.3	20	16	63	29	23	15	14
9	9.8	11	12	e8.8	9.5	19	16	82	54	32	16	13
10	9.7	12	15	9.3	9.5	20	15	50	242	25	15	13
11	10	13	12	10	9.4	21	15	27	522	22	15	13
12	12	14	10	11	9.5	16	15	61	147	22	15	13
13	10	13	9.5	11	9.5	16	15	199	174	20	14	13
14	12	12	11	10	9.5	23	14	56	66	19	14	13
15	10	13	12	9.4	9.1	16	15	30	51	18	14	17
16	9.2	13	13	9.6	9.1	16	15	25	34	18	15	17
17	9.1	12	12	10	9.1	17	16	21	98	17	18	14
18	9.2	14	11	9.1	9.3	21	28	20	41	17	16	14
19	9.0	13	11	7.8	10	22	21	18	33	17	15	13
20	9.1	12	9.8	7.8	12	26	19	191	29	20	14	13
21	8.9	12	11	8.0	12	19	27	480	28	22	14	13
22	8.8	12	12	7.4	12	16	18	537	29	20	14	13
23	8.8	22	12	6.6	13	17	16	291	26	17	14	13
24	9.1	17	11	6.5	18	20	14	112	29	16	16	14
25	9.2	13	10	e6.7	15	25	17	60	26	16	17	14
26	8.9	13	10	e7.0	21	78	17	48	23	15	16	13
27	9.3	13	13	e7.2	24	32	14	37	23	15	21	13
28	10	12	33	e7.2	44	44	14	23	25	15	16	13
29	9.9	12	17	e7.3	92	36	12	132	22	16	16	12
30	10	12	14	e7.3	---	25	13	340	21	16	16	13
31	10	---	13	e7.4	---	22	---	279	---	15	15	---
TOTAL	308.0	481.6	384.3	278.2	437.9	1,837	507	3,267	2,093	628	492	412
MEAN	9.94	16.1	12.4	8.97	15.1	59.3	16.9	105	69.8	20.3	15.9	13.7
MAX	12	93	33	14	92	596	28	537	522	33	28	17
MIN	8.8	9.6	9.5	6.5	7.5	16	12	11	21	15	14	12
CFSM	0.25	0.41	0.32	0.23	0.39	1.52	0.43	2.70	1.78	0.52	0.41	0.35
IN.	0.29	0.46	0.37	0.26	0.42	1.75	0.48	3.11	1.99	0.60	0.47	0.39

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2004, BY WATER YEAR (WY)

MEAN	15.1	17.3	14.0	13.3	18.5	35.0	33.9	30.8	34.6	18.6	16.1	20.8
MAX	26.1	28.6	22.9	26.8	31.5	59.3	70.9	105	75.3	52.3	28.2	95.3
(WY)	(1994)	(1993)	(1993)	(1996)	(1999)	(2004)	(1993)	(2004)	(1990)	(1993)	(1993)	(1992)
MIN	6.79	8.14	4.42	8.95	6.91	14.5	8.47	13.2	8.38	5.83	6.69	6.12
(WY)	(1990)	(1991)	(1990)	(1991)	(1989)	(2000)	(1990)	(1989)	(1989)	(1989)	(1988)	(1990)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1988 - 2004	
ANNUAL TOTAL	5,640.3		11,126.0			
ANNUAL MEAN	15.5		30.4		22.5	
HIGHEST ANNUAL MEAN					35.1	1993
LOWEST ANNUAL MEAN					13.0	1989
HIGHEST DAILY MEAN	154	May 11	596	Mar 5	1,190	Sep 16, 1992
LOWEST DAILY MEAN	(a)1.0	Sep 1	6.5	Jan 24	(a)1.0	Sep 1, 2003
ANNUAL SEVEN-DAY MINIMUM	6.5	Aug 18	(b)6.9	Jan 23	(c)1.4	Jul 22, 1994
MAXIMUM PEAK FLOW			1,390	May 21	(d)4,010	Jun 29, 1990
MAXIMUM PEAK STAGE			13.13	May 21	(f)15.60	Jun 29, 1990
ANNUAL RUNOFF (CFSM)	0.395		0.777		0.574	
ANNUAL RUNOFF (INCHES)	5.37		10.59		7.80	
10 PERCENT EXCEEDS	23		41		34	
50 PERCENT EXCEEDS	12		15		15	
90 PERCENT EXCEEDS	8.9		9.2		8.2	

(a) Result of gate regulation at dam 0.35 mi upstream
(b) Ice affected
(c) Result of closing dam gates to fill lake 0.35 mi upstream
(d) From rating curve extended above 1,100 ft^3/s, on basis of contracted-area measurement
(e) Estimated due to ice effect or missing record
(f) From floodmark on gage house

05404500 DEVILS LAKE NEAR BARABOO, WI

LOCATION.--Lat 43°25'35", long 89°43'40", in SW¼ SE¼ sec.13, T.11 N., R.6 E., Sauk County, Hydrologic Unit 07070004, in Devils Lake State Park, 3.5 mi south of Baraboo.

DRAINAGE AREA.--4.79 mi^2. Area of Devils Lake, 361 acres.

GAGE-HEIGHT RECORD

PERIOD OF RECORD.--June 1922 to August 1930, June to August 1932, June 1934 to September 1981 (fragmentary). October 1981 to September 1984, data unpublished in district files. October 1984 to current year.

REVISED RECORDS.--WDR WI-78-1: Drainage area.

GAGE.--Water-stage recorder installed July 17, 1991. Datum of gage is 955.00 ft, above NGVD of 1929.

REMARKS.--Lake has no surface outlet. Water removed from lake by siphon Oct. 1-8, June 18 to July 15, Aug. 19 to Sept. 3 and Sept. 7-30. Water diverted into lake (during runoff events) from Nov. 11 to Apr. 7.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height observed, 14.13 ft, July 18, 1993; minimum observed, 1.49 ft Feb. 8, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum recorded gage height, 11.87 ft, June 17 and 18; minimum recorded, 6.63 ft, Nov. 1 and 2.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.08	6.66	6.95	7.13	7.13	7.27	8.92	8.86	10.67	11.24	10.77	10.10
2	7.04	6.67	6.95	7.14	7.14	7.36	8.93	8.84	10.68	11.24	10.77	10.05
3	7.00	6.73	6.94	7.15	7.15	7.42	8.93	8.83	10.68	11.21	10.79	10.00
4	6.98	6.90	6.94	7.16	7.15	7.47	8.94	8.81	10.67	11.31	10.89	9.98
5	6.95	6.90	6.94	7.16	7.15	7.79	8.94	8.79	10.66	11.32	10.86	9.96
6	6.94	6.89	6.94	7.17	7.19	8.00	8.94	8.78	10.66	11.31	10.83	9.93
7	6.90	6.88	6.93	7.16	7.19	8.08	8.95	8.76	10.66	11.27	10.80	9.89
8	6.87	6.86	6.93	7.16	7.19	8.13	8.93	8.79	10.64	11.22	10.77	9.83
9	6.86	6.85	6.92	7.16	7.19	8.17	8.93	8.91	10.68	11.19	10.74	9.78
10	6.86	6.84	7.00	7.15	7.18	8.20	8.92	8.94	11.17	11.17	10.70	9.73
11	6.85	6.83	7.02	7.15	7.18	8.25	8.90	8.96	11.50	11.13	10.66	9.68
12	6.85	6.83	7.02	7.15	7.18	8.27	8.89	8.98	11.65	11.09	10.62	9.63
13	6.84	6.81	7.01	7.15	7.18	8.28	8.88	9.04	11.72	11.04	10.59	9.59
14	6.86	6.80	7.01	7.15	7.17	8.32	8.86	9.12	11.76	10.98	10.56	9.53
15	6.84	6.80	7.01	7.15	7.17	8.34	8.85	9.14	11.76	10.93	10.54	9.52
16	6.83	6.79	7.02	7.14	7.17	8.35	8.84	9.15	11.77	10.98	10.51	9.50
17	6.82	6.80	7.02	7.15	7.16	8.37	8.85	9.16	11.86	11.11	10.49	9.45
18	6.80	6.81	7.02	7.15	7.16	8.38	8.92	9.19	11.86	11.10	10.47	9.40
19	6.79	6.81	7.01	7.14	7.16	8.39	8.92	9.19	11.81	11.08	10.44	9.34
20	6.78	6.80	7.01	7.14	7.18	8.41	8.92	9.21	11.76	11.06	10.38	9.28
21	6.77	6.78	7.00	7.13	7.20	8.42	8.94	9.30	11.71	11.07	10.32	9.22
22	6.76	6.78	7.00	7.12	7.20	8.43	8.94	9.81	11.68	11.06	10.26	9.18
23	6.75	6.96	7.00	7.13	7.21	8.43	8.93	10.11	11.63	11.03	10.23	9.13
24	6.74	7.00	6.99	7.13	7.21	8.46	8.92	10.28	11.61	11.00	10.22	9.08
25	6.73	7.00	6.99	7.13	7.21	8.50	8.93	10.34	11.56	10.97	10.25	9.03
26	6.71	6.99	6.99	7.14	7.21	8.64	8.92	10.35	11.50	10.94	10.20	8.98
27	6.70	6.99	6.99	7.15	7.21	8.69	8.91	10.36	11.45	10.92	10.32	8.94
28	6.69	6.98	7.07	7.14	7.20	8.75	8.90	10.35	11.40	10.89	10.28	8.88
29	6.68	6.98	7.11	7.14	7.21	8.82	8.89	10.39	11.35	10.85	10.24	8.83
30	6.68	6.97	7.12	7.14	---	8.87	8.87	10.47	11.29	10.83	10.19	8.79
31	6.67	---	7.13	7.13	---	8.90	---	10.62	---	10.80	10.14	---
MEAN	6.83	6.86	7.00	7.14	7.18	8.26	8.91	9.41	11.33	11.08	10.51	9.47
MAX	7.08	7.00	7.13	7.17	7.21	8.90	8.95	10.62	11.86	11.32	10.89	10.10
MIN	6.67	6.66	6.92	7.12	7.13	7.27	8.84	8.76	10.64	10.80	10.14	8.79

05404500 DEVILS LAKE NEAR BARABOO, WI--CONTINUED

PRECIPITATION QUANTITY

PERIOD OF RECORD.-October 1996 to current year (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Gage established on July 17, 1991. Prior to Oct. 1, 1996, record was not published. Rainfall estimated to be 0.00 for December 10, 12, 15, 16, 21, January 17 and 27 because recorded precipitation interpreted as snowmelt.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 5.01 in., June 1, 2000.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.98 in., June 9.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.01	0.00	0.00	0.00	0.30	0.00	0.01	0.00	0.86	0.07	0.07
2	0.00	0.42	0.00	0.10	0.00	0.00	0.00	0.01	0.04	0.00	0.32	0.00
3	0.06	1.97	0.00	0.00	0.00	0.03	0.00	0.00	0.00	1.13	1.85	0.00
4	0.00	0.63	0.00	0.00	0.00	0.55	0.00	0.00	0.00	0.63	0.02	0.00
5	0.00	0.00	0.10	0.00	0.00	0.90	0.00	0.00	0.22	0.12	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.02	0.04	0.24	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.03	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.31	0.00	0.00	0.00	0.00
9	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.00	2.98	0.48	0.00	0.00
10	0.00	0.01	0.00	0.00	0.00	0.14	0.00	0.30	1.25	0.00	0.00	0.00
11	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.00	0.00
12	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.25	0.29	0.02	0.00	0.00
13	0.21	0.00	0.00	0.00	0.00	0.20	0.00	0.77	0.34	0.00	0.00	0.00
14	0.23	0.02	0.00	0.00	0.00	0.03	0.00	0.28	0.00	0.00	0.00	0.00
15	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64
16	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.91	1.85	0.03	0.00
17	0.00	0.00	0.00	0.00	0.00	0.10	0.18	0.30	0.07	0.00	0.00	0.00
18	0.00	0.25	0.00	0.00	0.00	0.06	0.55	0.01	0.00	0.00	0.03	0.00
19	0.00	0.01	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.45	0.01	0.30	0.36	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.07	0.00	0.08	2.84	0.25	0.27	0.00	0.00
22	0.00	0.58	0.00	0.00	0.16	0.00	0.00	0.54	0.01	0.00	0.00	0.00
23	0.00	1.39	0.00	0.00	0.02	0.00	0.00	1.22	0.29	0.00	0.28	0.05
24	0.12	0.00	0.00	0.00	0.00	0.20	0.14	0.00	0.23	0.00	0.93	0.00
25	0.00	0.00	0.00	0.00	0.00	0.75	0.10	0.03	0.00	0.00	0.01	0.00
26	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.93	0.00
27	0.03	0.00	0.68	0.00	0.00	0.04	0.00	0.00	0.22	0.00	0.93	0.00
28	0.02	0.00	0.01	0.00	0.00	0.36	0.00	0.00	0.01	0.00	0.18	0.00
29	0.06	0.00	0.00	0.00	0.08	0.00	0.00	0.56	0.00	0.03	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.03	0.06	1.46	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.11	---	0.00	0.00	---
TOTAL	0.96	5.33	1.07	0.10	0.78	3.91	1.47	10.73	7.58	5.66	5.58	0.76

WTR YR 2004 TOTAL 43.93

05405000 BARABOO RIVER NEAR BARABOO, WI

LOCATION.--Lat 43°28'51", long 89°38'09", in NW ¼ NW ¼ sec.35, T.12 N., R.7 E., Sauk County, Hydrologic Unit 07070004, on left bank 50 ft downstream from highway bridge, 0.3 mi downstream from Rowley Creek and 5.3 mi east of Baraboo.

DRAINAGE AREA.--609 mi^2.

PERIOD OF RECORD.--December 1913 to March 1922. September 1942 to current year.

REVISED RECORDS.--WSP 455: 1915. WSP 505: 1917(M). WSP 1438: 1914, 1915(M), 1916-17, 1918-20(M), 1944(M), 1949(M). WSP 1914: 1948, 1950, 1956. WDR WI-75-1: 1968. WDR WI-77-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 788.21 ft above NGVD of 1929. Dec. 18, 1913, to Mar. 31, 1922, nonrecording gage at bridge 2.3 mi upstream at datum 7.6 ft higher. Sept. 24, 1942, to June 10, 1963, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Gage-height telemeter at station.

EXTREMES OUTSIDE THE PERIOD OF RECORD.--Flood of Aug. 6, 1935, reached a stage of 15.8 ft from floodmarks, site and datum in use in 1922, discharge, 5,100 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	195	234	267	391	e170	1,130	686	278	1,990	433	303	365
2	194	252	255	334	e170	e1,440	556	272	1,890	560	299	341
3	197	287	245	326	e170	e1,660	476	269	1,750	437	341	326
4	193	550	231	253	e170	e1,980	424	263	1,660	637	859	308
5	202	729	229	e240	e170	e2,190	387	243	1,510	731	785	291
6	215	786	230	e200	e170	e2,490	360	234	1,210	813	654	278
7	219	752	232	e290	e170	e2,540	342	228	838	816	512	271
8	211	566	234	e270	e170	e2,370	332	251	662	731	384	274
9	203	366	238	e240	e170	e2,180	323	638	750	649	331	273
10	200	283	281	e220	e170	e1,980	313	744	2,950	712	313	268
11	198	255	300	213	e170	e1,570	300	901	3,390	713	301	261
12	202	261	265	213	e170	952	288	951	3,540	641	290	257
13	201	264	319	212	e170	558	276	973	3,240	570	282	252
14	242	267	338	215	e170	493	266	1,090	2,950	498	276	250
15	254	266	295	210	e170	461	260	1,100	2,780	435	269	266
16	268	261	263	199	e170	423	258	1,090	2,670	582	264	262
17	267	256	259	197	e170	392	266	1,110	2,560	1,090	264	277
18	253	268	262	188	e170	372	328	1,050	2,210	926	265	307
19	235	269	250	e190	e180	370	383	750	1,710	624	274	298
20	230	276	253	e180	e190	404	428	553	1,270	478	284	268
21	227	276	220	e170	206	447	478	746	904	431	274	253
22	225	261	221	e160	220	468	471	2,250	687	410	263	247
23	226	476	226	e150	235	436	451	3,160	599	392	264	244
24	222	597	228	e150	258	407	423	3,780	577	376	288	245
25	222	563	240	e150	289	420	385	3,930	547	354	350	248
26	217	472	227	e160	320	740	358	3,980	523	325	329	250
27	218	381	212	e160	364	982	348	3,710	498	306	879	254
28	221	320	536	e170	468	992	344	3,150	482	297	1,190	251
29	223	294	676	e170	693	1,050	323	2,520	455	289	966	248
30	229	280	621	e170	---	947	291	1,970	436	287	581	245
31	234	---	530	e170	---	824	---	2,060	---	294	419	---
TOTAL	6,843	11,368	9,183	6,561	6,483	33,668	11,124	44,244	47,238	16,837	13,353	8,178
MEAN	221	379	296	212	224	1,086	371	1,427	1,575	543	431	273
MAX	268	786	676	391	693	2,540	686	3,980	3,540	1,090	1,190	365
MIN	193	234	212	150	170	370	258	228	436	287	263	244
CFSM	0.36	0.62	0.49	0.35	0.37	1.78	0.61	2.34	2.59	0.89	0.71	0.45
IN.	0.42	0.69	0.56	0.40	0.40	2.06	0.68	2.70	2.89	1.03	0.82	0.50

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2004, BY WATER YEAR (WY)

MEAN	283	329	248	247	336	798	709	462	464	327	266	315
MAX	842	942	519	945	1,135	1,759	2,588	1,518	1,575	1,495	1,018	1,285
(WY)	(1973)	(1986)	(1993)	(1946)	(1966)	(1948)	(1993)	(1973)	(2004)	(1993)	(1980)	(1965)
MIN	117	116	76.2	78.3	89.3	170	253	138	112	112	95.8	100
(WY)	(1959)	(1959)	(1959)	(1959)	(1959)	(1964)	(1946)	(1958)	(1958)	(1965)	(1958)	(1958)

05405000 BARABOO RIVER NEAR BARABOO, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1914 - 2004	
ANNUAL TOTAL	116,906		215,080			
ANNUAL MEAN	320		588		399	
HIGHEST ANNUAL MEAN					824	1993
LOWEST ANNUAL MEAN					158	1958
HIGHEST DAILY MEAN	1,340	May 13	3,980	May 26	7,540	Mar 26, 1917
LOWEST DAILY MEAN	152	Aug 24	(a)150	Jan 23-25	26	Oct 6, 1950
ANNUAL SEVEN-DAY MINIMUM	157	Aug 21	(a)157	Jan 21	(a)72	Dec 8, 1958
MAXIMUM PEAK FLOW			4,010	May 26	(b)7,900	Mar 26, 1917
MAXIMUM PEAK STAGE			19.67	May 26	22.78	Jul 18, 1993
ANNUAL RUNOFF (CFSM)	0.526		0.965		0.654	
ANNUAL RUNOFF (INCHES)	7.14		13.14		8.89	
10 PERCENT EXCEEDS	532		1,230		788	
50 PERCENT EXCEEDS	254		298		251	
90 PERCENT EXCEEDS	190		195		140	

(a) Ice affected
(b) Estimated gage height, 17.50 ft, site and datum then in use, from rating curve extended above 6,000 ft^3/s
(e) Estimated due to ice effect or missing record

054064775 BLACK EARTH CREEK TRIBUTARY AT COUNTY TRUNK HIGHWAY KP AT CROSS PLAINS, WI

LOCATION.--Lat 43°06'43", long 89°39'26" in SW ¼ NW ¼ sec.3, T.7 N., R.7 E., Dane County, Hydrologic Unit 07070005, 0.7 mi east of Garfoot Road and 0.2 mi west of Bourbon Road at Cross Plains.

DRAINAGE AREA.--0.2 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1998 to current year.

GAGE.--Water-stage recorder in a 2-ft H-flume. Elevation of gage is 873 ft, from topographic map. Unpublished discharge data from June 1998 to September 1999 available in district office.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	e0.27	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	e0.17	0.00	0.00	0.00	e0.04	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	e1.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	e0.25	0.00
4	0.00	e2.2	0.00	0.00	0.00	e0.05	0.00	0.00	0.00	0.05	e0.17	0.00
5	0.00	e0.02	0.00	0.00	0.00	e0.85	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	e0.01	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.02	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	e0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e1.6	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e2.3	0.00	0.00	0.00	0.00
23	0.00	e1.4	0.00	0.00	0.07	0.00	0.00	e1.5	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	e0.05	0.00	0.00	e0.01	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	e0.03	e0.07	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	e0.10	e0.34	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	e0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	e0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	e0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.31	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.01	---	0.00	0.00	---
TOTAL	0.00	4.89	0.35	0.00	0.73	1.63	0.00	5.79	0.03	0.76	0.42	0.00
MEAN	0.00	0.16	0.01	0.00	0.03	0.05	0.00	0.19	0.00	0.02	0.01	0.00
MAX	0.00	2.2	0.35	0.00	0.21	0.85	0.00	2.3	0.03	0.67	0.25	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CFSM	0.00	0.81	0.06	0.00	0.13	0.26	0.00	0.93	0.00	0.12	0.07	0.00
IN.	0.00	0.91	0.07	0.00	0.14	0.30	0.00	1.08	0.01	0.14	0.08	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2004, BY WATER YEAR (WY)

MEAN	0.00	0.03	0.00	0.00	0.02	0.01	0.01	0.08	0.04	0.01	0.05	0.01
MAX	0.01	0.16	0.01	0.00	0.03	0.05	0.02	0.19	0.18	0.02	0.29	0.06
(WY)	(2003)	(2004)	(2004)	(2001)	(2000)	(2004)	(2001)	(2004)	(2000)	(2003)	(2001)	(2001)
MIN	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1999)	(1999)	(1999)	(1999)	(2001)	(1999)	(2004)	(1999)	(2003)	(1998)	(2002)	(1998)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1998 - 2004	
ANNUAL TOTAL	9.28		14.60			
ANNUAL MEAN	0.03		0.04		0.02	
HIGHEST ANNUAL MEAN					0.04	2004
LOWEST ANNUAL MEAN					0.00	1999
HIGHEST DAILY MEAN	2.2	Nov 4	2.3	May 22	8.2	Aug 2, 2001
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Jun 26, 1998
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Jun 30, 1998
MAXIMUM PEAK FLOW					69	Mar 20, 1999
MAXIMUM PEAK STAGE					2.85	Mar 20, 1999
ANNUAL RUNOFF (CFSM)	0.127		0.199		0.112	
ANNUAL RUNOFF (INCHES)	1.73		2.72		1.53	
10 PERCENT EXCEEDS	0.00		0.00		0.00	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

(e) Estimated due to ice effect or missing record

054064775 BLACK EARTH CREEK TRIBUTARY AT COUNTY TRUNK HIGHWAY KP AT CROSS PLAINS, WI—Continued

PRECIPITATION QUANTITY

PERIOD OF RECORD.-July 1998 to current year.

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Gage established July 1998.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 6.52 in., Aug 2, 2001.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 3.67 in., May 21.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.13	0.00	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.35	0.46
2	0.00	1.22	0.00	0.02	0.00	0.01	0.00	0.04	0.00	0.00	0.38	0.00
3	0.10	2.28	0.00	0.00	0.00	0.01	0.00	0.00	0.00	1.08	1.19	0.00
4	0.00	1.37	0.02	0.00	0.00	0.64	0.00	0.00	0.00	0.02	0.00	0.00
5	0.00	0.00	0.12	0.00	0.00	0.49	0.00	0.00	0.03	0.01	0.01	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.01	0.02	0.08	0.00	0.06
7	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.08	0.00	0.01	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.00	0.00	0.00	0.00
9	0.00	0.00	0.52	0.00	0.00	0.02	0.00	0.13	0.12	0.17	0.00	0.01
10	0.00	0.00	0.65	0.00	0.00	0.11	0.00	0.45	0.83	0.00	0.00	0.00
11	0.25	0.01	0.00	0.00	0.09	0.00	0.00	0.01	0.12	0.05	0.00	0.00
12	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.00
13	0.44	0.00	0.00	0.00	0.00	0.19	0.00	0.48	0.00	0.00	0.00	0.00
14	0.22	0.00	0.00	0.00	0.00	0.05	0.00	0.27	0.03	0.00	0.00	0.00
15	0.00	0.00	0.07	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.56
16	0.00	0.00	0.06	0.00	0.00	0.04	0.12	0.00	0.41	1.05	0.01	0.00
17	0.00	0.08	0.00	0.00	0.00	0.15	0.01	0.73	0.07	0.01	0.01	0.01
18	0.00	0.18	0.00	0.00	0.02	0.05	0.10	0.02	0.00	0.01	0.33	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.34	0.08	0.47	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.07	3.67	0.21	0.39	0.01	0.00
22	0.00	0.24	0.00	0.00	0.13	0.00	0.01	1.18	0.00	0.00	0.00	0.00
23	0.00	1.81	0.00	0.00	0.00	0.00	0.00	1.39	0.05	0.00	0.00	0.03
24	0.51	0.00	0.00	0.00	0.00	0.32	0.16	0.00	0.02	0.00	0.19	0.01
25	0.00	0.00	0.00	0.00	0.00	0.95	0.13	0.18	0.01	0.00	0.01	0.00
26	0.00	0.00	0.00	0.00	0.01	0.12	0.01	0.00	0.00	0.00	0.01	0.00
27	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.29	0.00
28	0.04	0.00	0.05	0.00	0.00	0.33	0.01	0.00	0.01	0.00	0.12	0.00
29	0.09	0.00	0.00	0.00	0.10	0.00	0.00	0.65	0.00	0.28	0.01	0.00
30	0.00	0.00	0.00	0.00	---	0.06	0.03	0.68	0.00	0.15	0.01	0.01
31	0.01	---	0.00	0.00	---	0.00	---	0.35	---	0.00	0.00	---
TOTAL	1.66	7.35	1.63	0.02	0.69	3.81	1.29	10.74	2.43	3.31	2.93	1.15

CAL YR 2003 TOTAL 31.07
WTR YR 2004 TOTAL 37.01

054064775 BLACK EARTH CREEK TRIBUTARY AT COUNTY TRUNK HIGHWAY KP AT CROSS PLAINS, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1998 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: August 2000 to current year.

INSTRUMENTATION.--Continuous water temperature recorder August 2000 to current year.

REMARKS.--Water temperature recorder located near H-flume represent water temperature at sensor within 0.5°C. Unpublished water temperature data from August 2000 to September 2002 are available in the District Office.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum observed, 33.5°C, June 1, 2002; minimum observed, 0.0°C on many days during winter period.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum observed, 28.0°C, June 8; minimum observed, 0.0°C on many days during winter period.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	9.5	0.0	3.5	7.5	3.5	5.5	0.5	0.0	0.0	0.0	0.0	0.0
2	8.5	0.0	3.5	7.0	5.5	6.0	0.0	0.0	0.0	3.5	0.0	0.5
3	12.0	5.0	8.0	6.0	4.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0
4	12.5	1.0	6.0	6.0	3.5	5.0	0.0	0.0	0.0	0.0	0.0	0.0
5	11.0	2.0	6.5	4.5	3.0	3.5	1.0	0.0	0.0	0.0	0.0	0.0
6	12.0	2.5	7.5	3.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
7	19.5	6.5	11.5	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
8	18.0	7.5	11.5	0.0	0.0	0.0	3.0	0.0	0.5	0.0	0.0	0.0
9	16.5	9.0	12.0	0.0	0.0	0.0	1.5	0.0	1.0	0.0	0.0	0.0
10	16.0	8.0	12.0	1.5	0.0	0.5	1.0	0.0	0.5	0.0	0.0	0.0
11	18.0	9.0	13.5	7.5	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
12	12.5	6.0	9.0	6.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0
13	16.0	5.5	10.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	11.0	5.0	9.0	3.5	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
15	10.0	1.5	5.5	4.0	1.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0
16	8.5	0.5	4.0	5.5	2.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0
17	8.5	0.0	4.0	7.0	0.5	4.0	0.0	0.0	0.0	0.0	0.0	0.0
18	15.0	5.0	8.5	10.5	2.0	6.5	0.0	0.0	0.0	0.0	0.0	0.0
19	11.5	3.5	7.0	6.5	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
20	17.0	7.0	11.5	8.5	0.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0
21	14.5	7.0	10.0	3.5	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
22	11.5	1.0	6.0	3.0	2.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0
23	11.0	1.5	5.5	5.0	2.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0
24	9.0	1.0	5.5	2.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
25	8.0	3.0	6.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	5.5	2.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	4.5	0.0	3.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	6.5	2.5	4.5	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
29	6.5	2.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	9.5	3.5	7.0	5.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
31	10.0	5.0	7.5	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0
MONTH	19.5	0.0	7.4	10.5	0.0	2.2	3.0	0.0	0.1	3.5	0.0	0.0

054064775 BLACK EARTH CREEK TRIBUTARY AT COUNTY TRUNK HIGHWAY KP AT CROSS PLAINS, WI—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	0.0	0.0	0.0	3.0	0.0	0.5	6.5	0.0	2.0	12.5	4.0	8.0
2	0.0	0.0	0.0	1.5	0.0	0.5	9.0	0.0	3.0	12.0	0.5	6.0
3	0.0	0.0	0.0	0.5	0.0	0.0	8.5	0.0	3.5	11.0	0.0	5.0
4	0.0	0.0	0.0	1.0	0.0	0.0	8.0	0.0	2.5	18.5	5.5	11.0
5	0.0	0.0	0.0	2.0	0.0	0.5	8.0	0.0	3.0	16.0	2.5	9.5
6	0.0	0.0	0.0	1.5	0.0	0.5	17.0	3.5	8.5	18.5	10.5	13.5
7	0.0	0.0	0.0	1.0	0.0	0.0	13.0	0.5	7.0	15.0	7.5	10.5
8	0.0	0.0	0.0	0.0	0.0	0.0	10.5	0.5	6.5	18.0	7.0	12.0
9	0.0	0.0	0.0	2.0	0.0	0.0	11.5	0.0	5.0	18.5	11.5	14.5
10	0.0	0.0	0.0	1.5	0.0	0.5	9.5	0.0	4.5	17.0	12.0	14.0
11	0.0	0.0	0.0	0.0	0.0	0.0	8.5	0.0	2.5	18.0	10.5	14.0
12	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	2.0	19.5	13.0	16.0
13	0.0	0.0	0.0	2.0	0.0	0.0	10.0	0.0	3.5	18.0	12.5	16.0
14	0.0	0.0	0.0	0.0	0.0	0.0	16.0	0.0	6.5	12.5	7.5	11.0
15	0.0	0.0	0.0	0.0	0.0	0.0	14.5	1.0	8.0	11.5	9.5	10.5
16	0.0	0.0	0.0	1.5	0.0	0.0	20.5	8.0	12.5	14.5	6.0	11.0
17	0.0	0.0	0.0	2.0	0.0	0.5	15.5	10.0	12.0	20.5	11.5	16.0
18	0.0	0.0	0.0	1.0	0.0	0.0	17.0	9.5	13.5	17.0	13.0	15.5
19	0.0	0.0	0.0	3.0	0.0	1.5	14.5	5.0	11.0	18.5	8.5	14.0
20	0.0	0.0	0.0	7.0	0.0	2.0	11.0	4.0	7.5	24.0	15.0	19.5
21	0.0	0.0	0.0	0.0	0.0	0.0	10.5	3.5	8.5	19.5	6.5	14.5
22	0.0	0.0	0.0	1.5	0.0	0.0	11.0	2.0	6.0	19.0	14.0	15.5
23	0.0	0.0	0.0	7.0	0.0	1.5	12.5	0.0	6.0	17.5	14.0	15.5
24	0.0	0.0	0.0	9.0	1.5	4.0	11.0	2.0	6.0	14.5	12.0	13.0
25	0.0	0.0	0.0	10.5	5.0	7.0	11.5	3.5	7.0	14.5	12.5	13.5
26	0.0	0.0	0.0	10.0	8.5	9.5	10.0	2.0	6.0	14.0	12.5	13.0
27	0.0	0.0	0.0	9.0	6.5	7.5	9.5	0.0	4.0	16.0	12.0	14.0
28	0.0	0.0	0.0	8.5	7.5	8.0	18.5	4.5	11.0	17.5	10.0	13.0
29	1.5	0.0	0.0	8.0	4.5	6.5	19.0	11.5	15.0	14.0	9.5	12.0
30	---	---	---	8.0	2.5	5.0	12.0	6.5	8.0	18.0	13.0	15.0
31	---	---	---	6.5	0.0	3.0	---	---	---	17.5	14.0	15.5
MONTH	1.5	0.0	0.0	10.5	0.0	1.9	20.5	0.0	6.7	24.0	0.0	13.0
		JUNE			JULY			AUGUST			SEPTEMBER	
1	15.5	13.5	14.5	23.0	13.5	18.5	23.5	15.5	19.5	21.5	14.0	17.5
2	15.5	15.0	15.5	22.5	14.5	19.0	22.0	17.5	19.5	22.5	16.0	18.5
3	16.0	11.5	14.0	23.0	16.5	19.5	23.5	18.0	20.5	22.5	14.5	18.0
4	18.5	9.5	14.0	21.5	19.5	20.5	22.5	19.0	20.5	23.5	14.5	18.0
5	20.5	11.0	16.0	21.0	16.5	19.5	19.5	13.0	16.5	25.0	16.5	20.5
6	23.0	15.0	18.5	20.0	16.5	18.0	19.5	11.5	15.5	20.5	13.0	18.5
7	24.5	16.0	20.0	18.0	12.0	15.5	19.0	12.0	15.5	18.0	10.0	14.0
8	28.0	19.0	22.5	20.0	10.5	15.5	22.5	14.0	18.0	19.5	8.5	13.5
9	25.0	17.0	22.0	19.5	13.0	16.0	23.5	16.5	19.5	17.0	8.5	13.0
10	18.0	15.5	17.0	21.5	14.0	17.5	17.5	13.0	15.5	21.5	10.5	15.5
11	18.5	16.5	17.5	22.5	15.0	18.5	14.0	11.5	12.5	22.5	13.5	17.0
12	23.0	16.0	19.0	24.0	17.0	20.0	17.5	10.0	13.5	23.5	12.5	17.0
13	23.0	20.0	21.0	26.5	16.5	20.5	18.0	8.5	13.0	24.0	13.5	18.0
14	20.5	16.0	19.0	24.0	15.0	19.0	19.5	8.0	13.5	24.5	16.5	20.0
15	22.5	14.0	18.0	24.5	13.5	19.0	20.0	8.5	14.0	22.0	16.0	19.0
16	25.0	16.0	20.0	19.5	13.0	17.0	20.0	11.0	15.5	17.0	9.5	13.5
17	23.5	17.0	20.0	19.5	16.0	17.5	22.0	14.0	17.0	17.5	7.5	12.5
18	20.5	12.0	17.0	21.0	13.0	17.5	23.5	12.0	16.5	19.5	11.0	15.0
19	18.5	10.0	14.0	22.0	14.5	18.5	17.0	9.0	13.0	21.5	12.5	15.5
20	20.5	11.0	15.5	24.5	17.5	21.0	19.5	10.5	14.5	19.0	11.0	14.5
21	19.5	14.0	16.0	23.5	19.0	21.0	16.5	6.5	11.5	20.5	10.0	14.5
22	19.5	10.5	15.0	25.0	16.5	20.5	21.5	9.5	15.5	19.5	8.5	13.5
23	20.5	12.5	16.5	21.0	15.5	18.0	19.5	15.5	17.5	22.0	11.5	16.0
24	15.5	9.5	12.5	21.0	13.0	17.0	20.0	15.5	17.5	18.0	10.0	14.5
25	18.5	7.0	12.5	20.5	12.5	16.0	21.0	15.5	18.0	18.0	7.0	12.0
26	19.0	8.5	14.0	21.5	11.5	16.0	24.5	17.0	20.5	18.5	5.5	11.0
27	20.0	10.0	14.5	22.5	12.5	17.0	24.5	17.5	20.5	19.0	6.0	12.5
28	20.0	11.5	15.5	22.5	13.0	17.5	18.5	12.0	16.0	15.0	6.0	11.0
29	22.5	10.5	16.0	21.5	16.0	18.5	19.5	10.5	14.0	14.5	3.0	8.5
30	22.0	12.0	17.0	21.5	17.0	18.5	20.5	11.5	16.0	16.5	3.0	10.0
31	---	---	---	22.0	16.0	18.5	21.0	11.0	15.5	---	---	---
MONTH	28.0	7.0	16.8	26.5	10.5	18.3	24.5	6.5	16.3	25.0	3.0	15.1
YEAR	28.0	0.0	8.2									

05406500 BLACK EARTH CREEK AT BLACK EARTH, WI

LOCATION.--Lat 43°08'03", long 89°43'56" in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.25, T.8 N., R.6 E., Dane County, Hydrologic Unit 07070005, on right bank, 0.8 mi east of Black Earth and 2.1 mi upstream from Vermont Creek.

DRAINAGE AREA.--45.6 mi^2, of which 2.8 mi^2 probably is noncontributing.

PERIOD OF RECORD.--February 1954 to current year.

REVISED RECORDS.--WDR WI-76-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 812.95 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges and Oct. 1-14, Nov. 4-25, which are fair (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	e20	41	31	e25	52	40	30	92	42	51	46
2	22	e39	39	31	e25	48	38	30	78	42	52	42
3	23	e73	38	31	e25	40	36	30	71	44	57	41
4	23	225	35	30	25	38	34	28	66	71	112	41
5	23	72	35	29	25	124	33	27	63	53	66	40
6	22	49	34	e29	26	63	33	27	62	50	58	41
7	21	40	33	e29	26	49	32	27	59	50	55	41
8	20	36	32	29	25	43	32	28	57	49	53	40
9	20	33	32	29	25	40	31	32	56	51	52	40
10	19	32	62	29	26	38	31	33	60	54	51	39
11	19	32	52	29	26	38	31	33	74	51	49	38
12	20	33	44	29	25	35	30	32	86	49	49	38
13	19	33	40	29	25	34	29	36	71	48	48	38
14	22	33	38	29	25	35	29	45	65	48	44	38
15	e23	33	36	28	25	34	29	44	60	46	43	41
16	e22	33	36	28	24	34	30	40	57	79	42	40
17	e21	33	38	28	24	34	35	39	63	86	41	41
18	e21	34	38	28	24	34	33	49	59	61	42	40
19	e21	32	38	28	24	33	33	41	57	55	44	39
20	e21	29	37	27	30	33	34	40	55	53	40	40
21	e21	26	37	26	33	33	42	123	54	54	39	39
22	e21	25	37	e26	31	32	39	686	54	54	39	39
23	e21	125	37	e26	45	32	37	466	51	52	39	37
24	e21	85	36	e26	61	36	36	180	54	51	40	37
25	e22	61	32	e25	44	37	37	125	54	50	41	37
26	e22	49	31	e25	50	81	37	103	51	50	41	37
27	e20	48	31	e25	48	59	34	91	47	50	42	37
28	e20	46	33	e24	45	56	32	82	46	48	42	36
29	e20	44	34	e25	46	59	30	85	45	48	45	34
30	e21	43	33	e25	---	48	30	115	43	49	45	32
31	e20	---	33	e25	---	43	---	106	---	49	45	---
TOTAL	653	1,496	1,152	858	908	1,395	1,007	2,853	1,810	1,637	1,507	1,169
MEAN	21.1	49.9	37.2	27.7	31.3	45.0	33.6	92.0	60.3	52.8	48.6	39.0
MAX	23	225	62	31	61	124	42	686	92	86	112	46
MIN	19	20	31	24	24	32	29	27	43	42	39	32
CFSM	0.49	1.17	0.87	0.65	0.73	1.05	0.78	2.15	1.41	1.23	1.14	0.91
IN.	0.57	1.30	1.00	0.75	0.79	1.21	0.88	2.48	1.57	1.42	1.31	1.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2004, BY WATER YEAR (WY)

MEAN	31.6	33.3	30.5	29.3	33.6	47.6	42.4	39.9	39.4	37.2	33.4	32.9
MAX	51.5	70.2	48.0	51.6	64.9	85.3	86.5	92.0	119	140	104	66.0
(WY)	(1999)	(1986)	(1988)	(1974)	(1994)	(1961)	(1993)	(2004)	(2000)	(1993)	(2001)	(1980)
MIN	15.9	16.1	14.8	15.1	16.0	16.9	22.5	18.7	14.4	14.0	15.5	15.3
(WY)	(1967)	(1967)	(1965)	(1959)	(1959)	(1968)	(1957)	(1965)	(1965)	(1965)	(1958)	(1958)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1954 - 2004	
ANNUAL TOTAL	11,520		16,445			
ANNUAL MEAN	31.6		44.9		36.0	
HIGHEST ANNUAL MEAN					61.0	1993
LOWEST ANNUAL MEAN					19.8	1964
HIGHEST DAILY MEAN	225	Nov 4	686	May 22	1,230	Aug 2, 2001
LOWEST DAILY MEAN	15	Sep 11	19	(a)Oct 10	12	(b)Feb 16-18, 1958
ANNUAL SEVEN-DAY MINIMUM	16	Sep 6	20	Oct 7	13	Jul 24, 1965
MAXIMUM PEAK FLOW			960	May 22	(c)1,750	Jul 3, 1954
MAXIMUM PEAK STAGE			5.72	May 22	7.08	Aug 2, 2001
INSTANTANEOUS LOW FLOW					(d)4.8	Nov 29, 1958
ANNUAL RUNOFF (CFSM)	0.737		1.05		0.841	
ANNUAL RUNOFF (INCHES)	10.01		14.29		11.43	
10 PERCENT EXCEEDS	41		61		52	
50 PERCENT EXCEEDS	29		38		31	
90 PERCENT EXCEEDS	21		24		19	

(a) Also occurred Oct. 11 and 13
(b) Also occurred July 26 and 29, 1965
(c) Gage height, 6.58 ft
(d) Result of freezeup
(e) Estimated due to ice effect or missing record

05407000 WISCONSIN RIVER AT MUSCODA, WI

LOCATION.--Lat 43°11'53", long 90°26'36", in SE ¼ NW ¼ sec.1, T.8 N., R.1 W., Grant County, Hydrologic Unit 07070005, on left bank at bridge on State Highway 80, 0.5 mi upstream from Eagle Mill Creek and 1.0 mi north of Muscoda.

DRAINAGE AREA.--10,400 mi^2.

PERIOD OF RECORD.--December 1902 to December 1903, gage height and discharge measurements only, October 1913 to current year. Monthly discharge for October and November 1913 published in WSP 1308. Gage-height records collected at same site November 1908 to December 1912 are contained in reports of U. S. Weather Bureau.

REVISED RECORDS.--WSP 785: 1921(M). WSP 875: 1921. WSP 1308: 1915(M), 1917-18(M), 1920-21(M), 1924(M). WDR WI-79-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 666.77 ft above NGVD of 1929. Prior to Nov. 22, 1929, nonrecording gage on bridge 200 ft upstream at same datum. Nov. 22, 1929, to Mar. 15, 1930, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges and June 17, 18 and June 28 to July 1, which are fair (see page 11). Flow regulated by 24 reservoirs and many powerplants upstream from station. In 1938 when the maximum of record occurred, there were 21 reservoirs upstream from station, the two large reservoirs, Petenwell and Castle Rock were not yet in existence. Usually flows less than 20 ft^3/s were diverted out of the basin through Portage Canal to the Fox River throughout the year. Gage-height telemeter and data-collection platform at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,860	3,430	5,210	e5,000	e4,700	e7,200	22,500	8,700	24,100	10,300	5,460	6,590
2	3,440	3,530	4,960	e5,000	e5,500	e8,300	27,900	11,000	23,100	10,600	5,680	6,560
3	3,700	3,920	5,470	e5,100	e6,400	8,990	30,900	11,300	23,100	9,860	6,260	5,650
4	3,610	6,140	5,320	e5,700	e5,900	8,840	26,400	8,400	24,500	9,510	8,020	5,690
5	3,620	7,900	5,150	e4,500	e6,500	10,600	13,900	7,940	24,900	9,120	9,650	5,620
6	3,610	7,120	5,180	e4,600	e6,200	12,400	14,200	7,170	23,400	10,400	8,680	4,930
7	3,790	6,510	5,350	e4,700	e7,700	13,100	16,500	6,240	20,600	12,800	7,700	4,380
8	4,040	5,790	5,090	e4,600	e7,900	13,400	16,000	7,280	19,300	12,600	6,140	5,210
9	3,680	5,540	4,530	e5,700	e6,700	12,900	13,900	7,100	15,900	11,900	5,790	4,580
10	3,610	5,000	5,130	e5,600	e6,000	11,800	12,100	8,410	16,000	11,800	4,990	4,520
11	2,960	4,630	5,750	e5,800	e6,000	11,400	12,400	8,080	20,500	10,900	5,500	4,570
12	2,990	4,600	e3,300	e5,800	e7,000	10,400	12,600	9,240	23,100	11,300	5,370	4,270
13	3,580	4,590	e2,800	e7,200	e8,300	10,800	12,600	11,700	27,700	10,900	6,580	4,730
14	3,440	5,190	e2,600	e7,700	e7,800	10,200	11,300	13,200	32,800	8,850	6,090	4,280
15	3,460	4,740	e4,000	e6,200	e7,700	9,960	9,060	13,400	37,400	9,040	4,690	4,750
16	3,900	4,460	e5,700	e6,300	e5,600	9,200	8,330	15,900	39,100	8,790	4,910	4,420
17	4,150	4,440	e6,000	e5,900	e6,000	8,560	8,950	17,500	40,200	9,810	4,840	5,630
18	3,760	4,830	e5,500	e7,000	e5,700	8,580	8,760	18,800	40,500	10,100	4,930	6,910
19	3,590	4,930	e5,100	e8,000	e4,500	8,100	7,740	18,000	38,800	8,930	4,740	6,330
20	3,970	4,720	e5,500	e4,600	e5,300	7,850	8,580	16,000	32,000	8,020	5,260	6,720
21	3,250	4,690	e5,700	e5,300	e5,800	7,660	9,580	14,700	28,500	7,110	5,710	5,250
22	3,400	4,850	e5,000	e5,400	e5,800	7,890	10,700	18,800	23,700	6,480	5,630	5,150
23	3,390	6,030	e5,200	e5,500	e5,200	7,330	9,850	24,200	19,000	7,480	4,690	5,090
24	3,410	6,660	e5,700	e4,700	e6,000	8,020	10,800	26,700	17,700	6,710	5,430	4,580
25	3,340	6,480	e4,000	e5,200	e6,600	6,790	12,200	25,800	17,700	6,270	5,050	4,070
26	3,410	6,840	e3,200	e5,500	e6,000	8,350	11,300	25,100	15,400	6,450	5,280	4,660
27	3,690	6,360	e5,200	e7,000	e5,500	10,300	10,900	26,100	14,200	6,300	5,720	4,680
28	3,700	5,590	e4,200	e4,200	e5,600	10,400	8,230	28,700	13,500	5,680	6,560	4,590
29	3,370	5,480	e5,800	e5,600	e6,200	11,100	8,390	30,200	11,300	5,780	6,610	4,170
30	3,450	5,340	e5,500	e4,800	---	12,600	8,740	30,500	10,200	5,600	8,120	4,160
31	3,520	---	e5,300	e5,300	---	17,600	---	27,100	---	5,610	8,610	---
TOTAL	110,690	160,330	152,440	173,500	180,100	310,620	395,310	503,260	718,200	275,000	188,690	152,740
MEAN	3,571	5,344	4,917	5,597	6,210	10,020	13,180	16,230	23,940	8,871	6,087	5,091
MAX	4,150	7,900	6,000	8,000	8,300	17,600	30,900	30,500	40,500	12,800	9,650	6,910
MIN	2,960	3,430	2,600	4,200	4,500	6,790	7,740	6,240	10,200	5,600	4,690	4,070

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2004, BY WATER YEAR (WY)

MEAN	7,338	7,683	6,524	6,097	6,637	10,670	16,780	12,020	10,790	7,369	5,961	7,144
MAX	25,460	17,130	13,100	11,400	12,020	30,400	37,650	32,270	28,840	17,780	11,610	31,280
(WY)	(1987)	(1986)	(1966)	(1973)	(1966)	(1973)	(1922)	(1960)	(1993)	(1978)	(1924)	(1938)
MIN	2,638	2,662	2,616	3,209	3,113	3,501	4,788	4,621	3,091	2,754	2,567	2,651
(WY)	(1977)	(1977)	(1977)	(1924)	(1924)	(1934)	(1964)	(1977)	(1988)	(1988)	(1988)	(1976)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1914 - 2004	
ANNUAL TOTAL	2,611,070		3,320,880			
ANNUAL MEAN	7,154		9,073		8,747	
HIGHEST ANNUAL MEAN					16,030	1973
LOWEST ANNUAL MEAN					4,145	1977
HIGHEST DAILY MEAN	40,500	May 17	40,500	Jun 18	79,500	Sep 16, 1938
LOWEST DAILY MEAN	2,560	Sep 9	(a)2,600	Dec 14	1,460	Jul 3, 1988
ANNUAL SEVEN-DAY MINIMUM	3,150	Sep 6	3,390	Oct 9	1,900	Aug 13, 1988
MAXIMUM PEAK FLOW			41,300	Jun 18	80,800	Sep 16, 1938
MAXIMUM PEAK STAGE			8.20	Jun 18	11.48	Sep 16, 1938
10 PERCENT EXCEEDS	12,700		18,200		15,300	
50 PERCENT EXCEEDS	5,400		6,300		6,920	
90 PERCENT EXCEEDS	3,590		3,990		3,970	

(a) Ice affected
(e) Estimated due to ice effect or missing record

05407470 KICKAPOO RIVER AT HWY 33 AT ONTARIO, WI

LOCATION.--Lat 43°43'18", long 90°35'15", IN SW ¼ NW ¼ sec.2, T.14 N., R.2 W., Vernon County, Hydrologic Unit 07070006, on right bank 85 ft downstream from Highway 33 bridge at Ontario.

DRAINAGE AREA.--117 mi^2.

PERIOD OF RECORD.--October 2001 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 850 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Recorded gage heights are available from June 15, 2001 to Sept. 30, 2001. Sediment loads are available from November 1972 to Sept. 1973. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	43	43	e46	e32	788	69	60	159	61	50	46
2	35	42	43	e43	e34	643	65	55	105	62	57	45
3	39	47	42	e42	e35	127	63	55	79	64	88	44
4	39	111	41	e42	e35	93	61	55	70	77	113	43
5	37	62	42	e40	e35	899	60	54	67	70	58	42
6	37	50	42	e38	e38	229	60	56	68	98	53	48
7	38	45	42	e37	e39	122	59	55	64	75	53	45
8	37	43	43	e38	e39	68	58	85	61	69	54	42
9	38	45	43	e39	e39	61	56	74	100	83	52	42
10	37	44	e42	e40	e39	68	55	103	408	83	51	42
11	40	46	e38	e40	e39	109	54	76	775	69	52	41
12	52	48	e39	e39	e39	55	53	70	237	66	52	41
13	42	51	e40	e38	e39	52	52	165	178	63	49	41
14	44	47	e42	e37	e37	88	52	109	123	59	47	41
15	42	48	e42	e36	e37	51	53	87	97	58	46	113
16	40	48	e42	e34	e37	50	54	76	86	57	47	55
17	39	48	e42	e34	e38	54	54	73	172	61	54	47
18	39	52	e41	e34	e39	63	67	71	95	56	50	45
19	38	50	e41	e34	e40	74	67	66	81	58	51	43
20	39	46	e41	e36	e41	81	63	75	75	59	46	42
21	39	45	e41	e37	e41	60	82	161	73	70	45	42
22	38	47	e40	e36	e40	50	67	476	71	63	44	41
23	38	64	e40	e33	e41	51	61	410	69	56	45	41
24	38	55	e41	e33	e41	62	58	204	78	53	46	46
25	39	52	e40	e32	e42	76	64	133	71	53	48	44
26	39	49	e40	e31	e55	123	64	108	67	52	47	42
27	40	47	e41	e30	e66	88	59	98	66	52	136	42
28	41	45	e60	e31	e90	118	58	89	74	51	55	41
29	42	43	e50	e31	185	103	56	180	65	51	49	40
30	42	45	e47	e32	---	80	57	275	62	52	52	41
31	46	---	e45	e32	---	73	---	477	---	51	48	---
TOTAL	1,229	1,508	1,316	1,125	1,352	4,659	1,801	4,131	3,796	1,952	1,738	1,368
MEAN	39.6	50.3	42.5	36.3	46.6	150	60.0	133	127	63.0	56.1	45.6
MAX	52	111	60	46	185	899	82	477	775	98	136	113
MIN	35	42	38	30	32	50	52	54	61	51	44	40
CFSM	0.34	0.43	0.36	0.31	0.40	1.28	0.51	1.14	1.08	0.54	0.48	0.39
IN.	0.39	0.48	0.42	0.36	0.43	1.48	0.57	1.31	1.21	0.62	0.55	0.43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2004, BY WATER YEAR (WY)

MEAN	53.3	52.8	49.7	44.1	56.7	116	76.1	92.7	89.1	58.8	51.8	46.2
MAX	62.4	58.4	58.1	53.3	72.3	150	95.1	133	127	66.3	56.1	53.4
(WY)	(2003)	(2002)	(2002)	(2002)	(2002)	(2004)	(2002)	(2004)	(2004)	(2002)	(2004)	(2002)
MIN	39.6	49.8	42.5	36.3	46.6	89.0	60.0	69.8	42.7	47.0	44.3	39.5
(WY)	(2004)	(2003)	(2004)	(2004)	(2004)	(2002)	(2004)	(2002)	(2003)	(2003)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2002 - 2004	
ANNUAL TOTAL	20,051		25,975			
ANNUAL MEAN	54.9		71.0		65.7	
HIGHEST ANNUAL MEAN					71.0	2004
LOWEST ANNUAL MEAN					57.4	2003
HIGHEST DAILY MEAN	869	Mar 15	899	Mar 5	899	Mar 5, 2004
LOWEST DAILY MEAN	29	Aug 22, 23	(a)30	Jan 27	29	Aug 22, 23, 2003
ANNUAL SEVEN-DAY MINIMUM	30	Aug 18	(a)31	Jan 25	30	Aug 18, 2003
MAXIMUM PEAK FLOW			1,440	Mar 1	(b)1,950	Mar 15, 2003
MAXIMUM PEAK STAGE			16.95	Mar 1	(c)16.95	Mar 1, 2004
INSTANTANEOUS LOW FLOW					28	(d)Jan 10, 2003
ANNUAL RUNOFF (CFSM)	0.470		0.607		0.562	
ANNUAL RUNOFF (INCHES)	6.38		8.26		7.63	
10 PERCENT EXCEEDS	68		99		88	
50 PERCENT EXCEEDS	43		50		53	
90 PERCENT EXCEEDS	35		38		38	

(a) Ice affected
(b) Gage height 16.24 ft
(c) Discharge 1440 cfs
(d) Also occurred Sept. 4, 2002, result of bridge construction
(e) Estimated due to ice effect or missing record

05408000 KICKAPOO RIVER AT LA FARGE, WI

LOCATION.--Lat 43°34'27", long 90°38'35", in NE ¼ SW ¼ sec.29, T.13 N., R.2 W., Vernon County, Hydrologic Unit 07070006, on left bank 10 ft upstream from bridge on State Highway 82, in La Farge, 0.3 mi upstream from Otter Creek, and 1.3 mi downstream from powerplant.

DRAINAGE AREA.--266 mi^2.

PERIOD OF RECORD.--October 1938 to current year.

REVISED RECORDS.--WSP 1388: 1951(M), 1954(M). WSP 1438: 1944-45(M), 1946, 1948, 1950(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 781.54 ft above NGVD of 1929. Prior to Dec. 4, 1939, nonrecording gage on highway bridge at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97	112	120	e130	e100	e800	175	142	643	166	135	137
2	97	112	112	e120	e110	1,820	165	131	418	169	142	133
3	104	123	124	e120	e110	541	158	126	328	165	172	129
4	110	323	123	e120	e110	283	152	124	277	222	353	126
5	105	242	119	e110	e110	1,290	148	121	250	197	185	123
6	102	156	119	e100	e110	1,590	147	122	247	246	153	127
7	101	135	119	e98	e110	366	145	122	230	241	144	131
8	100	120	122	e98	e110	259	144	276	212	201	147	122
9	98	121	124	e98	e110	203	141	378	219	198	144	120
10	99	135	136	e100	e110	196	137	255	696	254	138	120
11	102	122	e110	e100	e110	244	135	244	1,500	199	138	117
12	129	123	e100	e100	e110	173	133	194	1,120	187	140	114
13	126	132	e130	e100	e110	170	133	423	554	178	135	113
14	122	122	e120	e100	e110	201	132	351	468	169	130	113
15	119	121	e120	e100	e100	181	130	253	343	160	128	167
16	114	122	e120	e100	e98	154	133	205	291	157	127	208
17	111	120	e120	e100	e100	156	131	183	430	166	148	136
18	110	123	e120	e100	e110	163	149	174	322	157	140	126
19	111	131	e120	e100	e120	188	159	162	264	154	138	121
20	110	122	e110	e100	e120	183	153	305	235	164	131	118
21	109	117	e120	e100	e130	180	193	609	224	195	126	117
22	108	116	e120	e97	e130	144	174	1,940	222	209	124	118
23	108	145	e120	e97	e140	142	152	1,290	204	165	125	116
24	109	170	e110	e97	e150	153	142	840	211	153	126	123
25	110	127	e110	e98	e150	181	148	471	212	149	132	127
26	109	148	e120	e100	e160	305	161	359	191	146	131	120
27	111	128	e140	e100	e180	237	145	299	183	144	243	119
28	116	124	e160	e98	e210	243	139	259	200	140	189	118
29	119	121	e190	e95	e300	285	133	367	183	140	145	116
30	118	122	e160	e95	---	214	131	647	171	142	141	117
31	116	---	e140	e97	---	190	---	1,590	---	141	144	---
TOTAL	3,400	4,135	3,878	3,168	3,728	11,435	4,418	12,962	11,048	5,474	4,694	3,792
MEAN	110	138	125	102	129	369	147	418	368	177	151	126
MAX	129	323	190	130	300	1,820	193	1,940	1,500	254	353	208
MIN	97	112	100	95	98	142	130	121	171	140	124	113
CFSM	0.41	0.52	0.47	0.38	0.48	1.39	0.55	1.57	1.38	0.66	0.57	0.48
IN.	0.48	0.58	0.54	0.44	0.52	1.60	0.62	1.81	1.55	0.77	0.66	0.53

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2004, BY WATER YEAR (WY)

MEAN	145	153	133	127	159	299	272	200	199	164	144	159
MAX	317	337	336	421	499	761	723	580	445	838	446	539
(WY)	(1960)	(1983)	(1985)	(1946)	(1966)	(1961)	(1965)	(1973)	(1947)	(1978)	(1980)	(1965)
MIN	73.4	78.5	62.0	61.3	62.2	114	126	80.4	80.9	77.8	60.4	72.7
(WY)	(1959)	(1940)	(1959)	(1959)	(1959)	(1957)	(1942)	(1958)	(1958)	(1958)	(1958)	(1940)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1939 - 2004	
ANNUAL TOTAL	54,234		72,132			
ANNUAL MEAN	149		197		179	
HIGHEST ANNUAL MEAN					282	1993
LOWEST ANNUAL MEAN					97.1	1958
HIGHEST DAILY MEAN	(a)1,100	Mar 16	1,940	May 22	7,730	Feb 9, 1966
LOWEST DAILY MEAN	90	Aug 19, 20	(a)95	Jan 29, 30	36	Nov 3, 1939
ANNUAL SEVEN-DAY MINIMUM	92	Aug 14	(a)98	Jan 24	(a)49	Jan 3, 1968
MAXIMUM PEAK FLOW			2,130	Mar 6	14,300	Jul 1, 1978
MAXIMUM PEAK STAGE			10.87	Mar 6	14.92	Jul 1, 1978
ANNUAL RUNOFF (CFSM)	0.559		0.741		0.675	
ANNUAL RUNOFF (INCHES)	7.58		10.09		9.17	
10 PERCENT EXCEEDS	212		287		261	
50 PERCENT EXCEEDS	120		135		135	
90 PERCENT EXCEEDS	100		101		88	

(a) Ice affected
(e) Estimated due to ice effect or missing record

05410490 KICKAPOO RIVER AT STEUBEN, WI

LOCATION.--Lat 43°10'58", long 90°51'30", in NE ¼ SW ¼ sec.9, T.8 N., R.4 W., Crawford County, Hydrologic Unit 07070006, on right bank at upstream corner of town road bridge at Steuben and 18.6 mi upstream from mouth.

DRAINAGE AREA.--687 mi^2.

PERIOD OF RECORD.--May 1933 to current year. Prior to October 1982, all records published under station number 05410500.

REVISED RECORDS.--WSP 855: Drainage area. WSP 1438: 1933-38. WDR WI-79-1: 1978(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 657.00 ft above NGVD of 1929. May 1933 to Oct. 19, 1938, nonrecording gage at same site at datum 1.7 ft higher. Oct. 20, 1938 to September 1982, recording gage at site 1.2 mi downstream at datum 0.36 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Data-collection platform and gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	308	349	382	e330	e280	e600	557	409	1,700	537	463	457
2	306	355	378	e320	e290	e1,100	521	407	1,880	524	465	452
3	307	369	369	e310	e290	1,440	497	404	2,090	526	471	445
4	313	478	365	e300	e290	1,520	480	392	2,170	559	568	437
5	322	567	377	e280	e290	1,670	465	386	1,450	601	647	432
6	320	593	375	e280	e290	1,730	456	383	899	609	622	431
7	314	466	373	e290	e290	1,760	450	378	783	630	509	431
8	310	412	373	e300	e290	1,800	444	384	712	642	487	434
9	309	389	374	e300	e290	1,740	436	965	984	632	482	432
10	308	363	387	e300	e290	920	429	956	1,270	680	477	427
11	309	383	390	e300	e290	667	422	783	1,540	659	471	422
12	320	395	e370	e300	e290	603	415	718	1,730	648	465	420
13	331	387	e340	e300	e290	589	411	686	1,870	593	462	417
14	353	384	e370	e300	e290	538	407	833	1,940	561	457	414
15	347	388	e400	e300	e290	529	404	885	1,970	538	449	418
16	339	384	e370	e300	e280	540	401	751	1,840	521	444	427
17	333	383	e360	e300	e270	496	406	663	1,300	522	446	490
18	328	388	e370	e290	e270	487	460	626	1,070	515	457	464
19	327	390	e360	e290	e270	489	454	589	960	506	479	428
20	328	392	e360	e290	e270	500	464	569	794	498	463	418
21	328	391	e360	e280	e290	504	482	964	723	525	450	413
22	328	384	e360	e280	e290	496	489	2,130	688	560	439	409
23	327	398	e360	e280	e320	475	494	2,230	660	584	436	407
24	328	415	e350	e280	e320	460	459	2,150	645	528	439	406
25	330	434	e340	e280	e350	470	442	2,360	628	494	445	407
26	331	422	e340	e290	e360	597	439	2,660	615	479	449	408
27	332	394	e340	e290	e370	656	445	2,380	586	471	516	406
28	337	401	e340	e280	e390	684	437	1,620	574	466	529	399
29	344	392	e340	e270	e440	650	421	1,140	571	464	573	393
30	351	387	e380	e260	---	670	414	1,090	560	468	490	391
31	352	---	e340	e270	---	619	---	1,450	---	466	463	---
TOTAL	10,120	12,233	11,293	9,040	8,830	25,999	13,501	32,341	35,202	17,006	15,013	12,735
MEAN	326	408	364	292	304	839	450	1,043	1,173	549	484	424
MAX	353	593	400	330	440	1,800	557	2,660	2,170	680	647	490
MIN	306	349	340	260	270	460	401	378	560	464	436	391
CFSM	0.48	0.59	0.53	0.42	0.44	1.22	0.66	1.52	1.71	0.80	0.70	0.62
IN.	0.55	0.66	0.61	0.49	0.48	1.41	0.73	1.75	1.91	0.92	0.81	0.69

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 - 2004, BY WATER YEAR (WY)

MEAN	421	438	385	362	425	765	699	541	533	491	430	453
MAX	798	858	781	846	1,276	1,856	1,748	1,415	1,480	1,901	1,180	1,331
(WY)	(1973)	(1983)	(1985)	(1946)	(1966)	(1946)	(1959)	(1973)	(2000)	(1978)	(1935)	(1938)
MIN	206	222	172	172	184	252	351	228	223	189	188	199
(WY)	(1959)	(1938)	(1959)	(1959)	(1959)	(1934)	(1942)	(1934)	(1934)	(1936)	(1936)	(1937)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1933 - 2004	
ANNUAL TOTAL	152,300		203,313			
ANNUAL MEAN	417		556		496	
HIGHEST ANNUAL MEAN					792	1993
LOWEST ANNUAL MEAN					273	1958
HIGHEST DAILY MEAN	1,400	Mar 18	2,660	May 26	12,600	Jul 3, 1978
LOWEST DAILY MEAN	296	Aug 24	(a)260	Jan 30	(a)165	(b)Dec 10-20, 1958
ANNUAL SEVEN-DAY MINIMUM	300	Aug 19	(a)277	Jan 25	(a)165	Dec 10, 1958
MAXIMUM PEAK FLOW			2,730	May 26	16,500	Jul 3, 1978
MAXIMUM PEAK STAGE			12.80	May 26	(c)14.81	Jul 3, 1978
INSTANTANEOUS LOW FLOW					(c)161	Aug 9, 1936
ANNUAL RUNOFF (CFSM)	0.607		0.809		0.722	
ANNUAL RUNOFF (INCHES)	8.25		11.01		9.81	
10 PERCENT EXCEEDS	553		957		747	
50 PERCENT EXCEEDS	380		430		412	
90 PERCENT EXCEEDS	319		290		265	

(a) Ice affected
(b) Also occurred Jan. 4-9, Feb. 5-7, 1959, ice affected
(c) Site and datum then in use
(e) Estimated due to ice effect or missing record

The 24 reservoirs listed below are used to stabilize the flow of the Wisconsin and Tomahawk Rivers for power generation and are also used for recreational purposes. The first 21 reservoirs are owned and operated by the Wisconsin Valley Improvement Co., which furnishes the gage heights and capacity tables. Revised capacity tables for all 21 reservoirs were received from the Company in April 1957 and were used to compute month-end usable contents beginning Sept. 30, 1955. Another revised capacity table for Burnt Rollways Reservoir was used to compute month-end usable contents beginning Sept. 30, 1964. Lake Dubay is owned by the Consolidated Water Power Co. Petenwell and Castle Rock are owned and operated by the Wisconsin River Power Co., which furnished the gage heights and capacity tables for those two reservoirs. Month-end contents are computed by the U.S. Geological Survey. The usable capacity of these reservoirs is usually less in summer than in winter because the allowable summer drawdown is limited by the Department of Natural Resources in the interest of riparian property owners. There are occasionally formal or informal changes in capacity and in minimum drawdown levels. Usable capacity figures listed below are for winter regulation.

05390100 Lac Vieux Desert on Wisconsin River, lat 46°07'18", long 89°09'07", in SE 1/4 NW 1/4 sec.17, T.42 N., R.11 E., Vilas County, 4.8 mi northwest of Phelps, used as a reservoir since 1908, has a usable capacity of 652,000,000 ft^3. Drainage area, 34.4 mi^2.

05390150 Twin Lakes on Twin River, lat 46°01'20", long 89°10'05", in SW 1/4 NE 1/4 sec.19, T.41 N., R.11 E., Vilas County, 5.0 mi southwest of Phelps, used as a reservoir since 1908, has a usable capacity of 313,000,000 ft^3. Drainage area, 26 mi^2.

05390200 Buckatahpon Lakes on Buckatabon Creek, lat 46°01'18", long 89°18'40", in SE 1/4 NE 1/4 sec.24, T.41 N., R.9 E., Vilas County, 3.3 mi southwest of Conover, used as a reservoir since 1908, has a usable capacity of 130,000,000 ft^3. Drainage area, 16.9 mi^2.

05390250 Sevenmile Lake on Sevenmile Creek, lat 45°52'30", long 89°04'07", in SE 1/4 NE 1/4 sec.11, T.39 N., R.11 E., Oneida County, 9.1 mi southeast of town of Eagle River, used as a reservoir since 1908, has a usable capacity of 93,000,000 ft^3. Drainage area, 12.1 mi^2.

05390300 Lower Ninemile Lake on Ninemile Creek, lat 45°53'37", long 89°07'15", in NE 1/4 NW 1/4 sec.4, T.39 N., R.11 E., Oneida County, 6.6 mi southeast of town of Eagle River, used as a reservoir since 1908, has a usable capacity of 121,000,000 ft^3. Drainage area, 28.8 mi^2.

05390350 Burnt Rollways Reservoir on Eagle River, lat 45°53'40", long 89°08'28", in NE 1/4 NW 1/4 sec.5, T.39 N., R.11 E., Oneida County, 5.3 mi southeast of town of Eagle6 River, used as a reservoir since 1908, has a usable capacity of 779,000,000 ft^3. This reservoir includes 18 lakes controlled by the same dam. Drainage area, 142 mi^2.

05390400 Long Lake on Deerskin River, lat 46°02'37", long 89°02'44", in NW 1/4 SE 1/4 sec.7, T.41 N., R.12 E., Vilas County, 2.5 mi southeast of Phelps, used as a reservoir since 1908, has a usable capacity of 400,000,000 ft^3. Drainage area, 22.9 mi^2.

05390600 Deerskin Lake on Little Deerskin River, lat 45°59'07", long 89°09'40", in SE 1/4 sec.31, T.41 N., R.ll E., Vilas County, 6.3 mi northeast of town of Eagle River, used as a reservoir since 1908, has a usable capacity of 22,000,000 ft^3. Drainage area, 2.47 mi^2.

05390650 Sugar Camp Reservoir on Sugar Camp Creek, lat 45°52'19", long 89°23'40", in NE 1/4 sec.17, T.39 N., R.9 E., Oneida County, 7.6 mi southwest of town of Eagle River, used as a reservoir since 1908, has a usable capacity of 471,000,000 ft^3. Drainage area, 48.4 mi^2.

05390700 Little St. Germain Lake on Little St. Germain Creek, lat 45°53'55", long 89°27'10", in SE 1/4 sec.35, T.40 N., R.8 E., Vilas County, 9.6 mi west of town of Eagle River, used as a reservoir since 1908, has a usable capacity of 79,000,000 ft^3. Drainage area, 19 mi^2.

05390750 Big St. Germain Lake on St. Germain River, lat 45°55'06", long 89°31'55", in SE 1/4 sec.30, T.40 N., R.8 E., Vilas County, 5.0 mi south of Sayner, used as a reservoir since 1908, has a usable capacity of 202,000,000 ft^3. Drainage area, 73.1 mi^2.

05390800 Pickerel Lake on St. Germain River, lat 45°52'22", long 89°31'47", in NE 1/4 sec.18, T.39 N., R.8 E., Oneida County, 5.0 mi northeast of town of Lake Tomahawk, used as a reservoir since 1935, has a usable capacity of 338,000,000 ft^3. Drainage area, 86.2 mi^2.

05390900 Rainbow Lake on Wisconsin River, lat 45°50'02", long 89°32'42", in SW 1/4 sec.30, T.39 N., R.8 E., Oneida County, 800 ft upstream from U.S. Geological Survey river gaging station, 2.7 mi northeast of town of Lake Tomahawk, used as a reservoir since 1935, has a usable capacity of 2,181,000,000 ft^3. Drainage area, 744 mi^2.

05391100 South Pelican Lake on Pelican River, lat 45°31'37", long 89°12'24", in S 1/2 sec.11, T.35 N., R.10 E., Oneida County, 2.8 mi northwest of town of Pelican Lake, used as a reservoir since 1909, has a usable capacity of 305,000,000 ft^3. Drainage area, 19.8 mi^2.

05391300 North Pelican Lake (includes Moen Lakes) on North Branch Pelican River, lat 45°38'05", long 89°14'38", in SE 1/4 sec.4, T.36 N., R.10 E., Oneida County, 0.2 mi below Twin Lakes Creek and 8.0 mi east of Rhinelander city limits, used as a reservoir since 1908, has a usable capacity of 218,000,000 ft^3. Drainage area, 95 mi^2.

05392100 Minocqua Lake on Tomahawk River, lat 45°52'35", long 89°43'38", on line between secs.10 and 15, T.39 N., R.6 E., Oneida County, 1.0 mi west of Minocqua, used as a reservoir since 1910, has a usable capacity of 628,000,000 ft^3. Drainage area, 72.5 mi^2.

05392200 Squirrel Lake on Squirrel River, lat 45°50'37", long 89°54'13", in NE 1/4 sec.30, T.39 N., R.5 E., Oneida County, 9.4 mi west of Minocqua, used as a reservoir since 1908, has a usable capacity of 182,000,000 ft^3. Drainage area, 15.2 mi^2.

05392300 Willow Reservoir on Tomahawk River, lat 45°42'45", long 89°50'38", in NE 1/4 sec.10, T.37 N., R.5 E., Oneida County, 8.8 mi southwest of Hazelhurst, used as a reservoir since 1927, has a usable capacity of 3,302,000,000 ft^3. Drainage area, 310 mi^2.

05392500 Lake Nokomis on Tomahawk River, lat 45°32'20", long 89°44'48", in NW 1/4 sec.9, T.35 N., R.6 E., Lincoln County, at U.S. Geological Survey river gaging station, 0.5 mi east of Bradley, used as a reservoir since 1912, has a usable capacity of 1,808,000,000 ft^3. Drainage area, 544 mi^2.

05393600 Spirit River Flowage on Spirit River, lat 45°26'18", long 89°44'30", in NE 1/4 sec.16, T.34 N., R.6 E., Lincoln County, 2.0 mi south of Tomahawk, used as a reservoir since 1923, has a usable capacity of 756,000,000 ft^3. Drainage area, 158 mi^2.

05399600 Big Eau Pleine Reservoir on Big Eau Pleine River, lat 44°43'52", long 89°45'35", in SW 1/4 sec.14, T.26 N., R.6 E., Marathon County, 3.0 mi northeast of Dancy, used as a reservoir since 1937, has a capacity of 4,457,000,000 ft^3. Drainage area, 363 mi^2.

05400295 Lake Dubay on Wisconsin River, lat 44°39'54", long 89°39'03", in sec.10, T.25 N., R.7 E., Wood County, 1.5 mi downstream of Little Eau Pleine River and 10.5 mi northwest of Stevens Point, has a usable capacity of 2,117,000,000 ft^3. Drainage area, 4,900 mi^2.

05401400 Petenwell Flowage on Wisconsin River, lat 44°03'26", long 90°01'18", in SE 1/4 sec.4, T.18 N., R.4 E., Adams County, 5.2 mi upstream from Roche a Cri Creek, 2.4 mi west of Strongs Prairie, and 3.5 mi northeast of Necedah, used as a reservoir since 1950, has a total capacity of 19,880,000,000 ft^3. Drainage area, 5,970 mi^2.

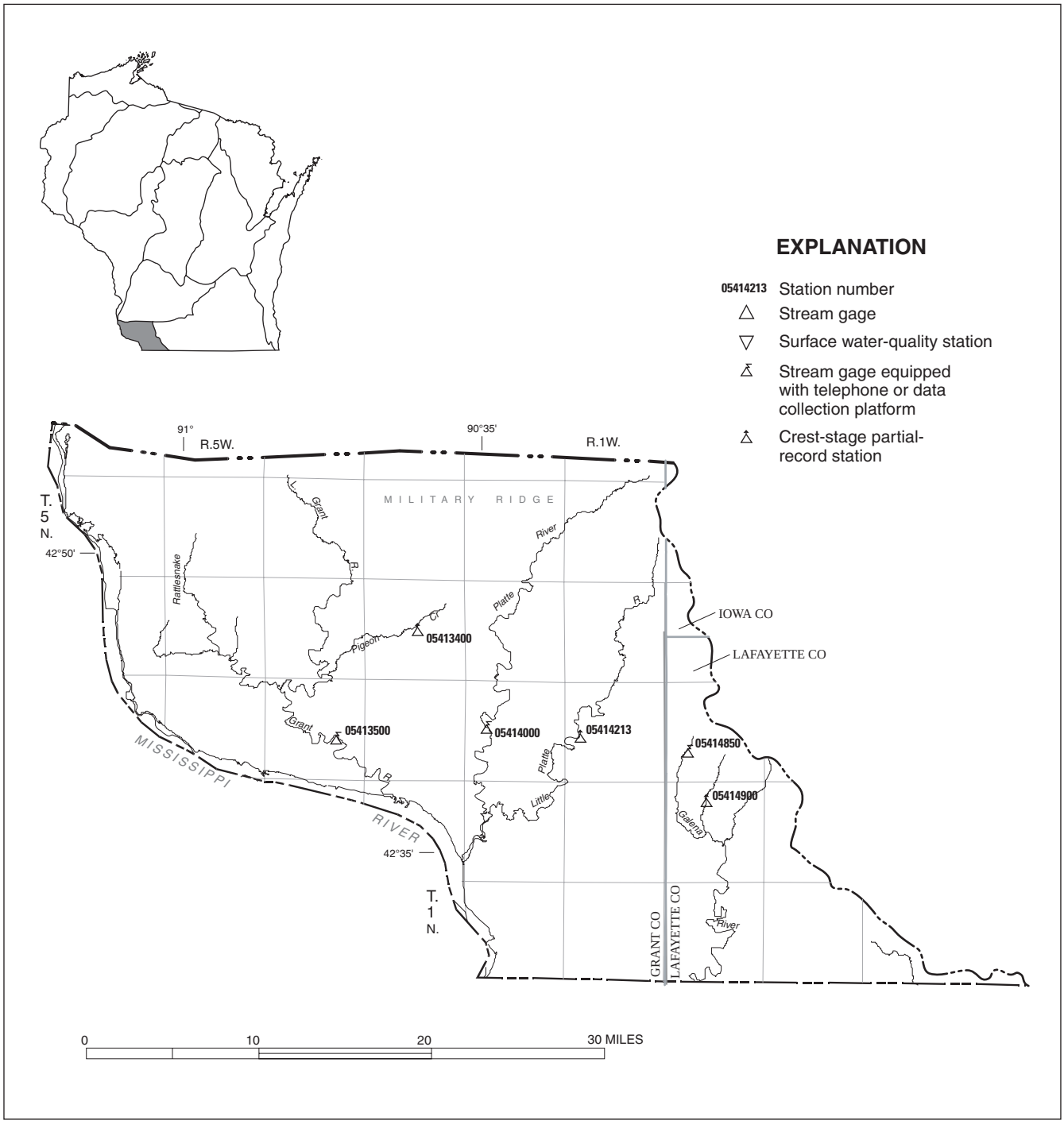
05403200 Castle Rock Flowage on Wisconsin River, lat 43°51'48", long 89°57'38", in sec.13, T.16 N., R.4 E., Adams County, 4.5 mi upstream from Duck Creek, and 2.0 mi south of Germantown, and 7.0 mi northeast of Mauston, used as a reservoir since 1950, has a total capacity of 7,630,000,000 ft^3. Drainage area, 7,056 mi^2.

MONTH-END CONTENTS, IN MILLIONS OF CUBIC FEET, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

	LAC VIEUX DESERT	TWIN LAKES	BUCKATAHPON LAKE	SEVENMILE LAKE	LOWER NINEMILE LAKE	BURNT ROLLWAYS RESERVOIR	LONG LAKE	DEERSKIN LAKE
Sept. 30	171	229	116	40	98	530	89	12
Oct. 31	183	217	111	32	91	530	62	10
Nov. 30	147	186	95	24	52	383	87	8
Dec. 31	92	70	74	0	22	0	105	6
Jan. 31	61	0	59	0	22	0	116	5
Feb. 29	40	2	51	41	33	37	126	5
Mar. 31	88	30	69	18	84	264	161	10
Apr. 30	297	167	115	63	98	575	258	17
May 31	285	223	115	68	102	568	242	18
June 30	236	220	115	62	100	524	222	17
July 31	228	214	115	56	101	6	194	15
Aug.31	203	211	114	43	97	536	148	14
Sept. 30	211	217	110	40	99	533	114	16

	SUGAR CAMP RESERVOIR	LITTLE ST. GERMAIN LAKE	BIG ST. GERMAIN LAKE	PICKEREL LAKE	RAINBOW LAKE	SOUTH PELICAN LAKE	NORTH PELICAN LAKE	MINOCQUA LAKE
Sept. 30	336	60	167	279	785	286	137	436
Oct. 31	318	58	143	271	821	271	122	414
Nov. 30	197	49	107	252	1,484	231	103	272
Dec. 31	208	39	78	235	1,764	182	3	172
Jan. 31	161	30	54	224	1,326	133	0	102
Feb. 29	155	21	17	217	814	127	34	70
Mar. 31	151	32	91	254	936	185	107	162
Apr. 30	420	76	173	278	2,149	295	135	343
May 31	405	78	167	276	2,140	298	134	454
June 30	342	67	156	277	1,845	271	133	459
July 31	366	61	156	274	1,362	261	133	448
Aug. 31	359	62	158	275	1,006	249	126	442
Sept. 30	363	64	156	276	848	246	129	442

	SQUIRREL LAKE	WILLOW RESERVOIR	LAKE NOKOMIS	SPIRIT RIVER FLOWAGE	BIG EAU PLEINE RESERVOIR	LAKE DUBAY	PETENWELL FLOWAGE	CASTLE ROCK FLOWAGE
Sept. 30	151	1,111	788	265	1,779	4,119	17,298	5,613
Oct. 31	154	926	548	218	1,581	4,175	17,219	5,536
Nov. 30	91	1,446	897	300	1,570	4,153	17,333	5,890
Dec. 31	39	1,518	913	230	1,414	3,906	17,606	5,876
Jan. 31	4	1,275	754	118	1,177	3,243	15,974	5,876
Feb. 29	6	976	576	113	952	2,872	14,805	4,868
Mar. 31	56	1,236	770	592	3,922	3,478	16,900	4,585
Apr. 30	151	2,535	1,722	736	4,265	4,432	18,240	6,377
May 31	174	3,172	1,768	693	4,487	4,386	18,143	6,506
June 30	163	3,011	1,627	634	4,382	4,110	17,562	5,844
July 31	161	2,292	1,187	433	3,828	4,150	17,632	5,903
Aug. 31	161	1,547	965	346	3,276	4,141	17,588	5,818
Sept. 30	166	1,232	806	316	2,414	4,128	17,571	5,786



Base from U.S. Geological Survey 1:100,000 digital data; modified by Wisconsin Department of Natural Resources. Wisconsin Transverse Mercator projection.

GRANT-PLATTE-GALENA RIVER BASIN

05413500 GRANT RIVER AT BURTON, WI

LOCATION.--Lat 42°43'13", long 90°49'09", in SW ¼ NW ¼ sec.23, T.3 N., R.4 W., Grant County, Hydrologic Unit 07060003, on right bank at downstream side of highway bridge at Burton, 5.9 mi northwest of Potosi and 9.5 mi upstream from mouth.

DRAINAGE AREA.--269 mi^2.

PERIOD OF RECORD.--October 1934 to current year. Published as "near Burton" October 1934 to September 1947. Records published for both sites March to September 1947. October 1934, monthly discharge published in WSP 1308.

REVISED RECORDS.--WSP 825: 1935-36. WSP 1308: 1935-37(M), 1941(M), 1945-46(M), 1949(M). WSP 1728: 1942(M). WDR WI-76-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 606.43 ft above NGVD of 1929. Oct. 17, 1934, to Sept. 30, 1947, non- recording gage at site 6 mi upstream at datum 33.18 ft higher. Mar. 18, 1947, to July 27, 1949, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Data-collection platform and gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	87	104	109	e76	288	192	108	609	226	174	152
2	82	103	98	115	e79	270	179	106	474	222	174	150
3	84	156	100	104	e80	176	167	104	397	223	202	148
4	86	839	100	e100	e81	154	159	103	350	249	322	146
5	85	297	106	e92	e82	600	153	102	323	224	217	145
6	84	169	103	e89	e83	378	150	102	313	229	184	145
7	84	142	101	e86	e84	223	145	106	292	257	178	143
8	84	127	103	e87	e85	186	141	121	274	226	175	140
9	83	117	103	e87	e86	168	135	111	259	248	178	139
10	83	116	115	e89	e87	156	131	139	261	306	172	139
11	84	117	100	e91	e88	153	127	165	338	245	167	138
12	92	115	e130	e90	e87	129	125	128	347	320	165	137
13	91	108	e120	e86	e87	140	123	164	355	237	162	137
14	100	105	e120	e84	e87	147	121	226	404	216	159	137
15	101	106	e110	e83	e87	139	119	154	293	206	156	140
16	90	106	e110	e82	e88	128	118	140	752	204	156	142
17	86	104	e110	e80	e88	128	131	135	1,530	237	168	136
18	86	108	e100	e74	e90	130	126	151	499	203	164	134
19	87	107	e100	e68	e100	130	120	141	401	195	159	132
20	86	102	e90	e77	e110	126	122	130	353	194	155	130
21	86	100	e110	e80	e300	122	148	156	336	274	153	130
22	86	97	e110	e80	e200	117	134	1,780	340	280	152	129
23	86	151	e100	e80	e180	118	120	2,250	300	212	153	130
24	87	177	97	e80	e340	141	116	873	292	198	158	131
25	95	128	97	e80	e180	182	119	544	292	191	176	130
26	89	120	118	e80	e230	328	120	426	269	187	162	129
27	87	114	118	e78	e210	319	112	363	256	184	191	130
28	89	110	162	e77	e190	271	111	315	252	180	190	130
29	90	106	146	e75	e280	263	110	542	241	181	187	128
30	90	107	128	e74	---	226	107	836	231	184	167	130
31	89	---	112	e73	---	207	---	1,040	---	180	158	---
TOTAL	2,714	4,441	3,421	2,630	3,845	6,243	3,981	11,761	11,633	6,918	5,434	4,107
MEAN	87.5	148	110	84.8	133	201	133	379	388	223	175	137
MAX	101	839	162	115	340	600	192	2,250	1,530	320	322	152
MIN	82	87	90	68	76	117	107	102	231	180	152	128
CFSM	0.33	0.55	0.41	0.32	0.49	0.75	0.49	1.41	1.44	0.83	0.65	0.51
IN.	0.38	0.61	0.47	0.36	0.53	0.86	0.55	1.63	1.61	0.96	0.75	0.57

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 2004, BY WATER YEAR (WY)

MEAN	121	131	112	133	201	313	184	174	214	177	150	133
MAX	276	626	350	467	668	1,057	505	489	920	808	502	330
(WY)	(1994)	(1962)	(1973)	(1974)	(1948)	(1959)	(1973)	(1973)	(1947)	(1993)	(1943)	(1993)
MIN	45.8	41.3	37.7	33.4	36.1	55.3	66.0	46.8	50.6	35.8	41.6	42.2
(WY)	(1935)	(1938)	(1959)	(1959)	(1959)	(1958)	(1957)	(1958)	(1936)	(1936)	(1937)	(1958)

05413500 GRANT RIVER AT BURTON, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1935 - 2004	
ANNUAL TOTAL	42,888		67,128			
ANNUAL MEAN	118		183		170	
HIGHEST ANNUAL MEAN					351	1993
LOWEST ANNUAL MEAN					59.3	1958
HIGHEST DAILY MEAN	839	Nov 4	2,250	May 23	10,700	Jun 13, 1947
LOWEST DAILY MEAN	77	Sep 4	(a)68	Jan 19	30	(b)Aug 5, 1936
ANNUAL SEVEN-DAY MINIMUM	77	Sep 4	(a)76	Jan 27	31	(c)Aug 3, 1936
MAXIMUM PEAK FLOW			4,280	May 23	(d)25,000	Jul 16, 1950
MAXIMUM PEAK STAGE			18.94	May 23	24.82	Jul 16, 1950
INSTANTANEOUS LOW FLOW					(f)21	Mar 4, 1954
ANNUAL RUNOFF (CFSM)	0.437		0.682		0.632	
ANNUAL RUNOFF (INCHES)	5.93		9.28		8.59	
10 PERCENT EXCEEDS	150		302		258	
50 PERCENT EXCEEDS	104		131		120	
90 PERCENT EXCEEDS	83		86		60	

(a) Ice affected
(b) Also occurred Aug. 8, 9, 1936, Sept. 22, 1937, and Feb. 19, 20, 1959, ice affected
(c) Also occurred Jan. 4, 1959, ice affected
(d) From rating curve extended above 18,000 ft^3/s on basis of slope-area measurement of peak flow
(e) Estimated due to ice effect or missing record
(f) Result of freezeup

05413500 GRANT RIVER AT BURTON, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964-67, 1978 to current year. National Stream-Quality Accounting Network data collection October 1986 to September 1994.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: Water years 1978 to current year (discontinued), April-September monthly totals only published for 1983 water year, but daily load estimates are available for the entire year.

INSTRUMENTATION.--Automatic pumping sampler since June 21, 1999.

REMARKS.--Sediment records for periods of no ice cover are fair to good. Records for high-flow periods during ice cover are poor. Monthly and annual load values are fair. Most samples are point samples.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 16,800 mg/L, June 16, 2004; minimum observed, 6 mg/L, Dec. 8, 1997.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 95,300 tons, June 17, 1978; minimum daily, 1.5 tons, Mar. 1, 2, 1978.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 16,800 mg/L, June 16; minimum observed, 7 mg/L, Feb. 4.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 47,000 tons, May 23; minimum daily, 1.6 tons, Feb. 3 and 4.

SUSPENDED SEDIMENT DISCHARGE, TONS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	3.6	3.1	8.6	e1.7	277	119	11	2,280	74	161	35
2	4.8	7.3	2.9	3.8	e1.7	188	83	9.7	873	66	167	35
3	5.2	103	3.0	3.5	e1.6	99	58	8.7	391	61	200	35
4	5.5	2,750	3.0	e3.4	e1.6	94	41	7.9	162	62	326	35
5	5.3	597	3.1	e3.2	e1.8	3,630	30	6.4	185	50	165	35
6	5.1	183	3.1	e3.1	e2.0	2,800	22	6.1	185	48	147	36
7	4.9	85	3.2	e3.1	e2.2	1,110	17	7.4	174	70	153	36
8	4.7	54	3.5	e3.2	e2.5	449	17	10	164	89	162	35
9	4.5	48	3.7	e3.2	e5.7	200	17	11	156	144	177	35
10	4.4	46	4.3	e3.4	e8.7	124	18	16	156	223	183	35
11	4.3	45	3.9	e3.5	e9.4	90	18	22	201	172	184	34
12	4.5	43	e5.4	e3.5	e10	56	18	20	219	214	169	34
13	4.3	39	e5.3	e3.4	e11	45	19	51	280	150	154	34
14	6.4	36	e5.7	e3.4	e12	34	19	155	489	130	140	34
15	7.4	33	e5.6	e3.4	e13	24	20	39	672	117	127	33
16	4.9	24	e6.1	e3.4	e14	16	20	34	20,900	110	117	31
17	3.5	17	e6.6	e3.3	e15	13	23	32	28,000	120	117	27
18	2.8	13	e6.4	e3.1	e16	13	22	35	1,300	97	105	24
19	2.7	9.1	e6.9	e2.9	e20	12	22	35	711	88	90	21
20	2.6	6.3	e6.4	e3.3	e29	12	23	45	503	82	78	19
21	2.6	4.4	e7.4	e3.4	e215	11	28	93	408	115	68	17
22	2.5	4.6	e7.0	e3.2	e133	12	24	34,700	350	128	60	16
23	2.4	36	e6.0	e3.1	e110	19	20	47,000	235	107	54	17
24	2.4	70	5.5	e2.9	e492	29	19	4,280	168	110	50	18
25	2.6	18	5.2	e2.8	e459	47	18	643	123	117	39	18
26	2.6	13	6.0	e2.6	e345	223	17	397	91	126	21	19
27	2.6	7.8	8.1	e2.4	e180	696	15	298	88	136	34	20
28	2.8	4.7	30	e2.3	e140	418	14	229	89	144	36	21
29	3.0	3.2	46	e2.1	e346	330	13	1,480	87	150	37	22
30	3.1	3.2	30	e1.9	---	234	12	4,020	83	159	35	21
31	3.3	---	20	e1.8	---	172	---	5,630	---	161	35	---
TOTAL	122.2	4,307.2	262.4	100.2	2,598.9	11,477	806	99,332.2	59,723	3,620	3,591	832

WTR YR 2004 TOTAL 186,772.1

e Estimated

05413500 GRANT RIVER AT BURTON, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Discharge, cfs (00060)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Suspended sediment concentration mg/L (80154)
OCT					
04...	0600	--	85	50	24
14...	1416	--	99	10	17
14...	1423	--	99	50	35
16...	1400	--	89	30	2
18...	0600	--	87	50	12
25...	0600	--	93	50	10
NOV					
01...	0500	--	88	50	14
03...	2330	--	274	50	530
04...	0145	--	486	50	832
04...	0415	--	723	50	1,770
04...	0715	--	964	50	1,580
04...	1440	--	1,050	10	1,030
04...	1446	--	1,050	50	1,050
04...	2300	--	567	50	962
15...	0500	--	104	50	125
22...	0500	--	97	50	13
25...	0848	--	131	10	27
25...	0852	--	130	50	70
29...	0500	--	107	50	11
DEC					
06...	0500	--	104	50	11
13...	0500	120	--	50	16
20...	0500	90	--	50	27
27...	0500	--	126	50	18
JAN					
01...	1133	--	84	10	48
01...	1137	--	84	50	12
14...	0500	84	--	50	15
21...	0500	80	--	50	16
28...	0720	77	--	50	11
FEB					
04...	0500	81	--	50	7
09...	1032	86	--	50	12
09...	1039	86	--	10	34
20...	1700	110	--	50	80
20...	2200	110	--	50	159
21...	0015	300	--	50	277
24...	0030	340	--	50	216
24...	0545	340	--	50	393
25...	0500	180	--	50	1,140
28...	0515	190	--	50	208
29...	0900	280	--	50	516
MAR					
03...	0500	--	189	50	201
05...	0845	--	590	50	1,270
06...	2300	--	253	50	2,640
17...	0500	--	128	50	38
22...	1320	--	117	10	32
22...	1329	--	117	50	46
26...	1145	--	302	50	123
26...	1815	--	497	50	262
31...	0500	--	213	50	334
APR					
07...	0600	--	147	50	43
14...	0957	--	121	50	59
21...	0600	--	140	50	71
28...	0600	--	111	50	49

05413500 GRANT RIVER AT BURTON, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Suspended sediment concentration mg/L (80154)
MAY				
05...	1155	100	10	26
05...	1206	100	50	19
12...	0600	132	50	55
19...	0600	149	50	84
22...	0000	324	50	407
22...	0345	540	50	9,400
22...	0500	784	50	10,400
22...	0630	1,070	50	7,960
22...	0745	1,370	50	6,230
22...	0845	1,730	50	6,140
22...	1110	3,080	10	7,060
22...	1120	3,140	50	8,120
22...	1259	3,420	50	8,480
22...	2145	1,570	50	6,290
23...	0300	1,110	50	2,410
23...	0730	1,410	50	3,560
23...	0900	1,790	50	5,670
23...	1145	3,860	50	10,700
23...	1930	1,990	50	8,890
23...	2345	1,430	50	3,760
24...	0630	992	50	2,080
25...	0230	602	50	476
26...	0600	443	50	353
29...	0615	292	50	245
29...	1500	496	50	397
29...	1715	723	50	956
29...	1900	984	50	1,640
31...	0500	1,250	50	1,920
31...	2000	831	50	2,160
JUN				
02...	0600	495	50	774
04...	0903	352	10	207
04...	0912	351	50	99
05...	0615	328	50	218
09...	0600	262	50	223
12...	0615	337	50	219
13...	2100	547	50	310
16...	0600	267	50	1,340
16...	1815	521	50	4,780
16...	1845	847	50	9,400
16...	1915	1,180	50	13,000
16...	2030	1,900	50	16,800
16...	2130	2,560	50	14,300
17...	0900	1,640	50	6,940
17...	1315	1,160	50	1,940
17...	1945	746	50	1,240
19...	1615	387	50	600
22...	1630	330	50	371
26...	0615	272	50	123
30...	0600	232	50	136
JUL				
06...	1220	232	10	76
06...	1230	232	50	70
10...	0615	348	50	277
14...	0600	219	50	226
21...	0600	190	50	151
28...	0600	180	50	295
AUG				
04...	0600	216	50	378
04...	0915	406	50	274
11...	0600	168	50	417
18...	0600	165	50	244
25...	0600	186	50	106
26...	1245	161	10	25
26...	1252	161	50	62
SEP				
01...	0600	153	50	86
08...	0600	140	50	94
15...	0600	138	50	91
22...	0600	129	50	45
29...	0600	128	50	63

05414000 PLATTE RIVER NEAR ROCKVILLE, WI

LOCATION.--Lat 42°43'52", long 90°38'25", in SW $^1/_4$ sec.17, T.3 N., R.2 W., Grant County, Hydrologic Unit 07060003, on right bank just downstream from bridge on County Trunk Highway B, 0.8 mi upstream from Blakely Branch, 2.2 mi east of Rockville, 4.5 mi northeast of Potosi, and 15.2 mi upstream from mouth.

DRAINAGE AREA.--142 mi^2.

PERIOD OF RECORD.--October 1934 to current year. Monthly discharge for October and November 1934 published in WSP 1308.

REVISED RECORDS.--WSP 1438: 1935-36, 1937(M), 1939(M), 1941-43(M), 1946(M). WDR WI-76-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 642.50 ft above NGVD of 1929. Prior to Oct. 1, 1941, nonrecording gage at site 1.3 mi upstream at datum 12.55 ft higher. Oct. 1, 1941, to June 29, 1949, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	43	68	83	e47	166	149	87	524	199	128	107
2	39	60	63	86	e47	154	138	85	400	193	133	105
3	40	110	65	82	e48	113	130	84	332	204	139	104
4	41	765	64	71	e48	109	122	84	301	234	221	103
5	40	184	67	e66	e48	478	118	82	282	196	142	102
6	40	121	64	e57	e49	225	115	82	288	193	130	102
7	39	100	63	e50	e49	167	111	85	258	226	127	100
8	38	88	64	e51	e49	139	109	91	240	190	125	98
9	37	79	65	e51	e49	126	105	85	226	190	128	98
10	37	77	79	e52	e50	117	102	113	242	201	122	98
11	38	76	67	e52	e49	113	99	123	321	189	121	97
12	40	73	65	e52	e50	98	97	100	268	215	119	95
13	40	67	73	e52	e50	103	97	134	428	179	116	95
14	48	65	74	e52	e50	119	97	157	375	168	114	95
15	46	63	71	e51	e50	104	95	125	305	162	112	102
16	41	62	71	e51	e50	99	94	115	655	161	112	102
17	39	60	68	e51	e50	99	105	122	1,010	170	119	96
18	40	61	66	e50	e52	100	98	183	444	157	116	94
19	40	60	62	e49	e60	99	95	137	358	152	114	92
20	40	58	55	e49	e130	97	98	126	320	151	111	91
21	40	56	70	e49	e160	93	120	166	316	199	109	91
22	40	56	65	e49	e130	90	106	1,330	303	185	108	90
23	40	135	64	e49	e150	90	98	1,280	271	156	108	90
24	42	134	57	e48	e240	110	95	622	270	147	113	90
25	47	101	65	e48	e130	117	98	425	259	142	121	90
26	44	91	61	e47	e180	280	96	335	238	139	115	89
27	43	84	71	e46	171	252	92	292	227	137	136	90
28	44	78	174	e46	151	220	91	254	225	134	123	90
29	44	74	115	e46	163	198	88	370	212	134	122	89
30	44	73	99	e46	---	174	87	515	204	137	114	90
31	43	---	92	e46	---	161	---	767	---	133	110	---
TOTAL	1,273	3,154	2,267	1,678	2,550	4,610	3,145	8,556	10,102	5,373	3,828	2,875
MEAN	41.1	105	73.1	54.1	87.9	149	105	276	337	173	123	95.8
MAX	48	765	174	86	240	478	149	1,330	1,010	234	221	107
MIN	37	43	55	46	47	90	87	82	204	133	108	89
CFSM	0.29	0.74	0.51	0.38	0.62	1.05	0.74	1.94	2.37	1.22	0.87	0.67
IN.	0.33	0.83	0.59	0.44	0.67	1.21	0.82	2.24	2.65	1.41	1.00	0.75

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 2004, BY WATER YEAR (WY)

MEAN	70.3	76.8	64.0	76.0	105	172	113	108	136	107	89.2	78.8
MAX	146	372	155	315	379	483	291	328	586	660	348	202
(WY)	(1962)	(1962)	(1973)	(1946)	(1938)	(1959)	(1993)	(1960)	(1947)	(1993)	(1943)	(1942)
MIN	25.3	29.2	23.7	22.1	24.3	33.4	42.0	36.1	34.3	24.0	30.3	33.7
(WY)	(1951)	(1938)	(1959)	(1959)	(1959)	(1957)	(1990)	(1958)	(1936)	(1936)	(1937)	(1989)

05414000 PLATTE RIVER NEAR ROCKVILLE, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1935 - 2004	
ANNUAL TOTAL	22,962		49,411			
ANNUAL MEAN	62.9		135		99.7	
HIGHEST ANNUAL MEAN					234	1993
LOWEST ANNUAL MEAN					40.8	1958
HIGHEST DAILY MEAN	765	Nov 4	1,330	May 22	7,830	Jul 16, 1950
LOWEST DAILY MEAN	36	Sep 7-11	37	Oct 9, 10	7.0	Dec 22, 1939
ANNUAL SEVEN-DAY MINIMUM	36	Sep 5	38	Oct 5	18	Nov 1, 1950
MAXIMUM PEAK FLOW			3,000	Jun 16	(a)43,500	Jul 16, 1950
MAXIMUM PEAK STAGE			10.56	Jun 16	17.26	Jul 16, 1950
INSTANTANEOUS LOW FLOW			(b)12	Jan 19	(b)0.00	Nov 24, 1950
ANNUAL RUNOFF (CFSM)	0.443		0.951		0.702	
ANNUAL RUNOFF (INCHES)	6.02		12.94		9.54	
10 PERCENT EXCEEDS	89		245		157	
50 PERCENT EXCEEDS	55		99		68	
90 PERCENT EXCEEDS	40		47		36	

(a) From rating curve extended above 7,000 ft^3/s on basis of slope-area measurement of peak flow
(b) Result of freezeup
(e) Estimated due to ice effect or missing record

05414850 GALENA RIVER AT U.W. PLATTEVILLE FARMS NEAR PLATTEVILLE, WI

LOCATION.--Lat 42°42'39", long 90°23'58", in NW ¼ NE ¼ NW ¼ sec.29, T.3 N., R.1 E. (revised), Lafayette County, Hydrologic Unit 07060005, on right bank 110 ft downstream from College Farm Road bridge.

DRAINAGE AREA.--2.94 mi^2.

PERIOD OF RECORD.--August 2002 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 995 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.91	2.2	1.8	1.7	1.5	2.5	2.2	1.8	6.8	4.5	3.0	2.8
2	0.83	3.3	1.7	1.7	1.5	2.1	2.2	1.8	6.0	4.5	3.2	2.8
3	0.82	5.2	1.7	1.7	1.5	1.9	2.1	1.8	5.6	4.8	4.6	2.8
4	0.83	9.2	1.7	1.6	1.5	3.4	2.1	1.8	5.5	4.8	4.5	2.7
5	0.84	3.1	1.7	e1.5	1.4	15	2.1	1.7	5.4	4.5	3.2	2.7
6	0.83	2.8	1.7	e1.5	e1.5	2.4	2.1	1.7	5.5	4.8	3.0	2.7
7	0.87	2.6	1.7	e1.5	1.5	2.3	2.1	1.8	5.4	4.6	3.1	2.6
8	0.88	2.4	1.7	e1.5	1.5	2.1	2.1	1.9	5.3	4.4	3.0	2.5
9	0.91	2.4	1.8	1.5	1.7	2.0	2.1	2.2	5.3	4.6	3.4	2.5
10	0.94	2.4	2.4	1.5	1.8	2.0	2.0	2.4	7.0	4.4	3.0	2.4
11	0.98	2.4	2.0	e1.5	1.6	1.9	2.0	2.1	6.8	5.1	3.0	2.4
12	1.0	2.3	1.8	e1.5	1.5	1.8	2.0	2.1	11	4.3	2.9	2.4
13	1.0	2.2	1.8	1.5	1.5	1.8	2.1	2.6	6.0	4.1	2.9	2.3
14	1.2	2.1	1.8	e1.5	e1.4	2.1	2.1	2.4	8.0	3.9	2.8	2.4
15	1.1	2.1	1.9	1.5	e1.4	1.8	2.0	2.3	5.6	3.8	2.8	2.8
16	1.1	2.1	1.9	1.5	e1.4	1.8	2.0	2.2	13	5.5	2.8	2.6
17	1.2	2.1	1.8	1.5	1.4	1.8	2.1	3.2	8.4	3.9	3.0	2.4
18	1.3	2.1	1.8	1.5	1.5	1.9	2.0	2.7	6.2	3.7	2.9	2.3
19	1.3	2.1	1.7	e1.5	1.5	1.8	2.0	2.6	5.8	3.6	3.0	2.3
20	1.4	2.0	1.7	e1.5	5.0	1.9	2.1	2.7	5.7	3.6	2.8	2.3
21	1.5	1.9	1.7	1.5	4.1	1.8	2.3	6.3	5.9	5.0	2.7	2.3
22	1.6	1.9	1.7	e1.5	3.2	1.8	2.0	26	5.5	3.8	2.8	2.3
23	1.7	4.8	1.7	e1.5	14	1.8	1.9	16	5.3	3.5	2.8	2.3
24	1.8	2.4	1.7	1.5	3.7	2.1	1.9	6.2	5.5	3.4	3.1	2.5
25	2.0	2.2	1.6	1.5	3.5	2.1	2.0	5.8	5.2	3.3	3.3	2.3
26	1.9	2.0	1.6	1.5	3.1	3.4	1.9	5.2	4.9	3.2	3.1	2.3
27	1.9	1.9	1.8	1.5	2.3	2.4	1.9	5.0	4.8	3.0	4.9	2.3
28	2.0	1.9	2.2	1.5	2.4	2.7	1.9	4.7	4.7	3.0	3.6	2.3
29	2.0	1.8	1.8	e1.5	2.2	2.4	1.9	8.8	4.6	3.2	3.3	2.3
30	2.1	1.8	1.8	e1.5	---	2.3	1.9	15	4.5	3.2	3.0	2.3
31	2.1	---	1.7	e1.5	---	2.2	---	11	---	3.1	2.9	---
TOTAL	40.84	79.7	55.4	47.2	72.1	79.3	61.1	153.8	185.2	125.1	98.4	73.9
MEAN	1.32	2.66	1.79	1.52	2.49	2.56	2.04	4.96	6.17	4.04	3.17	2.46
MAX	2.1	9.2	2.4	1.7	14	15	2.3	26	13	5.5	4.9	2.8
MIN	0.82	1.8	1.6	1.5	1.4	1.8	1.9	1.7	4.5	3.0	2.7	2.3
CFSM	0.45	0.90	0.61	0.52	0.85	0.87	0.69	1.69	2.10	1.37	1.08	0.84
IN.	0.52	1.01	0.70	0.60	0.91	1.00	0.77	1.95	2.34	1.58	1.25	0.94

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2004, BY WATER YEAR (WY)

MEAN	1.99	2.12	1.60	1.41	1.90	1.94	1.74	3.40	3.71	2.92	2.13	2.05
MAX	2.66	2.66	1.79	1.52	2.49	2.56	2.04	4.96	6.17	4.04	3.17	2.46
(WY)	(2003)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)
MIN	1.32	1.59	1.42	1.29	1.29	1.32	1.44	1.84	1.25	1.79	0.96	1.25
(WY)	(2004)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2002 - 2004	
ANNUAL TOTAL	553.65		1,072.04			
ANNUAL MEAN	1.52		2.93		2.22	
HIGHEST ANNUAL MEAN					2.93	2004
LOWEST ANNUAL MEAN					1.51	2003
HIGHEST DAILY MEAN	9.2	Nov 4	26	May 22	26	May 22, 2004
LOWEST DAILY MEAN	(a)0.82	Aug 5	0.82	Oct 3	0.82	Aug 5, 2003
ANNUAL SEVEN-DAY MINIMUM	0.84	Oct 2	0.84	Oct 2	0.84	Oct 2, 2003
MAXIMUM PEAK FLOW			72	Jun 16	72	Jun 16, 2004
MAXIMUM PEAK STAGE			6.44	Jun 16	6.44	Jun 16, 2004
INSTANTANEOUS LOW FLOW			0.79	Oct 3	0.65	Apr 7, 2003
ANNUAL RUNOFF (CFSM)	0.516		0.996		0.756	
ANNUAL RUNOFF (INCHES)	7.01		13.56		10.27	
10 PERCENT EXCEEDS	2.1		5.2		3.9	
50 PERCENT EXCEEDS	1.3		2.2		1.7	
90 PERCENT EXCEEDS	0.98		1.5		1.2	

(a) Also occurred Oct. 3
(e) Estimated due to ice effect or missing record

423912090170800 DISCOVERY FARMS WATERWAY SITE NO. 1 NEAR BELMONT, WI

LOCATION.--Lat 42°39'12", long 90°17'08", Lafayette County, Hydrologic Unit 07060005, 1000 ft east of intersection of Pleasant View Rd. and St. Peters Rd., south of St. Peters Rd. in waterway, 6.3 mi south-southeast of Belmont, WI.

DRAINAGE AREA.--16.9 acres.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 2003 to September 2004.

GAGE.--Water-stage recorder. Water levels are controlled by 2.5 ft H flume. Datum of gage is 1,038 ft above sea level, from topographic map.

REMARKS.--Records excellent. Note that discharge is the daily sum, in cubic feet.

DAILY SUM DISCHARGE, CUBIC FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	e0	0	0	0	0	0	0	0	0	0
2	---	---	e0	0	0	0	0	0	0	0	0	0
3	---	---	e0	0	0	0	0	0	0	0	0	0
4	---	---	0	0	0	23,180	0	0	0	0	0	0
5	---	---	0	0	0	6,462	0	0	0	0	0	0
6	---	---	0	0	0	0	0	0	0	0	0	0
7	---	---	0	0	0	0	0	0	0	0	0	0
8	---	---	0	0	0	0	0	0	0	0	0	0
9	---	---	0	0	0	0	0	0	0	0	0	0
10	---	---	0	0	0	0	0	0	0	0	0	0
11	---	---	0	0	0	0	0	0	0	0	0	0
12	---	---	0	0	0	0	0	0	378	0	0	0
13	---	---	0	0	0	0	0	0	0	0	0	0
14	---	---	0	0	0	0	0	0	0	0	0	0
15	---	---	0	0	0	0	0	0	0	0	0	0
16	---	---	0	0	0	0	0	0	4,723	0	0	0
17	---	---	0	0	0	0	0	0	0	0	0	0
18	---	---	0	0	155	0	0	0	0	0	0	0
19	---	---	0	0	583	0	0	0	0	0	0	0
20	---	---	0	0	20,300	0	0	0	0	0	0	0
21	---	---	0	0	3,388	0	0	31	0	0	0	0
22	---	---	0	0	3,899	0	0	0	0	0	0	0
23	---	---	0	0	7,863	0	0	32,820	0	0	0	0
24	---	---	0	0	113	0	0	0	0	0	0	0
25	---	---	0	0	401	0	0	0	0	0	0	0
26	---	---	0	0	728	0	0	0	0	0	0	0
27	---	---	0	0	380	0	0	0	0	0	0	0
28	---	---	0	0	244	0	0	0	0	0	0	0
29	---	---	0	0	0	0	0	0	0	0	0	0
30	---	---	0	0	---	0	0	1,041	0	0	0	0
31	---	---	0	0	---	0	---	0	---	0	0	---
TOTAL	---	---	0	0	38,054	29,642	0	33,892	5,101	0	0	0
MEAN	---	---	0	0	1,312	956	0	1,093	170	0	0	0
MAX	---	---	0	0	20,300	23,180	0	32,820	4,723	0	0	0
MIN	---	---	0	0	0	0	0	0	0	0	0	0

e Estimated

423912090170800 DISCOVERY FARMS WATERWAY SITE NO. 1 NEAR BELMONT, WI

WATER QUALITY RECORDS

PERIOD OF RECORD.--December 2003 to September 2004.

INSTRUMENTATION.--Water-quality sampler since December 2003.

REMARKS.--Chemical analyses by the Water and Environmental Analysis Lab (formerly the Environmental Task Force Lab) at the University of Wisconsin-Stevens Point. Samples with start and end dates/times are flow-composite samples which represent the event-mean concentation for the specified runoff period. Samples with only start dates/times are discrete samples collected by the same automatic point sampler. Runoff perods which were not sampled have zero subsamples. The sample runoff volume is the total flow that occurs between the start and end time of each flow-composite sample. The storm runoff volume is the total flow that occurs between the time that runoff starts and ends. In most cases, the sample runoff volume is slightly less than the storm runoff volume. A storm load (in pounds) can be computed by multiplying the storm runoff volume (in cubic feet) by the constituent concentration (in mg/L) and a factor of 6.2428x10^-5.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DISCRETE SAMPLES

Date	Time	Instan-taneous dis-charge, cfs (00061)	Sam-pling method, code (82398)	Chlor-ide, water, fltrd, mg/L (00940)	Residue on evap. at 105degC wat unf mg/L (00500)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Residue vola-tile, sus-pended, mg/L (00535)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Hydro-lyzable phos-phorus, water, fltrd, mg/L (00672)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Phos-phorus, water, fltrd, mg/L (00666)
FEB													
25...	1716	.034	50	14.5	300	24	13	8.84	10.3	5.5	4.86	1.04	5.06
26...	1517	.076	50	14.5	323	31	16	9.51	11.1	6.0	6.04	1.17	6.42

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Phos-phorus, water, unfltrd mg/L (00665)	Sus-pended sedi-ment concen-tration mg/L (80154)
FEB		
25...	5.64	2
26...	6.84	29

423912090170800 DISCOVERY FARMS WATERWAY SITE NO. 1 NEAR BELMONT, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
COMPOSITE SAMPLES

Date	End date	Time	End time	Sampling method, code (82398)	Chloride, water, fltrd, mg/L (00940)	Residue on evap. at 105degC wat unf mg/L (00500)	Residue total at 105 deg. C, suspended, mg/L (00530)	Residue volatile, suspended, mg/L (00535)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Hydrolyzable phosphorus, water, fltrd, mg/L (00672)	Nitrite + nitrate water fltrd, mg/L as N (00631)
FEB 18-19	20040219	2106	1034	50	117	1,779	66	59	63.5	69.4	43.6	5.60	.31
FEB 20-20	20040220	0509	0704	50	90	1,383	57	49	59.0	63.8	34.2	8.90	.08
FEB 20-20	20040220	0705	1234	50	82	1,287	44	33	50.3	58.7	26.5	11.4	.08
FEB 20-20	20040220	1235	1434	50	71	1,144	42	32	43.6	49.0	20.6	12.2	.06
FEB 20-20	20040220	1435	2334	50	67	1,122	41	35	42.3	51.4	20.0	13.2	.06
FEB 20-21	20040221	2335	0844	50	67	1,094	28	25	41.4	47.8	19	13.8	.06
FEB 21-22	20040222	1403	0345	50	63	1,088	26	22	42.7	49.1	24.8	11.5	.03
FEB 22-23	20040223	1615	1159	50	47.5	774	30	26	12.3	62.4	12.8	10.5	.05
FEB 23-24	20040224	1200	0234	50	25.5	454	26	20	13.8	14.8	8.1	8.5	.57
MAR 04-04	20040304	1957	2303	50	8.5	328	66	21	5.2	6.2	1.6	4.55	4.95
MAR 04-05	20040305	1957	0500	50	9.0	265	47	14	4.4	5.6	1.6	4.91	4.65
MAR 04-05	20040305	2305	0500	50	8.5	281	37	10	4.7	5.5	1.8	5.17	4.26
MAY 23-23	20040523	0017	0134	50	1.5	2,687	2,632	302	2.14	14.91	.64	1.132	.60
MAY 23-23	20040523	0343	0524	50	1.5	1,290	1,167	248	2.39	9.25	.32	1.268	.66
JUN 12-12	20040612	0054	0137	50	.5	292	204	29	1.48	3.00	.38	1.415	1.41
JUN 16-16	20040616	2002	2102	50	1.0	432	356	39	.92	2.64	.20	1.033	1.13

423912090170800 DISCOVERY FARMS WATERWAY SITE NO. 1 NEAR BELMONT, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Sus-pended sedi-ment concen-tration mg/L (80154)	Sample runoff volume, cubic feet (99906)
FEB 18-19	7.30	7.82	44	729
FEB 20-20	10.3	11.2	44	2,129
FEB 20-20	13.3	14.6	37	9,792
FEB 20-20	13.8	14.1	31	4,996
FEB 20-20	14.3	15.3	23	3,204
FEB 20-21	15.5	16.3	29	624
FEB 21-22	13.0	13.8	19	2,793
FEB 22-23	12.56	28.3	27	4,664
FEB 23-24	9.61	9.60	11	6,886
MAR 04-04	4.93	5.10	65	14,965
MAR 04-05	5.05	5.43	46	29,637
MAR 04-05	5.64	5.79	47	14,286
MAY 23-23	1.216	4.614	2,670	24,641
MAY 23-23	1.301	3.338	1,190	8,159
JUN 12-12	1.414	1.782	280	375
JUN 16-16	1.144	1.589	366	4,716

Discovery Farms Waterway Site No 1 Near Belmont, WI

Station ID: 423912090170800

Storm Beginning Date	Storm Beginning Time	Storm Ending Date	Storm Ending Time	Storm Runoff Volume, Cubic Feet	Peak Discharge (CFS)	Number of Subsamples
02-18-04	2100	02-19-04	1100	738	0.02	16
02-20-04	0500	02-20-04	0704	2135	0.39	4
02-20-04	0705	02-20-04	1234	9836	0.63	11
02-20-04	1235	02-20-04	1434	5021	1.04	4
02-20-04	1435	02-20-04	2334	3231	0.48	11
02-20-04	2335	02-21-04	1402	837	0.03	9
02-21-04	1403	02-22-04	1200	2903	0.20	2
02-22-04	1548	02-23-04	1159	4675	0.20	7
02-23-04	1200	02-24-04	0400	6901	0.41	6
02-25-04	1500	02-25-04	2200	401	0.05	1
02-26-04	1400	02-26-04	1900	728	0.08	1
02-27-04	1400	02-27-04	1900	380	0.05	0
02-28-04	1300	02-28-04	1600	244	0.05	0
03-04-04	1953	03-05-04	2304	15157	3.47	9
03-04-04	2305	03-05-04	0509	14484	3.23	15
03-04-04	1953	03-05-04	0509	29641	3.47	24
05-21-04	2247	05-21-04	2301	31	0.06	0
05-23-04	0016	05-23-04	0200	24648	30.44	13
05-23-04	0342	05-23-04	0600	8165	5.98	10
05-30-04	0753	05-30-04	0902	1041	0.88	0
06-12-04	0052	06-12-04	0140	378	0.45	6
06-16-04	2001	06-16-04	2106	4721	5.41	7

423909090172100 DISCOVERY FARMS WATERWAY SITE NO. 2 NEAR BELMONT, WI

LOCATION.--Lat 42°39'09", long 90°17'21", Lafayette County, Hydrologic Unit 07060005, 400 ft south of intersection of Pleasant View Rd. and St. Peters Rd., east of Pleasant View Rd. in waterway, 6.4 mi south-southeast of Belmont, WI.

DRAINAGE AREA.--17.2 acres.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 2003 to September 2004.

GAGE.--Water-stage recorder. Water levels are controlled by 2.5 ft H flume. Datum of gage is 1,028 ft above sea level, from topographic map.

REMARKS.--Records excellent except for estimated daily discharges in February, which are fair. Note that discharge is the daily sum, in cubic feet.

DAILY SUM DISCHARGE, CUBIC FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	e0	0	0	0	0	0	0	0	0	0
2	---	---	e0	0	0	0	0	0	0	0	0	0
3	---	---	e0	0	0	0	0	0	0	0	0	0
4	---	---	e0	0	0	6,713	0	0	0	0	0	0
5	---	---	e0	0	0	1,231	0	0	0	0	0	0
6	---	---	e0	0	0	0	0	0	0	0	0	0
7	---	---	e0	0	0	0	0	0	0	0	0	0
8	---	---	e0	0	0	0	0	0	0	0	0	0
9	---	---	e0	0	0	0	0	0	0	0	0	0
10	---	---	e0	0	0	0	0	0	0	0	0	0
11	---	---	e0	0	0	0	0	0	0	0	0	0
12	---	---	e0	0	0	0	0	0	435	0	0	0
13	---	---	e0	0	0	0	0	0	0	0	0	0
14	---	---	e0	0	0	0	0	0	0	0	0	0
15	---	---	e0	0	0	0	0	0	0	0	0	0
16	---	---	e0	0	0	0	0	0	5,126	0	0	0
17	---	---	e0	0	0	0	0	0	0	0	0	0
18	---	---	e0	0	0	0	0	0	0	0	0	0
19	---	---	e0	0	0	0	0	0	0	0	0	0
20	---	---	0	0	e16,570	0	0	0	0	0	0	0
21	---	---	0	0	e7,387	0	0	9	0	0	0	0
22	---	---	0	0	e7,089	0	0	21	0	0	0	0
23	---	---	0	0	13,490	0	0	41,180	0	0	0	0
24	---	---	0	0	2,583	0	0	0	0	0	0	0
25	---	---	0	0	1,017	0	0	0	0	0	0	0
26	---	---	0	0	1,262	0	0	0	0	0	0	0
27	---	---	0	0	632	0	0	0	0	0	0	0
28	---	---	0	0	305	0	0	0	0	0	0	0
29	---	---	0	0	0	0	0	0	0	0	0	0
30	---	---	0	0	---	0	0	2,448	0	0	0	0
31	---	---	0	0	---	0	---	63	---	0	0	---
TOTAL	---	---	0	0	50,335	7,944	0	43,721	5,561	0	0	0
MEAN	---	---	0	0	1,736	256	0	1,410	185	0	0	0
MAX	---	---	0	0	16,570	6,713	0	41,180	5,126	0	0	0
MIN	---	---	0	0	0	0	0	0	0	0	0	0

e Estimated

423909090172100 DISCOVERY FARMS WATERWAY SITE NO. 2 NEAR BELMONT, WI

WATER QUALITY RECORDS

PERIOD OF RECORD.--December 2003 to September 2004.

INSTRUMENTATION.--Water-quality sampler since December 2003.

REMARKS.--Chemical analyses by the Water and Environmental Analysis Lab (formerly the Environmental Task Force Lab) at the University of Wisconsin-Stevens Point. Samples with start and end dates/times are flow-composite samples which represent the event-mean concentation for the specified runoff period. Samples with only start dates/times are discrete samples collected by the same automatic point sampler. Runoff perods which were not sampled have zero subsamples. The sample runoff volume is the total flow that occurs between the start and end time of each flow-composite sample. The storm runoff volume is the total flow that occurs between the time that runoff starts and ends. In most cases, the sample runoff volume is slightly less than the storm runoff volume. A storm load (in pounds) can be computed by multiplying the storm runoff volume (in cubic feet) by the constituent concentration (in mg/L) and a factor of 6.2428x10^-5.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DISCRETE SAMPLES

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Chloride, water, fltrd, mg/L (00940)	Residue on evap. at 105degC wat unf mg/L (00500)	Residue total at 105 deg. C, suspended, mg/L (00530)	Residue volatile, suspended, mg/L (00535)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Hydrolyzable phosphorus, water, fltrd, mg/L (00672)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Phosphorus, water, fltrd, mg/L (00666)
FEB													
20...	0733	.39	50	64.5	754	96	66	31.7	39.0	18.6	4.8	.2	5.58
20...	1103	.42	50	56.0	802	91	73	27.8	38.5	14.1	6.29	.2	7.17
20...	1433	.26	50	56.0	772	35	29	30.0	37.4	16.5	7.71	.2	8.84
26...	1339	.09	50	.5	182	24	10	4.12	4.88	2.0	3.33	.72	3.50
26...	1539	.09	50	3.0	146	9	4	3.21	3.36	1.6	2.93	1.00	3.01
27...	1413	.06	50	2.5	143	17	7	3.16	3.64	1.5	2.54	1.13	2.67
27...	1613	.05	50	1.5	135	10	5	3.00	3.21	1.4	2.58	.98	2.61
28...	1350	.05	50	2.0	131	14	5	2.39	3.07	1.2	2.26	1.08	2.34

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)
FEB		
20...	8.13	118
20...	9.72	149
20...	11.1	92
26...	3.95	73
26...	3.20	59
27...	3.08	42
27...	2.97	64
28...	2.71	45

423909090172100 DISCOVERY FARMS WATERWAY SITE NO. 2 NEAR BELMONT, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
COMPOSITE SAMPLES

Date	End date	Time	End time	Sampling method, code (82398)	Chloride, water, fltrd, mg/L (00940)	Residue on evap. at 105degC wat unf mg/L (00500)	Residue total at 105 deg. C, suspended, mg/L (00530)	Residue volatile, suspended, mg/L (00535)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Hydrolyzable phosphorus, water, fltrd, mg/L (00672)	Nitrite + nitrate water fltrd, mg/L as N (00631)
FEB 22-23	20040223	1848	1032	50	31.0	483	21	19	17.4	19.2	11.6	9.26	.09
FEB 23-24	20040224	1033	0927	50	15.0	298	18	11	9.4	10.2	6.2	5.98	.48
FEB 24-25	20040225	0928	0940	50	13.0	277	11	9	7.2	8.07	4.4	5.89	1.26
MAR 04-04	20040304	2214	2312	50	7.0	505	331	50	3.9	6.1	1.1	3.6	4.02
MAR 04-05	20040305	2214	0141	50	7.0	410	240	38	3.7	5.4	1.2	3.90	3.70
MAR 04-05	20040305	2313	0141	50	7.0	344	154	25	3.5	5.3	1.2	4.36	3.54
MAY 23-23	20040523	0017	0159	50	1.5	5,512	5,030	432	2.39	21.11	.44	1.010	.62
MAY 23-23	20040523	0339	0549	50	<.5	1,696	1,680	206	1.87	10.31	.25	1.194	.73
MAY 30-30	20040530	0756	0921	50	1.0	1,904	1,831	230	1.50	10.99	.17	1.270	1.16
MAY 31-31	20040531	0725	0754	50	1.0	1,184	1,098	161	1.63	7.65	.08	1.365	.67
JUN 16-16	20040616	2000	2111	50	.5	2,847	2,779	233	.25	9.34	.10	1.292	1.03

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)	Sample runoff volume, cubic feet (99906)
FEB 22-23	9.77	10.5	33	6,029
FEB 23-24	6.35	6.91	12	11,868
FEB 24-25	6.11	6.70	83	1,562
MAR 04-04	3.79	4.69	324	3,929
MAR 04-05	4.14	4.80	240	7,938
MAR 04-05	4.40	5.17	118	3,927
MAY 23-23	1.040	6.697	5,499	32,116
MAY 23-23	1.188	4.082	1,634	9,050
MAY 30-30	1.309	4.469	1,831	2,435
MAY 31-31	1.326	3.716	1,082	58
JUN 16-16	1.364	2.963	2,804	5,125

Discovery Farms Waterway Site No 2 Near Belmont, WI

Station ID: 423909090172100

Storm Beginning Date	Storm Beginning Time	Storm Ending Date	Storm Ending Time	Storm Runoff Volume, Cubic Feet	Peak Discharge (CFS)	Number of Subsamples
02-20-04	0459	02-20-04	0917	4510	0.45	1
02-20-04	0917	02-20-04	1247	5104	0.43	1
02-20-04	1247	02-21-04	1115	9176	0.40	1
02-21-04	1115	02-23-04	1032	15167	0.31	8
02-23-04	1032	02-24-04	0927	11870	0.54	11
02-24-04	0927	02-25-04	1918	2308	0.06	12
02-26-04	1200	02-26-04	1438	523	0.11	1
02-26-04	1438	02-26-04	1902	733	0.11	1
02-27-04	1320	02-27-04	1512	296	0.06	1
02-27-04	1512	02-27-04	1800	336	0.06	1
02-28-04	1220	02-28-04	1500	305	0.07	1
03-04-04	2210	03-04-04	2312	3930	1.41	3
03-04-04	2312	03-05-04	0200	4014	1.36	7
03-04-04	2210	03-05-04	0200	7944	1.41	10
05-21-04	2252	05-21-04	2303	8	0.03	0
05-22-04	0403	05-22-04	0426	19	0.03	0
05-23-04	0016	05-23-04	0210	32121	35.15	14
05-23-04	0337	05-23-04	0615	9059	5.96	6
05-30-04	0754	05-30-04	0931	2444	1.11	9
05-31-04	0721	05-31-04	0800	63	0.06	2
06-12-04	0055	06-12-04	0133	435	0.48	0
06-16-04	1959	06-16-04	2119	5127	3.60	7

423846090171600 DISCOVERY FARMS WATERWAY SITE NO. 3 NEAR BELMONT, WI

LOCATION.--Lat 42°38'46", long 90°17'16", Lafayette County, Hydrologic Unit 07060005, 2600 ft south of intersection of Pleasant View Rd. and St. Peters Rd., 400 ft east of Pleasant View Rd. in waterway, 6.8 mi south-southeast of Belmont, WI.

DRAINAGE AREA.--39.5 acres.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 2003 to September 2004.

GAGE.--Water-stage recorder. Water levels are controlled by 2.5 ft H flume. Datum of gage is 1,018 ft above sea level, from topographic map.

REMARKS.--Records excellent. Note that discharge is the daily sum, in cubic feet.

DAILY SUM DISCHARGE, CUBIC FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	e0	0	0	0	0	0	0	0	0	0
2	---	---	e0	0	0	0	0	0	0	0	0	0
3	---	---	e0	0	0	0	0	0	0	0	0	0
4	---	---	e0	0	0	7,854	0	0	0	0	0	0
5	---	---	e0	0	0	2,322	0	0	0	0	0	0
6	---	---	e0	0	0	0	0	0	67	0	0	0
7	---	---	e0	0	0	0	0	0	0	0	0	0
8	---	---	e0	0	0	0	0	0	0	0	0	0
9	---	---	e0	0	0	0	0	0	0	0	0	0
10	---	---	e0	0	0	0	0	0	1,650	0	0	0
11	---	---	e0	0	0	0	0	0	28	0	0	0
12	---	---	e0	0	0	0	0	0	2,062	0	0	0
13	---	---	e0	0	0	0	0	0	0	0	0	0
14	---	---	e0	0	0	0	0	0	39	0	0	0
15	---	---	e0	0	0	0	0	0	0	0	0	0
16	---	---	e0	0	0	0	0	0	14,100	0	0	0
17	---	---	e0	0	0	0	0	0	463	0	0	0
18	---	---	e0	0	0	0	0	0	0	0	0	0
19	---	---	e0	0	0	0	0	0	0	0	0	0
20	---	---	0	0	13,260	0	0	0	0	0	0	0
21	---	---	0	0	11,890	0	0	163	0	0	0	0
22	---	---	0	0	15,900	0	0	77	0	0	0	0
23	---	---	0	0	40,560	0	0	45,790	0	0	0	0
24	---	---	0	0	6,069	0	0	0	0	0	0	0
25	---	---	0	0	968	0	0	0	0	0	0	0
26	---	---	0	0	1,055	0	0	0	0	0	0	0
27	---	---	0	0	223	0	0	0	0	0	0	0
28	---	---	0	0	171	0	0	0	0	0	0	0
29	---	---	0	0	0	0	0	0	0	0	0	0
30	---	---	0	0	---	0	0	2,560	0	0	0	0
31	---	---	0	0	---	0	---	263	---	0	0	---
TOTAL	---	---	0	0	90,096	10,176	0	48,853	18,409	0	0	0
MEAN	---	---	0	0	3,107	328	0	1,576	614	0	0	0
MAX	---	---	0	0	40,560	7,854	0	45,790	14,100	0	0	0
MIN	---	---	0	0	0	0	0	0	0	0	0	0

e Estimated

423846090171600 DISCOVERY FARMS WATERWAY SITE NO. 3 NEAR BELMONT, WI

WATER QUALITY RECORDS

PERIOD OF RECORD.--December 2003 to September 2004.

INSTRUMENTATION.--Water-quality sampler since December 2003.

REMARKS.--Chemical analyses by the Water and Environmental Analysis Lab (formerly the Environmental Task Force Lab) at the University of Wisconsin-Stevens Point. Samples with start and end dates/times are flow-composite samples which represent the event-mean concentation for the specified runoff period. Samples with only start dates/times are discrete samples collected by the same automatic point sampler. Runoff perods which were not sampled have zero subsamples. The sample runoff volume is the total flow that occurs between the start and end time of each flow-composite sample. The storm runoff volume is the total flow that occurs between the time that runoff starts and ends. In most cases, the sample runoff volume is slightly less than the storm runoff volume. A storm load (in pounds) can be computed by multiplying the storm runoff volume (in cubic feet) by the constituent concentration (in mg/L) and a factor of 6.2428x10^-5.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DISCRETE SAMPLES

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Chloride, water, fltrd, mg/L (00940)	Residue on evap. at 105degC wat unf mg/L (00500)	Residue total at 105 deg. C, suspended, mg/L (00530)	Residue volatile, suspended, mg/L (00535)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Hydrolyzable phosphorus, water, fltrd, mg/L (00672)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Phosphorus, water, fltrd, mg/L (00666)
JUN 16...	2328	.031	50	2.5	210	4	1	1.08	1.31	.21	.64	2.59	.718

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)
JUN 16...	.740	23

423846090171600 DISCOVERY FARMS WATERWAY SITE NO. 3 NEAR BELMONT, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
COMPOSITE SAMPLES

Date	End date	Time	End time	Sampling method, code (82398)	Chloride, water, fltrd, mg/L (00940)	Residue on evap. at 105degC wat unf mg/L (00500)	Residue total at 105 deg. C, suspended, mg/L (00530)	Residue volatile, suspended, mg/L (00535)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Hydrolyzable phosphorus, water, fltrd, mg/L (00672)	Nitrite + nitrate water fltrd, mg/L as N (00631)
FEB 20-20	20040220	0522	1139	50	2.0	136	18	7	3.1	3.1	1.42	1.5	1.74
FEB 20-20	20040220	1140	1439	50	3.0	160	11	6	3.3	2.8	1.03	2.38	2.18
FEB 20-21	20040221	1440	0039	50	3.0	158	10	5	2.5	3.0	.87	2.44	2.07
FEB 21-21	20040221	0040	1624	50	8.0	168	4	3	2.2	3.1	.78	2.31	2.00
FEB 21-22	20040222	1625	0930	50	13.0	216	7	5	2.5	2.9	.64	2.58	2.26
FEB 22-23	20040223	0931	0938	50	10.5	165	8	4	1.7	2.3	.32	1.96	1.83
FEB 23-23	20040223	0939	2338	50	7.0	130	12	4	1.6	1.7	.12	1.67	1.09
FEB 23-24	20040224	2338	2026	50	4.0	126	3	<1	1.5	1.6	.11	2.05	1.15
FEB 24-25	20040225	2026	1334	50	6.0	146	4	4	1.9	2.17	.5	2.56	1.36
MAR 04-04	20040304	2205	2324	50	.5	214	140	23	1.2	2.2	<.1	1.46	1.37
MAR 04-05	20040305	2205	0149	50	1.0	192	102	18	1.2	1.8	<.1	1.51	1.55
MAR 04-05	20040305	2325	0149	50	.5	204	110	18	1.3	1.9	<.1	1.53	1.64
MAY 21-21	20040521	2245	2304	50	1.0	3,402	3,238	423	1.93	19.62	.15	1.157	1.00
MAY 22-22	20040522	0358	0416	50	1.0	2,442	2,432	341	2.02	16.55	.17	1.036	.43
MAY 23-23	20040523	0018	0223	50	<.5	1,711	1,647	189	1.91	10.42	.15	.914	.36
MAY 30-30	20040530	0753	0836	50	.5	2,462	917	140	1.69	9.41	.22	1.165	.65
MAY 30-30	20040530	0847	1044	50	<.5	373	281	42	2.30	3.80	.22	1.240	.95
MAY 31-31	20040531	0722	0903	50	1.5	224	40	7	2.08	2.58	.13	.770	1.14
JUN 10-10	20040610	1403	1527	50	5.5	272	13	5	1.89	2.27	.27	.841	2.20
JUN 10-10	20040610	1700	1800	50	3.5	221	41	7	1.48	1.93	.25	.627	1.82
JUN 10-11	20040611	2024	0012	50	4.5	256	4	2	1.37	1.44	.13	.615	3.04
JUN 12-12	20040612	0050	0746	50	2.0	259	113	19	1.36	2.42	.22	.621	1.21
JUN 16-16	20040616	1959	2323	50	.5	314	244	33	.94	2.39	.19	.968	.63

423846090171600 DISCOVERY FARMS WATERWAY SITE NO. 3 NEAR BELMONT, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Sus-pended sedi-ment concen-tration mg/L (80154)	Sample runoff volume, cubic feet (99906)
FEB 20-20	1.51	1.55	19	454
FEB 20-20	2.46	2.53	13	3,721
FEB 20-21	2.43	2.74	8	9,422
FEB 21-21	2.57	2.80	3	7,022
FEB 21-22	2.95	3.16	10	10,087
FEB 22-23	2.24	2.23	7	17,763
FEB 23-23	1.93	1.89	5	32,785
FEB 23-24	2.28	2.38	4	5,986
FEB 24-25	2.43	2.65	11	1,270
MAR 04-04	1.47	1.90	138	4,047
MAR 04-05	1.64	1.92	117	10,171
MAR 04-05	1.66	1.92	98	5,861
MAY 21-21	1.187	6.495	3,283	161
MAY 22-22	1.088	5.681	2,449	75
MAY 23-23	.966	3.680	1,678	27,814
MAY 30-30	1.129	3.006	1,111	216
MAY 30-30	1.279	1.938	282	2,337
MAY 31-31	.795	.997	67	251
JUN 10-10	.918	1.08	12	170
JUN 10-10	.691	.785	71	573
JUN 10-11	.670	.694	16	265
JUN 12-12	.703	.952	137	2,056
JUN 16-16	1.072	1.459	266	14,038

Discovery Farms Waterway Site No 3 Near Belmont, WI

Station ID: **423846090171600**

Storm Beginning Date	Storm Beginning Time	Storm Ending Date	Storm Ending Time	Storm Runoff Volume, Cubic Feet	Peak Discharge (CFS)	Number of Subsamples
02-20-04	0500	02-20-04	1139	459	0.03	8
02-20-04	1139	02-20-04	1439	3722	0.45	6
02-20-04	1439	02-21-04	0039	9447	0.43	11
02-21-04	0039	02-21-04	1624	7031	0.16	11
02-21-04	1624	02-22-04	0930	10098	0.29	4
02-22-04	0930	02-23-04	0938	17767	0.40	11
02-23-04	0938	02-23-04	2338	32795	1.81	7
02-23-04	2338	02-24-04	2026	5986	0.22	10
02-24-04	2026	02-25-04	1700	1327	0.03	5
02-26-04	1400	02-26-04	1800	1055	0.16	0
02-27-04	1400	02-27-04	1800	223	0.04	0
02-28-04	1230	02-28-04	1430	167	0.04	0
03-04-04	2202	03-04-04	2324	4049	2.46	3
03-04-04	2324	03-05-04	0201	5993	2.21	7
03-04-04	2202	03-05-04	0201	10176	2.46	10
05-21-04	2244	05-21-04	2309	163	0.27	4
05-22-04	0356	05-22-04	0418	77	0.14	3
05-23-04	0017	05-23-04	0300	27826	19.76	14
05-23-04	0334	05-23-04	0639	17963	9.44	0
05-30-04	0752	05-30-04	0847	218	0.16	4
05-30-04	0847	05-30-04	1100	2342	1.20	12
05-31-04	0720	05-31-04	0940	263	0.07	9
06-06-04	0037	06-06-04	0300	67	0.01	0
06-10-04	1400	06-10-04	1600	178	0.07	18
06-10-04	1651	06-10-04	2024	1211	0.30	6
06-10-04	2024	06-11-04	0200	286	0.04	6
06-12-04	0049	06-12-04	0800	2062	0.82	13
06-14-04	0938	06-14-04	1100	39	0.01	0
06-16-04	1957	06-16-04	2323	14039	6.39	23
06-16-04	2323	06-17-04	0800	526	0.03	1

423900090172100 DISCOVERY FARMS WEATHER STATION NEAR BELMONT, WI—Continued

GALENA RIVER BASIN

423900090172100 DISCOVERY FARMS WEATHER STATION NEAR BELMONT, WI

LOCATION.--Lat 42°39'00", long 90°17'21", Lafayette County, Hydrologic Unit 07060005, 1,270 ft south of intersection of Pleasant View Rd. and St. Peters Rd., 30 ft east of Pleasant View Rd., 6.5 mi south-southeast of Belmont, WI.

PERIOD OF RECORD.--November 2003 to September 2004.

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Gage established Nov. 19, 2003. Rainfall for Nov. 1-19 and Dec. 3-5 estimated from nearby rain gage at U.W. Platteville Farms Met Site near Platteville, WI (Station number 424231090231900). Rainfall estimated to be 0.00 for Dec. 5, 15-16, and Feb. 26 because recorded precipitation was interpreted as collector snowmelt.

EXTREMES FOR CURRENT PERIOD.--Maximum daily rainfall, 1.91 in., May 23.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	e0.16	0.00	0.00	0.00	0.16	0.00	0.00	0.01	0.00	0.00	0.00
2	---	e1.40	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.21	0.00
3	---	e2.25	e0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.46	0.45	0.00
4	---	e0.86	e0.00	0.00	0.00	1.02	0.00	0.01	0.00	0.00	0.16	0.00
5	---	e0.00	e0.04	0.00	0.00	0.26	0.00	0.00	0.07	0.07	0.00	0.00
6	---	e0.00	0.00	0.00	0.00	0.02	0.00	0.02	0.15	0.90	0.00	0.00
7	---	e0.00	0.04	0.00	0.00	0.00	0.00	0.40	0.00	0.01	0.00	0.00
8	---	e0.00	0.02	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.02	0.00
9	---	e0.00	0.66	0.00	0.00	0.06	0.00	0.13	0.00	0.37	0.02	0.00
10	---	e0.00	0.44	0.00	0.00	0.02	0.00	0.23	1.25	0.00	0.00	0.00
11	---	e0.01	0.00	0.00	0.00	0.00	0.00	0.06	0.02	0.56	0.00	0.00
12	---	e0.01	0.00	0.00	0.00	0.00	0.00	0.07	0.66	0.00	0.00	0.00
13	---	e0.00	0.00	0.00	0.00	0.28	0.00	0.28	0.01	0.01	0.00	0.00
14	---	e0.00	0.00	0.00	0.00	0.04	0.00	0.22	0.19	0.00	0.00	0.00
15	---	e0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.70
16	---	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.44	0.17	0.18	0.00
17	---	e0.05	0.00	0.00	0.00	0.04	0.23	0.38	0.06	0.00	0.00	0.00
18	---	e0.04	0.00	0.00	0.00	0.13	0.02	0.00	0.02	0.00	0.01	0.00
19	---	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	---	0.00	0.00	0.00	0.37	0.00	0.49	0.00	0.00	0.00	0.00	0.00
21	---	0.00	0.00	0.00	0.00	0.00	0.12	1.57	0.24	1.05	0.00	0.00
22	---	0.53	0.00	0.00	0.12	0.00	0.00	1.24	0.00	0.00	0.00	0.00
23	---	1.41	0.00	0.00	0.00	0.00	0.00	1.91	0.00	0.00	0.00	0.08
24	---	0.00	0.00	0.00	0.00	0.49	0.05	0.01	0.31	0.00	0.33	0.01
25	---	0.00	0.00	0.00	0.00	0.49	0.06	0.09	0.00	0.00	0.00	0.00
26	---	0.00	0.00	0.00	0.00	0.16	0.01	0.00	0.00	0.00	0.52	0.00
27	---	0.00	0.18	0.00	0.00	0.05	0.00	0.00	0.16	0.00	0.07	0.00
28	---	0.00	0.04	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.30	0.00
29	---	0.00	0.00	0.00	0.04	0.01	0.00	0.98	0.00	0.36	0.01	0.00
30	---	0.00	0.00	0.00	---	0.03	0.00	1.05	0.00	0.03	0.01	0.00
31	---	---	0.00	0.00	---	0.00	---	0.51	---	0.00	0.00	---
TOTAL	---	6.72	1.42	0.00	0.53	3.65	0.99	9.29	4.63	3.99	2.29	0.79

e Estimated

EXPLANATION

- 05427948 Station number
- Stream gage
- Surface water-quality station
- Stream gage equipped with telephone or data collection platform
- Crest-stage partial-record station
- Lake gage equipped with telephone or data collection platform
- Precipitation gage

0 10 20 30 MILES

Base from U.S. Geological Survey 1:100,000 digital data; modified by Wisconsin Department of Natural Resources. Wisconsin Transverse Mercator projection.

ROCK RIVER BASIN

05423500 SOUTH BRANCH ROCK RIVER AT WAUPUN, WI

LOCATION.--Lat 43°38'30", long 88°43'14", in SW ¼ NW ¼ sec.33, T.14 N., R.15 E., Fond du Lac County, Hydrologic Unit 07090001, on left bank 260 ft upstream from U.S. Business Route 151 at Waupun, and 2.8 mi upstream from mouth.

DRAINAGE AREA.--63.6 mi^2.

PERIOD OF RECORD.--October 1948 to September 1969. March 1987 to current year. Monthly discharge for October and November 1948 published in WSP 1308, but unpublished daily discharges available for October to November 1948.

REVISED RECORDS.--WDR WI-88-1: Drainage area.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 863.46 ft above NGVD of 1929. October 1948 to September 1969, recording gage at site 150 ft downstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	5.8	39	e23	e12	174	95	42	576	108	32	19
2	2.3	8.3	34	e26	e10	320	86	38	477	91	29	18
3	5.4	19	35	e24	e10	267	78	36	398	81	30	16
4	2.7	136	32	e19	e10	203	72	34	334	79	32	15
5	2.6	56	31	e22	e9.7	413	67	32	274	75	28	14
6	2.6	38	27	e27	e9.9	428	65	31	233	83	26	18
7	3.5	29	26	e18	e9.9	338	61	30	201	79	24	14
8	3.1	24	26	e14	e9.3	231	58	60	166	79	24	13
9	3.5	19	29	e12	e9.4	184	55	95	265	81	33	12
10	3.2	16	69	e12	e9.4	147	52	104	696	78	27	11
11	3.7	15	61	e12	e9.1	125	50	94	1,080	71	25	11
12	3.8	15	51	e13	e9.0	86	48	80	945	66	24	10
13	3.1	13	40	e13	e9.8	86	45	148	654	65	22	9.9
14	5.2	13	34	e13	e10	88	44	117	533	61	21	9.5
15	3.3	13	31	e12	e9.9	73	42	107	469	57	20	14
16	3.1	12	32	e12	e9.9	67	44	85	424	51	23	10
17	3.1	12	29	e12	e9.4	66	43	74	479	47	38	9.2
18	3.5	19	28	e11	e9.1	64	61	70	455	43	34	7.7
19	3.0	18	24	e12	e9.0	62	58	62	399	41	33	7.4
20	3.4	17	25	e16	e11	81	59	312	350	39	28	7.0
21	2.1	15	23	e14	e9.9	76	84	336	306	37	26	8.4
22	2.8	14	23	e12	e9.3	69	75	542	264	36	24	7.0
23	2.9	132	23	e13	e11	65	65	662	233	32	22	6.1
24	3.8	111	20	e9.9	e11	69	59	701	278	30	21	5.7
25	4.4	83	21	e9.7	e11	78	62	568	275	30	21	5.5
26	4.1	71	19	e9.1	e13	127	58	480	243	28	19	5.3
27	6.1	61	19	e9.1	e14	118	53	405	203	27	29	5.5
28	6.7	54	32	e9.9	22	123	50	345	190	26	23	5.6
29	4.7	47	34	e13	56	166	46	311	159	25	22	5.3
30	4.9	44	31	e18	---	136	43	385	132	33	21	5.6
31	4.7	---	29	e15	---	111	---	624	---	27	20	---
TOTAL	113.4	1,130.1	977	455.7	353.0	4,641	1,778	7,010	11,691	1,706	801	305.7
MEAN	3.66	37.7	31.5	14.7	12.2	150	59.3	226	390	55.0	25.8	10.2
MAX	6.7	136	69	27	56	428	95	701	1,080	108	38	19
MIN	2.1	5.8	19	9.1	9.0	62	42	30	132	25	19	5.3
CFSM	0.06	0.59	0.50	0.23	0.19	2.35	0.93	3.56	6.13	0.87	0.41	0.16
IN.	0.07	0.66	0.57	0.27	0.21	2.71	1.04	4.10	6.84	1.00	0.47	0.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2004, BY WATER YEAR (WY)

MEAN	17.0	20.8	16.2	11.6	17.8	66.7	71.7	40.4	40.0	29.1	16.7	14.4
MAX	90.9	106	80.0	64.6	105	176	266	226	390	246	115	76.2
(WY)	(1996)	(1962)	(1966)	(1996)	(1966)	(1952)	(1993)	(2004)	(2004)	(1993)	(1960)	(1960)
MIN	0.63	0.53	0.16	0.09	0.08	5.40	7.80	3.54	1.36	0.95	0.56	0.55
(WY)	(1965)	(1965)	(1959)	(1959)	(1959)	(1964)	(1964)	(1958)	(1964)	(1964)	(1964)	(1963)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1949 - 2004	
ANNUAL TOTAL	4,581.80		30,901.0			
ANNUAL MEAN	12.6		84.4		30.4	
HIGHEST ANNUAL MEAN					94.1	1993
LOWEST ANNUAL MEAN					2.47	1964
HIGHEST DAILY MEAN	136	Nov 4	1,080	Jun 11	1,280	Apr 4, 1959
LOWEST DAILY MEAN	0.60	Sep 7	2.1	Oct 1	0.00	(a)
ANNUAL SEVEN-DAY MINIMUM	(b)0.81	Feb 23	3.0	Oct 17	0.00	(c)Sep 7, 1958
MAXIMUM PEAK FLOW			1,120	Jun 11	(d)1,500	Apr 3, 1959
MAXIMUM PEAK STAGE			8.20	Jun 11	8.20	Jun 11, 2004
INSTANTANEOUS LOW FLOW			1.4	Oct 12	0.00	(f)
ANNUAL RUNOFF (CFSM)	0.197		1.33		0.478	
ANNUAL RUNOFF (INCHES)	2.68		18.07		6.49	
10 PERCENT EXCEEDS	30		266		71	
50 PERCENT EXCEEDS	5.8		29		11	
90 PERCENT EXCEEDS	1.7		5.8		1.0	

(a) Many days in 1958-59, 1963-64
(b) Ice affected
(c) Also occurred in 1959
(d) From rating curve extended above 650 ft^3/s; gage height, 7.97 ft
(e) Estimated due to ice effect or missing record
(f) No flow at times in 1949, 1953-54, 1958-59, 1963-64

05424057 ROCK RIVER AT HORICON, WI

LOCATION.--Lat 43°27'01", long 88°37'56", in NW ¼ SE ¼ sec.6, T.11 N., R.16 E., Dodge County, Hydrologic Unit 07090001, on left bank downstream side of State Highway 33, 1,700 ft upstream of dam, at Horicon.

DRAINAGE AREA.--456 mi^2.

PERIOD OF RECORD.--November 1997 to December 2000, November 2001 to current year.

GAGE.--Water-stage recorder. Side-looking velocity meter system. Elevation of gage is 860 ft, from topographic map.

REMARKS.--Records fair except for periods of estimated record, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e5.8	e25	128	223	e23	e150	1,080	589	2,310	2,070	124	232
2	e5.5	e32	99	263	e24	704	1,040	558	2,390	1,990	118	148
3	e5.1	e52	100	295	e25	791	1,060	333	2,370	1,900	124	131
4	e4.4	e65	101	292	e31	989	954	235	2,370	1,860	136	114
5	e5.7	70	95	220	e34	1,230	741	230	2,370	1,780	130	108
6	e4.6	80	95	195	e34	1,320	660	264	2,360	1,700	122	103
7	e3.5	32	99	191	e34	1,360	642	316	2,290	1,550	123	120
8	e4.6	37	86	195	e34	1,380	670	308	2,270	1,650	121	126
9	e5.2	41	81	197	e36	1,430	649	313	2,280	1,560	109	123
10	e5.8	40	145	193	e37	1,370	641	444	2,320	1,500	111	132
11	e5.5	47	182	187	e42	1,450	620	546	2,440	1,430	112	137
12	e5.8	45	210	180	e42	1,040	420	526	2,690	1,390	114	146
13	e7.3	52	197	176	e45	1,360	393	636	2,800	1,290	114	138
14	e11	52	185	175	e47	1,370	357	727	2,860	1,160	108	129
15	e12	49	157	176	50	1,380	260	723	2,960	1,040	117	116
16	e11	54	130	176	48	1,320	190	709	3,000	893	107	131
17	e12	40	203	170	49	1,230	208	706	3,050	889	103	142
18	e13	88	452	171	47	1,100	186	746	3,130	883	101	133
19	e13	132	621	174	47	1,030	225	707	3,070	859	100	118
20	e13	97	637	173	54	1,160	220	725	2,960	766	97	113
21	e12	104	713	168	e46	1,130	259	855	2,850	726	99	114
22	e13	105	784	125	e41	852	317	1,110	2,810	728	91	115
23	e13	150	633	69	e41	752	316	1,280	2,740	702	100	107
24	e14	191	410	74	e39	754	332	1,520	2,680	649	100	98
25	e15	188	390	74	e42	738	336	1,680	2,590	628	96	112
26	e16	190	333	66	e45	856	462	1,800	2,500	508	96	107
27	e17	188	233	e32	e53	822	518	1,890	2,390	499	182	104
28	e17	188	285	e27	e63	761	418	1,950	2,350	491	262	106
29	e18	177	369	e26	e82	1,060	550	1,940	2,250	276	247	88
30	e19	174	351	e24	---	1,220	629	1,960	2,140	111	230	88
31	e20	---	e275	e23	---	1,170	---	2,100	---	124	240	---
TOTAL	327.8	2,785	8,779	4,730	1,235	33,279	15,353	28,426	77,590	33,602	4,034	3,679
MEAN	10.6	92.8	283	153	42.6	1,074	512	917	2,586	1,084	130	123
MAX	20	191	784	295	82	1,450	1,080	2,100	3,130	2,070	262	232
MIN	3.5	25	81	23	23	150	186	230	2,140	111	91	88
CFSM	0.02	0.20	0.62	0.33	0.09	2.35	1.12	2.01	5.67	2.38	0.29	0.27
IN.	0.03	0.23	0.72	0.39	0.10	2.71	1.25	2.32	6.33	2.74	0.33	0.30

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2004, BY WATER YEAR (WY)

MEAN	65.6	140	139	97.2	219	511	568	482	653	329	122	82.8
MAX	106	229	283	153	441	1,074	1,194	917	2,586	1,084	448	166
(WY)	(1999)	(2002)	(2004)	(2004)	(2002)	(2004)	(1998)	(2004)	(2004)	(2004)	(1999)	(1999)
MIN	10.6	91.0	63.1	42.2	26.4	81.6	145	310	110	40.7	14.0	6.24
(WY)	(2004)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(1998)	(1998)	(2002)	(2002)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1998 - 2004	
ANNUAL TOTAL	41,609.09		213,819.8			
ANNUAL MEAN	114		584		284	
HIGHEST ANNUAL MEAN					584	2004
LOWEST ANNUAL MEAN					98.7	2003
HIGHEST DAILY MEAN	920	May 13	3,130	Jun 18	3,130	Jun 18, 2004
LOWEST DAILY MEAN	-28	Aug 20	(e)3.5	Oct 7	-28	Aug 20, 2003
ANNUAL SEVEN-DAY MINIMUM	3.6	Aug 14	(e)4.7	Oct 3	3.6	Aug 14, 2003
ANNUAL RUNOFF (CFSM)	0.250		1.28		0.623	
ANNUAL RUNOFF (INCHES)	3.39		17.44		8.46	
10 PERCENT EXCEEDS	282		1,910		710	
50 PERCENT EXCEEDS	52		189		128	
90 PERCENT EXCEEDS	5.9		25		27	

(e) Estimated due to ice effect or missing record

05425500 ROCK RIVER AT WATERTOWN, WI

LOCATION.--Lat 43°11'17", long 88°43'34", in NE ¼ SW ¼ sec.4, T.8 N., R.15 E., Jefferson County, Hydrologic Unit 07090001, on left bank, 700 ft downstream from Milwaukee Street bridge, 1.1 mi downstream from Silver Creek, at Watertown.

DRAINAGE AREA.--969 mi^2.

PERIOD OF RECORD.--June 1931 to September 1970, October 1976 to current year; June to September 1914, daily gage heights available only in District files. Several 1914 water year discharges published in WSP 385.

REVISED RECORDS.--WSP 1438: 1933,1935(M), 1937(M), 1938-39, 1945(M); WDR WI-79-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 792.58 ft above NGVD of 1929. Prior to Sept. 26, 1933, nonrecording gage at site 700 ft upstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Flow partly regulated by powerplant at Watertown. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	115	411	625	e280	600	1,520	786	4,170	3,050	603	359
2	37	182	395	595	295	748	1,480	778	3,880	e2,900	459	384
3	37	203	360	561	296	812	1,460	764	3,780	e2,800	358	386
4	37	464	373	501	e270	877	1,480	753	3,760	e2,700	684	362
5	36	636	376	366	281	1,260	1,490	746	3,800	e2,700	562	308
6	36	746	355	e380	279	1,510	1,500	722	3,750	e2,600	504	236
7	23	781	329	e370	279	1,370	1,510	674	3,710	e2,500	462	222
8	31	701	321	e340	e250	1,330	1,490	625	3,600	2,340	427	194
9	45	729	322	e320	261	1,340	1,470	603	3,620	2,110	398	190
10	33	646	405	e300	264	1,370	1,430	637	4,070	2,010	372	192
11	32	587	516	e300	e240	1,410	1,370	842	4,330	1,990	347	179
12	39	509	463	e290	251	1,460	1,300	930	4,350	2,000	314	167
13	38	415	450	309	e230	1,520	1,230	1,060	4,070	1,910	322	171
14	60	279	507	296	244	1,550	1,170	1,200	3,920	1,830	337	169
15	55	295	525	297	e220	1,610	1,110	1,300	3,860	1,750	315	179
16	55	275	540	286	e210	1,620	1,010	1,280	3,820	1,710	253	178
17	62	248	543	293	212	1,650	1,030	1,270	4,070	1,660	215	178
18	65	283	517	e280	e190	1,690	985	1,340	4,020	1,600	198	188
19	66	306	467	e280	206	1,690	887	1,380	3,910	1,530	191	192
20	63	315	404	e280	188	1,700	840	1,370	3,900	1,450	198	185
21	60	349	522	e270	e180	1,730	972	1,470	3,900	1,410	194	161
22	62	381	594	e270	e190	1,700	1,040	2,220	3,860	1,340	189	164
23	63	372	629	e270	e210	1,670	988	2,810	3,800	1,240	191	158
24	67	436	664	e270	259	1,650	957	2,820	3,750	1,190	192	151
25	77	382	712	e270	275	1,630	954	2,700	3,680	1,120	198	158
26	79	441	709	e280	318	1,720	973	2,820	3,600	1,020	202	147
27	81	466	738	e280	397	1,700	942	3,010	3,530	921	228	138
28	82	461	755	e280	440	1,660	897	3,170	3,450	836	243	141
29	82	458	773	e280	498	1,690	833	3,250	3,330	768	262	143
30	85	438	709	e280	---	1,650	793	3,420	3,210	709	277	147
31	86	---	656	e280	---	1,570	---	3,990	---	683	286	---
TOTAL	1,711	12,899	16,040	10,299	7,713	45,487	35,111	50,740	114,500	54,377	9,981	6,127
MEAN	55.2	430	517	332	266	1,467	1,170	1,637	3,817	1,754	322	204
MAX	86	781	773	625	498	1,730	1,520	3,990	4,350	3,050	684	386
MIN	23	115	321	270	180	600	793	603	3,210	683	189	138
CFSM	0.06	0.44	0.53	0.34	0.27	1.51	1.21	1.69	3.94	1.81	0.33	0.21
IN.	0.07	0.50	0.62	0.40	0.30	1.75	1.35	1.95	4.40	2.09	0.38	0.24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2004, BY WATER YEAR (WY)

MEAN	336	414	338	283	363	959	1,283	754	520	369	255	258
MAX	2,981	2,034	1,148	1,055	1,627	2,448	3,875	2,634	3,817	1,754	1,540	1,552
(WY)	(1987)	(1986)	(1986)	(1946)	(1938)	(1985)	(1979)	(1993)	(2004)	(2004)	(1960)	(1986)
MIN	11.6	27.2	22.3	20.4	29.8	114	192	58.2	23.6	19.4	8.42	3.60
(WY)	(1964)	(1964)	(1938)	(1940)	(1936)	(1964)	(1964)	(1958)	(1931)	(1936)	(1934)	(1932)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1931 - 2004	
ANNUAL TOTAL	100,797		364,985			
ANNUAL MEAN	276		997		513	
HIGHEST ANNUAL MEAN					1,186	1993
LOWEST ANNUAL MEAN					64.5	1964
HIGHEST DAILY MEAN	1,330	May 21	4,350	Jun 12	4,970	Apr 4, 1959
LOWEST DAILY MEAN	20	Sep 11	23	Oct 7	0.90	(a)Oct 15, 1939
ANNUAL SEVEN-DAY MINIMUM	23	Sep 6	34	Oct 5	1.1	Sep 15, 1932
MAXIMUM PEAK FLOW			4,730	Jun 12	(b)5,080	Mar 31, 1979
MAXIMUM PEAK STAGE			6.09	Jun 12	(c)6.96	Jan 17, 1997
ANNUAL RUNOFF (CFSM)	0.285		1.03		0.529	
ANNUAL RUNOFF (INCHES)	3.87		14.01		7.19	
10 PERCENT EXCEEDS	704		2,930		1,350	
50 PERCENT EXCEEDS	160		508		271	
90 PERCENT EXCEEDS	43		147		41	

(a) Also occurred Sept. 9, 1944
(b) Gage height, 6.19 ft
(c) Backwater from ice
(e) Estimated due to ice effect or missing record

05425912 BEAVERDAM RIVER AT BEAVER DAM, WI

LOCATION.--Lat 43°26'57", long 88°50'21", in NE ¼ SW ¼ sec.4, T.11 N., R.14 E., Dodge County, Hydrologic Unit 07090002, on left bank 5 ft upstream from bridge on Davis Street, 0.8 mi downstream from outlet of Beaverdam Lake, at Beaver Dam.

DRAINAGE AREA.--157 mi^2.

PERIOD OF RECORD.--March 1985 to current year. Instantaneous stages from November 1984 to February 1985 in District data files.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 839.42 ft above NGVD of 1929.

REMARKS.--Records good (see page 11). Flow regulated by dam 0.8 mi upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	16	68	43	35	54	287	19	702	515	34	19
2	11	21	55	44	71	69	213	19	693	512	51	17
3	13	33	99	45	95	140	235	18	684	506	61	16
4	13	35	123	46	90	196	192	20	657	500	147	16
5	15	18	120	46	142	255	116	18	638	503	195	15
6	20	18	115	42	189	285	77	19	626	509	134	18
7	19	20	111	45	179	305	66	20	598	498	53	15
8	19	19	77	45	168	319	63	46	584	506	33	15
9	19	20	61	44	160	372	49	117	607	500	22	15
10	19	21	161	43	150	413	49	241	752	486	15	15
11	20	24	195	42	142	411	44	299	871	470	9.3	15
12	21	40	181	41	135	418	36	257	930	475	5.3	15
13	19	36	172	40	128	432	28	347	971	468	4.6	15
14	25	26	166	40	121	429	20	427	1,050	445	6.3	14
15	22	26	124	39	115	427	17	416	995	415	13	14
16	19	27	95	38	109	419	20	386	972	391	18	18
17	17	24	94	39	104	415	20	364	961	372	18	21
18	16	30	94	39	100	403	24	327	941	348	18	20
19	16	30	93	38	96	380	31	175	919	259	14	19
20	16	25	92	37	109	375	22	272	862	165	14	20
21	18	28	91	37	110	353	24	399	803	98	19	17
22	16	26	89	37	106	328	16	468	774	43	23	18
23	16	52	87	37	108	310	11	554	731	18	22	14
24	17	121	84	38	102	302	11	565	704	4.7	22	10
25	18	139	81	37	99	296	13	601	673	4.8	25	11
26	18	273	61	37	96	376	17	634	644	4.7	23	9.8
27	16	340	47	38	60	e354	13	648	612	4.1	21	9.6
28	17	353	49	37	39	e329	12	611	592	4.0	19	10
29	17	309	47	37	42	302	18	609	563	3.7	19	8.8
30	15	154	45	37	---	330	19	626	541	21	19	8.1
31	17	---	45	36	---	335	---	689	---	35	19	---
TOTAL	539	2,304	3,022	1,244	3,200	10,132	1,763	10,211	22,650	9,084.0	1,096.5	448.3
MEAN	17.4	76.8	97.5	40.1	110	327	58.8	329	755	293	35.4	14.9
MAX	25	353	195	46	189	432	287	689	1,050	515	195	21
MIN	11	16	45	36	35	54	11	18	541	3.7	4.6	8.1
CFSM	0.11	0.49	0.62	0.26	0.70	2.08	0.37	2.10	4.81	1.87	0.23	0.10
IN.	0.13	0.55	0.72	0.29	0.76	2.40	0.42	2.42	5.37	2.15	0.26	0.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2004, BY WATER YEAR (WY)

MEAN	66.5	91.9	80.5	72.9	77.8	162	166	117	147	104	64.5	54.1
MAX	446	350	289	281	182	327	527	449	755	561	287	282
(WY)	(1987)	(1986)	(1986)	(1986)	(1986)	(2004)	(1993)	(1993)	(2004)	(1993)	(1999)	(1986)
MIN	2.89	6.66	10.6	11.7	14.4	10.9	3.97	4.55	4.86	2.86	3.05	5.13
(WY)	(1989)	(1989)	(2003)	(2003)	(2003)	(1988)	(2000)	(1989)	(1985)	(1988)	(1988)	(1988)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1985 - 2004	
ANNUAL TOTAL	12,765.9		65,693.8			
ANNUAL MEAN	35.0		179		101	
HIGHEST ANNUAL MEAN					244	1993
LOWEST ANNUAL MEAN					21.0	2003
HIGHEST DAILY MEAN	353	Nov 28	1,050	Jun 14	1,050	Jun 14, 2004
LOWEST DAILY MEAN	3.7	Sep 25	3.7	Jul 29	0.64	Oct 30, 1988
ANNUAL SEVEN-DAY MINIMUM	8.1	Sep 20	6.3	Jul 23	0.77	Feb 11, 1987
MAXIMUM PEAK FLOW			1,140	Jun 14	1,140	Jun 14, 2004
MAXIMUM PEAK STAGE			10.68	Jun 14	10.68	Jun 14, 2004
INSTANTANEOUS LOW FLOW			3.4	Jul 29	1.3	Oct 5, 2002
ANNUAL RUNOFF (CFSM)	0.223		1.14		0.643	
ANNUAL RUNOFF (INCHES)	3.02		15.57		8.73	
10 PERCENT EXCEEDS	92		564		272	
50 PERCENT EXCEEDS	17		47		47	
90 PERCENT EXCEEDS	10		15		7.9	

(e) Estimated due to ice effect or missing record

05426000 CRAWFISH RIVER AT MILFORD, WI

LOCATION.--Lat 43°06'00", long 88°50'58", in NW $^1/_4$ SW $^1/_4$ sec.4, T.7 N., R.14 E., Jefferson County, Hydrologic Unit 07090002, on left bank near upstream side of highway bridge in Milford, 1.4 mi downstream from Rock Creek and 9.8 mi upstream from mouth.

DRAINAGE AREA.--762 mi^2.

PERIOD OF RECORD.--June 1931 to current year.

REVISED RECORDS.--WSP 975: 1937-38. WSP 1438: 1932-33(M), 1935(M), 1937, 1938-41(M), 1943-44(M), 1947-48(M). WDR WI-79-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 779.40 ft above NGVD of 1929. Prior to July 28, 1966, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Some diurnal fluctuation at lower flows, due to manipulation of gates on small dams upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	80	621	e342	e202	847	1,280	539	3,320	1,980	510	e224
2	32	99	562	e327	e202	1,040	1,260	500	3,400	1,890	533	e218
3	24	144	550	e312	e202	1,190	1,250	444	3,380	1,790	545	e211
4	41	308	540	e297	e210	1,330	1,170	374	3,310	1,770	683	201
5	40	487	531	e281	e223	1,550	1,080	367	3,200	1,730	750	176
6	36	635	484	e258	e226	1,600	1,030	351	3,080	1,690	803	165
7	34	724	433	e241	e238	1,910	965	342	2,940	1,660	810	190
8	35	759	424	e227	e259	2,040	916	322	2,800	1,600	790	185
9	40	729	429	e204	e272	2,060	834	340	2,720	1,550	761	170
10	41	695	527	e192	e284	1,960	778	360	2,700	1,500	719	147
11	35	657	514	e182	e300	1,920	703	405	2,810	1,430	654	144
12	42	608	531	e179	e316	1,850	649	435	3,030	1,420	587	148
13	43	571	582	e172	e334	1,710	601	540	3,210	1,370	518	128
14	72	478	585	e168	e354	1,620	535	625	3,310	1,320	457	121
15	61	442	592	e162	e373	1,560	462	679	3,350	1,250	398	102
16	63	406	596	e163	e379	1,470	435	708	3,320	1,180	338	143
17	58	345	584	e162	e389	1,370	460	725	3,310	1,120	315	134
18	51	343	561	e165	e397	1,290	391	843	3,250	1,050	274	128
19	59	329	532	e176	e408	1,190	461	901	3,180	978	261	114
20	52	284	523	e166	e414	1,200	534	941	3,060	933	241	113
21	69	325	468	e149	e422	1,160	606	1,020	2,960	881	223	116
22	61	316	431	e144	e425	1,080	664	1,420	2,880	833	183	114
23	60	298	419	e140	e427	1,040	683	1,830	2,770	765	193	101
24	57	353	414	e142	e435	1,000	696	2,260	2,700	679	171	102
25	66	442	373	e144	e437	966	701	2,610	2,610	609	166	115
26	70	581	356	e146	e458	1,030	685	2,860	2,510	523	155	105
27	66	631	e337	e154	e504	1,060	653	3,040	2,410	451	196	99
28	51	668	e345	e158	576	1,090	516	3,140	2,330	381	217	116
29	73	603	e355	e163	683	1,180	498	3,130	2,220	329	234	89
30	71	614	e360	e183	---	1,270	575	3,110	2,090	356	231	79
31	79	---	e359	e197	---	1,290	---	3,220	---	467	233	---
TOTAL	1,622	13,954	14,918	6,096	10,349	42,873	22,071	38,381	88,160	35,485	13,149	4,198
MEAN	52.3	465	481	197	357	1,383	736	1,238	2,939	1,145	424	140
MAX	79	759	621	342	683	2,060	1,280	3,220	3,400	1,980	810	224
MIN	24	80	337	140	202	847	391	322	2,090	329	155	79
CFSM	0.07	0.61	0.63	0.26	0.47	1.81	0.97	1.62	3.86	1.50	0.56	0.18
IN.	0.08	0.68	0.73	0.30	0.51	2.09	1.08	1.87	4.30	1.73	0.64	0.20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2004, BY WATER YEAR (WY)

MEAN	265	300	253	236	313	1,015	971	525	420	306	203	237
MAX	2,565	1,958	1,065	1,278	1,576	2,473	3,206	2,337	2,939	2,189	899	1,881
(WY)	(1987)	(1986)	(1983)	(1946)	(1938)	(1948)	(1959)	(1973)	(2004)	(1993)	(1993)	(1986)
MIN	16.8	25.9	18.0	15.2	16.2	56.2	193	73.8	34.4	17.9	18.0	8.11
(WY)	(1964)	(1950)	(1959)	(1940)	(1959)	(1940)	(1964)	(1958)	(1934)	(1965)	(1964)	(1958)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1931 - 2004	
ANNUAL TOTAL	78,337		291,256			
ANNUAL MEAN	215		796		422	
HIGHEST ANNUAL MEAN					1,117	1993
LOWEST ANNUAL MEAN					61.8	1964
HIGHEST DAILY MEAN	874	May 15	3,400	Jun 2	6,130	Apr 6, 1959
LOWEST DAILY MEAN	20	Sep 12	24	Oct 3	0.30	Sep 15, 1958
ANNUAL SEVEN-DAY MINIMUM	27	Sep 6	35	Oct 2	1.5	Sep 11, 1958
MAXIMUM PEAK FLOW			3,420	Jun 2	6,140	Apr 6, 1959
MAXIMUM PEAK STAGE			8.63	Jun 2	11.15	Apr 6, 1959
ANNUAL RUNOFF (CFSM)	0.282		1.04		0.553	
ANNUAL RUNOFF (INCHES)	3.82		14.22		7.52	
10 PERCENT EXCEEDS	562		2,230		1,100	
50 PERCENT EXCEEDS	110		464		200	
90 PERCENT EXCEEDS	44		100		40	

(e) Estimated due to ice effect or missing record

05426067 BARK RIVER AT NAGAWICKA ROAD AT DELAFIELD, WI

LOCATION.--Lat 43°05'16" long 88°22'34", in NE ¼ NW ¼ sec.9, T.7 N., R.18 E., Waukesha County, Hydrologic Unit 07090001, on left bank 20 ft upstream from Nagawicka Road in Delafield.

DRAINAGE AREA.--35.9 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 2002 to current year.

GAGE.--Water-stage recorder.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	12	13	e15	e9.4	e20	33	26	82	32	20	22
2	12	21	13	e15	e9.4	30	29	25	76	32	20	21
3	15	30	13	e15	e9.4	31	29	25	72	31	25	21
4	15	59	13	e15	e9.4	30	28	24	65	31	33	21
5	12	52	13	e14	e9.4	54	23	24	57	30	23	21
6	12	40	13	e14	e9.4	47	24	26	52	30	22	20
7	11	30	13	e13	e9.2	44	23	26	47	30	21	20
8	11	24	13	e13	e9.2	39	21	25	43	29	20	18
9	9.6	20	14	e12	e9.2	34	19	28	42	29	20	18
10	9.6	18	36	e12	e9.0	29	19	41	46	29	19	18
11	9.8	17	27	e11	e9.0	27	18	66	58	28	19	17
12	11	16	26	e11	e9.0	24	18	64	58	32	20	17
13	11	16	20	e11	e9.0	23	17	61	57	30	20	17
14	12	17	19	e10	e9.0	22	17	67	55	29	19	17
15	12	16	17	e10	e9.0	21	16	78	54	28	19	17
16	11	15	16	e10	e8.8	20	16	60	51	27	19	17
17	11	15	16	e10	e8.8	20	21	55	60	27	19	17
18	11	19	16	e9.8	e8.8	21	20	59	53	26	19	16
19	11	19	15	e9.8	e8.8	20	18	52	49	25	18	16
20	13	18	15	e9.8	e9.4	21	25	46	47	24	18	15
21	13	17	18	e9.6	e9.0	22	46	54	48	24	18	15
22	12	17	17	e9.6	e9.0	22	39	86	46	23	17	16
23	11	17	17	e9.6	e8.8	21	36	99	38	23	18	15
24	13	16	15	e9.4	e8.8	21	32	111	40	22	19	14
25	14	16	e14	e9.4	e8.8	20	31	113	40	23	19	14
26	12	16	e14	e9.4	e10	36	28	106	40	22	18	14
27	12	16	15	e9.4	e11	34	28	85	37	22	26	14
28	11	15	18	e9.4	e12	39	26	73	37	21	25	14
29	13	15	18	e9.4	e14	39	24	66	35	21	26	14
30	14	14	17	e9.4	---	35	26	64	33	21	24	14
31	13	---	e16	e9.4	---	36	---	81	---	21	23	---
TOTAL	369.0	633	520	344.4	274.0	902	750	1,816	1,518	822	646	510
MEAN	11.9	21.1	16.8	11.1	9.45	29.1	25.0	58.6	50.6	26.5	20.8	17.0
MAX	15	59	36	15	14	54	46	113	82	32	33	22
MIN	9.6	12	13	9.4	8.8	20	16	24	33	21	17	14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2004, BY WATER YEAR (WY)

MEAN	11.9	19.2	15.7	11.3	9.54	21.9	21.9	47.5	35.0	20.1	16.8	13.8
MAX	11.9	21.1	16.8	11.5	9.63	29.1	25.0	58.6	50.6	26.5	20.8	17.0
(WY)	(2004)	(2004)	(2004)	(2003)	(2003)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)
MIN	11.9	17.4	14.6	11.1	9.45	14.7	18.9	36.4	19.3	13.7	12.8	10.6
(WY)	(2004)	(2003)	(2003)	(2004)	(2004)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2003 - 2004	
ANNUAL TOTAL	6,020.1		9,104.4			
ANNUAL MEAN	16.5		24.9		24.9	
HIGHEST ANNUAL MEAN					24.9	2004
LOWEST ANNUAL MEAN					24.9	2004
HIGHEST DAILY MEAN	62	May 12	113	May 25	113	May 25, 2004
LOWEST DAILY MEAN	8.9	Sep 5	(a)8.8	Feb 16	(a)8.8	Feb 16, 2004
ANNUAL SEVEN-DAY MINIMUM	(a)9.0	Jan 23	(a)8.9	Feb 13	(a)8.9	Feb 13, 2004
MAXIMUM PEAK FLOW			117	May 25	117	May 25, 2004
MAXIMUM PEAK STAGE			13.48	May 25	13.48	May 25, 2004
10 PERCENT EXCEEDS	25		51		51	
50 PERCENT EXCEEDS	14		19		19	
90 PERCENT EXCEEDS	9.4		9.6		9.6	

(a) Ice affected
(e) Estimated due to ice effect or missing record

05426067 BARK RIVER AT NAGAWICKA ROAD AT DELAFIELD, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 2002 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: November 2002 to current year.
TOTAL-PHOSPHORUS DISCHARGE: November 2002 to current year.

INSTRUMENTATION.--Refrigerated automatic pumping sampler since November 2002.

REMARKS.--Records good.

COOPERATION.--Observer furnished by Delavan Lake Sanitary District.

EXTREMES FOR PERIOD OF RECORD.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 312 mg/L, May 1, 2003; minimum observed, 5 mg/L, Oct. 2, 2003.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 57 tons, May 22, 2004; minimum daily, 0.13 ton, Oct. 9-11, 2003.
TOTAL PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.59 mg/L, May 1, 2003; minimum observed, <0.02 mg/L, Feb. 13, 2003.
TOTAL PHOSPHORUS DISCHARGE: Maximum daily, 109 lb, May 22-23, 2004; minimum daily, 0.80 lb, Feb. 25-27 and Mar. 6-8, 2003.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 287 mg/L, May 13; minimum observed, 5 mg/L, Oct. 2.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 57 tons, May 22; minimum daily, 0.14 ton, Sept. 30.
TOTAL PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.29 mg/L, Nov. 4; minimum observed, 0.019 mg/L, Feb. 4.
TOTAL PHOSPHORUS DISCHARGE: Maximum daily, 109 lb, May 22, 23; minimum daily, 0.94 lb, Feb. 16.

SUSPENDED SEDIMENT DISCHARGE, TONS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.15	0.54	0.89	e0.65	e0.30	e1.5	e3.9	1.5	17	5.0	1.7	3.3
2	0.16	1.9	0.86	e0.65	e0.30	2.2	e2.9	1.4	14	4.9	1.6	3.1
3	e0.84	4.8	0.84	e0.65	e0.30	1.6	e2.8	1.4	13	4.7	3.2	3.0
4	e0.80	21	0.81	e0.65	e0.30	2.0	e2.7	1.3	11	4.7	4.4	3.0
5	e0.35	9.4	0.81	e0.60	e0.30	8.5	e1.7	1.3	9.4	4.6	1.8	2.9
6	0.16	5.4	0.76	e0.60	e0.30	4.2	2.2	1.4	8.2	4.6	1.6	2.7
7	0.15	3.0	0.73	e0.56	e0.28	2.9	2.0	1.4	7.1	4.5	1.6	2.6
8	0.14	1.4	0.72	e0.56	e0.27	2.3	1.7	1.4	6.3	4.4	1.5	2.4
9	0.13	1.2	0.86	e0.49	e0.27	1.9	1.5	1.5	5.8	4.3	1.5	2.3
10	0.13	1.1	4.1	e0.49	e0.26	1.6	1.4	13	e8.0	4.2	1.4	2.2
11	0.13	1.0	1.3	e0.44	e0.26	1.4	1.3	33	e13	e4.1	1.5	2.1
12	0.14	0.96	1.2	e0.44	e0.26	1.3	1.2	30	e13	e4.9	1.5	2.1
13	0.14	0.91	0.93	e0.44	e0.26	1.2	1.1	28	e13	4.0	1.4	2.0
14	e0.35	0.96	0.85	e0.40	e0.26	1.1	1.0	31	e12	3.8	1.4	2.0
15	e0.30	0.88	0.75	e0.40	e0.26	1.1	0.96	38	e11	3.6	1.3	1.9
16	0.15	0.84	0.74	e0.40	e0.24	0.98	0.91	24	11	3.4	1.3	1.9
17	0.15	0.81	0.71	e0.40	e0.24	0.96	e1.4	19	15	3.2	1.3	1.8
18	0.14	2.2	0.73	e0.40	e0.24	0.97	e1.3	27	12	3.1	1.2	1.7
19	0.14	2.3	0.69	e0.40	e0.24	0.93	e1.0	21	e9.2	2.9	1.2	1.7
20	e0.49	2.0	0.68	e0.40	e0.28	0.93	e2.1	15	e8.4	2.8	1.1	1.5
21	e0.40	1.6	0.79	e0.36	e0.27	0.98	11	22	e8.8	2.6	1.1	1.5
22	e0.35	1.5	e0.75	e0.36	e0.29	0.94	5.1	57	e8.0	2.5	1.0	1.5
23	0.15	1.4	0.73	e0.36	e0.31	0.88	4.9	50	6.2	2.4	1.1	1.5
24	0.46	1.3	0.67	e0.35	e0.33	0.86	2.2	42	6.4	2.3	1.1	1.3
25	0.66	1.2	e0.60	e0.35	e0.36	0.83	1.7	37	6.4	2.3	1.0	1.3
26	0.56	1.2	e0.60	e0.35	e0.43	4.4	1.6	31	6.3	2.2	1.0	1.3
27	0.54	1.1	0.66	e0.32	e0.50	4.2	1.6	27	5.9	2.1	e3.7	1.2
28	0.50	1.1	0.77	e0.32	e0.62	7.1	1.5	19	5.8	2.0	4.3	1.2
29	0.68	1.0	0.78	e0.32	e0.79	7.5	1.3	12	5.5	1.9	4.5	1.2
30	0.82	0.97	0.74	e0.32	---	5.1	1.4	9.9	5.2	1.9	3.9	1.1
31	0.66	---	e0.69	e0.32	---	5.6	---	20	---	1.8	3.5	---
TOTAL	10.92	74.97	27.74	13.75	9.32	77.96	67.37	618.5	281.9	105.7	59.7	59.3

WTR YR 2004 TOTAL 1,407.13

e Estimated

05426067 BARK RIVER AT NAGAWICKA ROAD AT DELAFIELD, WI—Continued

PHOSPHORUS, WATER, UNFILTERED, POUNDS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.36	1.80	2.47	e1.71	e0.98	e7.21	e11.4	4.66	44.6	10.3	3.30	6.04
2	1.45	9.81	2.37	e1.70	e0.97	12.6	e8.20	4.48	39.6	9.42	3.21	5.23
3	e3.40	20.2	2.28	e1.69	e0.97	12.1	e8.00	4.36	37.4	8.65	8.56	4.61
4	e3.30	72.4	2.18	e1.69	e0.97	12.0	e7.50	4.09	33.2	8.19	21.3	4.27
5	e2.10	38.5	2.13	e1.58	e0.97	42.0	6.48	4.08	29.2	7.54	8.20	3.80
6	1.43	23.7	1.99	e1.57	e0.97	26.8	6.41	4.39	26.4	7.11	5.97	3.20
7	1.37	15.6	1.89	e1.46	e0.96	20.9	5.93	4.34	23.4	6.58	5.20	2.87
8	1.26	8.92	1.82	e1.45	e0.96	16.1	5.32	4.17	21.4	6.20	4.62	2.42
9	1.14	6.44	2.34	e1.33	e0.96	12.7	4.77	4.66	20.4	6.09	4.30	2.35
10	1.14	5.46	20.5	e1.32	e0.95	10.3	4.65	32.3	e24.2	6.05	3.85	2.30
11	1.15	4.84	7.67	e1.21	e0.95	8.79	4.44	70.6	e32.4	5.79	3.68	2.26
12	1.25	4.49	5.82	e1.21	e0.95	7.50	4.22	63.0	e32.0	e18.7	3.71	2.23
13	1.22	4.13	4.17	e1.20	e0.96	6.66	4.01	61.9	e31.7	e16.5	3.67	2.26
14	e2.10	4.23	3.42	e1.09	e0.96	5.94	3.76	66.9	e30.3	5.72	3.56	2.24
15	e2.00	3.78	2.73	e1.09	e0.96	5.76	3.66	82.2	e29.6	5.54	3.47	2.26
16	1.27	3.50	2.41	e1.08	e0.94	5.46	3.58	52.8	e27.6	5.23	3.48	2.25
17	1.23	3.27	2.08	e1.08	e0.95	5.41	e6.80	46.5	44.2	5.11	3.46	2.21
18	1.21	6.76	1.97	e1.06	e0.95	5.58	e6.20	61.1	e28.9	4.90	3.29	2.17
19	1.19	6.08	1.82	e1.05	e0.95	5.48	4.00	48.6	e26.2	4.73	3.20	2.11
20	1.43	5.36	1.79	e1.05	e1.02	5.58	8.15	38.0	e24.8	4.53	3.08	2.02
21	e2.50	4.53	2.09	e1.03	e0.98	5.98	31.1	54.6	e25.5	4.35	3.00	1.95
22	e2.10	4.29	1.98	e1.03	e0.98	5.85	16.8	109	e24.2	4.26	2.96	2.11
23	1.19	4.27	1.93	e1.02	e0.95	5.60	15.7	109	19.4	4.16	3.07	2.04
24	2.78	3.82	1.79	e1.00	e0.95	5.55	9.66	79.8	19.0	4.01	3.09	1.85
25	4.67	3.65	e1.73	e0.99	e0.95	5.50	7.30	73.1	18.1	4.01	3.08	1.86
26	1.93	3.58	e1.70	e0.99	e1.13	17.7	5.54	63.9	16.8	3.90	3.01	1.89
27	1.74	3.36	1.75	e0.99	e1.63	14.8	5.23	59.1	15.1	3.79	e12.3	1.84
28	1.53	3.10	2.03	e0.98	e2.41	21.1	4.82	47.2	13.9	3.63	8.99	1.83
29	2.07	2.92	2.08	e0.99	e3.78	20.3	4.40	37.8	12.4	3.54	11.1	1.87
30	2.66	2.74	1.98	e0.98	---	15.7	4.62	35.5	11.1	3.56	8.41	1.81
31	2.14	---	e1.81	e0.98	---	e16.0	---	48.4	---	3.48	7.05	---
TOTAL	57.31	285.53	94.72	37.60	33.01	368.95	222.65	1,380.53	783.0	195.57	169.17	78.15

WTR YR 2004 TOTAL 3,706.19

e Estimated

05426067 BARK RIVER AT NAGAWICKA ROAD AT DELAFIELD, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Discharge, cfs (00060)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)
OCT							
02...	1435	--	11	10	.008	.023	5
24...	1930	--	17	50	--	.065	25
24...	2230	--	21	50	--	.089	35
25...	0130	--	17	50	--	.120	21
25...	0430	--	15	50	--	.082	15
25...	1100	--	14	50	--	.051	17
29...	1030	--	12	10	--	.023	16
NOV							
02...	0945	--	25	50	--	.117	48
02...	1245	--	28	50	--	.119	44
02...	1545	--	24	50	--	.092	25
02...	2145	--	26	50	--	.086	33
03...	1230	--	33	50	--	.114	52
03...	1530	--	40	50	--	.174	96
04...	0330	--	37	50	--	.125	53
04...	0545	--	57	50	--	.269	197
04...	1145	--	67	50	--	.290	166
04...	1250	--	66	10	--	.263	--
05...	0145	--	61	50	--	.165	81
05...	0945	--	52	50	--	.134	66
06...	0645	--	42	50	--	.111	53
07...	0700	--	32	50	--	.103	41
08...	1500	--	23	50	--	.065	20
09...	2300	--	18	50	--	.059	23
11...	2300	--	17	50	--	.052	22
19...	1010	--	19	50	--	.059	45
DEC							
10...	0400	--	27	50	--	.123	51
10...	0715	--	39	50	--	.150	79
10...	1015	--	44	50	--	.130	56
10...	1615	--	40	50	--	.088	26
10...	2215	--	35	50	--	.077	26
11...	0715	--	29	50	--	.052	17
18...	1035	--	16	10	--	.022	75
JAN							
19...	1130	9.8	--	50	--	.036	100
FEB							
04...	1400	9.4	--	70	--	.019	12
MAR							
02...	0900	--	29	50	--	.089	36
02...	1700	--	32	50	--	.069	17
03...	0100	--	32	50	--	.077	26
03...	0900	--	30	50	--	.069	16
03...	1700	--	32	50	--	.155	106
04...	0100	--	28	50	--	.072	21
04...	1021	--	28	50	--	.061	9
04...	1022	--	28	10	--	.062	19
04...	2115	--	34	50	--	.093	34
05...	0030	--	50	50	--	.155	80
05...	0430	--	57	50	--	.178	88
05...	0830	--	59	50	--	.159	75
05...	1055	--	57	50	--	.158	135
05...	1056	--	57	10	--	.152	63
05...	1630	--	52	50	--	.123	31
06...	0030	--	48	50	--	.106	38
06...	1230	--	46	50	--	.109	29
07...	0030	--	45	50	--	.101	39
07...	1230	--	45	50	--	.082	18
08...	0030	--	42	50	--	.082	23
08...	1230	--	39	50	--	.075	21
26...	0515	--	41	50	--	.136	91
26...	1324	--	37	50	--	.088	33
26...	1325	--	37	10	--	.084	38
26...	1600	--	34	50	--	.078	32
27...	0800	--	34	50	--	.074	38
28...	0001	--	33	50	--	.097	66
28...	0800	--	37	50	--	.085	51
28...	1200	--	37	50	--	.080	41
28...	1600	--	37	50	--	.087	50
28...	2000	--	48	50	--	.137	109
29...	0001	--	45	50	--	.131	107
29...	0940	--	38	50	--	.084	43
29...	0941	--	38	10	--	.090	65

05426067 BARK RIVER AT NAGAWICKA ROAD AT DELAFIELD, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)
APR							
20...	2145	38	50	--	--	.064	80
21...	0045	50	50	--	--	.195	182
21...	0445	53	50	--	--	.172	140
21...	0845	48	50	--	--	.117	76
21...	1245	45	50	--	--	.103	58
21...	2045	37	50	--	--	.091	58
22...	0845	38	50	--	--	.073	41
23...	0045	39	50	--	--	.092	64
23...	2045	33	50	--	--	.074	42
24...	1645	31	50	--	--	.050	20
26...	1330	30	10	--	--	.035	21
MAY							
10...	1600	51	50	--	--	.235	191
10...	1800	69	50	--	--	.230	185
11...	0200	75	50	--	--	.228	197
11...	1000	66	50	--	--	.178	167
11...	1800	62	50	--	--	.196	206
11...	2200	67	50	--	--	.209	214
12...	0600	69	50	--	--	.193	185
12...	1400	64	50	--	--	.161	151
12...	2200	57	50	--	--	.183	180
13...	0940	62	50	--	--	.262	287
13...	0941	62	10	--	--	.194	171
13...	1415	59	50	--	--	.156	132
14...	0615	59	50	--	--	.198	189
14...	1415	70	50	--	--	.186	172
15...	0215	78	50	--	--	.209	206
15...	1015	79	50	--	--	.191	162
15...	1815	77	50	--	--	.198	184
16...	0215	67	50	--	--	.175	159
16...	1415	57	50	--	--	.157	141
17...	2215	55	50	--	--	.189	162
18...	0215	61	50	--	--	.204	174
18...	1015	59	50	--	--	.182	161
18...	2215	57	50	--	--	.197	188
19...	1445	52	50	--	--	.165	142
21...	1400	59	50	--	--	.230	185
22...	0215	70	50	--	.030	.201	187
22...	1415	92	50	--	--	.258	266
22...	2215	94	50	--	--	.231	258
23...	1430	103	50	--	--	.211	167
24...	0230	110	50	--	.037	.149	169
24...	1430	112	50	--	--	.125	128
25...	0630	117	50	--	--	.121	118
25...	2230	112	50	--	--	.117	125
26...	1430	106	50	--	--	.106	100
27...	1030	86	50	--	--	.133	127
28...	1030	74	50	--	--	.127	129
28...	1105	74	10	--	--	.113	97
28...	1106	74	50	--	--	.104	80
31...	2045	87	50	--	--	.114	109
JUN							
01...	1120	81	50	--	--	.098	71
17...	0715	63	50	--	--	.166	102
17...	1145	58	50	--	--	.137	101
17...	1715	61	50	--	--	.128	95
JUL							
08...	0950	30	10	.011	--	.039	56
AUG							
03...	2015	37	50	--	.020	.097	72
04...	0015	47	50	--	.077	.197	104
04...	0415	40	50	--	--	.167	74
04...	0815	36	50	--	--	.117	44
04...	1215	32	50	--	.036	.085	28
11...	1050	19	10	--	--	.035	28
27...	0400	30	50	--	--	.162	139
28...	2015	31	50	--	--	.101	66
29...	0115	28	50	--	--	.097	74
SEP							
08...	1450	17	10	.011	--	.024	--

05426070 BARK RIVER AT DELAFIELD, WI

LOCATION.--Lat 43°03'46" long 88°24'09", in SW $^1/_4$ SW $^1/_4$ sec.17, T.7 N., R.18 E., Waukesha County, Hydrologic Unit 07090001, on right bank about 200 ft downstream from dam and 140 ft upstream from County Highway C in Delafield.

DRAINAGE AREA.--44.9 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 2002 to September 2003.

GAGE.--Water-stage recorder.

REMARKS.--Records good (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	3.9	21	15	13	14	37	21	79	40	17	20
2	2.2	5.0	4.8	15	13	14	37	21	62	38	16	20
3	2.2	48	4.8	15	14	14	37	20	69	38	18	21
4	2.3	107	6.9	15	14	15	37	20	79	38	79	21
5	2.3	119	8.5	15	14	36	23	21	78	38	78	20
6	2.3	116	8.4	15	13	47	15	21	78	29	31	21
7	2.4	52	8.4	15	13	48	15	21	50	22	16	21
8	2.5	17	8.4	15	14	46	14	21	36	22	16	20
9	2.5	17	8.4	15	14	45	14	39	58	23	16	19
10	2.8	23	49	15	14	32	14	49	68	23	20	18
11	3.1	31	13	15	14	25	14	51	68	23	22	19
12	3.7	30	13	15	14	25	14	72	67	40	22	19
13	3.8	24	13	14	14	25	13	108	67	51	22	19
14	9.3	16	13	14	14	25	13	117	67	48	22	19
15	15	16	45	14	14	25	12	108	62	48	21	19
16	14	15	51	14	14	24	11	108	60	40	16	19
17	15	14	15	14	14	24	11	75	90	31	14	19
18	17	14	14	14	14	24	10	61	79	30	14	19
19	17	13	14	14	14	24	10	83	66	40	14	19
20	8.3	13	14	14	14	24	11	75	47	38	14	19
21	4.4	13	14	13	14	23	66	45	38	27	14	19
22	4.0	12	14	13	14	23	90	100	46	27	14	11
23	3.5	42	14	13	14	18	51	122	50	27	31	2.5
24	3.5	60	14	13	14	10	20	123	50	27	25	2.2
25	3.6	59	14	13	14	9.5	20	121	50	27	15	2.1
26	3.7	59	14	13	14	24	35	119	46	25	15	2.2
27	3.7	58	14	13	14	36	53	117	45	22	16	4.5
28	3.7	57	15	13	14	36	30	114	45	21	41	5.2
29	3.9	56	15	13	14	37	20	112	44	20	58	5.2
30	3.8	55	15	13	---	37	21	111	40	17	35	4.6
31	3.8	---	15	13	---	37	---	111	---	16	21	---
TOTAL	171.5	1,164.9	491.6	435	402	846.5	768	2,307	1,784	956	773	449.5
MEAN	5.53	38.8	15.9	14.0	13.9	27.3	25.6	74.4	59.5	30.8	24.9	15.0
MAX	17	119	51	15	14	48	90	123	90	51	79	21
MIN	2.2	3.9	4.8	13	13	9.5	10	20	36	16	14	2.1
CFSM	0.12	0.86	0.35	0.31	0.31	0.61	0.57	1.66	1.32	0.69	0.56	0.33
IN.	0.14	0.97	0.41	0.36	0.33	0.70	0.64	1.91	1.48	0.79	0.64	0.37

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2004, BY WATER YEAR (WY)

MEAN	5.53	31.2	16.9	14.9	12.3	20.2	19.4	55.9	37.3	20.5	17.5	9.53
MAX	5.53	38.8	18.0	15.8	13.9	27.3	25.6	74.4	59.5	30.8	24.9	15.0
(WY)	(2004)	(2004)	(2003)	(2003)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)
MIN	5.53	23.5	15.9	14.0	10.7	13.0	13.2	37.4	15.2	10.2	10.1	4.09
(WY)	(2004)	(2003)	(2004)	(2004)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2003 - 2004	
ANNUAL TOTAL	5,787.1		10,549.0			
ANNUAL MEAN	15.9		28.8		28.8	
HIGHEST ANNUAL MEAN					28.8	2004
LOWEST ANNUAL MEAN					28.8	2004
HIGHEST DAILY MEAN	119	Nov 5	123	May 24	123	May 24, 2004
LOWEST DAILY MEAN	1.8	Jun 28	2.1	Sep 25	1.8	Jun 28, 2003
ANNUAL SEVEN-DAY MINIMUM	2.1	Sep 5	2.3	Oct 1	2.1	Sep 5, 2003
MAXIMUM PEAK FLOW			126	Nov 4	126	Nov 4, 2003
MAXIMUM PEAK STAGE			3.70	Nov 4	3.70	Nov 4, 2003
ANNUAL RUNOFF (CFSM)	0.353		0.642		0.642	
ANNUAL RUNOFF (INCHES)	4.79		8.74		8.72	
10 PERCENT EXCEEDS	35		66		66	
50 PERCENT EXCEEDS	13		19		19	
90 PERCENT EXCEEDS	2.5		6.4		6.4	

05426070 BARK RIVER AT DELAFIELD, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 2002 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: November 2002 to current year.
TOTAL-PHOSPHORUS DISCHARGE: November 2002 to current year.

REMARKS.--Records good. Samples collected using equal-width increment method (EWI) unless otherwise noted.

COOPERATION.--Observer furnished by Delavan Lake Sanitary District.

EXTREMES FOR PERIOD OF RECORD.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 46 mg/L, Mar. 13, 2003; minimum observed, 1 mg/L, Mar. 5, 2004.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 8.0 tons, Mar. 16, 2003; minimum daily, 0.01 ton, on many days in 2003 water year and Oct. 1-10, 2003.
TOTAL PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.053 mg/L, Sept. 3, 2004; minimum observed, 0.006 mg/L, Dec. 18, 2004.
TOTAL PHOSPHORUS DISCHARGE: Maximum daily, 16.1 lb, May 24, 2004; minimum daily, 0.12 lb, May 12, 2003.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 26 mg/L, Sept. 13; minimum observed, 1 mg/L, Mar. 5.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 2.7 tons, Aug. 29; minimum daily, 0.01 ton, Oct. 1-10.
TOTAL PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.026 mg/L, May 24; minimum observed, 0.006 mg/L, Dec. 18.
TOTAL PHOSPHORUS DISCHARGE: Maximum daily, 16.1 lb, May 24; minimum daily, 0.16 lb, Oct. 1-2 and Sept. 24-26.

SUSPENDED SEDIMENT DISCHARGE, TONS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.01	0.02	0.13	0.12	0.23	0.20	1.3	0.37	0.64	0.90	0.58	1.1
2	0.01	0.03	0.03	0.12	0.24	0.19	1.3	0.37	0.51	0.97	0.56	1.1
3	0.01	0.30	0.03	0.12	0.25	0.20	1.2	0.37	0.56	1.1	0.59	1.1
4	0.01	0.68	0.04	0.13	0.26	0.17	1.2	0.38	0.64	1.2	2.6	1.1
5	0.01	0.78	0.05	0.13	0.25	0.11	0.73	0.39	0.64	1.4	2.6	1.2
6	0.01	0.77	0.05	0.13	0.25	0.13	0.45	0.40	0.63	1.2	1.0	1.2
7	0.01	0.36	0.05	0.13	0.24	0.13	0.43	0.41	0.41	1.0	0.51	1.2
8	0.01	0.12	0.05	0.14	0.24	0.12	0.42	0.41	0.30	1.1	0.50	1.2
9	0.01	0.12	0.05	0.14	0.24	0.12	0.40	0.79	0.47	1.1	0.50	1.2
10	0.01	0.17	0.27	0.14	0.24	0.09	0.39	1.0	0.55	1.1	0.61	1.2
11	0.02	0.24	0.07	0.15	0.24	0.07	0.35	1.1	0.55	1.1	0.66	1.3
12	0.02	0.24	0.07	0.15	0.24	0.07	0.34	1.5	0.55	1.9	0.67	1.3
13	0.02	0.19	0.07	0.15	0.23	0.07	0.33	2.3	0.54	2.4	0.69	1.4
14	0.05	0.13	0.07	0.15	0.23	0.07	0.31	2.2	0.54	2.3	0.70	1.3
15	0.08	0.13	0.24	0.16	0.23	0.07	0.28	1.8	0.50	2.2	0.71	1.2
16	0.08	0.11	0.28	0.16	0.22	0.06	0.26	1.6	0.49	1.8	0.54	1.1
17	0.08	0.11	0.08	0.17	0.22	0.07	0.23	0.98	0.73	1.4	0.48	1.1
18	0.09	0.10	0.08	0.17	0.22	0.07	0.21	0.71	0.64	1.3	0.50	1.0
19	0.09	0.10	0.08	0.17	0.22	0.07	0.21	0.84	0.54	1.7	0.52	0.96
20	0.04	0.10	0.08	0.18	0.22	0.06	0.21	0.68	0.38	1.6	0.54	0.92
21	0.02	0.09	0.08	0.18	0.21	0.06	1.3	0.36	0.31	1.1	0.56	0.87
22	0.02	0.09	0.09	0.18	0.21	0.06	1.7	0.69	0.38	1.1	0.57	0.46
23	0.02	0.29	0.09	0.18	0.21	0.05	0.92	0.75	0.45	1.1	1.3	0.10
24	0.02	0.41	0.09	0.19	0.21	0.03	0.35	0.68	0.51	1.1	1.0	0.09
25	0.02	0.40	0.09	0.19	0.21	0.03	0.34	0.72	0.57	1.1	0.64	0.08
26	0.02	0.39	0.10	0.20	0.20	0.72	0.57	0.78	0.59	0.95	0.66	0.08
27	0.02	0.38	0.10	0.20	0.20	1.5	0.87	0.85	0.65	0.82	0.73	0.15
28	0.02	0.37	0.10	0.21	0.20	1.5	0.50	0.91	0.73	0.79	1.9	0.16
29	0.02	0.36	0.11	0.22	0.20	1.5	0.34	0.91	0.79	0.74	2.7	0.15
30	0.02	0.35	0.11	0.22	---	1.4	0.36	0.90	0.82	0.59	1.7	0.13
31	0.02	---	0.11	0.23	---	1.4	---	0.90	---	0.58	1.0	---
TOTAL	0.89	7.93	2.94	5.11	6.56	10.39	17.80	27.05	16.61	38.74	28.82	25.45

WTR YR 2004 TOTAL 188.29

05426070 BARK RIVER AT DELAFIELD, WI—Continued

PHOSPHORUS, WATER, UNFILTERED, POUNDS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.16	0.26	1.27	0.56	0.70	0.62	2.06	1.36	5.52	3.01	1.21	1.43
2	0.16	0.33	0.29	0.56	0.71	0.62	2.06	1.34	4.38	2.91	1.20	1.43
3	0.17	3.09	0.29	0.57	0.73	0.62	2.09	1.33	4.88	2.94	1.28	1.44
4	0.17	6.75	0.43	0.58	0.73	0.64	2.09	1.33	5.51	2.98	5.71	1.44
5	0.18	7.42	0.53	0.58	0.73	1.56	1.32	1.33	5.51	3.03	5.62	1.44
6	0.17	7.07	0.53	0.58	0.72	2.07	0.84	1.34	5.48	2.31	2.22	1.44
7	0.18	3.15	0.53	0.59	0.71	2.11	0.85	1.37	3.51	1.78	1.15	1.44
8	0.18	1.03	0.53	0.59	0.71	2.06	0.84	1.34	2.56	1.80	1.14	1.40
9	0.19	0.96	0.54	0.60	0.71	2.01	0.84	2.52	4.05	1.83	1.15	1.30
10	0.20	1.29	3.13	0.61	0.71	1.47	0.85	3.17	4.74	1.83	1.44	1.29
11	0.23	1.73	0.81	0.61	0.70	1.17	0.80	3.31	4.79	1.84	1.55	1.36
12	0.27	1.65	0.75	0.61	0.69	1.18	0.81	4.69	4.73	3.20	1.54	1.36
13	0.28	1.31	0.69	0.61	0.69	1.18	0.80	7.01	4.72	4.04	1.53	1.37
14	0.68	0.88	0.63	0.61	0.68	1.20	0.78	7.61	4.69	3.82	1.52	1.36
15	1.07	0.88	1.95	0.61	0.68	1.20	0.74	6.97	4.33	3.74	1.51	1.35
16	1.05	0.81	2.08	0.62	0.67	1.17	0.70	6.97	4.24	3.14	1.12	1.35
17	1.12	0.78	0.53	0.63	0.66	1.18	0.65	4.83	6.30	2.40	0.97	1.35
18	1.26	0.76	0.47	0.63	0.66	1.20	0.63	3.98	5.55	2.35	0.98	1.37
19	1.22	0.75	0.47	0.64	0.67	1.21	0.65	5.40	4.64	3.07	1.00	1.36
20	0.59	0.75	0.47	0.64	0.66	1.20	0.68	4.84	3.33	2.91	1.01	1.39
21	0.32	0.73	0.48	0.62	0.65	1.18	4.17	2.94	2.67	2.08	1.02	1.39
22	0.29	0.70	0.49	0.63	0.64	1.19	5.68	7.18	3.25	2.07	1.01	0.77
23	0.25	2.39	0.49	0.63	0.64	0.96	3.24	12.0	3.52	2.06	2.18	0.18
24	0.25	3.46	0.50	0.64	0.64	0.53	1.29	16.1	3.58	2.05	1.75	0.16
25	0.25	3.46	0.50	0.65	0.64	0.51	1.32	14.5	3.60	2.06	1.05	0.16
26	0.26	3.45	0.51	0.65	0.63	1.28	2.25	12.0	3.38	1.86	1.06	0.16
27	0.26	3.42	0.51	0.66	0.63	1.95	3.41	9.93	3.30	1.63	1.13	0.34
28	0.26	3.37	0.53	0.67	0.63	1.96	1.95	8.28	3.34	1.58	2.87	0.39
29	0.27	3.35	0.54	0.68	0.64	2.03	1.31	7.87	3.26	1.50	4.04	0.39
30	0.26	3.34	0.54	0.69	---	2.07	1.35	7.83	3.05	1.22	2.47	0.34
31	0.26	---	0.55	0.69	---	2.05	---	7.79	---	1.20	1.44	---
TOTAL	12.46	69.32	22.56	19.24	19.66	41.38	47.05	178.46	126.41	74.24	54.87	31.95

WTR YR 2004 TOTAL 697.60

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)
OCT						
02...	1210	2.2	70	.004	.014	2
29...	1235	3.8	10	--	.013	2
NOV						
13...	1510	17	10	--	.010	3
DEC						
11...	1500	13	10	--	.012	2
18...	1245	14	10	--	.006	2
FEB						
04...	1120	14	10	--	.010	7
MAR						
04...	1220	15	10	--	.008	5
05...	1135	47	10	--	.008	1
26...	1430	36	10	--	.010	16
APR						
26...	1510	53	10	--	.012	6
MAY						
13...	1130	117	10	--	.012	8
24...	1300	123	70	--	.026	2
28...	1430	114	10	--	.013	3
JUN						
22...	1345	50	10	--	.013	3
JUL						
08...	1230	22	10	<.002	.015	19
AUG						
11...	0830	22	10	--	.013	11
SEP						
13...	1200	19	10	.002	.013	26

430347088240800 NAGAWICKA LAKE AT DELAFIELD, WI

LOCATION.--Lat 43°03'47", long 88°24'08", in SW ¼ SW ¼ sec.17, T.7 N., R.18 E., Waukesha County, Hydrologic Unit 07090001, on dike of Nagawicka Lake dam about 120 ft west of gates in Delafield.

DRAINAGE AREA.--44.9 mi^2. Area of Nagawicka Lake, 917 acres.

GAGE-HEIGHT RECORD

PERIOD OF RECORD.--October 2002 to September 2004.

GAGE.--Water-stage recorder.

REMARKS.--Gage established Oct. 29, 2002. Lake levels controlled by city of Delafield.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 8.73 ft, May 23; minimum gage height, 7.60 ft, Dec. 1.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.28	8.35	7.64	7.92	7.80	7.84	8.27	8.38	8.41	8.42	8.34	8.37
2	8.27	8.44	7.67	7.92	7.79	7.89	8.24	8.38	8.47	8.42	8.34	8.37
3	8.28	8.55	7.70	7.92	7.80	7.93	8.23	8.36	8.49	8.40	8.40	8.37
4	8.30	8.61	7.72	7.93	7.79	7.97	8.20	8.34	8.48	8.40	8.56	8.36
5	8.32	8.51	7.74	7.92	7.79	8.12	8.18	8.35	8.45	8.41	8.42	8.35
6	8.32	8.35	7.74	7.90	7.80	8.14	8.19	8.35	8.41	8.38	8.36	8.34
7	8.32	8.23	7.75	7.89	7.80	8.15	8.21	8.38	8.38	8.40	8.36	8.34
8	8.33	8.24	7.76	7.89	7.79	8.14	8.21	8.35	8.41	8.41	8.36	8.33
9	8.34	8.24	7.80	7.88	7.79	8.12	8.21	8.39	8.43	8.44	8.37	8.31
10	8.34	8.25	7.93	7.88	7.78	8.11	8.22	8.40	8.46	8.46	8.37	8.29
11	8.34	8.22	7.96	7.87	7.77	8.11	8.23	8.52	8.51	8.47	8.36	8.28
12	8.36	8.18	7.97	7.87	7.77	8.11	8.23	8.54	8.50	8.55	8.37	8.27
13	8.35	8.15	8.00	7.86	7.76	8.10	8.22	8.56	8.49	8.51	8.36	8.26
14	8.39	8.15	8.02	7.86	7.76	8.10	8.21	8.52	8.48	8.47	8.35	8.25
15	8.36	8.16	8.01	7.85	7.75	8.11	8.21	8.48	8.49	8.43	8.35	8.23
16	8.33	8.16	7.90	7.85	7.74	8.10	8.21	8.41	8.48	8.42	8.34	8.23
17	8.30	8.16	7.90	7.87	7.74	8.09	8.29	8.34	8.55	8.44	8.36	8.22
18	8.27	8.22	7.90	7.86	7.73	8.09	8.31	8.42	8.49	8.42	8.36	8.21
19	8.26	8.24	7.90	7.85	7.73	8.08	8.34	8.40	8.46	8.40	8.38	8.19
20	8.23	8.25	7.88	7.84	7.74	8.07	8.40	8.34	8.42	8.38	8.38	8.17
21	8.24	8.27	7.88	7.83	7.76	8.07	8.51	8.42	8.45	8.38	8.39	8.15
22	8.25	8.28	7.89	7.82	7.76	8.05	8.45	8.61	8.48	8.40	8.38	8.15
23	8.25	8.25	7.89	7.82	7.77	8.05	8.36	8.67	8.46	8.39	8.39	8.17
24	8.27	8.15	7.90	7.83	7.78	8.07	8.40	8.69	8.47	8.37	8.36	8.17
25	8.33	8.08	7.89	7.82	7.78	8.10	8.43	8.69	8.46	8.35	8.37	8.20
26	8.33	8.01	7.89	7.83	7.78	8.22	8.43	8.67	8.46	8.34	8.38	8.21
27	8.33	7.94	7.89	7.83	7.79	8.23	8.39	8.63	8.45	8.34	8.46	8.23
28	8.33	7.85	7.91	7.83	7.80	8.24	8.33	8.57	8.45	8.33	8.48	8.25
29	8.33	7.76	7.92	7.82	7.81	8.28	8.33	8.49	8.43	8.33	8.43	8.23
30	8.35	7.68	7.92	7.81	---	8.30	8.37	8.45	8.42	8.34	8.37	8.24
31	8.35	---	7.91	7.80	---	8.28	---	8.42	---	8.34	8.37	---
MEAN	8.31	8.20	7.86	7.86	7.77	8.11	8.29	8.47	8.46	8.40	8.38	8.26
MAX	8.39	8.61	8.02	7.93	7.81	8.30	8.51	8.69	8.55	8.55	8.56	8.37
MIN	8.23	7.68	7.64	7.80	7.73	7.84	8.18	8.34	8.38	8.33	8.34	8.15

430348088240800 NAGAWICKA LAKE AT DELAFIELD, WI—Continued

PRECIPITATION QUANTITY

PERIOD OF RECORD.-October 2002 to September 2004 (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Gage established October 29, 2002. Rain gage covered Dec. 18 to Mar. 4.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.59 in., Aug. 3.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.03	0.00	---	---	---	0.00	0.00	0.01	0.00	0.00	0.00
2	0.00	1.29	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
3	0.19	1.21	0.00	---	---	---	0.00	0.00	0.00	0.17	2.59	0.00
4	0.00	1.56	0.01	---	---	0.71	0.00	0.00	0.00	0.13	0.00	0.00
5	0.00	0.00	0.02	---	---	0.36	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	---	---	0.01	0.08	0.03	0.00	0.10	0.00	0.01
7	0.00	0.00	0.00	---	---	0.04	0.00	0.03	0.00	0.02	0.00	0.00
8	0.00	0.00	0.01	---	---	0.00	0.00	0.62	0.00	0.00	0.00	0.00
9	0.00	0.00	0.64	---	---	0.00	0.00	0.15	0.53	0.13	0.26	0.00
10	0.00	0.05	1.13	---	---	0.03	0.00	1.20	0.84	0.00	0.00	0.00
11	0.22	0.00	0.00	---	---	0.01	0.00	0.18	0.42	0.95	0.00	0.00
12	0.00	0.00	0.00	---	---	0.00	0.00	0.37	0.11	0.00	0.00	0.00
13	0.03	0.00	0.00	---	---	0.10	0.00	0.38	0.00	0.00	0.00	0.00
14	0.41	0.00	0.00	---	---	0.10	0.00	0.72	0.22	0.00	0.00	0.00
15	0.00	0.01	0.04	---	---	0.00	0.00	0.00	0.00	0.01	0.00	0.06
16	0.00	0.02	0.09	---	---	0.00	0.00	0.00	0.72	0.66	0.00	0.00
17	0.00	0.21	0.00	---	---	0.07	0.56	0.38	0.44	0.00	0.04	0.00
18	0.00	0.45	0.00	---	---	0.01	0.10	0.14	0.01	0.00	0.07	0.00
19	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	---	---	---	0.00	1.41	0.05	0.00	0.00	0.00	0.00
21	0.00	0.00	---	---	---	0.00	0.11	1.37	0.47	0.24	0.00	0.00
22	0.00	0.09	---	---	---	0.00	0.00	1.32	0.00	0.00	0.00	0.00
23	0.00	0.21	---	---	---	0.00	0.00	0.67	0.09	0.00	0.00	0.00
24	0.76	0.00	---	---	---	0.09	0.21	0.01	0.31	0.00	0.06	0.00
25	0.00	0.00	---	---	---	0.25	0.15	0.02	0.00	0.00	0.01	0.00
26	0.00	0.00	---	---	---	0.64	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.02	---	---	---	0.00	0.00	0.00	0.14	0.00	0.82	0.00
28	0.10	0.00	---	---	---	0.56	0.00	0.00	0.00	0.00	0.54	0.00
29	0.10	0.00	---	---	---	0.00	0.00	0.11	0.00	0.00	0.00	0.00
30	0.00	0.00	---	---	---	0.06	0.13	0.77	0.00	0.03	0.00	0.00
31	0.00	---	---	---	---	0.00	---	0.30	---	0.00	0.00	---
TOTAL	1.81	5.15	---	---	---	---	2.75	8.82	4.31	2.44	4.39	0.07

05426250 BARK RIVER NEAR ROME, WI

LOCATION.--Lat 42°57'37" long 88°40'14", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.24, T.6 N., R.15 E., Jefferson County, Hydrologic Unit 07090001, on left bank just upstream from bridge on Cushman Road, 2.8 mi southwest of Rome.

DRAINAGE AREA.--122 mi^2.

PERIOD OF RECORD.--October 1979 to September 1982. October 1982 to September 1983 (fragmentary). October 1983 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 810 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	39	65	57	e35	67	148	102	324	146	71	83
2	16	50	76	57	e35	94	135	96	320	110	66	65
3	17	66	76	55	e35	99	118	84	321	115	45	66
4	16	124	72	52	e35	100	114	77	296	123	96	65
5	15	143	68	45	e35	149	114	73	278	116	176	61
6	15	139	61	e44	e34	162	106	69	262	112	143	59
7	16	135	57	e43	e34	152	103	71	246	119	144	50
8	16	135	54	e43	e34	159	92	66	229	115	132	51
9	18	131	52	e43	e34	169	90	72	204	109	134	54
10	21	127	83	43	e34	153	87	82	203	106	120	53
11	26	123	99	44	e34	132	83	121	231	100	117	51
12	26	112	98	44	e34	121	79	138	229	98	99	48
13	25	92	104	43	e34	113	73	147	217	104	97	44
14	27	101	95	42	e34	94	71	166	214	100	93	30
15	23	95	88	41	e34	93	63	179	211	96	74	33
16	22	88	83	39	e33	93	26	127	205	95	70	35
17	21	81	76	e39	e33	88	43	146	224	93	67	39
18	21	86	76	e38	e35	88	55	198	227	85	95	39
19	22	83	72	e35	e33	88	49	221	223	82	64	38
20	22	84	63	e35	e34	77	81	205	219	79	49	39
21	23	80	63	e35	e35	77	127	211	220	79	59	39
22	25	78	65	e35	e36	84	127	358	228	75	78	36
23	25	73	62	e35	e38	81	125	387	222	87	68	36
24	28	60	57	e35	e39	80	121	369	228	110	44	35
25	31	68	54	e35	41	82	125	376	219	166	49	28
26	30	68	52	e36	43	121	123	362	215	126	56	26
27	31	69	54	e36	47	142	132	343	200	106	64	28
28	34	65	60	e36	50	154	123	324	190	88	80	30
29	34	71	62	e36	53	158	107	311	176	81	94	29
30	38	74	61	e35	---	157	105	340	162	78	80	28
31	43	---	59	e35	---	154	---	345	---	77	59	---
TOTAL	744	2,740	2,167	1,271	1,065	3,581	2,945	6,166	6,943	3,176	2,683	1,318
MEAN	24.0	91.3	69.9	41.0	36.7	116	98.2	199	231	102	86.5	43.9
MAX	43	143	104	57	53	169	148	387	324	166	176	83
MIN	15	39	52	35	33	67	26	66	162	75	44	26
CFSM	0.20	0.75	0.57	0.34	0.30	0.95	0.80	1.63	1.90	0.84	0.71	0.36
IN.	0.23	0.84	0.66	0.39	0.32	1.09	0.90	1.88	2.12	0.97	0.82	0.40

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2004, BY WATER YEAR (WY)

MEAN	69.6	89.8	79.1	64.9	79.6	123	144	115	87.7	66.0	65.3	67.4
MAX	214	214	138	105	137	248	327	199	231	176	127	212
(WY)	(1987)	(1986)	(1986)	(1985)	(1999)	(1986)	(1993)	(2004)	(2004)	(1993)	(1995)	(1986)
MIN	23.6	47.6	34.2	34.2	25.9	35.0	56.1	48.1	13.3	7.66	6.04	14.6
(WY)	(1989)	(2000)	(1990)	(2003)	(2003)	(2003)	(2003)	(1989)	(1988)	(1988)	(1988)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1980 - 2004	
ANNUAL TOTAL	17,608		34,799			
ANNUAL MEAN	48.2		95.1		88.1	
HIGHEST ANNUAL MEAN					139	1993
LOWEST ANNUAL MEAN					46.2	2003
HIGHEST DAILY MEAN	199	May 10	387	May 23	459	Apr 20, 1993
LOWEST DAILY MEAN	11	Sep 8-13	15	Oct 5, 6	3.6	Aug 4, 1988
ANNUAL SEVEN-DAY MINIMUM	11	Sep 7	16	Oct 2	3.8	Aug 1, 1988
MAXIMUM PEAK FLOW			408	May 23	476	Apr 20, 1993
MAXIMUM PEAK STAGE			2.22	May 23	2.56	Apr 20, 1993
ANNUAL RUNOFF (CFSM)	0.395		0.779		0.722	
ANNUAL RUNOFF (INCHES)	5.37		10.61		9.81	
10 PERCENT EXCEEDS	94		205		160	
50 PERCENT EXCEEDS	34		76		76	
90 PERCENT EXCEEDS	17		33		32	

(e) Estimated due to ice effect or missing record

05427085 ROCK RIVER AT ROBERT STREET AT FORT ATKINSON, WI

LOCATION.--Lat 42°55'39", long 88°50'34", in SW ¼ NE ¼ sec.4, T.5 N., R.14 E., Jefferson County, Hydrologic Unit 07090001, on upstream center of Robert Street bridge at Fort Atkinson.

DRAINAGE AREA.--2,240 mi^2.

PERIOD OF RECORD.--October 1998 to current year.

GAGE.--Water-stage recorder and Accoustical Velocity Meter (AVM) system. Single-path transducer installation. Datum of gage is 775.09 ft above NGVD of 1929 (levels by the City of Fort Atkinson).

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	189	309	1,300	e900	e400	e1,400	3,560	1,770	8,530	6,710	1,700	836
2	196	416	1,300	e870	e410	e1,700	3,470	1,690	9,160	6,460	1,430	857
3	177	630	1,300	e850	e420	e1,900	3,380	1,610	9,320	6,080	1,390	876
4	186	1,040	1,210	e800	e430	e2,200	3,230	1,510	9,380	5,840	2,280	858
5	189	1,530	1,180	e770	e440	e2,600	3,090	1,480	9,160	5,810	2,290	790
6	181	1,790	1,130	e740	e440	e3,400	3,010	1,430	8,830	5,550	2,020	703
7	179	1,890	1,060	e720	e450	e3,900	2,960	1,390	8,550	5,390	1,890	667
8	181	1,930	1,010	e690	e440	4,310	2,870	1,300	8,350	5,270	1,860	607
9	158	1,830	1,020	e670	e440	4,250	2,760	1,380	7,960	5,110	1,750	543
10	188	1,770	e1,200	e640	e460	4,050	2,640	1,540	7,990	4,920	1,690	523
11	128	1,670	e1,300	e630	e480	3,910	2,540	1,990	8,180	4,740	1,580	516
12	229	1,450	e1,200	e620	e500	3,830	2,410	2,170	8,770	4,680	1,470	519
13	196	1,420	e1,200	e600	e520	3,670	2,290	2,480	9,140	4,530	1,330	484
14	218	1,110	e1,300	e570	e530	3,520	2,150	2,800	9,250	4,460	1,220	471
15	256	1,030	e1,300	e570	e510	3,580	1,980	2,990	9,140	4,240	1,130	436
16	247	1,000	e1,300	e560	e500	3,490	1,870	3,010	9,120	4,020	1,010	499
17	224	913	e1,300	e540	e510	3,410	1,880	2,960	9,110	3,880	936	478
18	240	946	e1,200	e560	e510	3,330	1,690	3,090	9,070	3,740	816	471
19	220	974	e1,200	e540	e530	3,230	1,560	3,130	9,020	3,590	793	453
20	226	942	e1,000	e520	e550	3,240	1,630	3,120	8,820	3,420	741	441
21	236	1,000	e1,000	e480	e570	3,290	2,000	3,310	8,640	3,260	681	436
22	228	991	e1,100	e490	e620	3,130	2,330	4,860	8,420	3,140	617	435
23	219	930	e1,100	e470	e650	3,100	2,290	6,240	8,240	2,940	637	423
24	239	964	e980	e460	e760	3,070	2,270	7,440	8,150	2,730	588	425
25	267	1,150	e1,000	e450	e750	3,030	2,190	7,820	8,110	2,610	582	420
26	282	1,270	e1,000	e460	e830	3,240	2,060	7,800	8,050	2,300	571	400
27	286	1,350	e1,000	e450	e930	3,370	2,000	7,840	7,780	2,100	693	396
28	251	1,380	e1,100	e440	e1,100	3,400	1,900	7,790	7,510	1,950	727	392
29	331	1,330	e1,100	e430	e1,300	3,570	1,810	7,520	7,220	1,770	807	378
30	273	1,310	e1,100	e430	---	3,730	1,870	7,640	6,940	1,660	822	366
31	294	---	e960	e410	---	3,670	---	7,910	---	1,700	843	---
TOTAL	6,914	36,265	35,450	18,330	16,980	101,520	71,690	119,010	255,910	124,600	36,894	16,099
MEAN	223	1,209	1,144	591	586	3,275	2,390	3,839	8,530	4,019	1,190	537
MAX	331	1,930	1,300	900	1,300	4,310	3,560	7,910	9,380	6,710	2,290	876
MIN	128	309	960	410	400	1,400	1,560	1,300	6,940	1,660	571	366
CFSM	0.10	0.54	0.51	0.26	0.26	1.46	1.07	1.71	3.81	1.79	0.53	0.24
IN.	0.11	0.60	0.59	0.30	0.28	1.69	1.19	1.98	4.25	2.07	0.61	0.27

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)

MEAN	716	962	899	681	1,291	2,125	2,361	2,836	3,649	1,486	857	664
MAX	1,418	1,408	1,427	1,032	2,469	3,275	3,590	3,839	8,530	4,019	1,960	1,548
(WY)	(2002)	(2002)	(2002)	(1999)	(1999)	(2004)	(2001)	(2004)	(2004)	(2004)	(1999)	(2001)
MIN	223	565	446	299	250	581	928	2,013	827	410	266	204
(WY)	(2004)	(2000)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2003)	(2003)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1999 - 2004	
ANNUAL TOTAL	258,478		839,662			
ANNUAL MEAN	708		2,294		1,542	
HIGHEST ANNUAL MEAN					2,294	2004
LOWEST ANNUAL MEAN					630	2003
HIGHEST DAILY MEAN	2,900	May 13	9,380	Jun 4	9,380	Jun 4, 2004
LOWEST DAILY MEAN	108	Sep 12	128	Oct 11	108	Sep 12, 2003
ANNUAL SEVEN-DAY MINIMUM	123	Sep 6	172	Oct 5	123	Sep 6, 2003
ANNUAL RUNOFF (CFSM)	0.316		1.02		0.688	
ANNUAL RUNOFF (INCHES)	4.29		13.94		9.35	
10 PERCENT EXCEEDS	1,430		7,290		3,250	
50 PERCENT EXCEEDS	432		1,300		998	
90 PERCENT EXCEEDS	196		399		370	

(e) Estimated due to ice effect or missing record

05427235 LAKE KOSHKONONG NEAR NEWVILLE, WI

LOCATION.--Lat 42°51'27", long 88°56'27", in NW $^1/_4$ NE $^1/_4$ sec.34, T.5 N., R.13 E., Jefferson County, Hydrologic Unit 07090001, 80 ft east of Pottawatomi Trail Bridge at Bingham Point Estates, and 4.5 mi northeast of Newville.

DRAINAGE AREA.--2,560 mi^2, at lake outlet. Area of Lake Koshkonong, 16.3 mi^2.

PERIOD OF RECORD.--July 1987 to current year.

GAGE.--Water-stage recorder. Datum of gage is 770.00 ft above NGVD of 1929 (Wisconsin Department of Transportation bench mark).

REMARKS.--Lake level regulated by dam at Indianford. Gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum recorded gage height, 12.23 ft, Apr. 25, 1993; minimum recorded, 5.10 ft, Dec. 28, 29, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum recorded gage height, 11.50 ft, June 5; minimum recorded gage height, 5.65 ft, Feb. 13.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.12	5.90	6.42	5.85	5.80	6.01	8.16	6.70	11.12	10.60	6.84	6.31
2	6.09	5.94	6.37	5.80	5.81	6.09	8.16	6.63	11.30	10.46	6.75	6.29
3	6.09	6.02	6.34	5.81	5.85	6.20	8.17	6.55	11.42	10.34	6.66	6.27
4	6.10	6.22	6.30	5.81	5.90	6.34	8.08	6.47	11.48	10.30	6.76	6.27
5	6.08	6.34	6.26	5.75	5.91	6.65	8.01	6.39	11.49	10.17	6.78	6.26
6	6.08	6.44	6.21	5.75	5.88	6.96	7.96	6.31	11.46	10.04	6.77	6.26
7	6.08	6.57	6.14	5.76	5.84	7.29	7.91	6.21	11.40	9.95	6.73	6.24
8	6.08	6.63	6.10	5.77	5.80	7.59	7.86	6.18	11.33	9.83	6.70	6.21
9	6.08	6.70	6.07	5.77	5.75	7.82	7.78	6.25	11.23	9.71	6.69	6.24
10	6.08	6.79	6.20	5.77	5.71	7.99	7.71	6.31	11.16	9.61	6.66	6.26
11	6.08	6.90	6.23	5.78	5.68	8.10	7.61	6.45	11.17	9.49	6.59	6.30
12	6.11	7.04	6.24	5.78	5.67	8.17	7.51	6.54	11.17	9.38	6.47	6.33
13	6.09	7.06	6.27	5.78	5.66	8.21	7.42	6.69	11.20	9.28	6.36	6.33
14	6.16	6.97	6.31	5.78	5.68	8.27	7.31	6.85	11.28	9.17	6.27	6.30
15	6.14	6.92	6.35	5.76	5.70	8.25	7.19	6.96	11.32	9.05	6.27	6.27
16	6.13	6.88	6.33	5.74	5.71	8.24	7.10	7.05	11.34	8.94	6.26	6.30
17	6.12	6.82	6.29	5.74	5.72	8.22	7.03	7.15	11.44	8.82	6.29	6.26
18	6.12	6.83	6.23	5.72	5.73	8.20	6.92	7.28	11.45	8.68	6.29	6.23
19	6.12	6.76	6.17	5.70	5.74	8.16	6.88	7.35	11.43	8.55	6.27	6.20
20	6.13	6.68	6.08	5.70	5.77	8.16	6.75	7.42	11.39	8.42	6.23	6.19
21	6.15	6.59	5.99	5.69	5.80	8.07	6.84	7.54	11.37	8.31	6.22	6.21
22	6.13	6.49	5.94	5.69	5.82	7.99	6.86	8.03	11.36	8.22	6.20	6.23
23	6.13	6.48	5.94	5.69	5.86	7.94	6.88	8.57	11.29	8.09	6.21	6.24
24	6.13	6.51	5.92	5.69	5.90	7.91	6.88	9.11	11.26	7.94	6.25	6.26
25	6.18	6.43	5.91	5.68	5.91	7.87	6.91	9.58	11.19	7.81	6.29	6.27
26	6.19	6.44	5.90	5.67	5.89	7.94	6.92	9.96	11.12	7.67	6.30	6.27
27	6.17	6.43	5.91	5.68	5.90	7.94	6.85	10.25	11.03	7.51	6.35	6.27
28	6.12	6.46	5.95	5.71	5.91	7.97	6.78	10.45	10.96	7.36	6.37	6.29
29	6.05	6.40	5.97	5.74	5.94	8.06	6.77	10.60	10.84	7.21	6.37	6.25
30	5.99	6.42	5.95	5.76	---	8.14	6.74	10.75	10.72	7.07	6.36	6.25
31	5.96	---	5.91	5.78	---	8.15	---	10.93	---	6.95	6.33	---
MEAN	6.11	6.57	6.14	5.75	5.80	7.71	7.33	7.73	11.26	8.87	6.45	6.26
MAX	6.19	7.06	6.42	5.85	5.94	8.27	8.17	10.93	11.49	10.60	6.84	6.33
MIN	5.96	5.90	5.90	5.67	5.66	6.01	6.74	6.18	10.72	6.95	6.20	6.19

05427570 ROCK RIVER AT INDIANFORD, WI

LOCATION.--Lat 42°48'15", long 89°05'24", in SW ¼ SW ¼ sec.16, T.4 N., R.12 E., Rock County, Hydrologic Unit 07090001, on right bank 50 ft upstream from bridge on County Trunk Highways F and M, 250 ft upstream from dam in Indianford, and 1.8 mi upstream from Yahara River.

DRAINAGE AREA.--2,630 mi^2.

PERIOD OF RECORD.--May 1975 to current year.

REVISED RECORDS.--WDR WI-79-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 763.84 ft (revised Oct. 1, 1990) above NGVD of 1929 (Rock County Surveyor bench mark).

REMARKS.--Records poor (see page 11). Natural flow of stream affected by dam in Indianford. Discharge is adjusted for flow through wicket gates. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	244	594	978	1,010	396	1,180	4,030	2,140	8,400	7,200	1,970	1,300
2	230	647	1,030	947	408	1,270	4,030	2,060	8,850	6,970	1,920	1,280
3	177	855	985	973	253	1,500	4,060	1,890	9,070	6,740	1,870	1,140
4	235	956	932	1,070	186	1,710	3,950	1,610	9,150	6,670	2,070	988
5	255	1,100	907	740	328	2,100	3,830	1,600	9,110	6,550	2,070	948
6	243	1,230	832	783	329	2,570	3,720	1,460	9,000	6,170	1,990	864
7	203	1,250	757	786	310	2,940	3,690	1,550	8,800	6,080	1,970	958
8	224	1,340	775	790	248	3,380	3,580	1,310	8,460	5,960	1,910	591
9	239	1,450	737	799	170	3,630	3,470	1,380	8,170	5,830	1,820	365
10	243	1,300	898	804	185	3,690	3,380	1,460	8,110	5,660	1,790	360
11	196	1,360	771	818	481	3,730	3,280	1,700	8,170	5,470	1,680	372
12	214	1,310	719	830	689	3,850	3,240	1,680	8,160	5,330	1,680	411
13	212	1,380	807	863	563	3,800	3,030	1,850	8,160	5,160	1,490	592
14	282	1,410	885	852	475	3,630	2,800	2,020	8,300	5,080	1,340	662
15	222	1,430	1,290	850	483	3,840	2,740	2,160	8,500	4,940	1,340	549
16	278	1,410	1,650	858	486	3,890	2,640	2,190	8,550	4,610	1,300	655
17	241	1,400	1,640	824	493	3,910	2,670	2,170	8,820	4,330	1,380	662
18	227	1,650	1,550	812	483	4,050	2,210	2,490	8,790	4,170	1,270	622
19	274	1,590	1,450	734	516	3,840	2,110	2,540	8,790	3,960	1,330	585
20	214	1,410	1,310	711	514	3,660	2,320	2,530	8,590	3,860	1,000	395
21	271	1,420	1,130	670	524	3,800	2,200	2,810	8,610	3,720	843	302
22	285	1,390	1,100	685	552	3,650	2,490	3,560	8,580	3,640	726	333
23	273	1,160	1,080	693	656	3,600	2,430	4,240	8,400	3,560	572	317
24	270	964	1,070	695	820	3,520	2,520	5,020	8,370	3,340	416	288
25	286	1,150	1,050	714	990	3,400	2,360	5,630	8,250	3,180	618	360
26	275	1,190	1,050	703	1,050	3,580	2,290	6,150	8,120	3,000	674	370
27	505	1,070	1,020	461	1,060	3,710	2,310	6,630	7,950	2,800	829	363
28	595	1,050	1,050	356	1,070	3,620	1,920	7,090	7,840	2,590	987	459
29	653	947	1,120	372	1,130	3,750	1,880	7,330	7,570	2,370	961	359
30	653	974	1,080	378	---	4,080	2,220	7,650	7,360	2,220	1,190	339
31	579	---	1,020	386	---	4,050	---	8,020	---	2,090	1,340	---
TOTAL	9,298	36,387	32,673	22,967	15,848	102,930	87,400	101,920	253,000	143,250	42,346	17,789
MEAN	300	1,213	1,054	741	546	3,320	2,913	3,288	8,433	4,621	1,366	593
MAX	653	1,650	1,650	1,070	1,130	4,080	4,060	8,020	9,150	7,200	2,070	1,300
MIN	177	594	719	356	170	1,180	1,880	1,310	7,360	2,090	416	288
CFSM	0.11	0.46	0.40	0.28	0.21	1.26	1.11	1.25	3.21	1.76	0.52	0.23
IN.	0.13	0.51	0.46	0.32	0.22	1.46	1.24	1.44	3.58	2.03	0.60	0.25

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2004, BY WATER YEAR (WY)

MEAN	1,351	1,571	1,509	1,081	1,295	2,860	3,605	2,555	2,033	1,495	1,049	1,057
MAX	7,729	5,047	3,745	2,622	2,751	6,113	9,466	6,028	8,433	4,621	3,377	3,911
(WY)	(1987)	(1986)	(1986)	(1985)	(1999)	(1985)	(1979)	(1993)	(2004)	(2004)	(1993)	(1986)
MIN	216	297	262	254	283	741	957	317	185	158	130	178
(WY)	(1977)	(1977)	(1977)	(1977)	(1977)	(2003)	(2003)	(1977)	(1988)	(1988)	(1988)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1975 - 2004	
ANNUAL TOTAL	286,723		865,808			
ANNUAL MEAN	786		2,366		1,792	
HIGHEST ANNUAL MEAN					3,252	1993
LOWEST ANNUAL MEAN					509	1977
HIGHEST DAILY MEAN	2,940	May 21	9,150	Jun 4	11,700	Apr 7, 1979
LOWEST DAILY MEAN	81	Sep 6	170	Feb 9	39	Jun 19, 1988
ANNUAL SEVEN-DAY MINIMUM	111	Sep 3	219	Oct 7	85	Jun 15, 1988
MAXIMUM PEAK FLOW			9,200	Jun 4	11,900	Apr 5, 1979
MAXIMUM PEAK STAGE			15.27	Jun 4	(a)16.23	Apr 5, 1979
ANNUAL RUNOFF (CFSM)	0.299		0.899		0.681	
ANNUAL RUNOFF (INCHES)	4.06		12.25		9.26	
10 PERCENT EXCEEDS	1,450		6,810		3,800	
50 PERCENT EXCEEDS	530		1,340		1,300	
90 PERCENT EXCEEDS	224		329		371	

(a) Datum then in use

05427718 YAHARA RIVER AT WINDSOR, WI

LOCATION.--Lat 43°12'32", long 89°21'09", in NW ¼ NE ¼ sec.31, T.9 N., R.10 E., Dane County, Hydrologic Unit 07090001, at bridge on road to Lake Windsor Country Club.

DRAINAGE AREA.--73.6 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1976 to December 1981, October 1989 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 870 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.6	9.2	19	16	e11	75	20	17	45	20	22	21
2	9.5	22	18	17	e11	50	19	17	33	20	26	19
3	9.5	47	17	17	e11	30	18	17	28	24	30	19
4	9.5	279	17	16	e11	24	18	17	26	86	64	18
5	9.2	80	17	15	e11	165	17	17	24	45	34	18
6	9.3	41	17	e14	e11	77	17	16	24	33	25	18
7	9.0	25	17	e14	e11	36	17	16	23	28	23	18
8	8.9	20	17	e14	e11	26	17	17	23	25	22	18
9	8.6	17	17	e14	e11	22	16	23	23	24	21	18
10	8.3	16	66	14	11	20	16	25	37	25	21	18
11	7.9	16	41	14	e11	20	15	30	88	24	21	18
12	7.8	16	30	14	e10	20	15	23	69	23	20	17
13	8.6	16	22	14	e11	17	15	24	43	22	19	17
14	12	16	19	14	e11	18	15	32	32	22	19	17
15	9.7	15	18	13	e10	17	15	27	28	21	19	19
16	8.9	15	19	13	e10	17	15	22	25	23	19	19
17	8.7	15	18	13	e10	17	19	21	44	23	20	18
18	8.6	22	17	13	e11	17	22	51	30	22	20	17
19	8.7	20	17	e13	12	17	19	29	26	21	19	17
20	9.0	17	17	e12	14	22	19	23	24	20	18	16
21	8.9	16	17	e12	14	20	25	77	24	23	18	16
22	8.8	16	17	e12	14	18	20	408	25	23	18	16
23	9.0	141	17	e12	19	18	18	480	23	22	18	16
24	11	67	16	e12	31	21	17	318	24	22	19	16
25	11	33	17	e12	34	22	19	106	24	21	23	16
26	9.4	25	16	e12	48	56	18	60	22	19	21	16
27	9.4	22	17	e12	58	34	17	42	22	19	27	16
28	9.5	21	20	e11	67	31	17	34	23	19	22	16
29	9.3	20	19	e11	77	35	17	34	22	20	21	16
30	9.6	19	18	e11	---	26	17	69	21	27	20	16
31	9.6	---	17	e11	---	22	---	68	---	26	19	---
TOTAL	286.8	1,104.2	631	412	582	1,010	529	2,160	925	792	708	520
MEAN	9.25	36.8	20.4	13.3	20.1	32.6	17.6	69.7	30.8	25.5	22.8	17.3
MAX	12	279	66	17	77	165	25	480	88	86	64	21
MIN	7.8	9.2	16	11	10	17	15	16	21	19	18	16
CFSM	0.13	0.50	0.28	0.18	0.27	0.44	0.24	0.95	0.42	0.35	0.31	0.24
IN.	0.14	0.56	0.32	0.21	0.29	0.51	0.27	1.09	0.47	0.40	0.36	0.26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2004, BY WATER YEAR (WY)

MEAN	16.5	18.7	15.9	16.6	25.5	37.6	24.3	23.4	26.3	21.7	18.8	18.7
MAX	29.2	36.8	27.0	32.5	74.2	135	47.8	69.7	75.4	95.3	40.3	50.1
(WY)	(1994)	(2004)	(1994)	(1996)	(1994)	(1976)	(1993)	(2004)	(2000)	(1993)	(1993)	(1980)
MIN	7.75	8.78	8.54	6.50	4.76	11.8	14.1	7.71	7.48	7.12	7.29	7.12
(WY)	(1978)	(1978)	(1978)	(1978)	(1978)	(1978)	(1978)	(1977)	(1977)	(1977)	(1991)	(1977)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1976 - 2004	
ANNUAL TOTAL	6,053.9		9,660.0			
ANNUAL MEAN	16.6		26.4		21.7	
HIGHEST ANNUAL MEAN					39.1	1993
LOWEST ANNUAL MEAN					10.9	1977
HIGHEST DAILY MEAN	279	Nov 4	480	May 23	519	Jul 6, 1993
LOWEST DAILY MEAN	7.8	Oct 12	7.8	Oct 12	(a)4.6	Mar 1, 1978
ANNUAL SEVEN-DAY MINIMUM	8.4	Oct 7	8.4	Oct 7	(a)4.6	Mar 1, 1978
MAXIMUM PEAK FLOW			721	May 23	2,050	Jul 6, 1993
MAXIMUM PEAK STAGE			6.04	May 23	6.58	Jul 6, 1993
INSTANTANEOUS LOW FLOW			(b)4.3	Feb 15	(b)2.9	Feb 25, 1991
ANNUAL RUNOFF (CFSM)	0.225		0.359		0.295	
ANNUAL RUNOFF (INCHES)	3.06		4.88		4.01	
10 PERCENT EXCEEDS	21		36		31	
50 PERCENT EXCEEDS	14		18		17	
90 PERCENT EXCEEDS	9.1		11		9.1	

(a) Ice affected
(b) Result of freezeup
(e) Estimated due to ice effect or missing record

05427718 YAHARA RIVER AT WINDSOR, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1975 to September 1980, October 1989 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: March 1990 to current year.
TOTAL-PHOSPHORUS DISCHARGE: March 1990 to current year.
TOTAL ORTHO-PHOSPHORUS DISCHARGE: October 1990 to September 1992.

INSTRUMENTATION.--Water-quality sampler since March 1990.

REMARKS.--Records good. Samples are point samples unless otherwise indicated.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 7,070 mg/L, June 29, 1990; minimum observed, 3.0 mg/L, Sept. 10, 2002.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 1,950 tons, May 23, 2004; minimum daily, 0.10 ton, Sept. 10, 2002.
TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 5.10 mg/L, June 7, 1993; minimum observed, 0.01 mg/L, Jan. 31, 1991, and Oct. 29, 1997.
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 5,590 lb, May 23, 2004; minimum daily, 0.70 lb, Nov. 13-15, 1997.
TOTAL ORTHO-0HOSPHORUS CONCENTRATIONS: Maximum observed, 1.10 mg/L, Mar. 2, 3, 1991; minimum observed, <0.01 mg/L, Nov. 13, 1990 and June 26, 1994.
TOTAL ORTHO-PHOSPHORUS DISCHARGE: Maximum daily, 1,260 lb, Mar. 2, 1991; minimum daily, 0.49 lb, Nov. 26, 1990.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 2,940 mg/L, May 23; minimum observed, 5.0 mg/L, Mar. 4.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 1,950 tons, May 23; minimum daily, 0.28 ton, Apr. 15.
TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 3.64 mg/L, May 23; minimum observed, 0.028 mg/L, Jan. 12.
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 5,590 lb, May 23; minimum daily, 1.59 lb, Feb. 12.
TOTAL ORTHO-PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.505 mg/L, Feb. 28; minimum observed, 0.120 mg/L, July 4.

SUSPENDED SEDIMENT DISCHARGE, TONS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.66	0.37	0.50	0.74	0.43	9.2	0.69	0.37	8.5	1.9	1.2	1.3
2	0.64	0.92	0.48	0.74	0.42	3.1	0.51	0.37	5.8	1.9	2.1	1.0
3	0.62	15	0.47	0.75	0.42	0.90	0.40	0.36	5.4	3.2	3.1	0.93
4	0.61	122	0.46	0.70	0.42	0.61	0.38	0.37	5.3	37	17	0.88
5	0.57	10	0.47	0.65	0.42	105	0.37	0.36	5.5	6.1	3.3	0.84
6	0.57	2.5	0.46	0.61	0.42	16	0.36	0.36	5.6	3.1	1.4	0.81
7	0.53	1.2	0.46	0.61	0.41	2.0	0.35	0.35	4.4	1.9	0.98	0.78
8	0.52	0.91	0.46	0.61	0.41	0.90	0.34	0.37	3.5	1.3	0.82	0.74
9	0.48	0.79	0.48	0.60	0.41	0.58	0.32	1.2	3.0	1.3	0.79	0.72
10	0.45	0.76	9.0	0.62	0.42	0.52	0.31	3.1	7.4	1.6	0.79	0.69
11	0.42	0.75	2.6	0.61	0.41	0.50	0.30	3.4	22	1.8	0.78	0.66
12	0.40	0.74	1.6	0.60	0.37	0.79	0.30	1.3	16	1.9	0.76	0.63
13	0.43	0.72	1.1	0.59	0.40	0.62	0.29	2.5	5.9	1.6	0.71	0.60
14	0.78	0.71	0.97	0.58	0.40	0.54	0.29	3.6	3.3	1.3	0.69	0.58
15	0.46	0.71	0.87	0.56	0.36	0.50	0.28	1.7	2.5	1.1	0.67	0.76
16	0.41	0.70	0.90	0.54	0.36	0.50	0.29	1.1	2.6	1.3	0.64	1.2
17	0.39	0.69	0.86	0.56	0.36	0.51	0.78	1.6	11	1.5	0.64	0.86
18	0.37	1.4	0.83	0.53	0.39	0.52	1.5	32	4.6	1.1	0.63	0.76
19	0.36	1.2	0.80	0.54	0.41	0.51	0.37	4.1	2.9	1.0	0.61	0.67
20	0.36	0.90	0.81	0.49	0.51	0.95	0.34	2.2	2.0	0.95	0.58	0.62
21	0.35	0.80	0.80	0.49	0.51	0.90	1.0	194	2.1	1.3	0.56	0.58
22	0.33	0.74	0.80	0.49	0.49	0.79	0.46	942	2.3	1.4	0.55	0.55
23	0.33	61	0.79	0.49	0.99	0.73	0.39	1,950	2.2	1.1	0.55	0.52
24	0.54	9.1	0.75	0.48	2.3	0.81	0.37	210	2.3	1.0	0.56	0.49
25	0.76	2.3	0.77	0.48	4.0	1.0	0.41	41	2.2	0.96	1.4	0.47
26	0.46	1.1	0.75	0.48	7.0	11	0.39	16	2.1	0.89	0.90	0.45
27	0.41	0.65	0.76	0.48	8.8	1.5	0.38	9.1	2.0	0.87	2.0	0.43
28	0.39	0.57	0.89	0.44	13	2.4	0.37	6.0	2.1	0.87	1.1	0.40
29	0.38	0.54	0.86	0.43	14	5.3	0.36	4.3	2.0	0.99	0.97	0.38
30	0.39	0.52	0.81	0.43	---	1.5	0.37	37	2.0	2.2	0.92	0.40
31	0.39	---	0.78	0.43	---	0.96	---	27	---	2.0	0.88	---
TOTAL	14.76	240.29	33.34	17.35	59.24	171.64	13.27	3,497.11	148.5	86.43	48.58	20.70

CAL YR 2003 TOTAL 697.02
WTR YR 2004 TOTAL 4,351.21

05427718 YAHARA RIVER AT WINDSOR, WI—Continued

PHOSPHORUS, WATER, UNFILTERED, POUNDS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.57	2.61	9.10	2.75	1.72	226	10.6	3.59	51.3	9.02	13.3	7.58
2	2.57	16.7	8.72	2.75	1.72	102	8.66	3.61	29.5	8.98	15.4	6.10
3	2.55	96.3	8.54	2.75	1.72	41.9	7.19	3.61	21.0	15.3	29.6	5.03
4	2.56	982	8.39	2.58	1.73	24.7	6.06	3.67	17.9	152	125	4.68
5	2.46	185	8.41	2.38	1.73	688	5.17	3.70	16.0	55.1	38.5	4.61
6	2.49	47.4	8.25	2.23	1.73	220	4.73	3.67	14.9	26.9	18.3	4.60
7	2.41	17.0	8.16	2.21	1.74	48.7	4.53	3.71	14.4	18.9	15.5	4.56
8	2.38	10.3	8.18	2.19	1.74	23.3	4.31	4.03	14.3	14.7	14.8	4.49
9	2.28	8.22	8.37	2.17	1.74	14.7	4.06	7.27	14.5	14.1	14.2	4.49
10	2.20	7.36	87.3	2.20	1.80	11.6	3.87	7.78	37.6	15.1	13.9	4.50
11	2.09	7.21	43.4	2.18	1.74	9.87	3.70	10.5	178	15.2	13.7	4.42
12	2.08	7.00	16.4	2.14	1.59	8.33	3.56	6.30	121	14.5	13.3	4.37
13	2.31	6.74	9.28	2.11	1.75	6.16	3.45	6.84	49.6	13.8	12.8	4.30
14	3.88	6.60	6.73	2.09	1.76	5.41	3.01	9.92	27.5	13.3	12.5	4.31
15	2.93	6.53	5.30	2.01	1.60	4.41	2.60	8.47	20.9	12.9	12.4	4.72
16	2.55	6.37	5.19	1.97	1.60	4.32	2.70	6.71	19.0	14.0	12.2	4.75
17	2.46	6.22	4.71	2.05	1.60	4.44	3.35	6.51	53.0	14.2	12.5	4.53
18	2.42	12.1	4.33	1.96	1.77	4.54	4.01	31.4	21.1	13.3	12.4	4.34
19	2.43	9.94	3.99	1.99	1.87	4.50	3.53	15.3	14.9	12.7	12.0	4.16
20	2.50	7.51	3.85	1.84	2.32	5.82	3.46	9.69	11.9	12.4	11.4	4.03
21	2.46	7.00	3.63	1.84	2.33	5.30	4.60	669	11.4	13.8	11.2	3.99
22	2.40	6.76	3.45	1.84	2.25	4.96	3.80	3,120	11.3	14.1	11.0	3.98
23	2.45	427	3.25	1.85	12.9	4.54	3.48	5,590	10.5	13.4	11.1	3.95
24	3.12	133	2.92	1.85	95.2	4.87	3.33	1,470	10.6	13.1	11.2	3.90
25	3.99	31.6	2.94	1.85	150	6.51	3.73	289	10.0	12.7	13.9	3.94
26	2.67	17.1	2.87	1.86	253	74.4	3.62	120	9.41	11.7	12.5	3.94
27	2.59	11.6	2.89	1.86	286	28.0	3.49	71.1	9.26	11.4	20.9	3.94
28	2.65	10.5	3.38	1.71	301	21.5	3.43	53.2	9.79	11.4	15.5	3.86
29	2.61	9.87	3.23	1.71	345	38.0	3.44	50.0	9.45	11.9	12.4	3.87
30	2.71	9.57	3.02	1.71	---	19.0	3.55	157	9.19	16.0	10.0	3.85
31	2.72	---	2.89	1.72	---	13.1	---	123	---	15.3	8.22	---
TOTAL	80.49	2,113.11	301.07	64.35	1,482.65	1,678.88	129.02	11,868.58	849.20	611.20	561.62	133.79

CAL YR 2003 TOTAL 5,040.00
WTR YR 2004 TOTAL 19,873.96

05427718 YAHARA RIVER AT WINDSOR, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)
NOV						
03...	0315	20	50	--	.144	13
03...	1445	53	50	--	.303	64
03...	2130	94	50	--	.433	105
03...	2330	145	50	.220	.677	392
04...	0100	210	50	.230	.648	309
04...	0245	340	50	.280	.743	277
04...	0400	394	50	.290	.735	271
04...	0910	355	50	.310	.617	129
04...	1800	216	50	.330	.639	94
05...	0215	118	50	.300	.520	63
06...	0910	44	50	--	.221	19
06...	0911	44	10	--	.210	24
10...	1215	16	10	--	.082	17
23...	0315	33	50	--	.190	29
23...	0530	86	50	--	.486	299
23...	0600	109	50	--	.539	323
23...	0630	135	50	.179	.520	242
23...	0745	183	50	--	.651	274
23...	0915	226	50	.252	.588	237
23...	1700	165	50	.312	.594	106
24...	0800	73	50	--	.393	49
27...	1330	22	50	--	.092	10
DEC						
10...	0015	22	50	--	.089	12
10...	0530	54	50	--	.204	51
10...	0900	72	50	--	.264	55
10...	1045	83	50	--	.286	75
11...	0730	47	50	--	.220	21
15...	0800	18	10	--	.055	18
JAN						
12...	0800	14	10	--	.028	80
FEB						
23...	1730	22	50	--	.195	22
24...	0930	32	50	--	.640	28
25...	0930	25	50	--	.770	25
25...	1900	47	50	--	1.00	58
26...	1100	33	50	--	1.04	30
26...	1800	54	50	--	.885	49
26...	2045	72	50	--	.947	89
27...	0847	46	50	--	.994	42
27...	0848	46	10	--	1.04	36
27...	1900	74	50	--	.815	68
28...	0700	52	50	--	.852	35
28...	1500	51	50	--	.692	36
28...	1700	71	50	--	.742	63
28...	1830	95	50	.502	.863	145
28...	2000	106	50	.505	.896	129
29...	0730	76	50	--	1.02	73
29...	1730	80	50	.414	.667	49
MAR						
01...	0445	84	50	--	.637	58
01...	2045	71	50	--	.474	33
02...	2045	40	50	--	.319	17
04...	1300	22	50	--	.179	5
04...	2330	34	50	--	.187	23
05...	0115	69	50	--	.376	102
05...	0215	99	50	.260	.579	212
05...	0315	136	50	.268	.990	645
05...	0345	154	50	--	.958	582
05...	0430	173	50	.236	.803	466
05...	0600	192	50	--	.737	311
05...	0730	211	50	.342	.765	295
05...	1830	156	50	--	.829	145
06...	1215	71	50	--	.487	72
09...	0130	23	50	--	.134	10
23...	1509	18	50	--	.051	15
23...	1510	18	10	--	.042	18
26...	0001	34	50	--	.153	54
26...	0245	59	50	--	.267	148
26...	0330	70	50	--	.342	191
26...	1130	61	50	--	.241	52
28...	1145	26	50	--	.096	13
29...	0230	40	50	--	.230	104
30...	1845	24	50	--	.121	19

05427718 YAHARA RIVER AT WINDSOR, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)
APR						
14...	1219	15	50	--	.041	7
14...	1220	15	10	--	.032	8
17...	0830	25	50	--	--	29
18...	0800	33	50	--	--	49
21...	0700	25	50	--	--	13
MAY						
06...	0900	17	10	--	.041	22
10...	1745	35	50	--	--	78
10...	1900	43	50	--	--	101
11...	1915	26	50	--	--	23
13...	1745	36	50	--	--	79
15...	1015	27	50	--	--	21
17...	2200	26	50	--	--	51
18...	0130	59	50	--	--	449
18...	0930	60	50	--	--	249
19...	1515	27	50	--	--	41
21...	1230	35	50	--	.768	633
21...	1645	58	50	--	--	203
21...	1715	79	50	--	--	349
21...	1815	110	50	--	1.57	1,100
21...	1845	139	50	--	--	1,280
21...	1915	173	50	--	1.98	1,670
21...	2030	226	50	--	2.28	1,310
22...	0015	310	50	--	1.92	1,050
22...	0045	364	50	--	1.68	1,320
22...	0130	445	50	--	--	1,380
22...	0215	521	50	--	2.81	2,220
22...	1445	365	50	--	.740	158
23...	0330	277	50	--	.758	214
23...	0600	460	50	--	2.15	1,360
23...	0700	547	50	--	--	1,350
23...	0800	663	50	--	3.64	2,940
23...	2330	425	50	--	1.18	393
24...	1700	265	50	--	.665	181
24...	2345	158	50	--	--	196
25...	1215	101	50	--	.484	125
29...	0330	30	50	--	.274	56
29...	1445	41	50	--	--	46
30...	0645	34	50	--	.171	30
30...	1215	68	50	.133	.323	126
30...	1315	99	50	--	.567	423
30...	1345	111	50	--	--	423
30...	1430	126	50	.173	.580	312
30...	1730	108	50	--	--	303
30...	2130	90	50	.172	.444	156
JUN						
01...	1045	45	50	--	.205	60
06...	1100	24	50	--	.115	90
10...	0045	26	50	--	.133	49
10...	1815	45	50	--	.189	69
10...	2345	79	50	--	.276	130
11...	0645	101	50	--	.326	108
11...	2100	73	50	--	.342	64
12...	0515	82	50	--	.371	116
12...	2115	57	50	--	.264	59
14...	0835	33	50	--	.157	42
14...	0836	33	10	--	.156	35
16...	1745	25	50	--	.125	33
17...	0200	43	50	--	.234	93
17...	0315	62	50	--	.342	184
17...	0715	48	50	--	.235	83
18...	0715	31	50	--	--	60
20...	1600	24	50	--	.089	29
22...	0630	26	50	--	--	35

05427718 YAHARA RIVER AT WINDSOR, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)
JUL						
03...	1900	25	50	--	.109	35
03...	2345	54	50	--	.236	124
04...	0345	112	50	.141	.424	238
04...	0415	125	50	--	--	231
04...	0500	139	50	.123	.399	230
04...	1030	100	50	.120	.290	93
04...	2245	53	50	--	.300	60
06...	1530	32	50	--	--	32
08...	1530	25	50	--	.104	18
12...	0638	23	50	--	.124	32
12...	0639	23	10	--	.115	74
30...	1230	26	50	--	--	21
30...	1745	35	50	--	--	42
31...	1015	26	50	--	--	29
AUG						
02...	1130	29	50	--	--	33
02...	1630	38	50	--	--	40
03...	0845	24	50	--	--	19
03...	2030	37	50	--	.223	47
03...	2100	58	50	--	.276	68
04...	0001	82	50	--	.388	92
04...	0045	96	50	--	--	144
04...	0130	108	50	--	.492	175
04...	0600	72	50	--	.378	109
05...	0415	39	50	--	.236	41
06...	1245	24	50	--	.128	20
25...	0215	23	50	--	--	41
25...	1445	24	50	--	--	20
27...	0200	24	50	--	.110	19
27...	0545	34	50	--	.149	49
27...	0645	43	50	--	.169	54
27...	0910	32	50	--	.146	26
27...	0911	32	10	--	.155	186
28...	1000	22	50	--	.129	17
SEP						
01...	0615	23	50	--	--	25
15...	2030	22	50	--	--	15
29...	1305	16	10	--	.046	9

05427850 YAHARA RIVER AT STATE HIGHWAY 113 AT MADISON, WI

LOCATION.--Lat 43°09'03", long 89°24'07", in SW ¼ SW ¼ sec.23, T.8 N., R.9 E., Dane County, Hydrologic Unit 07090001, at northbound bridge on Highway 113, 5.3 mi north of the state capitol in Madison.

DRAINAGE AREA.--114 mi^2, of which 36.6 mi^2 is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 2002 to current year.

GAGE.--Water-stage recorder. Side-looking velocity meter system. Datum of gage is 840.00 ft above NGVD of 1929 (Wisconsin Department of Transportation benchmark).

REMARKS.--Records good (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	41	85	44	38	184	76	52	183	73	151	60
2	8.1	82	69	44	33	159	70	55	146	75	111	67
3	59	140	62	56	41	101	80	31	114	52	113	66
4	33	326	57	45	47	93	59	67	111	98	183	60
5	32	366	55	39	38	206	56	44	106	139	162	53
6	27	175	48	37	42	277	76	58	98	91	107	74
7	37	100	42	40	47	139	59	47	73	94	85	68
8	36	63	73	37	46	91	72	52	106	83	73	60
9	31	54	76	37	47	72	64	78	110	81	80	58
10	34	62	123	39	49	47	65	77	87	81	91	49
11	14	70	132	41	53	70	63	82	157	67	83	65
12	57	36	73	43	56	64	52	53	152	71	76	52
13	36	85	64	45	47	41	51	77	119	65	69	49
14	40	46	54	39	54	56	55	84	96	76	65	49
15	43	63	56	36	49	74	38	74	84	68	63	40
16	43	57	59	41	49	47	70	59	76	73	62	92
17	19	47	55	42	54	53	71	58	114	104	78	59
18	58	80	50	34	54	53	-41	105	104	80	54	58
19	33	70	50	32	47	38	170	76	81	87	72	54
20	38	69	34	38	47	81	68	86	60	77	71	59
21	54	89	58	39	56	64	81	89	91	73	57	56
22	37	53	48	32	58	43	79	436	87	86	53	53
23	38	130	49	39	55	67	59	721	89	73	72	40
24	34	254	43	31	78	69	72	747	97	69	53	64
25	43	144	42	34	84	54	45	411	73	66	65	57
26	45	111	41	34	104	156	71	167	79	64	64	50
27	16	82	42	29	128	119	43	139	70	61	83	59
28	41	77	60	25	133	80	-2.0	102	74	42	79	43
29	64	62	48	25	165	126	101	124	66	66	62	48
30	35	69	34	40	---	121	74	139	50	166	69	41
31	38	---	64	36	---	63	---	174	---	187	63	---
TOTAL	1,158.1	3,103	1,846	1,173	1,799	2,908	1,897.0	4,564	2,953	2,588	2,569	1,703
MEAN	37.4	103	59.5	37.8	62.0	93.8	63.2	147	98.4	83.5	82.9	56.8
MAX	64	366	132	56	165	277	170	747	183	187	183	92
MIN	8.1	36	34	25	33	38	-41	31	50	42	53	40
CFSM	0.48	1.34	0.77	0.49	0.80	1.21	0.82	1.90	1.27	1.08	1.07	0.73
IN.	0.56	1.49	0.89	0.56	0.86	1.40	0.91	2.19	1.42	1.24	1.23	0.82

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2004, BY WATER YEAR (WY)

MEAN	45.2	79.7	52.5	40.9	57.2	71.4	64.5	103	72.1	53.6	51.0	44.2
MAX	53.1	103	59.5	50.4	71.6	93.8	82.1	147	98.4	83.5	82.9	56.8
(WY)	(2003)	(2004)	(2004)	(2002)	(2002)	(2004)	(2002)	(2004)	(2004)	(2004)	(2004)	(2004)
MIN	37.4	56.0	45.5	34.6	37.9	47.1	48.2	77.8	37.8	34.4	27.2	37.4
(WY)	(2004)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2003)	(2003)	(2003)	(2003)

05427850 YAHARA RIVER AT STATE HWY 113 AT MADISON, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2002 - 2004	
ANNUAL TOTAL	17,912.2		28,261.1			
ANNUAL MEAN	49.1		77.2		61.3	
HIGHEST ANNUAL MEAN					77.2	2004
LOWEST ANNUAL MEAN					45.3	2003
HIGHEST DAILY MEAN	366	Nov 5	747	May 24	747	May 24, 2004
LOWEST DAILY MEAN	-1.4	Apr 17	-41	Apr 18	-41	Apr 18, 2004
ANNUAL SEVEN-DAY MINIMUM	20	Aug 30	30	Oct 5	20	Aug 30, 2003
MAXIMUM PEAK FLOW			849	May 24	849	May 24, 2004
MAXIMUM PEAK STAGE			11.83	May 24	11.83	May 24, 2004
INSTANTANEOUS LOW FLOW			-560	Apr 18	-759	Jun 10, 2002
ANNUAL RUNOFF (CFSM)	0.634		0.998		0.792	
ANNUAL RUNOFF (INCHES)	8.61		13.58		10.76	
10 PERCENT EXCEEDS	82		127		100	
50 PERCENT EXCEEDS	40		63		49	
90 PERCENT EXCEEDS	24		37		29	

05427850 YAHARA RIVER AT STATE HIGHWAY 113 AT MADISON, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 2002 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: January 2002 to current year.
SUSPENDED-SEDIMENT DISCHARGE: January 2002 to current year.
TOTAL-PHOSPHORUS DISCHARGE: January 2002 to current year.

INSTRUMENTATION.--Automatic pumping sampler since January 2002.

REMARKS.--Records good. Samples are point samples unless otherwise noted.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum, 31.5°C, July 18, 2002; minimum, 0.0°C, on many days during winter.
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 107 mg/L, May 24, 2004; minimum observed, 4.0 mg/L, Feb. 18, 2003.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 216 tons, May 24, 2004; minimum daily, -2.43 ton, Apr. 18, 2004.
TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.472 mg/L, May 25, 2004; minimum observed, 0.013 mg/L, Feb. 18, 2003.
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 1,660 lb, May 24, 2004; minimum daily, -42.5 lb, Apr. 18, 2004.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 28.5°C, July 20, 21; minimum, 0.0°C, on many days during winter.
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 107 mg/L, May 24; minimum observed, 8.0 mg/L, Oct. 5.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 216 tons, May 24; minimum daily, -2.43 ton, Apr. 18.
TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.472 mg/L, May 25; minimum observed, 0.036 mg/L, Feb. 23.
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 1,660 lb, May 24; minimum daily, -42.5 lb, Apr. 18.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	11.5	9.5	10.5	9.5	8.0	8.5	1.0	0.0	0.5	3.5	2.5	3.0
2	10.5	8.5	9.5	8.5	7.5	8.0	1.0	0.0	0.5	3.0	2.0	2.5
3	10.0	8.5	9.5	8.0	5.5	7.0	2.5	1.0	2.0	3.5	2.0	3.0
4	11.0	8.5	9.5	7.0	5.5	6.0	3.0	2.5	2.5	3.0	1.5	2.5
5	12.5	9.0	10.5	6.5	5.0	5.5	3.5	2.5	3.0	2.0	1.0	1.5
6	13.5	10.5	12.0	5.5	4.0	4.5	3.5	3.0	3.0	2.0	1.0	1.5
7	16.0	12.0	13.5	4.5	2.0	3.5	4.0	3.0	3.5	1.5	1.5	1.5
8	17.5	14.5	15.5	3.0	1.0	2.0	4.0	3.5	4.0	1.5	1.0	1.5
9	18.0	16.0	17.0	4.0	2.5	3.0	3.5	2.5	3.0	2.0	1.5	2.0
10	19.0	16.0	17.5	4.0	3.0	3.5	2.5	0.0	1.0	1.5	1.5	1.5
11	19.0	17.0	18.0	5.0	3.0	4.0	1.5	0.0	0.5	1.5	1.0	1.5
12	18.0	15.5	16.5	6.5	4.0	5.0	2.0	1.0	1.5	2.0	1.5	1.5
13	17.0	14.5	15.5	4.0	2.0	3.0	2.0	1.0	1.5	2.5	2.0	2.0
14	16.0	14.0	15.0	4.0	2.0	3.0	2.0	1.5	2.0	2.0	1.5	2.0
15	14.5	12.5	13.5	4.0	3.5	4.0	2.0	1.5	2.0	1.5	1.0	1.5
16	12.5	11.0	11.5	4.5	4.0	4.5	2.0	1.5	2.0	1.5	1.0	1.0
17	12.0	9.5	10.5	6.0	4.0	5.0	2.5	2.0	2.0	1.5	1.0	1.5
18	12.5	9.5	11.0	7.5	6.0	7.0	2.5	2.0	2.5	1.5	1.0	1.5
19	14.0	10.5	12.0	7.5	6.0	6.5	3.0	2.0	2.5	1.0	0.5	1.0
20	15.5	12.5	13.5	7.5	5.5	6.5	3.0	2.5	2.5	1.0	0.5	1.0
21	14.5	12.5	13.5	7.0	4.5	5.5	3.0	2.5	3.0	1.5	0.5	1.0
22	13.0	10.5	12.0	4.5	3.5	4.0	3.5	2.5	3.0	1.5	0.5	1.0
23	12.5	10.5	11.5	5.0	4.0	4.5	3.5	3.0	3.5	1.5	0.5	1.0
24	11.0	9.5	10.0	4.0	0.0	1.5	3.5	3.0	3.0	0.5	0.5	0.5
25	11.5	9.5	10.0	1.0	0.0	0.5	3.0	2.5	3.0	0.5	0.5	0.5
26	10.0	7.5	8.5	1.0	0.0	0.5	3.0	2.0	2.0	0.5	0.0	0.5
27	8.5	7.0	7.5	2.0	1.0	1.5	3.0	2.0	2.5	0.5	0.0	0.5
28	8.0	6.5	7.5	2.0	0.0	1.0	3.5	2.5	3.0	0.5	0.0	0.5
29	7.5	6.0	6.5	0.5	0.0	0.5	3.5	2.5	3.0	0.5	0.0	0.0
30	10.0	6.0	8.0	1.5	0.0	0.5	3.5	2.5	3.0	0.0	0.0	0.0
31	10.5	9.5	10.0	---	---	---	3.5	2.5	3.0	0.0	0.0	0.0
MONTH	19.0	6.0	11.8	9.5	0.0	4.0	4.0	0.0	2.4	3.5	0.0	1.3

05427850 YAHARA RIVER AT STATE HIGHWAY 113 AT MADISON, WI—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	0.0	0.0	0.0	1.0	0.0	0.5	10.5	7.0	8.5	13.5	12.0	12.5
2	0.0	0.0	0.0	2.0	0.5	1.0	11.5	8.0	9.5	13.5	10.5	12.0
3	0.0	0.0	0.0	2.5	1.5	2.0	10.5	8.5	9.5	14.0	10.0	12.0
4	0.0	0.0	0.0	3.0	2.0	2.5	10.5	7.0	8.5	16.5	12.5	14.5
5	0.0	0.0	0.0	2.5	1.0	2.0	11.0	7.5	9.0	16.5	14.0	15.5
6	0.0	0.0	0.0	2.5	1.5	2.0	13.0	9.5	11.0	16.5	15.0	16.0
7	0.0	0.0	0.0	2.0	0.0	0.5	15.5	11.0	13.0	16.0	13.5	15.0
8	0.0	0.0	0.0	1.5	0.0	0.5	14.5	11.0	12.0	18.0	12.5	14.5
9	0.0	0.0	0.0	4.5	1.0	2.0	12.5	9.5	11.0	19.5	15.0	17.0
10	0.0	0.0	0.0	4.5	3.0	3.5	12.5	10.5	11.5	19.5	18.0	18.5
11	0.0	0.0	0.0	3.5	0.0	2.5	10.5	9.0	9.5	19.5	17.0	18.0
12	0.0	0.0	0.0	3.0	0.0	1.5	9.0	6.5	8.0	22.5	18.5	20.0
13	0.0	0.0	0.0	3.5	2.0	3.0	10.0	6.0	8.0	22.5	21.0	21.5
14	0.0	0.0	0.0	3.0	0.5	2.0	13.0	8.5	10.5	21.0	16.0	18.5
15	0.0	0.0	0.0	2.0	0.5	1.0	14.0	11.0	12.5	18.5	14.5	16.5
16	0.0	0.0	0.0	3.0	0.0	1.5	17.5	13.0	14.5	20.5	16.5	18.0
17	0.0	0.0	0.0	3.0	1.0	2.0	21.0	15.5	17.5	21.5	18.0	19.5
18	0.0	0.0	0.0	2.5	1.5	2.0	19.0	16.5	18.0	21.0	18.5	19.5
19	0.0	0.0	0.0	5.0	2.0	3.0	18.0	16.5	17.0	20.5	17.0	18.5
20	0.0	0.0	0.0	7.5	4.5	5.5	16.5	13.0	14.0	23.5	19.0	20.5
21	0.0	0.0	0.0	5.0	1.5	3.0	13.0	12.0	12.5	22.5	17.5	19.5
22	0.0	0.0	0.0	5.5	2.5	3.5	12.0	11.0	11.5	19.0	17.0	18.0
23	0.0	0.0	0.0	7.5	3.0	5.0	12.0	9.5	10.5	18.0	16.0	16.5
24	0.0	0.0	0.0	8.5	6.5	7.5	12.5	10.0	11.5	17.0	15.5	16.0
25	0.0	0.0	0.0	10.5	8.0	9.0	11.5	10.0	10.5	16.5	15.0	15.5
26	0.0	0.0	0.0	12.0	10.0	11.0	12.0	9.5	10.5	16.5	15.0	15.5
27	0.0	0.0	0.0	12.0	11.0	11.5	12.5	9.0	10.5	18.5	16.5	17.0
28	0.5	0.0	0.0	13.0	12.0	12.5	15.0	10.0	12.0	20.5	17.0	18.5
29	1.0	0.0	0.5	13.0	10.5	12.0	17.5	14.5	16.0	20.0	17.0	18.0
30	---	---	---	12.0	9.0	10.5	17.0	12.5	14.0	17.0	16.0	16.5
31	---	---	---	9.0	7.5	8.5	---	---	---	18.0	17.0	17.0
MONTH	1.0	0.0	0.0	13.0	0.0	4.3	21.0	6.0	11.8	23.5	10.0	17.0
		JUNE			JULY			AUGUST			SEPTEMBER	
1	17.5	17.0	17.0	25.0	23.0	24.0	25.5	22.5	24.0	25.0	21.5	23.0
2	19.5	17.0	18.0	26.5	23.5	25.0	25.5	24.5	25.0	26.5	23.0	24.5
3	22.0	18.0	19.5	25.0	23.5	24.5	27.5	24.5	25.5	27.0	24.0	25.0
4	22.0	19.0	20.0	24.5	23.5	24.0	25.5	23.5	24.5	26.5	24.0	25.5
5	22.0	20.5	21.5	25.0	23.5	24.0	24.5	22.0	23.5	26.5	24.0	25.0
6	23.5	20.5	21.5	23.5	22.0	22.5	24.5	21.5	22.5	25.5	22.5	24.0
7	25.0	22.5	23.5	22.0	20.5	21.0	24.5	22.0	23.0	23.5	21.0	22.0
8	26.5	24.0	25.0	22.0	19.5	20.0	24.0	21.0	22.0	21.5	19.5	20.5
9	27.0	25.5	26.5	22.0	20.5	21.0	24.5	22.0	23.5	20.0	18.0	19.0
10	25.5	21.0	23.0	24.5	20.5	22.5	23.5	20.0	21.5	22.5	18.0	20.0
11	21.0	20.0	20.0	25.0	23.5	24.5	20.0	18.0	19.0	23.5	20.0	21.5
12	23.5	19.0	20.5	26.5	24.0	25.0	19.0	16.5	18.0	24.5	21.5	22.5
13	24.0	21.5	23.0	27.0	24.5	25.5	21.5	17.0	19.0	24.5	22.5	23.5
14	24.0	22.5	23.5	26.5	24.5	26.0	22.0	18.5	20.0	25.0	22.0	23.0
15	26.0	23.0	24.0	26.5	24.0	25.0	22.0	19.0	20.0	24.5	22.0	23.0
16	25.5	24.0	24.5	26.5	25.0	25.5	22.0	20.0	21.0	22.0	20.0	21.0
17	25.5	24.5	25.0	25.0	23.0	23.5	22.0	20.0	20.5	22.0	19.0	20.5
18	24.5	23.0	24.0	26.0	22.0	24.0	23.5	20.5	22.0	22.0	19.5	20.5
19	23.0	21.0	22.0	26.5	24.0	25.0	22.5	20.0	21.0	22.0	20.0	21.0
20	23.5	21.0	22.0	28.5	25.0	25.5	23.0	20.0	21.0	21.5	18.5	20.0
21	22.5	20.5	21.5	28.5	26.5	27.0	21.5	19.0	20.0	22.5	19.0	20.0
22	21.5	19.5	20.5	27.5	26.0	26.5	22.5	19.5	21.0	22.5	19.0	20.5
23	21.5	20.0	20.5	26.5	24.5	25.5	22.5	21.5	21.5	22.5	20.0	21.0
24	20.5	18.5	19.5	25.5	22.5	24.0	22.0	20.5	21.0	22.0	20.0	21.0
25	20.0	17.5	18.5	26.0	22.0	24.0	22.5	21.0	21.5	20.5	18.0	19.5
26	21.0	19.0	19.5	27.0	22.5	24.5	24.5	21.5	22.5	21.0	17.0	18.5
27	21.5	20.0	20.5	26.0	23.5	24.5	26.0	23.5	24.5	20.5	17.5	19.0
28	22.0	20.0	20.5	26.5	24.0	25.0	24.5	20.5	22.5	19.5	17.0	18.0
29	23.5	20.5	22.0	25.5	24.0	24.5	22.5	18.5	20.5	18.5	15.0	16.5
30	24.5	22.5	23.0	24.0	22.0	23.0	22.0	19.5	20.5	18.5	15.0	16.5
31	---	---	---	25.0	21.5	23.0	23.5	20.0	21.5	---	---	---
MONTH	27.0	17.0	21.7	28.5	19.5	24.2	27.5	16.5	21.7	27.0	15.0	21.2
YEAR	28.5	0.0	11.8									

05427850 YAHARA RIVER AT STATE HIGHWAY 113 AT MADISON, WI—Continued

SUSPENDED SEDIMENT DISCHARGE, TONS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.83	1.64	3.37	1.29	1.14	7.44	4.68	3.86	25.5	8.47	20.6	4.96
2	0.26	4.02	2.55	1.28	0.95	9.14	4.24	4.19	19.1	8.78	13.7	5.68
3	3.54	8.02	2.20	1.76	1.27	5.09	5.11	1.99	13.9	5.44	13.9	5.52
4	1.64	24.0	1.96	1.32	1.52	4.61	3.46	5.53	13.5	12.5	26.0	4.83
5	0.69	27.6	1.86	1.10	1.16	13.2	3.27	3.22	12.8	16.1	22.1	4.07
6	1.23	10.4	1.55	1.02	1.33	22.4	4.93	4.66	11.6	11.3	12.8	6.24
7	1.84	4.98	1.30	1.13	1.55	8.02	3.50	3.57	7.92	15.0	9.40	5.53
8	1.76	2.70	2.66	1.02	1.51	4.65	4.69	4.12	13.0	10.0	7.66	4.65
9	1.43	2.19	2.79	1.03	1.57	3.45	4.06	7.06	9.20	9.70	8.59	4.41
10	2.02	2.60	4.98	1.10	1.67	1.99	4.19	7.01	10.1	9.70	10.1	3.50
11	0.49	3.02	4.63	1.18	1.86	4.53	4.06	7.67	14.4	7.55	8.90	5.02
12	3.08	1.25	2.61	1.25	2.01	3.04	3.19	6.43	21.1	8.14	7.88	3.71
13	1.67	4.13	2.19	1.33	1.61	1.71	3.14	7.19	11.2	7.24	6.90	3.40
14	1.90	1.61	1.75	1.11	1.94	2.61	3.51	8.12	11.7	8.87	6.34	3.37
15	2.07	3.06	1.83	1.00	1.72	3.79	2.18	6.93	9.84	7.66	6.05	2.56
16	2.04	2.21	1.95	1.19	1.73	2.11	4.91	5.19	6.15	8.39	5.88	7.53
17	0.69	1.71	1.77	1.23	1.98	2.50	5.05	5.12	14.8	13.3	7.88	4.17
18	2.96	3.40	1.56	0.93	2.00	2.52	-2.43	11.2	13.1	9.42	4.84	4.04
19	1.40	2.83	1.55	0.86	1.68	1.65	22.9	7.41	9.40	10.5	7.00	3.64
20	1.67	2.76	0.93	1.08	1.69	4.49	4.93	8.78	6.43	8.91	6.82	4.05
21	2.62	3.82	1.88	1.12	2.14	3.33	6.26	9.25	7.36	8.29	5.08	3.74
22	1.58	1.92	1.46	0.87	2.26	2.00	6.12	74.3	8.92	10.2	4.58	3.44
23	1.62	6.18	1.45	1.13	1.33	3.61	4.21	128	10.8	8.24	6.79	2.36
24	1.38	22.6	1.26	0.84	3.39	1.67	5.53	216	12.2	7.63	4.51	4.32
25	1.87	6.97	1.22	0.95	3.77	2.78	3.01	115	8.41	7.17	5.85	3.67
26	1.96	4.79	1.18	0.96	5.02	11.3	5.53	35.6	9.34	6.86	5.68	3.06
27	0.50	3.29	1.47	0.78	3.11	7.98	2.89	19.5	7.98	6.42	7.92	3.76
28	1.70	3.02	1.94	0.64	7.05	4.80	-0.12	11.6	8.60	3.92	7.36	2.46
29	3.02	2.26	1.44	0.65	9.43	8.79	9.04	15.1	7.41	7.06	5.32	2.81
30	1.36	2.58	0.92	1.20	---	8.42	6.07	17.6	5.15	23.5	6.06	2.26
31	1.50	---	2.10	1.05	---	3.62	---	23.8	---	18.2	5.34	---
TOTAL	53.32	171.56	62.31	33.40	69.39	167.24	142.11	785.00	340.91	304.46	277.83	122.76

WTR YR 2004 TOTAL 2,530.29

05427850 YAHARA RIVER AT STATE HIGHWAY 113 AT MADISON, WI—Continued

PHOSPHORUS, WATER, UNFILTERED, POUNDS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.1	17.6	37.2	14.4	12.8	433.7	50.8	40.7	261	85.4	206	50.5
2	2.71	43.3	28.2	14.4	10.7	102	46.0	44.2	196	88.5	138	57.9
3	37.0	86.3	24.4	19.8	14.2	56.5	55.3	21.0	142	54.8	140	56.3
4	17.1	257	21.7	14.9	17.1	51.2	37.5	58.2	138	126	261	49.3
5	10.5	297	20.6	12.3	13.0	146	35.3	33.8	131	154.4	222	41.5
6	12.9	113	17.2	11.5	14.9	478.1	53.2	49.0	118	114	128	63.8
7	19.4	53.9	14.4	12.8	17.4	88.8	61.1	37.5	80.8	115.1	94.6	56.6
8	18.5	29.2	29.5	11.5	17.0	51.5	50.6	43.1	132	101	77.1	47.6
9	15.1	23.7	31.0	11.5	17.6	38.2	43.8	73.9	93.7	97.6	86.5	45.2
10	15.4	28.2	37.8	12.4	18.7	22.0	45.1	73.2	103	97.5	102	35.9
11	5.20	32.8	50.6	13.2	20.9	98.5	43.7	80.2	162.6	76.0	89.7	51.5
12	32.5	13.6	29.1	14.1	22.6	33.6	34.3	44.9	215	81.8	79.5	38.1
13	17.6	86.2	24.4	15.0	18.0	18.9	33.7	74.9	97.6	72.8	69.6	35.0
14	20.1	38.7	19.5	12.4	21.8	28.7	37.6	84.6	119	89.2	64.0	34.6
15	21.8	63.2	20.4	11.2	19.3	41.8	23.4	72.2	100	77.0	61.0	26.3
16	21.6	24.1	21.7	13.3	19.4	23.2	52.6	54.0	53.7	84.3	59.4	77.5
17	7.34	18.6	19.8	13.8	22.2	27.5	54.0	53.2	150	134	79.6	43.0
18	31.4	37.1	17.4	10.5	22.4	27.7	-42.5	116	133	94.6	48.9	41.6
19	14.9	30.9	17.4	9.71	18.8	18.1	208.1	76.8	76.9	105	70.8	37.6
20	17.7	30.2	10.4	12.2	18.9	49.2	52.5	90.9	65.2	89.5	69.0	34.1
21	27.8	41.8	21.0	12.7	24.0	36.5	66.6	95.7	67.7	83.2	52.6	38.7
22	16.8	21.1	16.4	9.80	25.3	21.9	65.1	766	75.1	103	46.4	35.7
23	17.2	67.8	12.7	12.8	10.7	39.5	44.8	1,167	110	82.7	68.8	24.4
24	14.8	113.7	14.1	9.46	37.8	25.7	58.7	1,660	123	76.6	45.7	44.8
25	19.9	76.5	13.7	10.7	42.0	30.3	32.0	1,046	85.0	72.0	59.3	38.1
26	21.0	119.1	13.2	10.8	56.0	123	58.6	150.4	94.3	68.9	57.6	31.8
27	5.34	36.2	9.70	8.76	211.3	87.0	30.6	250.4	80.6	64.5	80.4	39.1
28	18.2	33.2	21.7	7.24	78.5	52.2	-2.10	119	86.8	39.4	74.8	25.6
29	32.4	24.9	16.2	7.27	105	95.6	95.5	155	74.8	70.9	54.0	29.3
30	14.6	28.5	10.3	13.5	---	91.6	64.1	181	52.0	236	61.7	23.6
31	16.1	---	23.6	11.8	---	39.3	---	244	---	197.7	54.3	---
TOTAL	561.99	1,887.4	665.30	375.74	948.3	2,477.8	1,490.00	7,056.8	3,417.8	3,033.4	2,802.3	1,255.0

WTR YR 2004 TOTAL 25,971.83

05427850 YAHARA RIVER AT STATE HIGHWAY 113 AT MADISON, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
COMPOSITE SAMPLES

Date	Time	End date	End time	Discharge, cfs (00060)	Sampling method, code (82398)	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)
OCT 05-05	0300	20031005	2100	32	50	.061	8
OCT 10-10	0300	20031010	2100	34	50	.084	22
NOV 13-13	0300	20031113	2100	85	50	.188	18
NOV 14-14	0300	20031114	2100	46	50	.156	13
NOV 15-15	0300	20031115	2100	63	50	.186	18
NOV 24-24	0300	20031124	2100	254	50	.082	16
NOV 26-26	0300	20031126	2100	111	50	.199	16
DEC 10-10	0300	20031210	2100	123	50	.049	10
DEC 11-11	0300	20031211	2100	132	50	.071	13
DEC 23-23	0300	20031223	2100	49	50	.048	11
DEC 27-27	0300	20031227	2100	42	50	.043	13
MAR 11-11	0300	20040311	2100	70	50	.261	24
MAR 24-24	0300	20040324	2100	69	50	.069	9
APR 07-07	0200	20040407	2000	59	50	.192	22
APR 19-19	0200	20040419	2000	170	50	.227	50
MAY 23-23	0300	20040523	2100	721	50	.300	66
MAY 24-24	0300	20040524	2100	747	50	.412	107
MAY 25-25	0300	20040525	2100	411	50	.472	104
MAY 26-26	0300	20040526	2100	167	50	.167	79
JUN 09-09	0300	20040609	2100	110	50	.158	31
JUN 11-11	0300	20040611	2100	157	50	.192	34
JUN 13-13	0300	20040613	2100	96	50	.152	35
JUN 16-16	0300	20040616	2100	76	50	.131	30
JUN 19-19	0300	20040619	2100	81	50	.176	43
JUN 21-21	0300	20040621	2100	91	50	.138	30
JUN 22-22	0300	20040622	2100	87	50	.160	38
JUL 05-05	0300	20040705	2100	139	50	.206	43
JUL 07-07	0300	20040707	2100	94	50	.227	59
JUL 31-31	0300	20040731	2100	187	50	.196	36
AUG 21-21	0300	20040821	2100	57	50	.171	--
SEP 20-20	0300	20040920	2100	59	50	.107	--

05427850 YAHARA RIVER AT STATE HIGHWAY 113 AT MADISON, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DISCRETE SAMPLES

Date	Time	Discharge, cfs (00060)	Sampling method, code (82398)	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)
NOV					
24...	1355	254	50	.083	50
DEC					
10...	1400	123	50	.065	19
FEB					
23...	0300	55	50	.036	9
27...	0300	128	50	.306	9
MAR					
01...	0300	184	50	.437	15
06...	0300	277	50	.320	30
MAY					
12...	1115	53	50	.147	39
12...	1120	53	50	.166	50
27...	1145	139	50	.334	52
27...	1155	139	50	.333	51

05427948 PHEASANT BRANCH AT MIDDLETON, WI

LOCATION.--Lat 43°06'12", long 89°30'42", in NE ¼ NW ¼ sec.11, T.7 N., R.8 E., Dane County, Hydrologic Unit 07090001, on left bank at bridge on U.S. Highway 12, 2.5 mi upstream from Lake Mendota, at Middleton.

DRAINAGE AREA.--18.3 mi^2, of which 1.22 mi^2 is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1974 to current year.

GAGE.--Water-stage recorder, crest-stage gage, parshall flume, and concrete control. Datum of gage is 901.5 ft above NGVD of 1929.

REMARKS.--Records good except those for October 9,10, 25-27, 28-31 and August 9-16, which are fair (see page 11). Low flows occasionally affected by construction activities upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.8	2.6	1.9	0.85	24	3.3	1.5	16	2.4	3.4	4.4
2	1.2	20	2.3	1.9	0.97	19	2.9	1.5	6.9	2.3	3.9	4.8
3	1.6	52	2.1	1.9	1.0	6.1	2.7	1.6	4.5	13	21	3.4
4	2.0	265	2.0	1.7	0.99	5.6	2.4	1.6	3.6	36	61	2.3
5	1.7	36	2.2	1.6	0.98	106	2.4	1.5	3.2	8.0	11	0.99
6	1.8	12	2.1	1.4	1.0	23	2.2	1.4	3.0	4.5	5.5	1.6
7	1.6	6.5	2.0	1.3	1.0	7.2	2.1	1.3	3.0	4.4	4.3	2.4
8	0.65	4.5	2.0	1.3	0.99	4.3	1.9	1.4	2.8	3.9	3.9	2.3
9	0.78	3.6	2.9	1.3	1.0	3.5	1.5	3.4	3.5	4.0	3.6	2.2
10	0.77	3.3	55	1.3	1.1	3.2	0.69	4.7	17	3.6	3.2	1.9
11	0.76	3.0	21	1.3	1.0	3.1	1.2	5.7	37	3.2	2.9	1.8
12	1.3	2.8	6.3	1.4	1.0	2.4	1.5	3.5	35	3.1	2.7	1.7
13	1.2	2.2	3.8	1.4	0.99	2.4	1.9	3.5	9.7	2.8	2.5	1.6
14	4.6	2.0	3.2	1.4	0.99	2.8	2.3	8.0	5.2	2.6	2.3	1.6
15	3.8	1.9	2.9	1.3	0.97	2.3	1.7	6.3	4.1	2.5	2.1	4.4
16	2.7	1.9	3.2	1.2	1.0	2.2	1.5	3.4	5.1	12	2.2	4.2
17	2.0	1.9	2.9	1.4	1.00	2.4	5.8	3.3	17	22	2.0	2.9
18	1.6	3.7	2.3	1.3	1.0	2.6	3.7	11	6.9	5.1	3.2	2.4
19	1.4	3.4	2.0	1.1	1.1	2.4	3.0	5.3	4.0	3.4	3.8	2.1
20	1.5	2.9	1.8	1.1	3.6	2.5	3.8	3.1	3.3	3.2	2.5	1.9
21	1.5	2.3	1.7	1.1	6.9	2.1	8.1	86	3.6	4.4	2.0	1.8
22	1.4	1.9	1.9	0.99	8.9	2.0	4.5	352	3.4	5.0	1.9	1.7
23	1.4	126	1.9	0.93	15	1.9	3.0	234	3.1	4.1	1.9	1.7
24	2.2	32	1.7	0.87	36	3.1	2.2	48	4.8	3.6	2.8	1.7
25	3.2	9.3	1.6	0.88	19	4.7	3.4	23	4.6	3.5	3.7	1.6
26	2.5	5.8	1.5	1.00	21	50	2.9	13	3.5	3.2	2.7	1.6
27	2.0	4.2	1.7	1.0	21	13	2.2	7.8	3.1	2.5	3.2	1.5
28	1.6	3.5	5.5	1.0	17	8.0	1.9	5.2	3.1	2.1	2.9	1.6
29	1.5	3.0	3.6	0.96	16	8.8	1.7	8.2	2.8	2.6	2.8	1.6
30	1.4	2.9	2.8	0.88	---	5.0	1.5	50	2.6	7.6	2.4	1.6
31	1.5	---	2.2	0.84	---	3.8	---	36	---	4.2	2.4	---
TOTAL	54.26	621.3	150.7	38.95	183.33	329.4	79.89	936.2	225.4	184.8	175.7	67.29
MEAN	1.75	20.7	4.86	1.26	6.32	10.6	2.66	30.2	7.51	5.96	5.67	2.24
MAX	4.6	265	55	1.9	36	106	8.1	352	37	36	61	4.8
MIN	0.65	1.8	1.5	0.84	0.85	1.9	0.69	1.3	2.6	2.1	1.9	0.99
CFSM	0.10	1.21	0.28	0.07	0.37	0.62	0.16	1.77	0.44	0.35	0.33	0.13
IN.	0.12	1.35	0.33	0.08	0.40	0.72	0.17	2.04	0.49	0.40	0.38	0.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2004, BY WATER YEAR (WY)

MEAN	2.69	3.73	2.43	2.51	6.30	10.0	5.48	5.11	7.03	5.37	4.10	3.76
MAX	6.42	20.7	6.11	7.75	20.4	34.6	16.8	30.2	41.7	32.5	26.5	13.0
(WY)	(1987)	(2004)	(1985)	(1997)	(1994)	(1993)	(1999)	(2004)	(2000)	(1993)	(2001)	(1980)
MIN	0.86	0.67	0.34	0.36	0.46	1.63	0.95	0.96	0.92	0.94	0.92	0.74
(WY)	(1977)	(1991)	(1990)	(1991)	(1978)	(1981)	(1990)	(1977)	(1989)	(1976)	(2003)	(1976)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1974 - 2004	
ANNUAL TOTAL	1,735.61		3,047.22			
ANNUAL MEAN	4.76		8.33		4.90	
HIGHEST ANNUAL MEAN					11.0	1993
LOWEST ANNUAL MEAN					2.78	1977
HIGHEST DAILY MEAN	265	Nov 4	352	May 22	566	Aug 2, 2001
LOWEST DAILY MEAN	(a)0.54	Aug 28	(a)0.65	Oct 8	0.17	Dec 25-27, 1989
ANNUAL SEVEN-DAY MINIMUM	(a)0.69	Aug 27	0.93	Jan 29	0.18	Dec 21, 1989
MAXIMUM PEAK FLOW			652	May 22	964	Aug 2, 2001
MAXIMUM PEAK STAGE			8.74	May 22	9.88	Aug 2, 2001
INSTANTANEOUS LOW FLOW			(a)0.47	Apr 10	0.15	Dec 21, 1989
ANNUAL RUNOFF (CFSM)	0.278		0.487		0.287	
ANNUAL RUNOFF (INCHES)	3.78		6.64		3.89	
10 PERCENT EXCEEDS	6.4		14		6.8	
50 PERCENT EXCEEDS	1.9		2.6		2.0	
90 PERCENT EXCEEDS	0.96		1.1		0.85	

(a) Result of contruction upstream

05427948 PHEASANT BRANCH AT MIDDLETON, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: October 1977 to current year.
TOTAL-PHOSPHORUS DISCHARGE: January 1992 to December 1993, and October 1994 to current year.
TOTAL ORTHO-PHOSPHORUS DISCHARGE: January to September 1992.

INSTRUMENTATION.--Automatic pumping sampler since December 1977.

REMARKS.--Records good. Samples are point samples unless otherwise indicated.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 15,400 mg/L, Apr. 30, 1984; minimum observed, 4 mg/L, Mar. 12, 1979, May 11, 1995, Mar. 17, 2001, July 3 and Aug. 7, 2002.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 2,870 tons, June 10, 1984; minimum daily, 0.01 ton, on many days in 1990, 1991, and 2003 water years.
TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 15.1 mg/L, July 4, 1994; minimum observed, 0.03 mg/L, Jan. 28, 1998.
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 4,310 lb, May 18, 2000; minimum daily, 0.19 lb, Jan. 14, 31, 1998.
TOTAL ORTHO-PHOSPHORUS CONCENTRATIONS: Maximum observed, 2.40 mg/L, Feb. 29, 1992; minimum observed, 0.010 mg/L, Nov. 4, 2003.
TOTAL ORTHO-PHOSPHORUS DISCHARGE: Maximum daily, 966 lb, Feb. 28, 1992; minimum daily, 0.13 lb, Sept. 13, 1992.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 4,850 mg/L, May 22; minimum observed, 8 mg/L, May 14.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 2,400 tons, May 22; minimum daily, 0.02 ton, Apr. 10.
TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 1.99 mg/L, May 21; minimum observed, 0.058 mg/L, Sept. 30.
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 3,190 lb, May 22; minimum daily, 0.24 lb, Sept. 30.
TOTAL ORTHO-PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.507 mg/L, Mar. 5; minimum observed, 0.010 mg/L, Nov. 4.

SUSPENDED SEDIMENT DISCHARGE, TONS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.08	0.14	0.22	0.50	0.06	3.9	0.08	0.06	3.4	0.11	0.19	0.13
2	0.08	2.9	0.18	0.38	0.07	4.6	0.07	0.06	0.83	0.10	0.13	0.14
3	0.12	20	0.16	0.31	0.08	0.77	0.07	0.06	0.37	3.8	30	0.10
4	0.14	755	0.16	0.23	0.07	0.87	0.06	0.06	0.22	107	47	0.07
5	0.12	13	0.16	0.20	0.07	97	0.06	0.05	0.18	2.2	2.5	0.03
6	0.13	2.4	0.15	0.16	0.08	9.8	0.05	0.05	0.17	0.19	0.47	0.05
7	0.11	0.94	0.14	0.14	0.08	2.7	0.05	0.05	0.17	0.17	0.16	0.07
8	0.05	0.45	0.13	0.13	0.07	1.2	0.05	0.05	0.16	0.14	0.12	0.07
9	0.05	0.29	0.29	0.11	0.08	0.60	0.04	0.11	0.31	0.13	0.12	0.07
10	0.05	0.22	23	0.10	0.08	0.34	0.02	0.14	1.3	0.11	0.10	0.06
11	0.05	0.19	4.9	0.10	0.08	0.24	0.03	0.16	7.5	0.09	0.09	0.05
12	0.09	0.18	0.81	0.10	0.08	0.17	0.04	0.09	39	0.09	0.09	0.05
13	0.08	0.15	0.35	0.10	0.07	0.17	0.05	0.08	0.68	0.08	0.08	0.05
14	0.47	0.13	0.22	0.10	0.07	0.19	0.06	0.33	0.15	0.07	0.07	0.05
15	0.40	0.13	0.16	0.09	0.07	0.15	0.05	0.24	0.09	0.06	0.07	0.42
16	0.26	0.12	0.17	0.09	0.08	0.14	0.06	0.12	0.71	1.4	0.07	0.18
17	0.18	0.12	0.15	0.10	0.08	0.14	0.57	0.11	3.0	3.7	0.07	0.11
18	0.13	0.24	0.13	0.09	0.08	0.15	0.20	0.92	0.30	0.40	0.22	0.08
19	0.12	0.22	0.11	0.08	0.09	0.13	0.15	0.27	0.14	0.20	0.19	0.06
20	0.12	0.19	0.09	0.08	0.31	0.13	0.47	0.14	0.11	0.15	0.07	0.06
21	0.11	0.15	0.09	0.08	0.65	0.11	0.66	345	0.12	0.20	0.06	0.05
22	0.11	0.12	0.10	0.07	0.76	0.10	0.27	2,400	0.11	0.22	0.05	0.05
23	0.10	134	0.10	0.07	2.2	0.12	0.15	666	0.10	0.18	0.05	0.05
24	0.20	15	0.09	0.06	8.2	0.27	0.10	43	0.40	0.16	0.13	0.05
25	0.31	3.3	0.08	0.06	2.6	2.0	0.13	10	0.41	0.15	0.25	0.05
26	0.22	1.6	0.08	0.07	3.0	35	0.11	3.2	0.28	0.14	0.10	0.05
27	0.16	0.86	0.11	0.08	2.1	3.1	0.08	1.1	0.22	0.10	0.12	0.05
28	0.12	0.55	2.6	0.07	1.6	1.3	0.07	0.40	0.20	0.09	0.10	0.05
29	0.12	0.34	1.6	0.07	2.4	1.2	0.06	0.76	0.17	0.11	0.09	0.05
30	0.10	0.26	1.1	0.06	---	0.38	0.05	37	0.14	0.71	0.07	0.05
31	0.11	---	0.74	0.06	---	0.15	---	15	---	0.45	0.07	---
TOTAL	4.49	953.19	38.37	3.94	25.26	167.12	3.91	3,524.61	60.94	122.70	82.90	2.40

WTR YR 2004 TOTAL 4,989.83

05427948 PHEASANT BRANCH AT MIDDLETON, WI—Continued

PHOSPHORUS, WATER, UNFILTERED, POUNDS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.53	0.99	1.14	0.85	0.29	86.6	2.12	0.64	30.4	1.99	1.81	2.11
2	0.56	19.4	0.99	0.83	0.33	54.9	1.48	0.65	11.5	1.92	2.06	2.27
3	0.79	92.4	0.90	0.85	0.35	16.3	1.13	0.68	5.55	18.4	86.6	1.61
4	0.95	1,320	0.89	0.75	0.33	13.3	0.98	0.67	3.07	51.3	185	1.05
5	0.83	139	0.97	0.72	0.33	450	0.98	0.62	2.05	11.1	25.9	0.45
6	0.86	39.9	0.92	0.63	0.35	104	0.92	0.59	1.73	4.28	11.5	0.72
7	0.76	17.8	0.87	0.59	0.34	28.0	0.86	0.57	1.59	2.78	6.32	1.04
8	0.31	10.2	0.87	0.59	0.33	11.5	0.80	0.60	1.41	2.09	4.16	1.01
9	0.38	6.82	1.79	0.59	0.34	6.58	0.62	1.43	1.84	2.16	3.22	0.94
10	0.37	5.03	81.7	0.58	0.35	4.18	0.29	1.98	18.6	1.96	2.35	0.82
11	0.37	3.34	36.6	0.60	0.34	2.89	0.51	2.38	86.9	1.75	1.72	0.75
12	0.63	2.26	11.0	0.63	0.33	1.55	0.63	1.44	263	1.70	1.37	0.70
13	0.57	1.28	6.38	0.64	0.32	1.43	0.80	1.55	29.7	1.60	1.23	0.66
14	2.23	0.91	5.17	0.61	0.32	1.71	0.98	4.86	7.53	1.50	1.13	0.64
15	1.84	0.87	4.46	0.57	0.32	1.40	0.70	4.00	4.42	1.47	1.05	1.73
16	1.30	0.82	4.37	0.54	0.33	1.33	0.63	2.20	5.63	14.1	1.08	1.63
17	1.00	0.82	3.41	0.58	0.32	1.45	2.37	2.13	22.8	33.5	1.01	1.10
18	0.79	1.60	2.41	0.53	0.34	1.57	1.49	7.47	7.75	6.86	1.59	0.88
19	0.71	1.43	1.80	0.47	0.37	1.47	1.22	3.44	4.23	3.44	1.92	0.76
20	0.73	1.21	1.37	0.45	1.40	1.52	1.54	2.00	3.47	2.49	1.27	0.69
21	0.73	0.97	1.18	0.43	10.2	1.32	3.34	513	3.70	2.63	1.00	0.64
22	0.69	0.80	1.11	0.39	26.8	1.26	1.85	3,190	3.44	2.73	0.93	0.61
23	0.67	413	0.95	0.37	83.8	1.18	1.22	1,560	3.11	2.23	0.96	0.59
24	1.09	110	0.76	0.34	281	1.88	0.92	236	4.67	1.98	1.42	0.58
25	1.59	28.3	0.67	0.34	159	6.16	1.41	58.8	4.35	1.90	1.89	0.55
26	1.21	14.8	0.64	0.37	144	94.1	1.22	26.7	3.28	1.75	1.35	0.53
27	0.98	6.79	0.72	0.38	127	25.5	0.91	14.3	2.83	1.35	1.64	0.50
28	0.79	3.49	2.40	0.37	103	15.0	0.80	7.45	2.79	1.12	1.45	0.50
29	0.75	1.78	1.59	0.35	86.3	12.6	0.69	9.44	2.48	1.40	1.40	0.49
30	0.70	1.25	1.22	0.31	---	5.33	0.62	130	2.21	4.04	1.21	0.24
31	0.75	---	0.99	0.29	---	3.15	---	81.6	---	2.26	1.19	---
TOTAL	26.46	2,247.26	180.24	16.54	1,028.83	959.16	34.03	5,867.19	546.03	189.78	356.73	26.79

WTR YR 2004 TOTAL 11,479.04

05427948 PHEASANT BRANCH AT MIDDLETON, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)
NOV						
02...	0450	6.4	50	--	.137	37
02...	1815	33	50	--	.199	66
03...	0630	23	50	--	.185	34
03...	1920	74	50	.070	.336	125
04...	0030	161	50	.080	.583	441
04...	0140	272	50	.060	1.19	1,350
04...	0215	358	50	.010	1.32	1,690
04...	0245	444	50	.050	1.47	2,580
04...	0315	511	50	--	1.21	1,800
04...	0345	558	50	--	1.27	1,940
04...	0445	590	50	.030	1.01	1,920
04...	0645	522	50	--	.834	1,170
04...	0730	463	50	.060	.766	774
04...	1045	275	50	.120	.854	625
04...	1915	107	50	.260	.748	229
05...	1333	28	50	--	.708	100
05...	1334	28	10	--	.727	129
10...	1340	3.3	10	--	.284	24
23...	0100	6.2	50	--	.138	31
23...	0145	32	50	--	--	213
23...	0510	70	50	--	.331	269
23...	0605	119	50	.052	.784	750
23...	0725	180	50	.068	.758	706
23...	0815	217	50	--	.818	680
23...	0915	239	50	.087	.707	505
23...	1545	150	50	.115	.521	268
24...	0430	48	50	--	.663	175
26...	1115	5.9	50	--	.497	102
DEC						
09...	2130	6.2	50	--	.143	43
10...	0305	28	50	--	.204	161
10...	0810	64	50	--	.263	185
10...	1415	76	50	--	.287	154
11...	0230	35	50	--	.332	102
15...	0935	2.9	10	--	.296	20
28...	0215	5.6	50	--	--	187
JAN						
12...	0940	1.3	10	--	.085	138
FEB						
02...	1115	.97	10	--	.063	135
21...	1000	5.6	50	--	.232	41
21...	2215	8.8	50	--	.408	29
23...	1045	8.8	50	--	.899	36
24...	0345	45	50	--	1.41	105
25...	1015	15	50	--	1.67	45
25...	2230	24	50	--	1.34	51
26...	2245	27	50	--	1.22	59
27...	2300	24	50	--	1.05	24
28...	1115	12	50	--	1.31	38
28...	2330	22	50	--	.981	51
29...	1745	13	50	--	1.04	45
MAR						
01...	1800	29	50	--	.569	50
03...	1230	5.6	50	--	.494	43
04...	2000	5.4	50	--	.434	28
04...	2325	26	50	--	.410	121
05...	0225	62	50	--	.495	209
05...	0445	108	50	.507	1.18	431
05...	0555	133	50	--	.738	443
05...	0800	158	50	.213	.936	421
05...	1745	93	50	.157	.683	284
06...	1600	16	50	--	.926	106
07...	1615	6.2	50	--	.659	153
23...	1549	1.9	50	--	.116	17
23...	1550	1.9	10	--	.104	33
25...	2230	6.7	50	--	.129	32
25...	2320	30	50	--	.586	537
26...	0545	66	50	--	.304	267
26...	1800	42	50	--	.349	219
28...	0630	5.9	50	--	.386	53
29...	2330	6.2	50	--	.221	37

05427948 PHEASANT BRANCH AT MIDDLETON, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)
APR					
14...	1345	2.2	50	.079	9
14...	1346	2.2	10	.075	10
17...	0235	5.9	50	--	96
17...	0845	6.7	50	--	22
20...	1810	5.8	50	--	80
21...	0630	9.3	50	--	29
22...	0045	5.9	50	--	24
MAY					
06...	0955	1.4	10	.079	38
10...	1500	6.7	50	--	11
14...	0745	5.9	50	--	8
14...	1400	10	50	.118	21
15...	0815	7.0	50	--	14
17...	2045	6.2	50	--	12
18...	0900	15	50	--	17
19...	0315	7.3	50	--	19
21...	0750	8.2	50	.122	15
21...	1635	42	50	.249	117
21...	1730	125	50	1.99	2,190
21...	1915	215	50	1.08	1,020
21...	2240	314	50	1.05	1,610
21...	2345	461	50	1.64	3,130
22...	0040	562	50	--	3,000
22...	0120	606	50	1.62	2,990
22...	0415	647	50	1.71	4,850
22...	0810	523	50	1.87	2,280
22...	1030	363	50	1.69	1,270
22...	1430	211	50	1.69	709
23...	0100	105	50	1.12	416
23...	0510	178	50	1.08	748
23...	0615	282	50	1.09	1,000
23...	0730	406	50	1.03	1,090
23...	1215	367	50	1.37	1,670
23...	1745	179	50	1.42	658
24...	0945	48	50	.889	297
28...	0500	5.9	50	.311	31
29...	1515	10	50	--	39
30...	0925	11	50	.228	47
30...	1020	47	50	.927	1,060
30...	1215	66	50	--	278
30...	1415	88	50	.471	345
30...	2030	80	50	.450	214
31...	2045	28	50	--	113
JUN					
02...	1515	6.4	50	.307	39
09...	1515	5.9	50	--	65
10...	1140	9.3	50	.122	10
11...	0115	47	50	.319	63
11...	0715	47	50	--	61
11...	1930	27	50	.463	36
12...	0115	46	50	1.93	1,760
12...	1330	33	50	--	53
14...	0200	5.9	50	.295	14
16...	2130	7.8	50	.134	14
16...	2210	18	50	.318	150
17...	1030	22	50	.232	31
18...	1645	5.4	50	.201	13
24...	1100	5.9	50	--	37
JUL					
03...	1630	8.1	50	.150	14
03...	1910	34	50	.330	178
04...	0115	49	50	.247	105
04...	1330	34	50	.270	3,860
05...	1345	6.7	50	.260	17
12...	0734	3.2	50	.102	10
12...	0735	3.2	10	.102	12
16...	1610	14	50	.172	19
16...	2230	33	50	.291	81
17...	0430	34	50	--	71
18...	0500	6.4	50	.263	30
30...	1145	9.3	50	--	17
30...	1800	10	50	--	60

05427948 PHEASANT BRANCH AT MIDDLETON, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)
AUG					
03...	1810	14	50	.121	12
03...	1830	32	50	.298	185
03...	2045	89	50	1.06	817
04...	0300	105	50	.653	367
04...	1445	43	50	.415	166
06...	0315	6.2	50	.440	41
18...	1830	5.9	50	--	42
24...	2115	6.4	50	--	26
31...	0930	2.4	50	.094	11
31...	0931	2.4	10	.091	36
SEP					
15...	1615	6.7	50	--	62
15...	2215	7.6	50	--	17
30...	1120	1.5	10	.058	38

054279509 PHEASANT BRANCH TRIBUTARY AT MIDDLETON, WI

LOCATION (revised).--Lat 43°07'10", long 89°29'02", in SE ¼ SE ¼ sec.36, T.8 N., R.8 E., Dane County, Hydrologic Unit 07090001, on left bank about 1.0 mi from County Highway M and Q bridge in Middleton, and approximately 1.1 mi from mouth.

PERIOD OF RECORD.--October 2000 to current year.

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 840.2 ft above NGVD of 1929.

REMARKS.--Records good except those for Nov. 4, 5, 23 and May 21 to July 18, which are poor (see page 11). Gage-height telemeter at station. Drainage area is not listed because discharge is primarily from springs. On Jan. 22, 2003, the ditch that diverted water from some contriubuting springs to the flume was filled in and the flow from these springs now bypasses the flume.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	2.2	2.3	2.3	2.3	2.4	2.3	2.3	e3.7	e2.5	2.5	2.5
2	2.2	2.5	2.3	2.3	2.3	2.3	2.3	2.3	e2.8	e2.5	2.5	2.5
3	2.3	3.0	2.2	2.3	2.3	2.2	2.3	2.3	e2.7	e2.9	3.2	2.5
4	2.3	e10	2.2	2.2	2.3	2.3	2.3	2.3	e2.6	e3.9	5.3	2.6
5	2.2	e4.0	2.3	2.2	2.3	6.5	2.3	2.3	e2.5	e2.7	2.5	2.6
6	2.2	2.3	2.3	2.3	2.3	2.4	2.3	2.3	e2.5	e2.5	2.5	2.6
7	2.2	2.3	2.3	2.3	2.2	2.4	2.3	2.3	e2.4	e2.5	2.5	2.6
8	2.2	2.3	2.3	e2.2	2.3	2.3	2.3	2.4	e2.4	e2.5	2.4	2.6
9	2.2	2.3	2.4	2.2	2.3	2.3	2.3	2.4	e2.4	e2.5	2.4	2.6
10	2.3	2.3	2.8	2.2	2.3	2.3	2.3	2.4	e2.4	e2.5	2.5	2.5
11	2.2	2.4	2.4	2.3	2.3	2.3	2.3	2.4	e3.0	e2.5	2.5	2.5
12	2.2	2.4	2.3	2.3	2.3	2.2	2.2	2.3	e3.5	e2.5	2.5	2.6
13	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.4	e2.9	e2.5	2.5	2.6
14	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.4	e2.6	e2.5	2.5	2.6
15	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.4	e2.4	e2.5	2.5	2.7
16	2.2	2.4	2.4	2.3	2.3	2.4	2.3	2.4	e2.6	e2.5	2.4	2.8
17	2.2	2.3	2.3	2.3	2.3	2.4	2.4	2.5	e3.2	e2.5	2.4	2.6
18	2.2	2.4	2.3	2.3	2.3	2.4	2.4	2.4	e2.8	e2.5	2.5	2.6
19	2.2	2.3	2.3	2.3	2.3	2.3	2.4	2.4	e2.6	2.5	2.5	2.5
20	2.2	2.3	2.3	2.3	2.5	2.3	2.4	2.4	e2.5	2.5	2.5	2.5
21	2.2	2.3	2.3	2.3	2.4	2.3	2.4	e8.0	e2.5	2.6	2.4	2.6
22	2.2	2.3	2.3	2.3	2.4	2.3	2.4	e18	e2.5	2.6	2.4	2.6
23	2.2	e7.0	2.2	2.3	2.6	2.3	2.4	e12	e2.5	2.5	2.5	2.6
24	2.3	3.2	2.2	2.3	2.4	2.4	2.4	e7.0	e2.5	2.4	2.6	2.5
25	2.2	2.4	2.2	2.3	2.4	2.5	2.5	e5.0	e2.5	2.5	2.6	2.5
26	2.2	2.4	2.2	2.3	2.4	2.8	2.4	e4.0	e2.5	2.5	2.6	2.6
27	2.2	2.4	2.3	2.3	2.4	2.5	2.4	e3.3	e2.5	2.5	2.6	2.6
28	2.2	2.4	2.3	2.3	2.4	2.6	2.4	e2.6	e2.5	2.4	2.6	2.5
29	2.2	2.4	2.3	e2.3	2.3	2.5	2.3	e2.4	e2.5	2.4	2.5	2.5
30	2.2	2.4	2.3	2.3	---	2.4	2.2	e5.0	e2.5	2.5	2.5	2.6
31	2.2	---	2.3	e2.3	---	2.3	---	e4.4	---	2.5	2.5	---
TOTAL	68.6	85.8	71.5	70.8	67.8	77.5	70.1	119.0	79.5	79.4	80.9	77.2
MEAN	2.21	2.86	2.31	2.28	2.34	2.50	2.34	3.84	2.65	2.56	2.61	2.57
MAX	2.3	10	2.8	2.3	2.6	6.5	2.5	18	3.7	3.9	5.3	2.8
MIN	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.4	2.4	2.4	2.5

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2004, BY WATER YEAR (WY)

MEAN	3.93	4.05	3.82	3.59	3.45	3.58	3.46	3.82	3.41	3.52	3.11	3.06
MAX	4.73	4.71	4.65	4.34	4.74	4.70	4.72	4.70	5.27	4.81	4.61	4.35
(WY)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)
MIN	2.21	2.86	2.31	2.28	2.34	2.50	2.34	2.50	2.31	2.22	2.11	2.27
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2003)	(2003)	(2003)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2001 - 2004	
ANNUAL TOTAL	921.8		948.1			
ANNUAL MEAN	2.53		2.59		3.43	
HIGHEST ANNUAL MEAN					4.69	2002
LOWEST ANNUAL MEAN					2.59	2004
HIGHEST DAILY MEAN	(e)10	Nov 4	(e)18	May 22	(e)18	May 22, 2004
LOWEST DAILY MEAN	2.0	(a)Jul 19	2.2	(b)Oct 1	2.0	(a)Jul 19, 2003
ANNUAL SEVEN-DAY MINIMUM	2.0	Jul 19	2.2	Oct 11	2.0	Jul 19, 2003
MAXIMUM PEAK FLOW			(c)		(c)	Jun 3, 2002
MAXIMUM PEAK STAGE			13.72	May 22	14.71	Aug 2, 2001
INSTANTANEOUS LOW FLOW			2.1	Jan 4	1.9	(d)Jul 19, 2003
10 PERCENT EXCEEDS	2.9		2.6		4.8	
50 PERCENT EXCEEDS	2.3		2.4		2.6	
90 PERCENT EXCEEDS	2.1		2.2		2.2	

(a) Also occurred July 20, 24, 25, and Aug. 11, 13, 2003
(b) Also occurred many other days
(c) Discharge unknown
(d) Also occurred Aug. 11, 14, 2003
(e) Estimated due to ice effect or missing record

05427965 SPRING HARBOR STORM SEWER AT MADISON, WI

LOCATION.--Lat 43°04'45", long 89°28'15", in NW 1/4 SE 1/4 sec.18, T.7 N., R.9 E., Dane County, Hydrologic Unit 07090001, in city park near the junction of Spring Harbor Drive and University Avenue in Madison.

DRAINAGE AREA.--3.29 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1976 to current year.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 855.3 ft above NGVD of 1929.

REMARKS.--Records good except those for periods of flow between 0.00 ft^3/s and 0.3 ft^3/s and flow greater than 100 ft^3/s, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.06	0.11	0.00	0.02	0.03	6.8	0.07	0.05	1.3	0.00	0.29	8.3
2	0.05	28	0.00	0.00	0.18	1.8	0.05	0.12	0.46	0.01	0.59	0.89
3	0.07	38	0.00	0.00	0.39	0.36	0.05	0.08	0.30	29	13	0.35
4	0.05	64	0.00	0.00	0.40	7.3	0.05	0.09	0.16	14	8.7	0.24
5	0.05	5.5	0.08	0.00	0.40	29	0.05	0.07	0.08	0.95	0.67	0.17
6	0.04	0.41	0.00	0.00	0.34	1.9	0.10	0.08	0.02	1.2	0.22	0.46
7	0.02	0.14	0.00	0.00	0.08	0.34	0.06	0.06	0.00	1.3	0.12	0.12
8	0.01	0.03	0.00	0.00	0.07	0.17	1.1	2.8	0.00	0.31	0.10	0.28
9	0.05	0.00	6.2	0.00	0.09	0.11	1.8	8.3	0.05	4.6	0.11	0.29
10	0.04	0.00	29	0.00	0.06	0.12	1.1	8.1	13	1.1	0.05	0.13
11	0.66	0.01	2.6	0.00	0.06	0.15	0.97	2.1	13	0.45	0.05	0.06
12	0.28	0.00	0.31	0.01	0.05	0.12	0.73	0.32	2.8	0.19	0.05	0.05
13	0.90	0.00	0.08	0.00	0.05	0.17	0.06	5.6	0.29	0.11	0.05	0.05
14	7.9	0.00	0.07	0.00	0.06	0.62	0.05	6.2	0.21	0.07	0.05	0.05
15	0.62	0.00	0.01	0.00	0.05	0.25	0.76	0.90	0.15	0.05	0.03	6.0
16	0.16	0.00	0.58	0.21	0.02	0.13	1.5	0.27	4.1	12	0.02	2.3
17	0.07	0.05	0.33	0.16	0.02	0.47	6.6	8.5	6.3	4.8	2.8	1.9
18	0.05	4.6	0.14	0.06	0.11	0.63	1.3	6.8	0.77	0.38	4.9	0.24
19	0.04	0.69	0.05	0.05	0.24	0.36	0.36	0.70	0.21	0.26	2.1	0.11
20	0.03	0.27	0.00	0.02	10	0.16	5.5	0.40	0.08	0.20	0.43	0.12
21	0.02	0.11	0.00	0.05	2.8	0.08	4.6	50	0.96	3.1	0.19	0.08
22	0.01	0.15	0.03	0.04	1.3	0.05	0.64	58	0.49	0.85	0.10	0.05
23	0.00	51	0.00	0.14	5.0	0.05	0.21	51	1.3	0.38	0.07	0.05
24	4.7	4.2	0.00	0.02	1.9	0.81	0.56	3.7	4.7	0.23	2.1	0.05
25	3.0	0.41	0.00	0.00	1.8	11	2.1	2.0	1.2	0.13	1.4	0.05
26	0.38	0.14	0.00	0.00	2.3	23	0.77	0.45	0.33	0.07	0.44	0.09
27	0.15	0.04	0.13	0.19	2.3	1.1	0.20	0.21	0.21	0.05	5.6	0.08
28	0.08	0.00	1.7	0.02	2.7	4.8	0.11	0.09	0.14	0.07	2.9	0.06
29	0.17	0.00	0.38	0.02	2.6	1.8	0.07	6.1	0.06	8.6	1.4	0.05
30	0.21	0.00	0.17	0.01	---	0.30	0.06	19	0.05	20	0.48	0.05
31	0.13	---	0.08	0.00	---	0.16	---	7.3	---	1.5	0.31	---
TOTAL	20.00	197.86	41.94	1.02	35.40	94.11	31.58	249.39	52.72	105.96	49.32	22.72
MEAN	0.65	6.60	1.35	0.03	1.22	3.04	1.05	8.04	1.76	3.42	1.59	0.76
MAX	7.9	64	29	0.21	10	29	6.6	58	13	29	13	8.3
MIN	0.00	0.00	0.00	0.00	0.02	0.05	0.05	0.05	0.00	0.00	0.02	0.05
CFSM	0.20	2.00	0.41	0.01	0.37	0.92	0.32	2.45	0.53	1.04	0.48	0.23
IN.	0.23	2.24	0.47	0.01	0.40	1.06	0.36	2.82	0.60	1.20	0.56	0.26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2004, BY WATER YEAR (WY)

MEAN	1.07	1.35	0.54	0.50	1.36	2.02	1.91	1.91	2.57	2.12	1.94	1.74
MAX	3.19	6.60	1.99	1.73	3.60	6.97	6.26	8.04	7.20	6.51	5.01	4.97
(WY)	(1985)	(2004)	(1985)	(1990)	(1994)	(1993)	(1999)	(2004)	(2000)	(1993)	(2001)	(1980)
MIN	0.11	0.03	0.00	0.00	0.05	0.19	0.54	0.25	0.33	0.24	0.11	0.11
(WY)	(2001)	(1977)	(1990)	(1977)	(1978)	(1999)	(1985)	(1994)	(1987)	(2001)	(2003)	(1976)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1976 - 2004
ANNUAL TOTAL	621.19	902.02	
ANNUAL MEAN	1.70	2.46	1.59
HIGHEST ANNUAL MEAN			3.09 1993
LOWEST ANNUAL MEAN			0.97 1988
HIGHEST DAILY MEAN	64 Nov 4	64 Nov 4	79 Aug 2, 2001
LOWEST DAILY MEAN	0.00 many days	0.00 many days	0.00 many days
ANNUAL SEVEN-DAY MINIMUM	0.00 (a)Jan 6	0.00 (b)Nov 28	0.00 (c)
MAXIMUM PEAK FLOW		501 May 21	754 Jul 5, 1993
MAXIMUM PEAK STAGE		3.50 May 21	4.16 Jul 5, 1993
ANNUAL RUNOFF (CFSM)	0.517	0.749	0.485
ANNUAL RUNOFF (INCHES)	7.02	10.20	6.59
10 PERCENT EXCEEDS	3.0	6.0	3.5
50 PERCENT EXCEEDS	0.11	0.16	0.14
90 PERCENT EXCEEDS	0.00	0.00	0.00

(a) Also occurred Feb. 6 and Nov. 28
(b) Also occurred Jan. 2
(c) Annual seven-day minimum flows are 0.00 for most years

05427965 SPRING HARBOR STORM SEWER AT MADISON, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1976 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: October 1991 to current year.

INSTRUMENTATION.--Automatic pumping sampler.

REMARKS.--Records good. Samples are point samples unless otherwise indicated.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 3,870 mg/L, July 4, 1994; minimum observed, 1 mg/L, Aug. 6, 1993, Sept. 15, 1998, and July 26, 1999.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 137 tons, June 17, 1996; minimum daily, 0.00 ton, on many days.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 2,900 mg/L, Aug. 3; minimum observed, 4 mg/L, July 31.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 69 tons, May 21; minimum daily, 0.00 ton, on many days.

SUSPENDED SEDIMENT DISCHARGE, TONS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	1.4	0.00	0.00	0.04	0.00	0.00	2.7
2	0.00	5.2	0.00	0.00	0.00	0.14	0.00	0.00	0.01	0.00	0.00	0.02
3	0.00	5.0	0.00	0.00	0.00	0.02	0.00	0.00	0.00	27	32	0.00
4	0.00	39	0.00	0.00	0.00	8.0	0.00	0.00	0.00	1.2	0.92	0.00
5	0.00	0.38	0.00	0.00	0.00	18	0.00	0.00	0.00	0.03	0.02	0.00
6	0.00	0.01	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.13	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.07	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.04	5.2	0.00	0.01	0.00	0.00
9	0.00	0.00	1.3	0.00	0.00	0.00	0.06	2.6	0.00	1.5	0.00	0.00
10	0.00	0.00	1.8	0.00	0.00	0.00	0.03	5.0	3.3	0.02	0.00	0.00
11	0.03	0.00	0.11	0.00	0.00	0.00	0.02	0.08	1.7	0.00	0.00	0.00
12	0.01	0.00	0.01	0.00	0.00	0.00	0.02	0.01	1.5	0.00	0.00	0.00
13	0.06	0.00	0.00	0.00	0.00	0.00	0.00	1.7	0.00	0.00	0.00	0.00
14	0.44	0.00	0.00	0.00	0.00	0.03	0.00	1.0	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.01	0.15	0.05	0.00	0.00	0.00	1.8
16	0.00	0.00	0.02	0.00	0.00	0.00	0.34	0.00	2.0	16	0.00	0.21
17	0.00	0.00	0.00	0.00	0.00	0.02	2.4	8.0	0.75	0.16	0.34	0.50
18	0.00	0.82	0.00	0.00	0.00	0.03	0.25	1.1	0.02	0.00	3.9	0.00
19	0.00	0.01	0.00	0.00	0.00	0.02	0.01	0.02	0.00	0.00	0.04	0.00
20	0.00	0.00	0.00	0.00	1.6	0.00	1.3	0.01	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.69	0.00	0.28	69	0.03	0.12	0.00	0.00
22	0.00	0.00	0.00	0.00	0.12	0.00	0.01	39	0.01	0.02	0.00	0.00
23	0.00	46	0.00	0.00	1.8	0.00	0.00	18	0.75	0.00	0.00	0.00
24	0.84	0.26	0.00	0.00	0.54	0.05	0.02	0.31	0.75	0.00	0.62	0.00
25	0.06	0.01	0.00	0.00	0.20	43	0.07	0.20	0.03	0.00	0.07	0.00
26	0.00	0.00	0.00	0.00	0.36	17	0.02	0.03	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.27	0.08	0.00	0.01	0.00	0.00	1.4	0.00
28	0.00	0.00	0.06	0.00	0.67	0.77	0.00	0.00	0.00	0.00	0.20	0.00
29	0.00	0.00	0.01	0.00	0.51	0.13	0.00	1.4	0.00	5.8	0.04	0.00
30	0.00	0.00	0.00	0.00	---	0.01	0.00	8.3	0.00	6.1	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.74	---	0.02	0.00	---
TOTAL	1.44	96.69	3.31	0.00	6.76	88.85	5.02	161.76	10.89	58.18	39.55	5.23

WTR YR 2004 TOTAL 477.68

05427965 SPRING HARBOR STORM SEWER AT MADISON, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Suspended sediment concentration mg/L (80154)
OCT				
11...	2200	6.1	50	23
14...	0050	16	50	47
14...	0700	14	50	23
14...	1615	4.4	50	6
24...	1700	26	50	144
24...	2310	9.2	50	17
25...	0520	4.7	50	6
NOV				
02...	0325	23	50	128
02...	0720	76	50	111
02...	1320	24	50	20
02...	1625	30	50	24
03...	0445	9.2	50	15
03...	1320	68	50	30
03...	1930	28	50	20
04...	0105	198	50	144
04...	0140	339	50	885
04...	0225	221	50	473
04...	0305	120	50	274
04...	1020	47	50	44
04...	2240	15	50	35
05...	1100	4.1	50	21
18...	0445	23	50	172
18...	1055	5.8	50	20
23...	0050	8.7	50	28
23...	0140	82	50	295
23...	0205	198	50	1,030
23...	0230	84	50	535
23...	0605	180	50	136
23...	1410	38	50	28
24...	0230	9.2	50	26
DEC				
09...	2030	21	50	176
09...	2105	45	50	115
10...	0010	34	50	31
10...	0620	50	50	23
10...	1230	24	50	20
FEB				
20...	0810	20	50	116
20...	1115	21	50	43
20...	2335	4.7	50	274
21...	1310	4.4	50	65
23...	1405	8.7	50	77
23...	1710	9.2	50	235
23...	2320	4.7	50	231
25...	1520	5.8	50	51
26...	1430	5.8	50	72
27...	1615	6.1	50	46
28...	1450	11	50	183
29...	1455	6.4	50	110
MAR				
01...	0000	11	50	684
01...	0610	5.2	50	25
01...	1505	4.1	50	43
01...	1810	13	50	112
02...	0020	4.7	50	32
04...	1955	21	50	279
04...	2320	81	50	599
05...	0835	37	50	119
05...	1445	16	50	51
06...	0305	4.1	50	23
25...	2200	20	50	328
25...	2235	100	50	1,160
25...	2325	259	50	1,820
25...	2355	110	50	1,700
26...	0355	45	50	104
26...	1310	13	50	91
26...	2225	4.4	50	31
28...	1535	6.1	50	54
28...	1840	12	50	62
29...	0050	5.0	50	38

05427965 SPRING HARBOR STORM SEWER AT MADISON, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Suspended sediment concentration mg/L (80154)
APR				
16...	0000	22	50	178
16...	0140	4.4	50	42
17...	0245	23	50	209
17...	0305	51	50	361
17...	0410	23	50	203
17...	1020	5.8	50	20
18...	0155	16	50	465
20...	1755	23	50	117
20...	2100	11	50	40
21...	0310	6.7	50	11
21...	0615	13	50	57
21...	0920	5.0	50	10
MAY				
08...	2255	81	50	993
08...	2340	37	50	590
09...	0245	15	50	83
09...	0855	8.7	50	35
09...	1515	3.8	50	14
10...	1415	50	50	796
10...	1620	25	50	104
11...	0135	5.0	50	14
18...	1030	6.1	50	20
21...	0745	81	50	524
21...	0805	147	50	945
21...	1420	17	50	28
21...	1640	114	50	324
21...	1700	161	50	660
21...	1800	213	50	993
21...	2220	46	50	60
21...	2310	228	50	451
21...	2345	380	50	1,360
22...	0245	85	50	177
22...	0340	149	50	178
22...	1035	44	50	51
22...	1950	18	50	51
22...	2320	46	50	101
23...	0235	128	50	210
23...	0430	80	50	134
23...	0540	276	50	256
23...	0615	138	50	240
23...	1335	34	50	40
24...	0500	6.1	50	30
25...	0130	6.1	50	40
29...	0940	24	50	250
29...	1245	11	50	44
29...	1855	5.0	50	11
30...	0850	23	50	234
30...	1010	124	50	578
30...	1210	46	50	69
30...	1740	16	50	24
31...	0720	6.1	50	24
31...	0845	23	50	78
31...	1800	5.2	50	16
JUN				
10...	1135	30	50	141
10...	1155	55	50	272
10...	1600	14	50	25
10...	1755	42	50	112
10...	2100	19	50	36
11...	0035	47	50	59
11...	0540	24	50	21
11...	1800	5.2	50	9
12...	0025	45	50	218
12...	0035	16	50	1,060
16...	2140	32	50	279
16...	2155	58	50	318
16...	2325	29	50	83
17...	1145	4.7	50	8
23...	2120	9.6	50	223
23...	2125	29	50	592
23...	2210	7.7	50	249
24...	1130	29	50	134
24...	1720	5.2	50	10

05427965 SPRING HARBOR STORM SEWER AT MADISON, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Suspended sediment concentration mg/L (80154)
JUL				
03...	1605	70	50	605
03...	1630	339	50	498
03...	1655	186	50	1,060
03...	1730	50	50	342
03...	1905	159	50	276
03...	2045	68	50	99
04...	0600	18	50	27
04...	1820	5.2	50	12
06...	2240	4.4	50	75
09...	1205	37	50	500
09...	1210	57	50	212
09...	1405	8.7	50	90
09...	2015	5.0	50	8
16...	1140	21	50	305
16...	1445	7.7	50	25
16...	1615	45	50	360
16...	1640	159	50	2,420
16...	1710	47	50	583
16...	1905	23	50	84
17...	0115	12	50	21
17...	1030	4.1	50	5
29...	1450	17	50	203
29...	1530	110	50	588
29...	1815	13	50	65
30...	0520	85	50	142
30...	0600	43	50	694
30...	0640	96	50	123
30...	0855	27	50	66
30...	1505	14	50	17
31...	0020	4.1	50	4
AUG				
03...	2000	257	50	751
03...	2015	292	50	2,900
03...	2035	102	50	1,180
03...	2240	36	50	85
04...	0450	14	50	29
04...	1405	5.8	50	46
17...	0310	4.7	50	147
17...	0705	5.0	50	16
18...	1735	62	50	965
18...	1800	24	50	601
18...	1805	58	50	425
18...	2015	8.7	50	54
19...	0225	4.4	50	6
24...	2145	42	50	200
24...	2205	24	50	216
27...	0105	55	50	350
27...	0800	5.2	50	8
28...	0940	11	50	77
28...	1900	6.1	50	23
SEP				
01...	0620	30	50	89
01...	0630	70	50	227
01...	0715	34	50	241
01...	1630	6.1	50	9
15...	1005	12	50	139
15...	1035	34	50	458
15...	1605	26	50	125
15...	2215	5.8	50	8
16...	2305	15	50	92
17...	0215	3.4	50	141

05428000 LAKE MENDOTA AT MADISON, WI

LOCATION.--Lat 43°05'42", long 89°22'12", in NW ¼ SE ¼ sec.12, T.7 N., R.9 E., Dane County, Hydrologic Unit 07090001, in county boat house at dam at outlet, in Madison.

DRAINAGE AREA.--233 mi^2. Area of Lake Mendota, 15.2 mi^2.

PERIOD OF RECORD.--January 1916 to current year (incomplete).

REVISED RECORDS.--WDR WI-73-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 840.00 ft above NGVD of 1929, or 5.60 ft below City of Madison datum. Prior to Oct. 1, 1979, at datum 7.82 ft higher; prior to Nov. 15, 1971, nonrecording gage at same site at the higher datum.

REMARKS.--Lake level regulated by concrete dam with two 12-foot gates and 20-foot lock at outlet. Gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height observed, 12.75 ft, June 5, 2000; minimum observed, 8.02 ft, Feb. 24 to Mar. 10, 1920, current datum.

EXTREMES FOR CURRENT YEAR.--Maximum recorded gage height, 11.66 ft, May 31; minimum recorded, 8.82 ft, Feb. 19.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.72	9.26	9.56	9.39	9.01	9.16	9.99	9.74	11.57	10.81	10.26	10.00
2	9.68	9.33	9.49	9.39	9.01	9.22	9.96	9.73	11.53	10.79	10.30	10.01
3	9.67	9.43	9.44	9.39	9.01	9.26	9.96	9.72	11.48	10.78	10.34	10.03
4	9.66	9.84	9.43	9.36	9.00	9.30	9.89	9.71	11.41	11.03	10.49	10.02
5	9.64	9.98	9.44	9.35	9.00	9.48	9.85	9.70	11.34	11.02	10.49	10.0
6	9.63	10.04	9.42	9.30	9.02	9.60	9.84	9.70	11.28	10.96	10.49	9.98
7	9.63	10.07	9.39	9.29	9.01	9.66	9.82	9.69	11.21	10.95	10.47	9.93
8	9.64	10.06	9.39	9.29	8.99	9.69	9.80	9.69	11.16	10.92	10.43	9.88
9	9.65	10.03	9.39	9.27	8.98	9.70	9.75	9.76	11.11	10.85	10.43	9.84
10	9.64	9.99	9.56	9.26	8.97	9.70	9.72	9.81	11.08	10.81	10.38	9.81
11	9.65	9.98	9.59	9.26	8.96	9.70	9.67	9.83	11.17	10.75	10.31	9.79
12	9.66	10.00	9.57	9.24	8.95	9.70	9.64	9.85	11.22	10.72	10.24	9.78
13	9.64	9.93	9.56	9.23	8.94	9.70	9.63	9.89	11.25	10.68	10.21	9.76
14	9.67	9.87	9.56	9.22	8.93	9.71	9.62	9.94	11.25	10.61	10.18	9.75
15	9.63	9.84	9.55	9.21	8.91	9.72	9.61	9.94	11.22	10.54	10.15	9.74
16	9.59	9.81	9.59	9.20	8.90	9.71	9.61	9.90	11.19	10.50	10.10	9.76
17	9.55	9.77	9.56	9.20	8.89	9.72	9.66	9.94	11.20	10.48	10.09	9.74
18	9.52	9.81	9.55	9.18	8.87	9.73	9.68	10.02	11.17	10.42	10.09	9.72
19	9.50	9.82	9.54	9.17	8.87	9.73	9.71	10.02	11.08	10.38	10.08	9.69
20	9.48	9.76	9.51	9.16	8.89	9.75	9.70	10.05	11.01	10.34	10.05	9.67
21	9.46	9.71	9.50	9.14	8.90	9.73	9.77	10.14	10.96	10.32	10.02	9.67
22	9.41	9.66	9.50	9.11	8.90	9.72	9.77	10.67	10.92	10.29	10.0	9.66
23	9.39	9.81	9.49	9.11	8.91	9.72	9.76	11.16	10.88	10.22	10.0	9.64
24	9.38	9.86	9.46	9.11	8.92	9.75	9.76	11.46	10.91	10.17	9.98	9.62
25	9.41	9.81	9.44	9.10	8.93	9.78	9.80	11.58	10.90	10.15	10.01	9.59
26	9.38	9.79	9.43	9.09	8.96	9.93	9.81	11.61	10.88	10.12	9.97	9.58
27	9.35	9.75	9.42	9.08	9.00	9.96	9.78	11.60	10.86	10.10	10.00	9.58
28	9.33	9.72	9.44	9.07	9.04	10.01	9.77	11.56	10.87	10.08	9.99	9.55
29	9.31	9.64	9.44	9.05	9.09	10.05	9.77	11.52	10.85	10.05	9.97	9.53
30	9.29	9.61	9.42	9.03	---	10.06	9.76	11.54	10.82	10.17	9.95	9.53
31	9.30	---	9.41	9.02	---	10.02	---	11.60	---	10.24	9.97	---
MEAN	9.53	9.80	9.49	9.20	8.96	9.70	9.76	10.36	11.13	10.52	10.18	9.76
MAX	9.72	10.07	9.59	9.39	9.09	10.06	9.99	11.61	11.57	11.03	10.49	10.03
MIN	9.29	9.26	9.39	9.02	8.87	9.16	9.61	9.69	10.82	10.05	9.95	9.53

05428500 YAHARA RIVER AT EAST MAIN STREET AT MADISON, WI

LOCATION.--Lat 43°05'22", long 89°21'39", in sec.7, T.7 N., R.10 E., Dane County, Hydrologic Unit 07090001, at Main Street bridge in Madison.

DRAINAGE AREA.--233 mi^2

PERIOD OF RECORD.--November 2003 to September 2004.

GAGE.--Submersible pressure transducer, acoustic velocity meter and phone line with modem. Datum of gage is 841.22 ft above NGVD of 1929.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	309	88	89	53	232	99	397	327	67	102
2	---	---	261	97	e102	44	235	90	392	354	57	102
3	---	---	159	113	e93	38	254	101	402	349	77	108
4	---	---	107	109	92	56	232	86	417	243	71	112
5	---	---	97	128	96	77	222	81	439	238	81	109
6	---	---	91	95	99	53	229	79	443	235	103	106
7	---	---	108	91	95	60	228	80	451	241	129	100
8	---	94	114	85	95	63	242	86	431	271	142	93
9	---	227	123	79	97	83	221	92	360	306	135	95
10	---	228	145	81	105	89	217	91	287	306	127	92
11	---	243	105	92	94	87	192	84	196	294	130	88
12	---	186	76	78	93	81	135	84	180	288	131	91
13	---	255	86	72	93	85	117	81	186	284	129	75
14	---	239	92	80	93	90	143	80	181	319	131	60
15	---	222	93	96	96	77	114	83	225	326	135	64
16	---	208	108	89	98	91	105	86	286	327	130	55
17	---	212	112	85	95	94	119	87	307	314	127	59
18	---	189	105	105	100	81	114	78	300	307	112	62
19	---	215	120	96	93	80	110	79	306	286	100	63
20	---	355	82	77	126	84	98	78	301	290	99	47
21	---	335	106	84	92	72	99	132	305	287	100	32
22	---	331	95	98	95	72	85	145	314	279	99	28
23	---	360	104	95	98	79	89	193	243	250	94	39
24	---	339	97	85	87	86	91	247	193	191	94	42
25	---	291	95	79	76	90	86	287	194	169	98	40
26	---	282	87	98	43	92	94	289	195	162	99	45
27	---	292	95	81	41	83	96	336	195	99	101	46
28	---	319	107	91	46	97	103	410	194	67	95	34
29	---	292	101	102	44	170	106	438	220	69	95	28
30	---	286	102	110	---	e237	102	361	246	76	94	29
31	---	---	101	91	---	e233	---	376	---	68	91	---
TOTAL	---	6,000	3,583	2,850	2,566	2,777	4,510	4,919	8,786	7,622	3,273	2,046
MEAN	---	261	116	91.9	88.5	89.6	150	159	293	246	106	68.2
MAX	---	360	309	128	126	237	254	438	451	354	142	112
MIN	---	94	76	72	41	38	85	78	180	67	57	28
CFSM	---	1.11	0.49	0.39	0.38	0.38	0.64	0.68	1.25	1.05	0.45	0.29
IN.	---	0.95	0.57	0.45	0.41	0.44	0.71	0.78	1.39	1.21	0.52	0.32

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2004, BY WATER YEAR (WY)

MEAN	---	---	116	91.9	88.5	89.6	150	159	293	246	106	68.2

SUMMARY STATISTICS FOR 2004 WATER YEAR

HIGHEST DAILY MEAN	451	Jun 7
LOWEST DAILY MEAN	28	Sep 22
ANNUAL SEVEN-DAY MINIMUM	38	Sep 24

(e) Estimated due to ice effect or missing record

05428600 WEST BRANCH STARKWEATHER CREEK AT MADISON, WI

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January to September 2004.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January to July 2004.

INSTRUMENTATION.--Continuous specific conductance record since Janary 2004. Sensor located near left edge of water.

REMARKS.--Records for specific conductance were faulty Feb. 16, Mar. 22, June 6-8, and July 4-Sept. 30.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 5,300 µS/cm, Jan. 17, 2004; minimum, 65 µS/cm, May 21, 2004.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 5,300 µS/cm, Jan. 17; minimum, 65 µS/cm, May 21.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	886	854	870
11	---	---	---	---	---	---	---	---	---	882	854	865
12	---	---	---	---	---	---	---	---	---	893	854	869
13	---	---	---	---	---	---	---	---	---	899	858	878
14	---	---	---	---	---	---	---	---	---	912	880	898
15	---	---	---	---	---	---	---	---	---	976	100	875
16	---	---	---	---	---	---	---	---	---	887	850	872
17	---	---	---	---	---	---	---	---	---	5,300	851	1,880
18	---	---	---	---	---	---	---	---	---	2,240	990	1,420
19	---	---	---	---	---	---	---	---	---	1,150	970	1,050
20	---	---	---	---	---	---	---	---	---	1,230	938	1,010
21	---	---	---	---	---	---	---	---	---	943	909	932
22	---	---	---	---	---	---	---	---	---	1,090	909	1,000
23	---	---	---	---	---	---	---	---	---	1,000	902	961
24	---	---	---	---	---	---	---	---	---	917	870	894
25	---	---	---	---	---	---	---	---	---	925	884	905
26	---	---	---	---	---	---	---	---	---	892	869	881
27	---	---	---	---	---	---	---	---	---	2,230	884	1,170
28	---	---	---	---	---	---	---	---	---	1,240	897	1,040
29	---	---	---	---	---	---	---	---	---	973	895	929
30	---	---	---	---	---	---	---	---	---	932	883	909
31	---	---	---	---	---	---	---	---	---	936	865	891
MONTH	---	---	---	---	---	---	---	---	---	5,300	100	1,000

05428600 WEST BRANCH STARKWEATHER CREEK AT MADISON, WI—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	865	810	833	---	---	---	925	904	912	892	879	886
2	1,870	808	1,000	---	---	---	939	914	922	937	758	855
3	2,270	860	1,370	---	---	---	941	915	926	953	748	850
4	1,660	866	1,150	---	---	---	933	914	923	857	780	836
5	866	829	845	---	---	---	934	919	927	852	823	837
6	1,360	829	939	---	---	---	937	921	928	882	829	856
7	2,130	992	1,350	---	---	---	937	917	925	946	761	826
8	1,150	883	1,000	---	---	---	934	914	922	850	783	836
9	909	868	889	---	---	---	919	904	908	783	162	411
10	918	858	871	---	---	---	926	906	914	673	370	603
11	961	838	878	---	---	---	915	896	902	717	525	640
12	861	820	842	---	---	---	905	894	900	786	715	757
13	1,220	820	891	---	---	---	907	889	899	803	396	691
14	1,040	824	877	---	---	---	916	899	906	591	413	494
15	1,030	808	887	---	---	---	916	889	901	676	488	612
16	---	---	---	---	---	---	922	873	903	775	676	728
17	---	---	---	---	---	---	921	327	597	814	149	746
18	---	---	---	---	---	---	765	440	634	604	173	365
19	---	---	---	---	---	---	856	723	806	627	419	522
20	---	---	---	---	---	---	855	453	787	766	627	702
21	---	---	---	---	---	---	695	397	567	779	65	457
22	---	---	---	---	---	---	812	695	759	224	88	161
23	---	---	---	964	944	954	858	812	839	243	115	195
24	---	---	---	1,070	732	875	865	776	856	365	221	292
25	---	---	---	1,030	115	902	852	623	732	478	365	421
26	---	---	---	908	97	563	842	755	790	559	451	510
27	---	---	---	866	791	834	955	830	856	657	559	608
28	---	---	---	885	658	822	965	836	870	720	608	660
29	---	---	---	909	644	784	888	835	875	769	508	664
30	---	---	---	921	899	911	895	869	882	660	223	477
31	---	---	---	908	897	901	---	---	---	468	304	392
MONTH	2,270	808	975	1,070	97	838	965	327	849	953	65	609
		JUNE			JULY			AUGUST			SEPTEMBER	
1	579	468	509	789	761	774	---	---	---	---	---	---
2	700	579	645	800	777	786	---	---	---	---	---	---
3	751	689	724	799	170	684	---	---	---	---	---	---
4	780	748	765	---	---	---	---	---	---	---	---	---
5	798	778	790	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	847	364	728	---	---	---	---	---	---	---	---	---
10	908	287	648	---	---	---	---	---	---	---	---	---
11	386	232	348	---	---	---	---	---	---	---	---	---
12	515	379	432	---	---	---	---	---	---	---	---	---
13	623	515	563	---	---	---	---	---	---	---	---	---
14	715	623	674	---	---	---	---	---	---	---	---	---
15	755	715	738	---	---	---	---	---	---	---	---	---
16	784	472	767	---	---	---	---	---	---	---	---	---
17	780	306	485	---	---	---	---	---	---	---	---	---
18	546	376	473	---	---	---	---	---	---	---	---	---
19	675	546	613	---	---	---	---	---	---	---	---	---
20	744	675	717	---	---	---	---	---	---	---	---	---
21	785	698	745	---	---	---	---	---	---	---	---	---
22	795	707	745	---	---	---	---	---	---	---	---	---
23	785	662	763	---	---	---	---	---	---	---	---	---
24	802	276	508	---	---	---	---	---	---	---	---	---
25	520	459	497	---	---	---	---	---	---	---	---	---
26	638	518	575	---	---	---	---	---	---	---	---	---
27	716	638	682	---	---	---	---	---	---	---	---	---
28	747	700	720	---	---	---	---	---	---	---	---	---
29	764	700	735	---	---	---	---	---	---	---	---	---
30	773	753	762	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	908	232	643	800	170	748	---	---	---	---	---	---
YEAR	5,300	65	789									

05429000 LAKE MONONA AT MADISON, WI

LOCATION.--Lat 43°03'48", long 89°23'49', in SE ¼ SW ¼ sec.23, T.7 N., R.9 E., Dane County, Hydrologic Unit 07090001, in Brittingham Park, in Madison.

DRAINAGE AREA.--279 mi^2. Area of Lake Monona, 5.3 mi^2.

PERIOD OF RECORD.--September 1915 to current year (fragmentary) in reports of the Geological Survey. For 1856 to March 1917 in reports of Wisconsin Railroad Commission, volume 19.

REVISED RECORDS.--WSP 1338: Lake area. WDR WI-73-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 840.00 ft above NGVD of 1929, or 5.60 ft below City of Madison datum. Prior to Oct. 1, 1979, datum 3.61 ft higher; prior to Nov. 15, 1971, nonrecording gage at same site at the higher datum.

REMARKS.--Lake level regulated by concrete dam with four 12-foot stop-log sections and 12-foot lock at outlet of Lake Waubesa. Gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height observed, 7.48 ft, June 14, 15, 2000; minimum observed, 3.22 ft, Jan. 20, 1965, current datum.

EXTREMES FOR CURRENT YEAR.--Maximum recorded gage height, 6.88 ft, June 11, 12; minimum recorded, 4.09 ft, Feb. 17-20.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.84	4.52	5.39	4.48	4.15	4.19	4.91	4.68	6.75	6.31	6.07	5.82
2	4.83	4.70	5.38	4.47	4.15	4.19	4.94	4.68	6.75	6.34	6.02	5.83
3	4.81	4.91	5.37	4.45	4.16	4.18	4.93	4.68	6.73	6.40	6.01	5.83
4	4.79	5.36	5.28	4.43	4.16	4.18	4.94	4.68	6.73	6.61	6.17	5.83
5	4.79	5.47	5.21	4.43	4.15	4.38	4.97	4.68	6.73	6.62	6.15	5.82
6	4.78	5.40	5.14	4.43	4.17	4.45	4.99	4.69	6.73	6.58	6.11	5.82
7	4.77	5.30	5.10	4.42	4.17	4.45	5.01	4.72	6.73	6.54	6.08	5.81
8	4.76	5.23	5.06	4.40	4.17	4.42	5.00	4.71	6.73	6.50	6.07	5.80
9	4.75	5.22	5.02	4.39	4.16	4.41	5.01	4.82	6.74	6.52	6.04	5.77
10	4.75	5.23	5.15	4.37	4.15	4.41	5.01	4.89	6.76	6.53	6.01	5.76
11	4.75	5.22	5.16	4.36	4.15	4.39	5.01	4.99	6.87	6.51	5.97	5.74
12	4.74	5.17	5.14	4.34	4.13	4.36	5.01	5.04	6.83	6.50	5.94	5.72
13	4.74	5.12	5.12	4.31	4.13	4.36	4.96	5.10	6.76	6.46	5.93	5.71
14	4.81	5.12	5.08	4.29	4.12	4.35	4.94	5.13	6.70	6.43	5.92	5.67
15	4.80	5.12	5.04	4.28	4.11	4.34	4.92	5.15	6.65	6.42	5.91	5.66
16	4.79	5.12	4.98	4.26	4.11	4.33	4.88	5.15	6.63	6.47	5.89	5.66
17	4.77	5.12	4.93	4.27	4.10	4.34	4.91	5.15	6.72	6.58	5.90	5.62
18	4.76	5.16	4.89	4.25	4.10	4.34	4.89	5.26	6.72	6.56	5.89	5.57
19	4.76	5.13	4.84	4.23	4.10	4.34	4.87	5.24	6.71	6.52	5.91	5.54
20	4.74	5.16	4.79	4.22	4.14	4.31	4.87	5.20	6.68	6.49	5.88	5.50
21	4.71	5.20	4.75	4.22	4.17	4.29	4.88	5.29	6.68	6.48	5.84	5.44
22	4.69	5.23	4.72	4.20	4.19	4.30	4.87	5.86	6.66	6.47	5.82	5.39
23	4.65	5.39	4.69	4.20	4.21	4.32	4.84	6.40	6.63	6.45	5.81	5.34
24	4.65	5.45	4.65	4.20	4.23	4.35	4.82	6.56	6.59	6.39	5.78	5.28
25	4.69	5.47	4.62	4.19	4.23	4.38	4.81	6.61	6.55	6.33	5.79	5.24
26	4.65	5.48	4.60	4.19	4.22	4.59	4.76	6.60	6.49	6.27	5.79	5.20
27	4.62	5.48	4.58	4.19	4.20	4.67	4.73	6.57	6.44	6.21	5.81	5.16
28	4.59	5.44	4.58	4.18	4.19	4.71	4.72	6.56	6.40	6.11	5.83	5.11
29	4.57	5.44	4.55	4.17	4.18	4.76	4.71	6.60	6.32	6.04	5.83	5.06
30	4.56	5.42	4.53	4.16	---	4.81	4.70	6.67	6.29	6.10	5.82	5.02
31	4.52	---	4.50	4.16	---	4.87	---	6.72	---	6.12	5.81	---
MEAN	4.72	5.23	4.93	4.29	4.16	4.41	4.89	5.45	6.66	6.41	5.93	5.56
MAX	4.84	5.48	5.39	4.48	4.23	4.87	5.01	6.72	6.87	6.62	6.17	5.83
MIN	4.52	4.52	4.50	4.16	4.10	4.18	4.70	4.68	6.29	6.04	5.78	5.02

430140089281000 KRONCKE DRIVE STORM SEWER AT MADISON, WI

LOCATION.--Lat 43°01'40", long 89°28'10", in NW ¼ NE ¼ sec.6, T.6 N., R.9 E., Dane County, Hydrologic Unit 07090001, 100 ft east of Teal Drive and 50 ft west of Tawhee Drive, at Madison.

DRAINAGE AREA.--0.08 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 2001 to current year.

GAGE.--Water-stage recorder and area-velocity flow meter in a 42-inch circular, concrete pipe. Elevation of gage is 1,030 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.53
2	0.00	0.37	0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93	0.49	0.00
4	0.00	0.49	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.03	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.01
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00
9	0.00	0.00	0.31	0.00	0.00	0.00	0.00	0.03	0.00	0.16	0.00	0.00
10	0.00	0.00	0.27	0.00	0.00	0.00	0.00	0.14	0.13	0.00	0.00	0.00
11	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.01	0.00	0.01
12	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.02	0.00	0.00	0.00
13	0.02	0.00	0.00	0.00	0.00	0.01	0.01	0.05	0.00	0.00	0.00	0.07
14	0.07	0.00	0.00	0.00	0.00	0.01	0.00	0.04	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11
16	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.10	0.29	0.00	0.00
17	0.00	0.02	0.00	0.01	0.00	0.02	0.08	0.37	0.03	0.00	0.10	0.00
18	0.00	0.09	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.00	0.22	0.00
19	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.18	0.00	0.09	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.01	0.00	0.02	0.00	0.04	1.7	0.02	0.07	0.00	0.00
22	0.00	0.02	0.00	0.00	0.01	0.00	0.00	0.52	0.00	0.00	0.00	0.00
23	0.00	0.61	0.00	0.00	0.09	0.00	0.00	1.5	0.06	0.00	0.00	0.00
24	e0.16	0.00	0.00	0.00	0.02	0.01	0.02	0.00	0.05	0.00	0.07	0.00
25	0.00	0.00	0.00	0.00	0.03	0.39	0.02	0.02	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.03	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.13	0.00
28	0.00	0.00	0.02	0.00	0.07	0.06	0.00	0.00	0.00	0.00	0.07	0.00
29	0.01	0.00	0.00	0.01	0.13	0.00	0.00	0.07	0.00	0.14	0.00	0.00
30	0.00	0.00	0.00	0.02	---	0.00	0.00	0.19	0.00	0.14	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.04	---	0.00	0.00	---
TOTAL	0.29	2.17	0.69	0.06	0.66	1.06	0.35	4.78	0.48	1.81	1.08	0.73
MEAN	0.01	0.07	0.02	0.00	0.02	0.03	0.01	0.15	0.02	0.06	0.03	0.02
MAX	0.16	0.61	0.31	0.02	0.18	0.39	0.09	1.7	0.13	0.93	0.49	0.53
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CFSM	0.12	0.90	0.28	0.02	0.28	0.43	0.15	1.93	0.20	0.73	0.44	0.30
IN.	0.13	1.01	0.32	0.03	0.31	0.49	0.16	2.22	0.22	0.84	0.50	0.34

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2004, BY WATER YEAR (WY)

MEAN	0.02	0.03	0.01	0.00	0.02	0.03	0.03	0.07	0.02	0.04	0.02	0.04
MAX	0.02	0.07	0.02	0.00	0.04	0.03	0.04	0.15	0.04	0.06	0.03	0.06
(WY)	(2002)	(2004)	(2004)	(2002)	(2002)	(2004)	(2002)	(2004)	(2002)	(2004)	(2004)	(2001)
MIN	0.01	0.00	0.01	0.00	0.01	0.02	0.01	0.03	0.02	0.01	0.01	0.02
(WY)	(2004)	(2003)	(2003)	(2003)	(2003)	(2003)	(2004)	(2002)	(2004)	(2002)	(2003)	(2002)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2001 - 2004	
ANNUAL TOTAL	9.83		14.16			
ANNUAL MEAN	0.03		0.04		0.03	
HIGHEST ANNUAL MEAN					0.04	2004
LOWEST ANNUAL MEAN					0.02	2003
HIGHEST DAILY MEAN	0.77	Jul 15	1.7	May 21	1.7	May 21, 2004
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Aug 19, 2001
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 8	0.00	Oct 1	0.00	Aug 26, 2001
ANNUAL RUNOFF (CFSM)	0.337		0.484		0.343	
ANNUAL RUNOFF (INCHES)	4.57		6.58		4.67	
10 PERCENT EXCEEDS	0.07		0.08		0.06	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

(e) Estimated due to ice effect or missing record

430140089281000 KRONCKE DRIVE STORM SEWER AT MADISON, WI—Continued

PRECIPITATION QUANTITY

PERIOD OF RECORD.-October 2001 to current year.

GAGE.--Tipping bucket rain gage with electronic datalogger, located 100 ft east of the storm sewer gage.

REMARKS.--Gage established October 2001.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 2.74 in., Sept. 13, 2003.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.57 in., May 22.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.07	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.90
2	0.00	1.59	0.00	0.04	0.00	0.00	0.00	0.07	0.00	0.00	0.11	0.00
3	0.05	1.53	0.00	0.00	0.1	0.00	0.00	0.00	0.00	2.07	0.83	0.00
4	0.00	1.46	0.00	0.00	0.00	0.79	0.00	0.00	0.00	0.12	0.00	0.00
5	0.00	0.00	0.11	0.04	0.00	0.44	0.00	0.00	0.00	0.02	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.01	0.06	0.03	0.02	0.30	0.00	0.14
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
8	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00
9	0.00	0.00	0.85	0.00	0.00	0.00	0.00	0.34	0.00	0.41	0.04	0.00
10	0.00	0.00	0.80	0.00	0.00	0.00	0.00	0.52	0.90	0.00	0.00	0.00
11	0.27	0.00	0.00	0.00	0.1	0.00	0.00	0.00	0.38	0.08	0.00	0.00
12	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00
13	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.00	0.00	0.00	0.00
14	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.07	0.00	0.00	0.00
15	0.00	0.00	0.02	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.51
16	0.00	0.04	0.09	0.00	0.00	0.00	0.00	0.00	0.57	0.79	0.06	0.00
17	0.00	0.09	0.00	0.00	0.00	0.15	0.43	0.80	0.21	0.00	0.29	0.00
18	0.00	0.45	0.00	0.00	0.1	0.00	0.08	0.08	0.00	0.00	0.53	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00
20	0.00	0.00	0.00	0.00	0.42	0.00	0.56	0.00	0.00	0.00	0.00	0.00
21	0.02	0.00	0.00	0.00	0.15	0.00	0.18	2.20	0.28	0.40	0.00	0.00
22	0.00	0.04	0.00	0.00	0.13	0.00	0.00	2.57	0.00	0.00	0.00	0.00
23	0.00	1.56	0.00	0.00	0.00	0.00	0.00	1.79	0.27	0.02	0.00	0.00
24	0.75	0.00	0.00	0.00	0.00	0.17	0.19	0.04	0.29	0.00	0.26	0.00
25	0.00	0.00	0.00	0.00	0.00	1.20	0.17	0.14	0.00	0.00	0.03	0.00
26	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.02	0.00
27	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.36	0.00
28	0.05	0.00	0.06	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.43	0.00
29	0.09	0.00	0.00	0.00	0.08	0.05	0.00	0.47	0.00	0.51	0.00	0.02
30	0.00	0.00	0.00	0.00	---	0.06	0.03	0.69	0.00	0.57	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.36	---	0.00	0.00	---
TOTAL	1.87	6.85	2.11	0.08	1.08	3.74	1.75	11.08	3.29	5.35	2.96	1.57

CAL YR 2003 TOTAL 31.73
WTR YR 2004 TOTAL 41.73

430209089274900 KNOX LANE STORM SEWER AT MADISON, WI

LOCATION.--Lat 43°02'09", long 89°27'49", in NE ¼ SE ¼ sec.31, T.7 N., R.9 E., Dane County, Hydrologic Unit 07090001, 0.1 mi west of Reetz Road and 50 ft east of Widklow Way, at Madison.

DRAINAGE AREA.--0.14 mi^2.

PERIOD OF RECORD.--October 2001 to current year.

REVISED RECORDS.--Records have been revised for the period Apr. 1 to Sept. 30, 2002, and are published below.

GAGE.--Water-stage recorder and area-velocity flow meter in a 42-inch circular, concrete pipe. Elevation of gage is 1,025 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharge, which are fair (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.21
2	0.00	0.53	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00
3	0.00	0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.91	0.28	0.00
4	0.00	0.62	0.00	0.00	0.00	0.48	0.00	0.00	0.00	e0.01	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.03
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.06
9	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.05	0.00	0.13	0.00	0.00
10	0.00	0.00	0.34	0.00	0.00	0.01	0.00	0.14	0.25	0.00	0.00	0.00
11	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.02	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.08	0.00	0.00	0.00
13	0.04	0.00	0.00	0.00	0.00	0.01	0.04	0.07	0.00	0.00	0.00	0.05
14	0.10	0.00	0.00	0.00	0.00	0.01	0.00	0.09	0.01	0.00	0.00	0.01
15	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.17
16	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.13	0.20	0.00	0.00
17	0.00	0.03	0.00	0.00	0.00	0.03	0.11	0.21	0.05	0.00	0.09	0.00
18	0.00	0.13	0.00	0.00	0.01	0.02	0.01	0.01	0.00	0.00	0.13	0.00
19	0.00	0.00	0.00	0.00	0.02	0.00	0.12	0.00	0.00	0.02	0.00	0.00
20	0.00	0.00	0.00	0.00	0.35	0.00	0.21	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.06	0.00	0.14	0.93	0.05	0.10	0.00	0.00
22	0.00	0.03	0.00	0.00	0.03	0.00	0.00	0.69	0.00	0.00	0.00	0.00
23	0.00	0.62	0.00	0.00	0.26	0.00	0.00	0.90	0.07	0.00	0.00	0.00
24	0.16	0.00	0.00	0.00	0.02	0.03	0.04	0.00	0.09	0.00	0.09	0.00
25	0.00	0.00	0.00	0.00	0.13	0.42	0.03	0.03	0.00	0.00	0.02	0.00
26	0.00	0.00	0.00	0.00	0.12	0.10	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.04	0.00	0.11	0.01	0.00	0.00	0.00	0.00	0.10	0.00
28	0.00	0.00	0.02	0.00	0.18	0.12	0.00	0.00	0.00	0.00	0.11	0.00
29	0.02	0.00	0.00	0.00	0.26	0.00	0.00	0.12	0.00	0.13	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.22	0.00	0.21	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.09	---	0.00	0.00	---
TOTAL	0.36	2.76	0.76	0.01	1.55	1.65	0.75	3.67	0.86	1.73	0.83	0.61
MEAN	0.01	0.09	0.02	0.00	0.05	0.05	0.03	0.12	0.03	0.06	0.03	0.02
MAX	0.16	0.80	0.34	0.01	0.35	0.48	0.21	0.93	0.25	0.91	0.28	0.21
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CFSM	0.08	0.66	0.18	0.00	0.38	0.38	0.18	0.85	0.20	0.40	0.19	0.15
IN.	0.10	0.73	0.20	0.00	0.41	0.44	0.20	0.98	0.23	0.46	0.22	0.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2004, BY WATER YEAR (WY)

MEAN	0.02	0.04	0.02	0.00	0.04	0.04	0.05	0.07	0.04	0.04	0.02	0.04
MAX	0.03	0.09	0.02	0.00	0.05	0.05	0.08	0.12	0.08	0.06	0.03	0.05
(WY)	(2002)	(2004)	(2004)	(2003)	(2002)	(2004)	(2002)	(2004)	(2002)	(2004)	(2002)	(2002)
MIN	0.01	0.00	0.01	0.00	0.02	0.03	0.02	0.05	0.02	0.02	0.01	0.02
(WY)	(2004)	(2003)	(2003)	(2004)	(2003)	(2002)	(2004)	(2003)	(2003)	(2002)	(2003)	(2004)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2001 - 2004	
ANNUAL TOTAL	11.90		15.54			
ANNUAL MEAN	0.03		0.04		0.04	
HIGHEST ANNUAL MEAN					0.04	2004
LOWEST ANNUAL MEAN					0.03	2003
HIGHEST DAILY MEAN	0.90	Apr 30	0.93	May 21	1.1	Jun 4, 2002
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Aug 20, 2001
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 13	0.00	Oct 1	0.00	Sep 10, 2001
ANNUAL RUNOFF (CFSM)	0.233		0.303		0.254	
ANNUAL RUNOFF (INCHES)	3.16		4.13		3.45	
10 PERCENT EXCEEDS	0.09		0.13		0.10	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

(e) Estimated due to ice effect or missing record

430230089284300 PIPING ROCK ROAD STORM SEWER AT MADISON, WI

LOCATION.--Lat 43°02'30", long 89°28'43", in SW ¼ NW ¼ sec31, T.7 N., R.9 E., Dane County, Hydrologic Unit 07090001, 200 ft west of South Whitney Way at Madison.

DRAINAGE AREA.--0.09 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 2002 to September 2003.

GAGE.--Water-stage recorder and area-velocity flow meter in a 38 x 60-inch elliptical, concrete pipe. Elevation of gage is 995 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.01	0.00	0.00	0.19
2	0.00	0.45	0.00	0.00	0.00	0.03	0.00	0.01	0.00	0.00	0.01	0.01
3	0.00	0.75	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.59	0.25	0.00
4	0.00	0.70	0.00	0.00	0.00	0.45	0.00	0.00	0.01	0.01	0.01	0.00
5	0.00	0.00	0.01	0.00	0.00	0.23	0.00	0.01	0.00	0.02	0.01	0.00
6	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.04	0.00	0.02
7	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00
9	e0.01	0.00	0.27	0.00	0.00	0.00	0.00	0.06	0.00	0.13	0.00	0.00
10	e0.02	0.00	0.29	0.00	0.00	0.01	0.00	0.27	0.28	0.00	0.00	0.00
11	e0.04	0.00	0.01	0.00	0.00	0.01	0.00	0.01	0.09	0.01	0.00	0.00
12	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00
13	0.04	0.00	0.00	0.00	0.00	0.01	0.02	0.08	0.00	0.00	0.00	0.00
14	0.06	0.00	0.01	0.00	0.00	0.02	0.01	0.09	0.02	0.00	0.00	0.03
15	0.00	0.00	0.01	0.00	0.00	e0.01	0.01	0.01	0.01	0.00	0.00	0.11
16	0.00	0.00	0.04	0.00	0.00	e0.01	0.01	0.02	0.13	0.21	0.00	0.00
17	0.00	0.01	0.01	0.00	0.00	e0.03	0.11	0.24	0.05	0.00	0.08	0.00
18	0.01	0.09	0.00	0.00	0.01	e0.03	0.03	0.01	0.00	0.00	0.09	0.00
19	0.01	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.01	0.00	0.00
20	0.00	0.00	0.00	0.00	0.25	0.02	0.13	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.01	0.00	0.05	0.01	0.05	1.3	0.04	0.07	0.00	0.00
22	0.00	0.02	0.01	0.00	0.05	0.01	0.01	0.74	0.00	0.00	0.00	0.00
23	0.00	0.69	0.00	0.00	0.20	0.00	0.00	1.1	0.04	0.00	0.00	0.00
24	0.15	0.01	0.00	0.00	0.03	0.03	0.04	0.01	0.06	0.00	0.09	0.00
25	0.00	0.00	0.00	0.00	0.07	0.39	0.04	0.05	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.10	0.08	0.02	0.02	0.00	0.00	0.00	0.00
27	0.00	0.00	0.02	0.00	0.10	0.00	0.00	0.01	0.00	0.00	0.11	0.00
28	0.00	0.00	0.02	0.00	0.18	0.12	0.00	0.00	0.00	0.00	0.07	0.00
29	0.01	0.00	0.01	0.00	0.26	0.00	0.01	0.11	0.00	0.07	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.01	0.00	0.29	0.00	0.20	0.00	0.00
31	0.00	---	0.00	0.00	---	0.01	---	0.10	---	0.00	0.00	---
TOTAL	0.35	2.72	0.73	0.00	1.31	1.79	0.49	4.65	0.78	1.36	0.72	0.36
MEAN	0.01	0.09	0.02	0.00	0.05	0.06	0.02	0.15	0.03	0.04	0.02	0.01
MAX	0.15	0.75	0.29	0.00	0.26	0.45	0.13	1.3	0.28	0.59	0.25	0.19
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CFSM	0.13	1.01	0.26	0.00	0.50	0.64	0.18	1.67	0.29	0.49	0.26	0.13
IN.	0.14	1.12	0.30	0.00	0.54	0.74	0.20	1.92	0.32	0.56	0.30	0.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2004, BY WATER YEAR (WY)

MEAN	0.01	0.05	0.01	0.00	0.03	0.04	0.02	0.09	0.02	0.03	0.01	0.02
MAX	0.01	0.09	0.02	0.00	0.05	0.06	0.03	0.15	0.03	0.04	0.02	0.03
(WY)	(2003)	(2004)	(2004)	(2003)	(2004)	(2004)	(2003)	(2004)	(2004)	(2004)	(2004)	(2003)
MIN	0.01	0.00	0.00	0.00	0.01	0.03	0.02	0.04	0.01	0.01	0.00	0.01
(WY)	(2004)	(2003)	(2003)	(2004)	(2003)	(2003)	(2004)	(2003)	(2003)	(2002)	(2003)	(2004)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2002 - 2004	
ANNUAL TOTAL	9.20		15.26			
ANNUAL MEAN	0.03		0.04		0.03	
HIGHEST ANNUAL MEAN					0.04	2004
LOWEST ANNUAL MEAN					0.02	2003
HIGHEST DAILY MEAN	0.75	Nov 3	1.3	May 21	1.3	May 21, 2004
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Jul 1, 2002
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 9	0.00	Oct 1	0.00	Aug 23, 2002
ANNUAL RUNOFF (CFSM)	0.280		0.463		0.321	
ANNUAL RUNOFF (INCHES)	3.80		6.31		4.37	
10 PERCENT EXCEEDS	0.05		0.10		0.07	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

(e) Estimated due to ice effect or missing record

430230089284300 PIPING ROCK ROAD STORM SEWER AT MADISON, WI—Continued

PRECIPITATION QUANTITY

PERIOD OF RECORD.-October 2002 to September 2003.

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Gage established October 2002.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 3.22 in., May 21.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.09	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.68
2	0.00	1.66	0.00	0.02	0.00	0.00	0.00	0.05	0.00	0.00	0.10	0.00
3	0.05	2.12	0.00	0.00	0.09	0.01	0.00	0.00	0.00	2.16	0.96	0.00
4	0.00	1.51	0.02	0.00	0.00	0.87	0.00	0.00	0.00	0.04	0.01	0.00
5	0.00	0.00	0.12	0.00	0.00	0.48	0.00	0.00	0.00	0.08	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.00	0.02	0.20	0.00	0.15
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
8	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.65	0.00	0.00	0.00	0.00
9	0.00	0.00	0.86	0.00	0.00	0.00	0.00	0.15	0.05	0.51	0.05	0.00
10	0.00	0.02	0.84	0.00	0.00	0.08	0.00	0.86	1.28	0.00	0.00	0.00
11	0.28	0.00	0.01	0.02	0.09	0.01	0.00	0.04	0.41	0.08	0.00	0.00
12	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.02	0.21	0.00	0.00	0.00
13	0.29	0.00	0.00	0.00	0.00	0.05	0.00	0.32	0.01	0.00	0.00	0.00
14	0.39	0.00	0.00	0.00	0.04	0.05	0.00	0.38	0.07	0.00	0.00	0.00
15	0.00	0.00	0.01	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.62
16	0.00	0.01	0.16	0.00	0.00	0.00	0.01	0.00	0.57	0.79	0.07	0.00
17	0.00	0.14	0.00	0.01	0.00	0.15	0.40	0.91	0.16	0.00	0.39	0.00
18	0.00	0.41	0.00	0.00	0.05	0.05	0.08	0.05	0.01	0.00	0.38	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.07	0.00	0.00
20	0.00	0.00	0.00	0.00	0.42	0.00	0.52	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.15	0.00	0.16	3.22	0.25	0.37	0.00	0.00
22	0.00	0.09	0.00	0.00	0.13	0.00	0.00	1.60	0.00	0.00	0.00	0.00
23	0.00	1.81	0.00	0.00	0.02	0.00	0.00	1.79	0.20	0.00	0.00	0.00
24	0.74	0.00	0.00	0.00	0.00	0.17	0.22	0.04	0.32	0.00	0.34	0.00
25	0.00	0.00	0.00	0.00	0.00	1.20	0.16	0.15	0.00	0.00	0.01	0.00
26	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.07	0.00
27	0.01	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.43	0.00
28	0.03	0.00	0.08	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.43	0.00
29	0.10	0.00	0.00	0.00	0.09	0.00	0.00	0.49	0.00	0.42	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.07	0.05	0.72	0.00	0.84	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.41	---	0.00	0.00	---
TOTAL	1.89	7.87	2.23	0.05	1.09	4.09	1.74	11.86	3.63	5.56	3.24	1.45

CAL YR 2003 TOTAL 36.03
WTR YR 2004 TOTAL 44.70

05429485 LAKE WAUBESA AT MCFARLAND, WI

LOCATION.--Lat 43°00'32", long 89°18'18", in SW $^1/_4$ sec.3, T.6 N., R.10 E., Dane County, Hydrologic Unit 07090001, on left bank just upstream from bridge on U.S. Highway 51, downstream of dam at outlet of Lake Waubesa and 1.0 mi southwest of McFarland.

DRAINAGE AREA.--327 mi^2.

PERIOD OF RECORD.--October 2003 to current year.

REVISED RECORDS.--WSP 805, WDR WI-73-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 840.00 ft above NGVD of 1929 (levels by Wisconsin Department of Natural Resources).

REMARKS.--Lake level regulated by dams at outlets of Lake Mendota and Lake Waubesa. Gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height observed, 6.30 ft, June 12, 2004; minimum observed, 3.85 ft, Feb. 18, 19, 20, 2004, current datum.

EXTREMES FOR CURRENT YEAR.--Maximum recorded gage height, 6.30 ft, June 12; minimum recorded, 3.85 ft, Feb. 18, 19, 20.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.81	4.30	5.02	4.23	3.90	3.98	4.69	4.57	6.16	5.87	5.79	5.54
2	4.78	4.40	5.00	4.22	3.90	4.00	4.71	4.58	6.14	5.83	5.76	5.55
3	4.75	4.55	4.97	4.21	3.91	3.99	4.74	4.58	6.12	5.86	5.74	5.54
4	4.74	4.90	4.94	4.19	3.91	3.99	4.75	4.57	6.09	6.12	5.82	5.53
5	4.72	5.06	4.91	4.18	3.90	4.16	4.74	4.58	6.07	6.13	5.82	5.51
6	4.71	5.08	4.86	4.15	3.93	4.23	4.75	4.60	6.06	6.11	5.80	5.53
7	4.69	5.03	4.79	4.12	3.93	4.25	4.76	4.61	6.07	6.09	5.78	5.54
8	4.69	4.97	4.74	4.09	3.92	4.22	4.78	4.62	6.08	6.05	5.76	5.51
9	4.68	4.91	4.72	4.07	3.91	4.19	4.78	4.74	6.10	6.02	5.75	5.49
10	4.67	4.87	4.87	4.06	3.90	4.17	4.78	4.82	6.15	6.02	5.74	5.46
11	4.66	4.87	4.91	4.05	3.90	4.19	4.78	4.93	6.26	6.01	5.71	5.44
12	4.69	4.88	4.85	4.04	3.89	4.18	4.77	4.95	6.29	6.00	5.67	5.43
13	4.65	4.86	4.81	4.03	3.88	4.16	4.76	5.01	6.27	5.98	5.64	5.40
14	4.66	4.81	4.77	4.02	3.88	4.17	4.74	5.05	6.23	5.95	5.61	5.37
15	4.63	4.79	4.72	4.01	3.87	4.16	4.70	5.06	6.19	5.92	5.59	5.36
16	4.56	4.77	4.70	4.00	3.87	4.16	4.67	5.03	6.14	5.93	5.57	5.38
17	4.52	4.76	4.66	4.00	3.86	4.16	4.68	5.02	6.19	5.99	5.57	5.35
18	4.49	4.79	4.62	4.00	3.86	4.17	4.66	5.08	6.20	6.01	5.58	5.31
19	4.46	4.81	4.58	4.00	3.85	4.17	4.65	5.02	6.17	6.01	5.59	5.27
20	4.45	4.79	4.53	3.98	3.89	4.22	4.64	4.98	6.15	6.01	5.57	5.22
21	4.46	4.79	4.48	3.97	3.93	4.25	4.69	5.04	6.14	6.01	5.55	5.19
22	4.44	4.81	4.45	3.96	3.93	4.23	4.67	5.51	6.14	6.02	5.52	5.15
23	4.41	4.92	4.43	3.95	3.95	4.22	4.65	5.88	6.12	6.00	5.50	5.10
24	4.40	5.01	4.40	3.94	3.97	4.24	4.61	5.99	6.15	5.97	5.49	5.06
25	4.43	5.01	4.37	3.93	3.98	4.30	4.62	6.01	6.13	5.94	5.50	5.02
26	4.42	5.03	4.34	3.93	3.99	4.46	4.62	6.02	6.08	5.90	5.50	4.98
27	4.39	5.04	4.31	3.93	3.98	4.52	4.60	6.01	6.04	5.86	5.55	4.95
28	4.37	5.06	4.30	3.93	3.97	4.56	4.53	5.99	6.01	5.81	5.55	4.90
29	4.35	5.04	4.29	3.93	3.96	4.63	4.51	5.97	5.96	5.76	5.56	4.86
30	4.33	5.03	4.28	3.92	---	4.67	4.54	6.03	5.91	5.81	5.54	4.81
31	4.31	---	4.25	3.91	---	4.69	---	6.13	---	5.83	5.54	---
MEAN	4.56	4.86	4.64	4.03	3.91	4.25	4.69	5.19	6.13	5.96	5.63	5.29
MAX	4.81	5.08	5.02	4.23	3.99	4.69	4.78	6.13	6.29	6.13	5.82	5.55
MIN	4.31	4.30	4.25	3.91	3.85	3.98	4.51	4.57	5.91	5.76	5.49	4.81

05429500 YAHARA RIVER AT MCFARLAND, WI

LOCATION.--Lat 43°00'32", long 89°18'18", in SW $^1/_4$ sec.3, T.6 N., R.10 E., Dane County, Hydrologic Unit 07090001, on left bank just upstream from bridge on U.S. Highway 51, downstream of dam at outlet of Lake Waubesa and 1.0 mi southwest of McFarland.

DRAINAGE AREA.--327 mi^2.

PERIOD OF RECORD.--September 1930 to current year. Prior to October 2000, published as "near McFarland".

REVISED RECORDS.--WSP 805, WDR WI-73-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 840.00 ft above NGVD of 1929 (levels by Wisconsin Department of Natural Resources). September 1930 to Dec. 22, 1934, nonrecording gage at same site at datum 0.40 ft higher. Dec. 23, 1934 to Sept. 30, 1982, recording gage at same site at datum 0.40 ft higher.

REMARKS.--Records fair (see page 11). Flow regulated by dams at outlets of Lake Mendota and Lake Waubesa. The Madison Metropolitan Sewerage District diverted an average of 62 ft^3/s of effluent into the Badfish Creek basin during 2004 water year. The data were provided by the Madison Metropolitan Sewerage District. Prior to 1958 the effluent was discharged into the Yahara River above McFarland. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	173	372	207	151	160	185	89	592	349	344	266
2	86	194	367	206	151	160	185	90	571	343	334	268
3	83	229	360	205	e150	159	187	92	547	350	328	268
4	83	307	351	201	152	158	186	78	524	426	349	267
5	83	347	345	e200	151	190	185	57	499	429	348	263
6	83	360	332	e190	e150	203	185	50	485	423	342	271
7	84	355	316	189	e150	204	194	55	471	418	335	273
8	85	336	306	185	154	199	203	57	460	407	329	266
9	85	322	300	181	152	191	202	80	454	401	323	264
10	85	313	338	179	151	175	202	62	455	402	320	257
11	86	312	e340	177	149	165	201	51	475	398	314	252
12	83	317	e330	178	148	166	201	65	471	396	303	250
13	116	313	e320	176	147	161	199	97	450	394	294	246
14	168	302	314	175	145	161	195	146	425	385	287	241
15	185	297	304	173	144	144	188	155	398	379	280	240
16	206	294	299	171	143	135	182	155	373	382	274	243
17	198	291	291	171	142	134	184	155	377	398	275	237
18	193	301	282	170	142	133	182	228	391	406	276	231
19	192	305	274	171	142	115	179	262	406	408	278	221
20	192	301	263	167	147	91	180	255	420	407	273	213
21	192	305	253	164	154	96	188	272	441	412	266	207
22	190	308	247	162	155	92	184	385	464	414	257	199
23	187	339	243	160	158	90	179	532	479	408	253	191
24	187	363	237	159	163	53	173	642	482	397	251	185
25	194	364	230	157	166	41	173	654	465	387	252	177
26	193	370	224	157	166	94	165	643	443	377	251	169
27	189	374	218	157	165	105	151	622	422	365	263	164
28	184	379	219	e150	163	109	144	598	405	352	266	156
29	181	376	218	e150	161	117	138	577	382	337	267	148
30	178	372	215	e150	---	142	106	582	361	350	265	141
31	176	---	211	153	---	168	---	600	---	354	265	---
TOTAL	4,515	9,519	8,919	5,391	4,412	4,311	5,406	8,386	13,588	12,054	9,062	6,774
MEAN	146	317	288	174	152	139	180	271	453	389	292	226
MAX	206	379	372	207	166	204	203	654	592	429	349	273
MIN	83	173	211	150	142	41	106	50	361	337	251	141
CFSM	0.45	0.97	0.88	0.53	0.47	0.43	0.55	0.83	1.39	1.19	0.89	0.69
IN.	0.51	1.08	1.01	0.61	0.50	0.49	0.61	0.95	1.55	1.37	1.03	0.77

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2004, BY WATER YEAR (WY)

MEAN	130	165	152	143	159	240	254	188	159	150	122	119
MAX	401	355	375	376	363	599	719	520	585	511	478	422
(WY)	(1981)	(1986)	(1986)	(1986)	(1938)	(1937)	(1959)	(1933)	(2000)	(1993)	(1993)	(1993)
MIN	4.09	27.4	36.5	34.0	31.6	28.3	12.4	42.1	15.6	16.0	15.9	13.8
(WY)	(1965)	(1940)	(1940)	(1977)	(1991)	(2003)	(2003)	(1958)	(1936)	(1965)	(1988)	(1964)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1930 - 2004	
ANNUAL TOTAL	45,385.9		92,337			
ANNUAL MEAN	124		252		165	
HIGHEST ANNUAL MEAN					336	1993
LOWEST ANNUAL MEAN					63.8	1964
HIGHEST DAILY MEAN	388	May 20	654	May 25	853	Apr 11, 1959
LOWEST DAILY MEAN	6.1	Sep 7	41	Mar 25	1.2	Jun 27, 1979
ANNUAL SEVEN-DAY MINIMUM	8.0	Sep 1	59	May 5	2.0	Jun 22, 1979
MAXIMUM PEAK FLOW			657	May 24, 25	(a)867	Apr 10, 1959
MAXIMUM PEAK STAGE			(b)6.26	Jun 12	(b)7.03	Jun 26, 2000
ANNUAL RUNOFF (CFSM)	0.380		0.772		0.505	
ANNUAL RUNOFF (INCHES)	5.16		10.50		6.86	
10 PERCENT EXCEEDS	328		413		327	
50 PERCENT EXCEEDS	84		214		140	
90 PERCENT EXCEEDS	13		116		40	

(a) Gage height, 5.82 ft, datum then in use
(b) Backwater from vegetation
(e) Estimated due to ice effect or missing record

425715089164700 LAKE KEGONSA AT BARBER DRIVE NEAR STOUGHTON, WI

LOCATION.--Lat 42°57'15", long 89°16'47", in SW $^1/_4$ sec.26, T.6 N., R.10 E., Dane County, Hydrologic Unit 07090001, on downstream side of bridge on Barber Drive, 3.5 mi northwest of Stoughton.

DRAINAGE AREA.--386 mi^2.

PERIOD OF RECORD.--October 2003 to current year.

GAGE.--Water-stage recorder. Datum of gage is 840.00 ft above sea level (levels from Wisconsin Department of Transportation benchmark).

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height observed, 4.71 ft, May 23, 2004; minimum observed, 2.44 ft, Jan. 19, 2004, current datum.

EXTREMES FOR CURRENT YEAR.--Maximum gage height observed, 4.71 ft, May 23; minimum observed, 2.44 ft, Jan. 19, current datum.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.24	2.52	3.09	2.68	2.75	2.79	2.95	2.94	4.57	3.77	3.43	3.29
2	3.25	2.61	3.10	2.67	2.72	2.83	2.98	2.90	4.54	3.77	3.39	3.28
3	3.26	2.76	3.12	2.65	2.72	2.85	3.00	2.86	4.49	3.80	3.36	3.27
4	3.28	2.94	3.12	2.63	2.72	2.85	3.01	2.85	4.42	4.04	3.37	3.25
5	3.29	3.00	3.13	2.59	2.69	3.01	3.03	2.87	4.35	4.07	3.30	3.22
6	3.30	3.04	3.11	2.56	2.70	3.06	3.05	2.90	4.28	4.08	3.24	3.21
7	3.31	3.07	3.08	2.56	2.70	3.08	3.07	2.94	4.22	4.10	3.22	3.20
8	3.33	3.10	3.06	2.55	2.68	3.06	3.09	2.95	4.16	4.10	3.20	3.18
9	3.34	3.09	3.06	2.53	2.66	3.01	3.10	3.09	4.13	4.11	3.18	3.15
10	3.36	3.08	3.17	2.51	2.64	2.95	3.12	3.17	4.13	4.12	3.15	3.13
11	3.37	3.06	3.19	2.49	2.63	2.92	3.13	3.25	4.17	4.11	3.15	3.11
12	3.39	3.03	3.19	2.48	2.62	2.88	3.15	3.29	4.22	4.10	3.16	3.10
13	3.38	3.02	3.18	2.48	2.60	2.85	3.15	3.35	4.20	4.09	3.20	3.08
14	3.35	3.00	3.17	2.48	2.59	2.82	3.16	3.43	4.17	4.06	3.23	3.06
15	3.29	2.99	3.14	2.48	2.58	2.79	3.16	3.49	4.13	4.03	3.26	3.06
16	3.20	2.97	3.11	2.48	2.56	2.75	3.17	3.54	4.09	4.00	3.26	3.07
17	3.12	2.94	3.09	2.50	2.56	2.72	3.22	3.57	4.08	3.98	3.31	3.06
18	3.04	2.96	3.05	2.49	2.54	2.68	3.20	3.64	4.04	3.96	3.33	3.04
19	2.97	2.95	3.00	2.46	2.53	2.66	3.20	3.62	3.99	3.93	3.35	3.02
20	2.89	2.94	2.97	2.45	2.55	2.65	3.22	3.61	3.94	3.92	3.33	3.00
21	2.82	2.94	2.95	2.48	2.56	2.63	3.26	3.68	3.92	3.92	3.32	3.07
22	2.75	2.92	2.93	2.49	2.56	2.60	3.27	4.04	3.91	3.91	3.29	3.14
23	2.68	2.97	2.90	2.53	2.58	2.58	3.24	4.43	3.89	3.87	3.28	3.21
24	2.62	2.99	2.87	2.57	2.60	2.58	3.22	4.51	3.90	3.81	3.27	3.19
25	2.61	3.01	2.85	2.61	2.61	2.57	3.20	4.60	3.89	3.75	3.27	3.18
26	2.59	3.04	2.82	2.67	2.65	2.71	3.17	4.64	3.87	3.68	3.25	3.19
27	2.58	3.06	2.79	2.71	2.68	2.78	3.13	4.63	3.85	3.62	3.32	3.20
28	2.55	3.08	2.78	2.75	2.71	2.83	3.06	4.59	3.83	3.57	3.33	3.20
29	2.53	3.08	2.77	2.76	2.74	2.89	3.02	4.52	3.80	3.51	3.32	3.19
30	2.52	3.10	2.74	2.76	---	2.92	3.00	4.53	3.77	3.51	3.30	3.18
31	2.52	---	2.71	2.76	---	2.93	---	4.57	---	3.48	3.29	---
MEAN	3.02	2.98	3.01	2.57	2.64	2.81	3.12	3.65	4.10	3.90	3.28	3.15
MAX	3.39	3.10	3.19	2.76	2.75	3.08	3.27	4.64	4.57	4.12	3.43	3.29
MIN	2.52	2.52	2.71	2.45	2.53	2.57	2.95	2.85	3.77	3.48	3.15	3.00

05429700 YAHARA RIVER AT FORTON STREET BRIDGE AT STOUGHTON, WI

LOCATION.--Lat 42°55'11", long 89°13'13", in sec.5, T.5 N., R.11 E., Dane County, Hydrologic Unit 07090001, at Forton Street Bridge in Stoughton.

DRAINAGE AREA.--407 mi^2.

PERIOD OF RECORD.--November 2003 to September 2004.

GAGE.--Submersible pressure transducer, acoustic velocity meter and phone line with modem.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	439	310	255	264	281	300	962	416	504	327
2	---	---	427	322	249	302	282	279	921	391	499	328
3	---	---	440	322	238	338	290	203	894	393	494	324
4	---	---	447	321	236	334	283	108	834	452	503	320
5	---	---	456	307	233	393	277	66	804	473	498	316
6	---	---	e440	198	219	432	283	69	795	521	468	313
7	---	---	e450	279	242	482	288	70	702	536	392	314
8	---	---	e450	304	248	457	291	61	675	531	392	310
9	---	---	e450	300	245	452	291	80	674	531	395	305
10	---	---	478	282	240	393	292	83	669	534	381	301
11	---	---	477	205	231	348	292	87	706	529	339	300
12	---	---	452	230	227	319	295	83	734	525	309	299
13	---	---	451	229	226	328	295	87	732	526	284	295
14	---	---	448	227	224	336	306	111	699	533	274	272
15	---	---	444	233	224	325	321	137	680	532	276	259
16	---	---	451	227	222	325	319	138	653	535	278	285
17	---	---	452	232	222	330	325	172	654	536	286	289
18	---	---	428	234	224	223	323	326	629	529	292	283
19	---	---	394	224	228	211	324	382	614	530	315	279
20	---	---	371	181	236	239	319	408	557	532	319	244
21	---	---	365	171	234	228	332	430	545	531	317	151
22	---	---	373	149	229	213	367	596	550	578	315	102
23	---	---	376	125	237	212	372	803	542	588	314	76
24	---	---	369	130	239	203	367	826	539	581	312	107
25	---	---	357	137	238	170	363	834	536	576	312	139
26	---	---	357	133	243	223	364	930	529	533	311	201
27	---	359	356	134	245	254	352	992	517	518	319	228
28	---	367	363	185	251	247	344	957	495	512	321	222
29	---	357	365	196	256	254	341	922	471	506	327	214
30	---	362	347	214	---	274	327	925	465	511	332	208
31	---	---	326	255	---	297	---	966	---	511	328	---
TOTAL	---	1,445	12,799	6,996	6,841	9,406	9,506	12,431	19,777	16,030	11,006	7,611
MEAN	---	361	413	226	236	303	317	401	659	517	355	254
MAX	---	367	478	322	256	482	372	992	962	588	504	328
MIN	---	357	326	125	219	170	277	61	465	391	274	76
CFSM	---	0.89	1.01	0.55	0.58	0.75	0.78	0.99	1.62	1.27	0.87	0.62
IN.	---	0.13	1.17	0.64	0.63	0.86	0.87	1.14	1.81	1.47	1.01	0.70

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2004, BY WATER YEAR (WY)

MEAN	---	---	413	226	236	303	317	401	659	517	355	254

SUMMARY STATISTICS FOR 2004 WATER YEAR

HIGHEST DAILY MEAN	992	May 27
LOWEST DAILY MEAN	61	May 8
ANNUAL SEVEN-DAY MINIMUM	74	May 5

(e) Estimated due to ice effect or missing record

05430150 BADFISH CREEK NEAR COOKSVILLE, WI

LOCATION.--Lat 42°50'00", long 89°11'48", in SW ¼ SE ¼ sec.4, T.4 N., R.11 E., Rock County, Hydrologic Unit 07090001, on right bank, 20 ft upstream from bridge on State Highway 59, 2.2 mi east of Cooksville, and 2.2 mi above the mouth.

DRAINAGE AREA.--82.6 mi^2.

PERIOD OF RECORD.--July 1977 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 807.06 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Approximately 55 percent of flow is effluent from Nine Springs treatment plant (data provided by Madison Metropolitan Sewerage District). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	71	88	86	e79	131	117	93	259	113	113	110
2	74	101	88	84	e80	133	112	92	184	119	112	109
3	75	158	87	86	80	114	107	94	160	132	118	105
4	72	326	86	85	79	111	104	93	148	572	152	102
5	72	178	87	e84	80	361	103	92	136	193	126	98
6	73	123	83	e85	79	181	102	92	130	159	116	101
7	75	105	84	e85	76	141	100	92	130	150	109	104
8	73	94	88	84	76	129	99	88	127	135	106	101
9	73	89	92	82	81	122	97	108	123	135	110	100
10	73	91	e160	80	78	114	93	122	131	131	111	99
11	71	93	e130	80	78	112	92	129	173	123	107	98
12	73	92	e110	84	79	105	92	111	194	123	106	97
13	72	88	e100	83	79	98	97	109	151	122	103	97
14	84	85	e100	83	79	100	95	115	142	118	101	97
15	76	86	e100	80	79	99	94	110	135	114	98	100
16	75	84	e99	80	81	97	95	100	128	110	97	106
17	74	85	e98	78	81	97	108	102	184	133	109	98
18	71	101	98	78	80	97	101	133	146	115	105	95
19	71	95	97	e79	80	96	100	115	131	113	110	92
20	73	90	93	e79	90	95	104	109	121	114	102	92
21	74	87	91	79	86	94	149	175	135	131	100	93
22	73	83	92	e80	86	96	119	938	138	129	96	92
23	72	123	92	e75	124	96	108	747	125	116	97	91
24	75	125	89	76	141	99	100	469	129	109	101	92
25	83	104	83	77	113	100	106	235	125	106	104	90
26	72	98	78	e77	114	195	105	191	117	105	103	91
27	73	91	83	77	117	150	100	167	114	109	127	90
28	74	86	88	78	111	138	95	151	119	108	114	90
29	73	84	89	e78	112	158	95	152	119	106	119	89
30	72	85	90	e78	---	133	96	266	116	140	108	90
31	72	---	89	e79	---	124	---	423	---	130	107	---
TOTAL	2,286	3,201	2,932	2,499	2,598	3,916	3,085	6,013	4,270	4,313	3,387	2,909
MEAN	73.7	107	94.6	80.6	89.6	126	103	194	142	139	109	97.0
MAX	84	326	160	86	141	361	149	938	259	572	152	110
MIN	71	71	78	75	76	94	92	88	114	105	96	89

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2004, BY WATER YEAR (WY)

MEAN	96.1	102	95.7	90.7	106	124	123	114	121	106	97.1	97.5
MAX	139	162	129	122	163	190	193	205	252	171	133	146
(WY)	(1987)	(1986)	(1983)	(1988)	(1994)	(1993)	(1993)	(1999)	(1996)	(1993)	(1996)	(2001)
MIN	66.9	69.5	69.7	65.3	73.1	80.4	88.7	78.3	76.4	70.4	59.2	67.6
(WY)	(1978)	(1978)	(1979)	(1991)	(1979)	(1981)	(1990)	(1981)	(1991)	(1977)	(1977)	(1991)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1977 - 2004	
ANNUAL TOTAL	32,260		41,409			
ANNUAL MEAN	88.4		113		106	
HIGHEST ANNUAL MEAN					136	1993
LOWEST ANNUAL MEAN					80.4	1991
HIGHEST DAILY MEAN	326	Nov 4	938	May 22	1,450	Jun 18, 1996
LOWEST DAILY MEAN	64	Sep 1	71	(a)Oct 11	35	Aug 1, 1977
ANNUAL SEVEN-DAY MINIMUM	68	Aug 30	72	Oct 26	48	Jul 28, 1977
MAXIMUM PEAK FLOW			1,170	May 22	2,210	Jun 17, 1996
MAXIMUM PEAK STAGE			8.60	May 22	10.18	Jun 17, 1996
10 PERCENT EXCEEDS	104		141		138	
50 PERCENT EXCEEDS	84		99		97	
90 PERCENT EXCEEDS	72		77		75	

(a) Also occurred Oct. 18, 19, Nov. 1
(e) Estimated due to ice effect or missing record

05430175 YAHARA RIVER NEAR FULTON, WI

LOCATION.--Lat 42°49'35", long 89°10'19", in SE $^1/_4$ NE $^1/_4$ sec.10, T.4 N., R.11 E., Rock County, Hydrologic Unit 07090001, on left bank, 20 ft upstream from bridge on State Highway 59, 0.5 mi downstream from Badfish Creek, and 2.6 mi northwest of Fulton.

DRAINAGE AREA.--518 mi^2.

PERIOD OF RECORD.--July 1977 to current year.

REVISED RECORDS.--WDR WI-96-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 789.85 ft above NGVD of 1929. July 1977 to April 1996, recording gage at site about 2,000 ft upstream at datum 2.85 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Regulation from dams and powerplants upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	148	288	483	360	e310	367	396	374	1,370	522	571	416
2	142	369	489	354	e300	399	371	362	1,150	501	564	414
3	143	516	494	357	e300	442	365	311	1,070	516	571	404
4	135	877	500	359	e300	427	372	250	1,010	1,090	630	390
5	132	663	499	350	e300	835	366	173	937	659	574	386
6	143	543	495	e300	e290	603	365	170	917	626	550	385
7	148	524	486	e340	e300	569	362	187	844	669	480	389
8	149	513	482	e350	e310	554	362	175	772	641	452	379
9	165	505	489	e340	e310	535	364	207	793	629	477	378
10	164	500	e620	e330	e310	486	362	260	795	638	472	378
11	156	500	e600	e300	e300	441	363	268	939	617	439	365
12	163	483	e550	e310	e290	415	363	228	937	615	399	367
13	173	464	e520	e290	e290	413	368	208	888	618	378	362
14	340	473	509	e290	e290	405	370	235	847	611	358	321
15	405	497	514	e280	e290	400	390	257	800	599	360	362
16	432	484	512	e280	e290	402	383	249	771	609	362	352
17	501	454	506	e280	e290	397	401	255	876	625	390	366
18	496	477	500	e280	e290	350	395	406	782	609	379	347
19	464	472	468	e280	e300	264	387	468	729	605	405	347
20	422	468	453	e250	324	305	399	457	684	606	398	338
21	431	461	437	e240	320	307	488	616	668	628	395	247
22	425	458	420	e220	316	309	458	1,780	693	660	392	223
23	413	507	423	e210	367	302	460	1,840	647	658	389	178
24	385	522	416	e220	390	301	439	1,510	658	636	393	192
25	372	502	419	e230	343	267	445	1,090	635	627	395	222
26	261	498	406	e220	340	420	439	1,070	634	599	387	267
27	344	490	403	e220	338	406	430	1,170	621	557	438	312
28	376	479	400	e230	362	381	416	1,100	608	574	427	302
29	356	482	397	e260	346	406	401	1,070	578	565	432	291
30	314	480	402	e280	---	377	401	1,260	567	625	414	299
31	239	---	388	e310	---	407	---	1,670	---	603	414	---
TOTAL	8,937	14,949	14,680	8,920	9,106	12,892	11,881	19,676	24,220	19,337	13,685	9,979
MEAN	288	498	474	288	314	416	396	635	807	624	441	333
MAX	501	877	620	360	390	835	488	1,840	1,370	1,090	630	416
MIN	132	288	388	210	290	264	362	170	567	501	358	178
CFSM	0.56	0.96	0.91	0.56	0.61	0.80	0.76	1.23	1.56	1.20	0.85	0.64
IN.	0.64	1.07	1.05	0.64	0.65	0.93	0.85	1.41	1.74	1.39	0.98	0.72

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2004, BY WATER YEAR (WY)

MEAN	360	419	387	337	368	444	453	423	399	344	307	321
MAX	623	711	558	542	585	760	1,043	858	1,002	862	760	696
(WY)	(2002)	(1986)	(1983)	(1986)	(1986)	(1994)	(1993)	(1993)	(2000)	(1993)	(1993)	(1993)
MIN	171	181	167	192	168	144	168	155	136	121	117	109
(WY)	(1991)	(1990)	(1990)	(1978)	(1991)	(2003)	(2003)	(1981)	(1988)	(1988)	(1988)	(1988)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1977 - 2004	
ANNUAL TOTAL	99,506		168,262			
ANNUAL MEAN	273		460		381	
HIGHEST ANNUAL MEAN					629	1993
LOWEST ANNUAL MEAN					261	2003
HIGHEST DAILY MEAN	877	Nov 4	1,840	May 23	2,880	Jun 18, 1996
LOWEST DAILY MEAN	109	Sep 9	132	Oct 5	60	Aug 7, 1977
ANNUAL SEVEN-DAY MINIMUM	113	Sep 23	142	Oct 1	104	Aug 3, 1977
MAXIMUM PEAK FLOW			2,670	May 23	3,230	Jun 18, 1996
MAXIMUM PEAK STAGE			10.02	May 23	11.16	Jun 18, 1996
ANNUAL RUNOFF (CFSM)	0.526		0.888		0.736	
ANNUAL RUNOFF (INCHES)	7.15		12.08		10.00	
10 PERCENT EXCEEDS	501		664		608	
50 PERCENT EXCEEDS	220		402		355	
90 PERCENT EXCEEDS	125		250		162	

(e) Estimated due to ice effect or missing record

05430446 MARKHAM CREEK NEAR JANESVILLE, WI

LOCATION.--Lat 42°38'34", long 89°04'59", in SE $^1/_4$ SW $^1/_4$ sec.9, T.2 N., R.12 E., Rock County, Hydrologic Unit 07090001, on right bank, 10 ft upstream of Oleary Road, and 1.8 mi upstream from Rock River.

DRAINAGE AREA.--9.32 mi^2.

PERIOD OF RECORD.--July to September 2004.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 800 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	3.7	2.5	1.5
2	---	---	---	---	---	---	---	---	---	3.5	2.7	1.4
3	---	---	---	---	---	---	---	---	---	3.8	3.1	1.4
4	---	---	---	---	---	---	---	---	---	11	5.0	1.3
5	---	---	---	---	---	---	---	---	---	4.9	3.1	1.3
6	---	---	---	---	---	---	---	---	---	4.3	3.0	1.3
7	---	---	---	---	---	---	---	---	---	20	2.9	1.3
8	---	---	---	---	---	---	---	---	---	5.2	2.8	1.3
9	---	---	---	---	---	---	---	---	---	5.6	2.5	1.3
10	---	---	---	---	---	---	---	---	---	5.6	2.2	1.3
11	---	---	---	---	---	---	---	---	---	4.2	2.0	1.2
12	---	---	---	---	---	---	---	---	---	3.9	1.9	1.2
13	---	---	---	---	---	---	---	---	---	3.6	1.8	1.2
14	---	---	---	---	---	---	---	---	---	3.3	1.7	1.2
15	---	---	---	---	---	---	---	---	---	3.2	1.6	1.2
16	---	---	---	---	---	---	---	---	---	3.2	1.6	1.2
17	---	---	---	---	---	---	---	---	---	3.3	1.6	1.2
18	---	---	---	---	---	---	---	---	---	3.1	1.6	1.2
19	---	---	---	---	---	---	---	---	---	3.1	1.5	1.1
20	---	---	---	---	---	---	---	---	---	3.0	1.5	1.1
21	---	---	---	---	---	---	---	---	---	3.3	1.4	1.1
22	---	---	---	---	---	---	---	---	---	3.2	1.4	1.1
23	---	---	---	---	---	---	---	---	---	2.9	1.4	1.0
24	---	---	---	---	---	---	---	---	---	2.9	1.4	1.0
25	---	---	---	---	---	---	---	---	---	2.9	1.5	1.1
26	---	---	---	---	---	---	---	---	---	2.8	1.5	1.1
27	---	---	---	---	---	---	---	---	---	2.8	1.6	1.1
28	---	---	---	---	---	---	---	---	---	2.7	1.6	1.1
29	---	---	---	---	---	---	---	---	---	2.6	1.8	1.1
30	---	---	---	---	---	---	---	---	---	2.8	1.6	1.1
31	---	---	---	---	---	---	---	---	---	2.7	1.5	---
TOTAL	---	---	---	---	---	---	---	---	---	133.1	63.3	36.0
MEAN	---	---	---	---	---	---	---	---	---	4.29	2.04	1.20
MAX	---	---	---	---	---	---	---	---	---	20	5.0	1.5
MIN	---	---	---	---	---	---	---	---	---	2.6	1.4	1.0
CFSM	---	---	---	---	---	---	---	---	---	0.46	0.22	0.13
IN.	---	---	---	---	---	---	---	---	---	0.53	0.25	0.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2004, BY WATER YEAR (WY)

MEAN	---	---	---	---	---	---	---	---	---	4.29	2.04	1.20
MAX	---	---	---	---	---	---	---	---	---	4.29	2.04	1.20
(WY)	---	---	---	---	---	---	---	---	---	(2004)	(2004)	(2004)
MIN	---	---	---	---	---	---	---	---	---	4.29	2.04	1.20
(WY)	---	---	---	---	---	---	---	---	---	(2004)	(2004)	(2004)

SUMMARY STATISTICS	FOR 2004 WATER YEAR (July - September)	
ANNUAL TOTAL	232.4	
ANNUAL MEAN	2.53	
HIGHEST DAILY MEAN	20	Jul 7
LOWEST DAILY MEAN	1.0	Sep 23, 24
ANNUAL SEVEN-DAY MINIMUM	1.1	Sep 19
MAXIMUM PEAK FLOW	64	Jul 7
MAXIMUM PEAK STAGE	3.86	Jul 7
INSTANTANEOUS LOW FLOW	0.98	Sep 23-25
ANNUAL RUNOFF (CFSM)	0.271	
ANNUAL RUNOFF (INCHES)	0.93	
10 PERCENT EXCEEDS	4.1	
50 PERCENT EXCEEDS	1.7	
90 PERCENT EXCEEDS	1.1	

05430500 ROCK RIVER AT AFTON, WI

LOCATION.--Lat 42°36'33", long 89°04'14", in NE $^1/_4$ sec.28, T.2 N., R.12 E., Rock County, Hydrologic Unit 07090001, on right bank in Afton, 0.3 mi downstream from highway bridge and 1.1 mi upstream from Bass Creek.

DRAINAGE AREA.--3,340 mi^2.

PERIOD OF RECORD.--January 1914 to current year. Monthly discharge for January 1914 published in WSP 1308. Unpublished daily discharges for January and February 1914 in District files.

REVISED RECORDS.--WSP 1238: 1916(M), 1919(M), 1933, 1937-38, 1943. WDR WI-79-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 742.36 ft above NGVD of 1929. Prior to Aug. 23, 1932, a nonrecording gage 20 ft upstream, and Aug. 23, 1932, to Sept. 30, 1933, water-stage recorder, at same site at datum 1 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are fair, and periods of discharge below 800 ft^3/s, which are poor (see page 11). Diurnal fluctuation caused by powerplants above station. Gage-height telemeter and data-collection platform at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	517	1,100	2,140	2,260	e840	1,910	4,460	2,860	9,860	7,910	2,930	1,750
2	599	1,290	2,100	2,150	e840	2,320	4,420	2,740	9,820	7,660	2,830	1,730
3	527	1,540	2,250	1,860	e700	2,400	4,360	2,650	9,880	7,530	2,760	1,690
4	467	2,050	2,260	1,810	e650	2,540	4,330	2,450	9,910	7,710	2,950	1,580
5	528	2,230	2,240	1,670	e800	3,140	4,190	2,360	9,860	7,680	2,960	1,520
6	505	2,120	2,270	1,470	e790	3,330	4,060	2,270	9,790	7,200	2,870	1,440
7	595	2,090	2,160	e1,400	e780	3,360	4,080	2,260	9,630	7,060	2,800	1,440
8	549	2,410	2,030	e1,400	e750	3,640	3,980	1,980	9,380	6,760	2,660	1,440
9	545	2,320	2,040	e1,300	e650	4,010	3,890	1,940	9,310	6,590	2,600	1,010
10	593	2,150	2,450	e1,300	e660	4,160	3,800	2,020	9,300	6,440	2,510	1,070
11	597	2,090	2,430	e1,300	e960	4,190	3,710	2,310	9,410	6,190	2,620	1,080
12	556	2,040	2,170	e1,300	e1,100	4,240	3,630	2,570	9,460	5,960	2,580	1,020
13	597	1,930	2,170	e1,300	e1,000	4,320	3,510	2,620	9,340	5,780	2,520	1,130
14	758	2,260	2,210	e1,300	e900	4,230	3,400	2,800	9,400	5,580	2,200	1,330
15	794	2,140	2,270	e1,300	e900	4,270	3,290	2,930	9,470	5,430	1,650	1,220
16	844	2,110	2,630	e1,300	e900	4,380	3,140	2,980	9,470	5,280	1,680	1,200
17	934	2,000	2,610	e1,300	e900	4,340	3,200	3,010	9,730	5,260	1,620	1,300
18	934	2,130	2,590	e1,300	e880	4,270	3,050	3,270	9,700	5,100	1,750	1,250
19	896	2,310	2,540	e1,200	e890	4,100	2,660	3,480	9,550	4,860	1,670	1,220
20	949	2,100	2,470	e1,100	e910	4,210	2,910	3,510	9,420	4,670	1,570	1,160
21	761	2,330	2,430	e1,100	e980	4,190	3,030	3,760	9,350	4,560	1,370	914
22	899	2,290	2,260	e1,100	e1,100	4,090	3,010	5,310	9,360	4,390	1,350	868
23	837	2,130	1,960	e1,100	1,280	3,960	3,070	6,340	9,140	4,410	1,320	856
24	930	1,870	1,980	e1,100	1,490	3,950	3,080	7,010	9,060	4,170	1,140	758
25	972	1,940	1,950	e1,100	1,420	3,930	3,100	7,080	8,970	4,000	1,160	775
26	825	2,050	1,970	e1,000	1,610	4,120	2,970	7,480	8,810	3,820	1,330	1,010
27	789	2,310	1,960	e900	1,610	4,300	2,950	7,930	8,660	3,600	1,430	1,000
28	1,310	2,270	1,980	e790	1,700	4,240	2,850	8,320	8,590	3,430	1,620	1,050
29	1,270	2,200	2,040	e800	1,720	4,210	2,650	8,550	8,320	3,280	1,610	1,040
30	1,290	2,180	2,280	e830	---	4,350	2,790	8,910	8,090	3,170	1,540	957
31	1,150	---	2,290	e830	---	4,500	---	9,500	---	3,080	1,770	---
TOTAL	24,317	61,980	69,130	39,970	29,710	119,200	103,570	133,200	280,040	168,560	63,370	35,808
MEAN	784	2,066	2,230	1,289	1,024	3,845	3,452	4,297	9,335	5,437	2,044	1,194
MAX	1,310	2,410	2,630	2,260	1,720	4,500	4,460	9,500	9,910	7,910	2,960	1,750
MIN	467	1,100	1,950	790	650	1,910	2,650	1,940	8,090	3,080	1,140	758
CFSM	0.23	0.62	0.67	0.39	0.31	1.15	1.03	1.29	2.79	1.63	0.61	0.36
IN.	0.27	0.69	0.77	0.45	0.33	1.33	1.15	1.48	3.12	1.88	0.71	0.40

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2004, BY WATER YEAR (WY)

MEAN	1,393	1,585	1,481	1,311	1,554	3,321	4,069	2,624	1,930	1,478	1,145	1,194
MAX	8,219	5,884	4,395	3,558	5,647	8,958	10,010	7,911	9,335	5,443	5,376	5,088
(WY)	(1987)	(1986)	(1986)	(1960)	(1938)	(1918)	(1979)	(1973)	(2004)	(1993)	(1924)	(1938)
MIN	254	397	383	275	327	610	1,002	389	314	247	183	212
(WY)	(1940)	(1964)	(1940)	(1959)	(1959)	(1940)	(1931)	(1958)	(1934)	(1934)	(1934)	(1939)

05430500 ROCK RIVER AT AFTON, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1914 - 2004	
ANNUAL TOTAL	466,271		1,128,855			
ANNUAL MEAN	1,277		3,084		1,927	
HIGHEST ANNUAL MEAN					3,925	1993
LOWEST ANNUAL MEAN					557	1964
HIGHEST DAILY MEAN	3,630	May 15	9,910	Jun 4	13,000	Mar 23, 24, 1929
LOWEST DAILY MEAN	335	Aug 27	467	Oct 4	42	Aug 25, 26, 1934
ANNUAL SEVEN-DAY MINIMUM	391	Sep 1	531	Oct 3	115	Aug 24, 1934
MAXIMUM PEAK FLOW			9,930	Jun 1	(a)13,000	Mar 23, 1929
MAXIMUM PEAK STAGE			10.96	Jun 1	(b)13.05	Feb 5, 1916
ANNUAL RUNOFF (CFSM)	0.382		0.923		0.577	
ANNUAL RUNOFF (INCHES)	5.19		12.57		7.84	
10 PERCENT EXCEEDS	2,410		7,770		4,070	
50 PERCENT EXCEEDS	960		2,260		1,360	
90 PERCENT EXCEEDS	528		852		486	

(a) Gage height, 11.81 ft, present datum
(b) Present datum, backwater from ice
(e) Estimated due to ice effect or missing record

054310157 JACKSON CREEK TRIBUTARY NEAR ELKHORN, WI

LOCATION.--Lat 42°39'03", long 88°33'03", in NW ¼ NE ¼ sec.12, T.2 N., R.16 E., Walworth County, Hydrologic Unit 07090001, on left bank 20 ft downstream from Interstate Highway 43, 1.1 mi upstream from Delavan Lake inlet at Mound Road, and 1.5 mi south of Elkhorn.

DRAINAGE AREA.--4.34 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1983 to current year.

REVISED RECORDS.--WDR WI-89-1: 1988.

GAGE.--Water-stage recorder. Datum of gage is 924.70 ft above NGVD of 1929 (Wisconsin Department of Transportation benchmark). Prior to Dec. 4, 1992, at site 180 ft downstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.36	0.65	0.96	1.3	e0.60	3.4	3.3	2.0	8.9	2.0	0.69	3.6
2	0.37	11	0.93	1.4	e0.60	2.8	2.8	1.6	4.7	2.1	0.80	1.4
3	0.70	28	0.88	1.5	e0.58	2.3	2.7	1.5	3.6	5.0	6.4	1.1
4	0.37	21	0.92	e1.1	e0.60	6.5	2.4	1.5	3.1	8.5	14	0.76
5	0.32	8.9	1.3	e1.00	e0.64	34	2.3	1.5	2.6	2.8	1.6	0.68
6	0.36	2.5	0.86	e0.96	e0.62	8.1	2.1	1.5	2.3	2.7	1.3	0.69
7	0.35	1.8	0.83	e0.94	e0.62	5.0	2.1	1.9	2.2	3.8	1.1	0.71
8	0.36	1.2	0.91	e0.90	e0.64	3.9	2.0	1.9	2.1	2.6	0.95	0.79
9	0.35	1.0	4.7	e0.92	e0.64	3.3	1.8	8.4	2.4	5.2	1.0	0.79
10	0.46	1.1	38	0.97	e0.66	3.0	1.6	3.2	10	3.6	1.0	0.77
11	0.43	1.0	8.0	1.0	e0.68	e2.6	1.6	2.5	9.6	2.3	1.0	0.83
12	0.87	0.98	3.0	1.0	e0.68	e2.3	1.6	2.4	29	2.6	0.98	0.63
13	0.50	0.92	2.3	0.96	e0.66	2.1	1.6	16	6.8	2.3	1.0	0.69
14	2.2	1.0	2.1	e0.92	e0.62	2.9	1.5	37	21	1.9	0.83	0.74
15	0.57	0.86	2.0	e0.88	e0.60	2.0	1.4	12	7.6	1.6	0.75	1.3
16	0.46	0.85	2.0	e0.96	e0.62	1.9	1.4	4.2	4.0	1.7	0.78	1.4
17	0.55	1.1	1.8	e0.90	e0.64	2.1	2.1	3.4	71	1.2	8.4	0.86
18	0.43	10	1.6	e0.84	e0.68	2.1	1.3	7.1	19	0.77	1.3	0.59
19	0.36	2.7	1.6	e0.78	e0.80	2.0	1.3	3.6	7.0	0.85	0.95	0.47
20	0.42	1.8	1.3	e0.76	2.6	e1.8	4.3	3.1	4.1	0.79	0.85	0.55
21	0.45	1.6	1.3	e0.72	2.3	e1.7	5.5	22	24	9.1	0.86	0.64
22	0.45	1.4	1.3	e0.70	2.0	1.7	2.4	91	12	3.3	0.71	0.61
23	0.60	2.7	1.3	e0.66	4.5	1.7	2.0	36	6.5	1.2	0.75	0.63
24	2.1	1.6	1.1	e0.62	2.2	6.0	2.2	12	15	0.65	2.6	0.72
25	1.3	1.3	1.00	e0.60	1.5	3.2	3.1	5.7	6.4	0.52	2.3	0.53
26	0.53	1.3	0.97	e0.62	1.7	20	2.0	4.4	3.7	0.61	0.87	0.49
27	0.54	1.2	1.1	e0.64	1.8	5.0	2.0	3.8	2.7	0.69	1.7	0.58
28	0.65	1.1	4.0	e0.64	1.8	11	1.9	3.2	3.3	0.66	8.0	0.62
29	0.64	1.1	2.0	e0.64	2.1	11	1.8	4.0	2.2	0.66	5.2	0.62
30	0.62	1.0	1.6	e0.62	---	4.8	2.2	33	2.2	0.89	1.6	0.64
31	0.51	---	1.4	e0.60	---	3.9	---	24	---	0.73	1.3	---
TOTAL	19.18	112.66	93.06	27.05	34.68	164.1	66.3	355.4	299.0	73.32	71.57	25.43
MEAN	0.62	3.76	3.00	0.87	1.20	5.29	2.21	11.5	9.97	2.37	2.31	0.85
MAX	2.2	28	38	1.5	4.5	34	5.5	91	71	9.1	14	3.6
MIN	0.32	0.65	0.83	0.60	0.58	1.7	1.3	1.5	2.1	0.52	0.69	0.47
CFSM	0.14	0.87	0.69	0.20	0.28	1.22	0.51	2.64	2.30	0.54	0.53	0.20
IN.	0.16	0.97	0.80	0.23	0.30	1.41	0.57	3.05	2.56	0.63	0.61	0.22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2004, BY WATER YEAR (WY)

MEAN	2.29	3.48	2.37	1.82	3.61	4.55	4.73	3.96	3.95	2.19	1.59	2.56
MAX	8.38	13.3	6.55	4.62	9.42	10.7	14.4	11.5	9.97	5.39	5.59	10.8
(WY)	(2002)	(1986)	(1985)	(1999)	(2001)	(1986)	(1993)	(2004)	(2004)	(1992)	(1995)	(1986)
MIN	0.30	0.58	0.49	0.45	0.33	1.11	1.17	0.79	0.54	0.44	0.30	0.27
(WY)	(1995)	(1990)	(1990)	(1994)	(1989)	(2003)	(2003)	(1989)	(1988)	(1988)	(1988)	(1987)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1984 - 2004	
ANNUAL TOTAL	628.60		1,341.75			
ANNUAL MEAN	1.72		3.67		3.08	
HIGHEST ANNUAL MEAN					5.74	1993
LOWEST ANNUAL MEAN					1.37	2003
HIGHEST DAILY MEAN	48	Jul 15	91	May 22	113	Feb 19, 1994
LOWEST DAILY MEAN	0.11	Sep 7	0.32	Oct 5	0.03	Sep 14, 1997
ANNUAL SEVEN-DAY MINIMUM	0.20	Sep 5	0.37	Oct 4	0.07	Sep 8, 1997
MAXIMUM PEAK FLOW			179	May 22	210	Apr 19, 1993
MAXIMUM PEAK STAGE			9.63	May 22	10.00	Apr 19, 1993
ANNUAL RUNOFF (CFSM)	0.397		0.845		0.710	
ANNUAL RUNOFF (INCHES)	5.39		11.50		9.65	
10 PERCENT EXCEEDS	2.9		8.0		6.4	
50 PERCENT EXCEEDS	0.86		1.5		1.3	
90 PERCENT EXCEEDS	0.35		0.60		0.41	

(e) Estimated due to ice effect or missing record

054310157 JACKSON CREEK TRIBUTARY NEAR ELKHORN, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1983 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: October 1983 to current year.
DISSOLVED AMMONIA NITROGEN DISCHARGE: February 1993 to September 1995.
TOTAL AMMONIA PLUS ORGANIC NITROGEN DISCHARGE: Water years 1984-85 and February 1993 to September 1995.
DISSOLVED NITRITE PLUS NITRATE DISCHARGE: February 1993 to September 1995.
TOTAL NITRITE PLUS NITRATE DISCHARGE: Water years 1984-85.
TOTAL-PHOSPHORUS DISCHARGE: October 1983 to current year.
DISSOLVED ORTHO-PHOSPHORUS DISCHARGE: February 1993 to September 1995.

INSTRUMENTATION.--Automatic pumping sampler since October 1983.

REMARKS.--Records good.

COOPERATION.--Observer furnished by Delavan Lake Sanitary District.

EXTREMES FOR PERIOD OF RECORD.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 5,520 mg/L, Aug. 7, 1984; minimum observed, 1 mg/L, on several days during 1984, May 12, 1990, and May 11, 1995.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 136 tons, June 17, 1996; minimum daily, 0.00 ton, on several days in 1994, 1995, 1997 and 2000 water years, Aug. 3, 2002, and June 29 to July 2, 2003.
DISSOLVED AMMONIA NITROGEN CONCENTRATIONS: Maximum observed, 1.00 mg/L, Jan. 24, 1994; minimum observed, <0.015 mg/L, on many days in 1995 water year.
DISSOLVED AMMONIA NITROGEN DISCHARGE: Maximum daily, 298 lb, Mar. 23, 1993; minimum daily, 0.02 lb, Jan. 8-11 and July 1-2, 1995.
TOTAL AMMONIA PLUS ORGANIC NITROGEN CONCENTRATIONS: Maximum observed, 16 mg/L, Nov. 19, 1983; minimum observed, 0.10 mg/L, Oct. 12, 1984.
TOTAL AMMONIA PLUS ORGANIC NITROGEN DISCHARGE: Maximum daily, 1,710 lb, Feb. 19, 1994; minimum daily, 0.09 lb, Jan. 9-11, 1995.
DISSOLVED NITRITE PLUS NITRATE CONCENTRATIONS: Maximum observed, 7.6 mg/L, Apr. 28, 1995; minimum observed, 0.30 mg/L, Aug. 7, 1995.
DISSOLVED NITRITE PLUS NITRATE DISCHARGE: Maximum daily, 1,080 lb, June 8, 1993; minimum daily, 0.43 lb, Aug. 6, 1995.
TOTAL NITRITE PLUS NITRATE CONCENTRATIONS: Maximum observed, 6.10 mg/L, Oct. 19, 1984; minimum observed, <0.10 mg/L, Oct. 12 and July 23, 1985.
TOTAL NITRITE PLUS NITRATE DISCHARGE: Maximum daily, 1,489 lb, May 28, 1984; minimum daily, 0.17 lb, July 23, 1985.
TOTAL PHOSPHORUS CONCENTRATIONS: Maximum observed, 8.20 mg/L, Aug. 7, 1984; minimum observed, 0.01 mg/L, Jan. 16, Mar. 14, 1990, and Dec. 27, 1994.
TOTAL PHOSPHORUS DISCHARGE: Maximum daily, 584 lb, Feb. 19, 1994; minimum daily, 0.01 lb, Aug. 2, 1994.
DISSOLVED ORTHO-PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.81 mg/L, Mar. 4, 1993; minimum observed, <0.01 mg/L, on many days during 1995.
DISSOLVED ORTHO-PHOSPHORUS DISCHARGE: Maximum daily, 126 lb, Mar. 23, 1993; minimum daily, 0.00 lb, Aug. 2, 1994, and Jan. 8-11, Aug. 6, 1995.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 3,270 mg/L, May 22; minimum observed, 5 mg/L, July 12, 22.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 100 tons, May 22; minimum daily, 0.01 ton, Aug. 14-16.
TOTAL PHOSPHORUS CONCENTRATIONS: Maximum observed, 4.69 mg/L, May 22; minimum observed, 0.05 mg/L, May 3.
TOTAL PHOSPHORUS DISCHARGE: Maximum daily, 367 lb, May 22; minimum daily, 0.12 lb, Oct. 5.

054310157 JACKSON CREEK TRIBUTARY NEAR ELKHORN, WI—Continued

SUSPENDED SEDIMENT DISCHARGE, TONS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.03	0.05	0.06	0.33	e0.04	0.34	0.17	0.30	0.38	0.05	0.02	e0.29
2	0.05	e1.8	0.05	0.38	e0.04	0.23	0.15	0.29	0.19	0.06	0.03	e0.11
3	0.09	13	0.05	0.41	e0.04	0.15	0.13	0.32	0.14	0.27	2.4	0.03
4	0.05	5.2	0.05	e0.32	e0.04	6.4	0.12	0.31	0.11	0.45	1.0	0.02
5	0.04	0.95	0.07	e0.32	e0.05	6.4	0.11	0.28	0.09	0.04	0.03	0.02
6	0.04	0.14	0.05	e0.28	e0.05	0.16	0.10	0.25	0.08	0.04	0.02	0.02
7	0.04	0.11	0.05	e0.25	e0.05	0.08	0.10	0.30	0.07	e0.31	0.02	0.03
8	0.04	0.08	0.05	e0.25	e0.04	0.06	0.09	0.27	0.06	0.04	0.02	0.03
9	0.04	0.08	1.9	e0.25	e0.05	0.05	0.08	5.5	0.07	0.16	0.02	0.03
10	0.05	0.09	5.7	0.20	e0.06	0.05	0.08	0.13	1.3	0.08	0.02	0.03
11	0.04	0.10	0.22	0.20	e0.06	e0.04	0.07	0.09	0.30	0.04	0.02	0.04
12	e0.15	0.11	0.10	0.19	e0.05	e0.04	0.07	0.07	10	0.04	0.02	0.03
13	e0.08	0.11	0.10	0.17	e0.06	0.03	0.07	10	0.17	0.03	0.02	0.04
14	e0.37	0.14	0.13	e0.17	e0.06	0.04	0.07	5.0	7.6	0.03	0.01	0.04
15	0.06	0.13	0.16	e0.14	e0.05	0.03	0.06	0.40	0.72	0.02	0.01	e0.11
16	0.05	0.14	0.22	e0.14	e0.06	0.03	0.06	0.44	0.28	0.02	0.01	e0.11
17	0.05	0.21	0.25	e0.14	e0.06	0.03	e0.44	0.32	31	0.02	e0.69	0.06
18	0.04	1.7	0.30	e0.11	e0.07	0.03	0.06	0.70	0.90	0.01	0.05	0.04
19	0.03	0.17	0.28	e0.10	e0.08	0.03	0.05	0.11	0.61	0.01	0.04	0.04
20	0.04	0.12	0.19	e0.09	0.22	e0.03	1.2	0.09	0.35	0.01	0.03	0.05
21	0.04	0.10	0.17	e0.09	0.19	e0.02	0.27	13	2.9	1.6	0.03	0.05
22	0.04	0.09	0.15	e0.08	0.18	0.02	0.07	100	0.44	0.06	0.02	0.05
23	0.05	0.17	0.13	e0.08	0.40	0.02	0.06	6.3	1.1	0.02	0.02	0.05
24	e0.35	0.10	0.10	e0.06	0.20	1.6	0.09	0.62	1.8	0.01	e0.21	0.05
25	e0.22	0.08	0.08	e0.05	0.14	0.16	0.21	0.51	0.16	0.00	e0.19	0.04
26	0.05	0.08	0.06	e0.06	0.16	5.0	0.10	0.41	0.09	0.01	0.02	0.03
27	0.05	0.07	0.06	e0.06	0.18	0.26	0.12	0.34	0.07	0.02	0.05	0.04
28	0.06	0.07	e0.67	e0.05	0.18	3.1	0.15	0.27	0.08	0.02	0.76	0.04
29	0.05	0.07	e0.34	e0.05	0.21	0.54	0.17	0.33	0.06	0.02	0.17	0.04
30	0.05	0.06	0.39	e0.05	---	0.26	0.27	11	0.06	0.03	0.04	0.04
31	0.04	---	0.36	e0.04	---	0.20	---	1.5	---	0.02	0.03	---
TOTAL	2.38	25.32	12.49	5.11	3.07	25.43	4.79	159.45	61.18	3.54	6.02	1.60

WTR YR 2004 TOTAL 310.38

e Estimated

054310157 JACKSON CREEK TRIBUTARY NEAR ELKHORN, WI—Continued

PHOSPHORUS, WATER, UNFILTERED, POUNDS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.14	0.25	0.31	0.70	e0.20	2.18	1.48	0.60	5.09	0.65	0.34	e3.30
2	0.14	23.3	0.30	0.83	e0.20	1.68	1.24	0.44	2.33	0.64	0.38	e1.30
3	0.26	60.7	0.29	0.91	e0.19	1.30	1.13	0.40	1.65	3.78	13.4	0.62
4	0.14	29.5	0.30	e0.68	e0.21	22.0	0.99	0.41	1.33	5.93	14.3	0.43
5	0.12	8.09	0.42	e0.64	e0.23	44.0	0.91	0.40	1.05	1.32	0.91	0.38
6	0.14	1.76	0.28	e0.60	e0.22	3.29	0.84	0.39	0.86	1.10	0.64	0.38
7	0.13	1.19	0.27	e0.58	e0.23	1.87	0.81	e4.50	0.74	e3.40	0.51	0.38
8	0.14	0.73	0.29	e0.54	e0.24	1.46	0.73	e4.00	0.66	0.81	0.43	0.43
9	0.13	0.58	9.21	e0.53	e0.25	1.23	0.65	22.1	e4.60	3.37	0.44	0.44
10	0.17	0.56	52.5	0.56	e0.26	1.09	0.58	e7.50	10.8	2.20	0.42	0.44
11	e0.69	0.52	5.09	0.57	e0.28	e0.94	0.54	1.57	5.54	1.24	0.39	0.48
12	e1.40	0.45	1.65	0.57	e0.28	e0.82	0.53	1.36	50.4	1.24	0.35	0.37
13	e0.80	0.39	1.16	0.51	e0.28	0.75	0.52	42.5	2.83	1.05	0.34	0.41
14	e3.50	0.41	0.98	e0.48	e0.27	1.04	0.48	43.7	39.2	0.81	0.26	0.44
15	0.22	0.32	0.84	e0.44	e0.27	0.68	0.44	8.68	4.53	0.62	0.22	e1.20
16	0.17	0.30	0.79	e0.47	e0.28	0.65	0.43	1.77	1.72	0.65	0.22	e1.30
17	0.21	0.42	0.63	e0.43	e0.30	0.73	e4.90	1.06	163	0.43	9.03	0.51
18	0.16	12.5	0.54	e0.39	e0.33	0.73	0.38	7.67	12.5	0.25	0.74	0.35
19	0.14	1.28	0.53	e0.36	e0.39	0.68	0.37	2.49	3.70	0.26	0.48	0.28
20	0.16	0.77	0.44	e0.34	e4.20	e0.60	6.55	1.90	1.82	0.23	0.40	0.33
21	0.17	0.65	0.47	e0.31	e3.70	e0.56	3.37	60.8	26.6	14.1	0.37	0.38
22	0.17	0.57	0.49	e0.30	e3.20	0.56	0.87	367	7.33	2.55	0.29	0.36
23	0.23	e4.30	0.51	e0.27	e7.20	0.55	0.63	43.3	5.45	0.84	0.28	0.38
24	e3.40	0.62	0.45	e0.25	e3.50	8.30	0.81	8.50	14.7	0.43	e2.40	0.43
25	e2.10	0.50	0.42	e0.24	0.89	1.22	1.87	2.80	3.30	0.33	e2.10	0.32
26	0.20	0.47	0.43	e0.24	0.99	27.1	0.78	1.89	1.75	0.37	0.26	0.29
27	0.20	0.42	0.51	e0.24	1.10	1.86	0.71	1.44	1.19	0.41	e0.80	0.34
28	0.24	0.38	e6.40	e0.23	1.11	15.4	0.66	1.07	e6.30	0.38	7.42	0.36
29	0.24	0.38	e3.20	e0.23	1.32	6.23	0.58	e9.40	0.85	0.37	3.66	0.35
30	0.23	0.33	0.81	e0.22	---	2.27	0.68	61.8	0.76	0.47	0.99	0.35
31	0.19	---	0.76	e0.20	---	1.77	---	19.6	---	0.38	0.78	---
TOTAL	16.33	152.64	91.27	13.86	32.12	153.54	35.46	731.04	382.58	50.61	63.55	17.33

WTR YR 2004 TOTAL 1,740.33

e Estimated

054310157 JACKSON CREEK TRIBUTARY NEAR ELKHORN, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Discharge, cfs (00060)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)
OCT						
01...	1215	--	.35	70	.07	54
06...	1330	--	.45	10	.07	41
NOV						
02...	0800	--	5.6	50	.75	261
03...	0750	--	6.9	10	.15	60
03...	1245	--	15	50	.38	142
03...	1515	--	47	50	.90	548
03...	1545	--	64	50	.69	457
03...	1815	--	59	50	.35	139
03...	2245	--	39	50	.23	46
04...	0315	--	21	50	.21	41
04...	1001	--	14	10	.17	24
04...	1645	--	15	50	.39	274
04...	1800	--	36	50	.47	324
04...	1830	--	45	50	.39	196
04...	2045	--	40	50	.27	97
05...	0115	--	21	50	.21	77
05...	0830	--	9.7	10	.14	18
17...	1300	--	.94	70	.06	70
18...	0145	--	12	50	.36	87
18...	0400	--	7.5	50	.22	--
18...	0750	--	4.7	10	.16	26
18...	0945	--	14	50	.49	239
18...	1030	--	20	50	.34	176
18...	1245	--	19	50	.20	37
18...	1715	--	10	50	.17	20
19...	0810	--	2.7	10	.08	24
DEC						
01...	0845	--	.94	10	.06	112
09...	2030	--	13	50	.70	359
09...	2115	--	19	50	.51	214
10...	0315	--	35	50	.30	113
10...	0630	--	52	50	.32	86
10...	0750	--	62	10	.20	39
10...	0800	--	62	50	.30	123
10...	1015	--	58	50	.27	55
10...	1445	--	42	50	.20	29
10...	1915	--	26	50	--	21
11...	0200	--	15	50	.13	11
11...	0935	--	8.0	10	.11	9
18...	1510	--	1.6	70	.06	73
28...	0630	--	8.9	50	--	87
JAN						
05...	1115	1.0	--	10	.12	104
FEB						
02...	0830	.60	--	10	.06	20

054310157 JACKSON CREEK TRIBUTARY NEAR ELKHORN, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)
MAR					
01...	0735	3.0	10	.12	39
04...	2015	10	50	.55	334
04...	2215	26	50	1.32	799
04...	2245	36	50	1.01	598
04...	2330	47	50	.73	462
05...	0145	52	50	.31	120
05...	0615	55	50	.26	77
05...	1045	35	50	.20	29
05...	1730	21	50	.13	12
06...	0015	14	50	.10	8
06...	0910	8.3	10	.06	9
06...	0915	8.3	50	.07	6
24...	0800	15	50	1.00	604
24...	1015	15	50	.20	67
24...	1230	8.9	50	.13	22
25...	0745	3.0	10	.06	14
26...	0030	16	50	.42	262
26...	0215	22	50	.29	118
26...	0315	31	50	.41	260
26...	0400	42	50	.47	309
26...	0615	36	50	.26	85
26...	1045	22	50	.17	17
26...	1730	12	50	.14	9
27...	0915	5.1	10	.06	22
28...	1730	11	50	.31	143
28...	1800	21	50	.55	364
28...	1830	30	50	.42	218
28...	1900	41	50	.48	256
28...	2115	33	50	.23	59
29...	0145	19	50	.14	16
29...	0850	11	10	.09	20
APR					
20...	1900	10	50	.47	146
20...	2045	17	50	.48	260
20...	2300	11	50	.20	36
21...	0115	8.8	50	.14	33
21...	0330	11	50	.16	30
21...	0545	8.2	50	.11	12
25...	0015	6.3	50	.18	52

054310157 JACKSON CREEK TRIBUTARY NEAR ELKHORN, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)
MAY					
03...	0800	1.4	10	.05	83
09...	0345	20	50	2.98	2,140
09...	0400	28	50	1.58	982
09...	0445	40	50	1.01	576
09...	0600	24	50	.31	114
09...	1030	7.9	50	.14	19
13...	0130	9.2	50	.54	228
13...	0345	9.8	50	.18	43
13...	0600	6.0	50	.11	18
13...	1700	56	50	1.05	723
13...	1730	72	50	1.70	1,030
13...	1845	52	50	.37	142
13...	2215	23	50	.20	46
14...	0500	9.8	50	.12	23
14...	0715	21	50	.25	122
14...	0745	35	50	.29	153
14...	0945	61	50	.23	64
14...	1100	75	50	.24	76
14...	1315	69	50	.21	48
14...	1730	40	50	.23	26
15...	0230	21	50	.18	12
15...	0830	13	10	.12	14
15...	1600	7.0	50	.10	9
16...	0830	4.4	10	.08	47
18...	0115	7.9	50	.33	95
18...	0215	15	50	.42	138
18...	0430	14	50	.18	29
18...	0900	6.5	50	.15	12
21...	1000	41	50	1.40	942
21...	1015	63	50	1.25	758
21...	1045	86	50	1.58	910
21...	1201	67	50	.40	124
21...	1202	66	10	.40	135
21...	1545	29	50	.28	56
21...	2230	20	50	.23	38
22...	0030	31	50	.24	74
22...	0045	109	50	1.63	1,430
22...	0100	141	50	4.69	3,270
22...	0130	163	50	3.05	2,310
22...	0230	178	50	.86	575
22...	0445	150	50	.79	386
22...	0815	113	50	.40	116
22...	1500	67	50	.35	97
23...	0430	34	50	.16	25
23...	0715	50	50	.62	383
23...	0930	52	50	.23	68
23...	1615	33	50	.18	42
24...	0330	18	50	.14	18
24...	0805	14	10	--	15
25...	0825	6.2	10	.09	35
30...	1100	22	50	.92	587
30...	1115	36	50	.65	401
30...	1145	63	50	.77	435
30...	1200	90	50	.70	462
30...	1230	105	50	.72	408
30...	1430	77	50	.28	61
30...	1830	40	50	.21	34
30...	2300	46	50	.19	30
31...	0545	29	50	.15	18
31...	1700	17	50	.11	14
31...	1915	21	50	.23	88
31...	2345	17	50	.12	16

054310157 JACKSON CREEK TRIBUTARY NEAR ELKHORN, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)
JUN					
10...	1130	17	50	.41	144
10...	1215	27	50	.38	147
10...	1645	14	50	.15	18
11...	0115	22	50	.14	26
11...	0545	12	50	.11	8
12...	0245	31	50	1.07	686
12...	0330	75	50	.73	413
12...	0715	46	50	.24	58
12...	2300	12	50	.09	19
13...	0820	7.4	10	.08	8
14...	1100	21	50	.64	425
14...	1115	45	50	.69	442
14...	1200	78	50	.61	329
14...	1730	26	50	.21	28
15...	0830	8.4	10	.10	39
17...	0530	26	50	.61	284
17...	0600	74	50	.67	439
17...	0645	132	50	.85	511
17...	0815	173	50	.58	312
17...	1145	120	50	.38	88
17...	2015	46	50	.20	16
18...	0740	23	10	.11	15
19...	0915	7.4	10	.10	35
21...	1145	22	50	.33	101
21...	1300	48	50	.28	87
21...	1345	61	50	.24	65
21...	1815	47	50	.20	31
22...	0100	22	50	.14	14
22...	0840	13	10	.10	--
23...	2315	30	50	.47	331
24...	0001	43	50	.46	230
24...	0215	25	50	.21	45
24...	0900	11	10	--	32
24...	1115	9.4	50	.13	16
24...	1330	14	50	.12	12
24...	2230	8.8	50	.10	9
JUL					
03...	1900	15	50	.13	30
03...	2115	17	50	.20	26
03...	2330	8.8	50	.12	13
04...	0215	10	50	.12	9
04...	0245	20	50	.20	63
04...	0500	18	50	.15	27
04...	1145	6.8	50	.10	6
09...	1530	15	50	.19	22
09...	2000	7.7	50	.12	9
12...	0825	2.6	10	.09	5
21...	1445	27	50	.49	227
21...	1515	37	50	.42	138
21...	1930	16	50	.21	18
22...	0740	3.7	10	.13	5
AUG					
02...	0830	.74	10	.09	14
03...	2200	36	50	.90	522
03...	2215	51	50	.59	260
03...	2245	65	50	.42	144
04...	0100	48	50	.23	--
04...	0430	20	50	.18	14
04...	0840	12	10	.17	7
17...	0545	24	50	.34	--
17...	0800	24	50	.21	26
17...	1000	13	50	.16	15
28...	0545	14	50	.16	27
28...	2115	22	50	.29	83
28...	2330	16	50	.15	19
29...	0850	5.8	10	.12	9
SEP					
07...	0745	.67	10	.10	--
13...	1315	.74	10	.11	19
20...	1000	.54	10	--	31
27...	1320	.67	10	.11	--

05431016 JACKSON CREEK AT MOUND ROAD NEAR ELKHORN, WI

LOCATION.--Lat 42°38'27", long 88°33'39", in SE ¼ SE ¼ sec.11, T.2 N., R.16 E., Walworth County, Hydrologic Unit 07090001, on left bank at bridge on Mound Road, 2.3 mi south of Elkhorn.

DRAINAGE AREA.--16.8 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1993 to current year.

GAGE.--Water-stage recorder. Datum of gage is 920.00 ft above NGVD of 1929 (Wisconsin Department of Transportation benchmark).

REMARKS.--Records fair except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.65	1.2	3.5	5.6	e0.86	11	19	7.3	62	7.4	1.5	2.8
2	0.62	e16	3.3	5.4	e0.84	13	15	6.3	35	6.3	1.4	2.8
3	0.63	e80	3.0	5.7	e0.84	11	13	6.0	23	6.0	1.3	2.6
4	0.82	e60	2.9	5.7	e0.82	11	11	5.6	18	9.4	4.9	2.2
5	0.83	e35	3.2	5.1	e0.80	84	9.8	5.5	14	8.2	4.1	1.7
6	0.75	14	3.2	e4.8	e0.80	53	8.9	5.3	12	6.4	2.8	1.4
7	0.68	9.4	3.0	e4.4	e0.76	30	8.4	5.0	10	6.6	2.4	1.3
8	0.66	7.5	2.9	e4.1	e0.76	21	7.7	5.5	8.3	6.3	2.0	1.2
9	0.66	6.3	3.4	e3.8	e0.76	16	6.8	16	7.8	5.6	1.7	1.2
10	0.69	5.7	68	e3.6	e0.76	13	6.1	14	12	6.0	1.4	1.2
11	0.72	5.5	53	e3.6	e0.74	e12	5.7	12	29	5.1	1.2	1.2
12	0.81	4.5	24	e3.4	e0.74	e9.4	5.5	9.3	59	4.8	1.2	1.0
13	0.92	4.2	14	e3.2	e0.74	8.4	5.4	26	43	4.6	1.2	0.79
14	1.3	4.0	12	e3.0	e0.72	9.3	5.1	116	35	4.1	1.2	0.72
15	2.0	3.5	10	e2.6	e0.70	8.2	4.8	107	33	3.6	1.2	0.73
16	1.6	3.1	9.5	e2.5	e0.70	7.5	4.6	47	20	3.2	1.0	1.3
17	1.3	2.8	8.5	e2.5	e0.74	7.2	5.6	30	105	3.2	1.0	1.2
18	1.2	13	7.2	e2.2	e0.80	7.3	5.0	37	86	3.1	2.0	1.1
19	1.1	12	6.5	e2.0	e0.90	7.2	4.2	30	34	2.8	1.5	0.97
20	0.96	7.2	5.9	e1.8	e3.0	e7.0	5.4	23	22	2.5	1.4	0.83
21	0.84	6.0	5.4	e1.7	5.0	e6.8	18	28	31	3.2	1.5	0.83
22	0.84	5.3	5.5	e1.4	4.6	6.5	12	267	50	5.2	1.6	0.79
23	0.87	5.9	5.4	e1.3	12	6.2	9.1	163	26	3.5	1.9	0.67
24	0.99	5.8	5.0	e1.2	13	12	8.1	90	29	2.8	2.3	0.65
25	2.6	e5.4	4.7	e1.2	6.1	15	11	47	23	2.3	2.7	0.65
26	2.1	4.9	4.3	e1.1	5.6	49	10	32	17	2.0	3.2	0.71
27	1.4	4.4	4.2	e1.1	5.8	40	8.3	24	13	2.0	3.5	0.72
28	1.3	4.0	9.0	e1.0	5.9	30	6.9	18	12	1.9	5.4	0.72
29	1.4	3.6	8.0	e1.0	7.1	56	6.6	16	10	1.8	7.0	0.65
30	1.5	3.6	e7.0	e0.90	---	34	6.2	49	8.6	1.8	4.3	0.65
31	1.3	---	6.2	e0.90	---	24	---	119	---	1.8	3.2	---
TOTAL	34.04	343.8	311.7	87.80	82.88	626.0	253.2	1,366.8	887.7	133.5	73.0	35.28
MEAN	1.10	11.5	10.1	2.83	2.86	20.2	8.44	44.1	29.6	4.31	2.35	1.18
MAX	2.6	80	68	5.7	13	84	19	267	105	9.4	7.0	2.8
MIN	0.62	1.2	2.9	0.90	0.70	6.2	4.2	5.0	7.8	1.8	1.0	0.65
CFSM	0.07	0.68	0.60	0.17	0.17	1.20	0.50	2.62	1.76	0.26	0.14	0.07
IN.	0.08	0.76	0.69	0.19	0.18	1.39	0.56	3.03	1.97	0.30	0.16	0.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2004, BY WATER YEAR (WY)

MEAN	5.93	7.95	5.48	6.72	16.5	16.0	21.8	17.3	26.4	6.72	4.45	4.85
MAX	22.4	22.4	10.5	21.6	53.5	48.2	77.4	44.1	66.2	22.6	23.8	14.7
(WY)	(2002)	(1996)	(1996)	(1999)	(2001)	(1993)	(1993)	(2004)	(1996)	(1993)	(1995)	(2001)
MIN	1.10	1.41	2.05	1.13	0.88	2.75	3.23	4.18	3.78	1.23	0.82	0.82
(WY)	(2004)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(1994)	(1994)	(2002)	(1999)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1993 - 2004	
ANNUAL TOTAL	1,858.29		4,235.70			
ANNUAL MEAN	5.09		11.6		10.8	
HIGHEST ANNUAL MEAN					15.8	1996
LOWEST ANNUAL MEAN					3.77	2003
HIGHEST DAILY MEAN	103	Jul 15	267	May 22	578	Apr 20, 1993
LOWEST DAILY MEAN	0.34	Sep 12	0.62	Oct 2	0.28	Sep 26, 1999
ANNUAL SEVEN-DAY MINIMUM	0.47	Sep 6	0.68	Sep 24	0.35	Sep 4, 1997
MAXIMUM PEAK FLOW			440	May 22	1,190	Apr 20, 1993
MAXIMUM PEAK STAGE			10.43	May 22	11.60	Apr 20, 1993
ANNUAL RUNOFF (CFSM)	0.303		0.689		0.645	
ANNUAL RUNOFF (INCHES)	4.11		9.38		8.76	
10 PERCENT EXCEEDS	10		30		23	
50 PERCENT EXCEEDS	2.4		4.9		4.4	
90 PERCENT EXCEEDS	0.72		0.82		0.90	

(e) Estimated due to ice effect or missing record

05431016 JACKSON CREEK AT MOUND ROAD NEAR ELKHORN, WI--CONTINUED

PRECIPITATION QUANTITY

PERIOD OF RECORD.--June 1999 to current year (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Rain gage covered Dec. 11, 2003 to Mar. 8, 2004.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 2.65 in., June 13, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 1.54 in., May 22, 30, but may have been greater during period of no record, July 1 to Aug. 23.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.26	0.00	---	---	---	0.00	0.01	0.00	---	---	0.08
2	0.00	1.37	0.00	---	---	---	0.00	0.00	0.00	---	---	0.00
3	0.13	1.51	0.00	---	---	---	0.00	0.00	0.00	---	---	0.00
4	0.00	0.67	0.04	---	---	---	0.00	0.00	0.00	---	---	0.00
5	0.00	0.00	0.07	---	---	---	0.00	0.00	0.00	---	---	0.00
6	0.00	0.00	0.00	---	---	---	0.01	0.00	0.00	---	---	0.02
7	0.00	0.00	0.00	---	---	---	0.00	0.28	0.00	---	---	0.00
8	0.00	0.00	0.00	---	---	---	0.00	0.02	0.00	---	---	0.00
9	0.00	0.00	0.84	---	---	0.00	0.00	0.78	0.20	---	---	0.00
10	0.00	0.01	1.12	---	---	0.00	0.00	0.18	1.13	---	---	0.00
11	0.18	0.00	---	---	---	0.00	0.00	0.01	0.15	---	---	0.00
12	0.00	0.01	---	---	---	0.00	0.00	0.37	0.60	---	---	0.00
13	0.01	0.00	---	---	---	0.09	0.00	1.12	0.00	---	---	0.00
14	0.47	0.00	---	---	---	0.07	0.00	0.90	0.63	---	---	0.00
15	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	---	---	0.16
16	0.00	0.00	---	---	---	0.00	0.00	0.00	0.04	---	---	0.00
17	0.00	0.40	---	---	---	0.05	0.26	0.10	1.41	---	---	0.00
18	0.00	0.51	---	---	---	0.06	0.00	0.43	0.00	---	---	0.00
19	0.00	0.00	---	---	---	0.07	0.00	0.00	0.00	---	---	0.00
20	0.00	0.00	---	---	---	0.00	0.58	0.00	0.00	---	---	0.00
21	0.00	0.00	---	---	---	0.00	0.22	1.02	0.85	---	---	0.00
22	0.00	0.11	---	---	---	0.00	0.00	1.54	0.00	---	---	0.00
23	0.00	0.18	---	---	---	0.00	0.00	0.24	0.25	---	---	0.00
24	0.48	0.00	---	---	---	0.59	0.27	0.00	0.14	---	0.00	0.00
25	0.00	0.00	---	---	---	0.34	0.04	0.03	0.00	---	0.00	0.00
26	0.00	0.00	---	---	---	0.50	0.00	0.00	0.00	---	0.01	0.00
27	0.00	0.03	---	---	---	0.01	0.00	0.00	0.07	---	0.17	0.00
28	0.08	0.00	---	---	---	0.74	0.00	0.00	0.00	---	0.76	0.00
29	0.09	0.00	---	---	---	0.00	0.00	0.33	0.00	---	0.00	0.00
30	0.00	0.00	---	---	---	0.08	0.22	1.54	0.00	---	0.00	0.00
31	0.00	---	---	---	---	0.00	---	0.24	---	---	0.00	---
TOTAL	1.44	5.06	---	---	---	---	1.60	9.14	5.47	---	---	0.26

05431016 JACKSON CREEK AT MOUND ROAD NEAR ELKHORN, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1983 to September 1985, February 1993 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: October 1999 to current year.
SUSPENDED-SEDIMENT DISCHARGE: February 1993 to current year.
DISSOLVED AMMONIA NITROGEN DISCHARGE: February 1993 to September 1995.
TOTAL AMMONIA PLUS ORGANIC NITROGEN DISCHARGE: February 1993 to September 1995.
DISSOLVED NITRITE PLUS NITRATE DISCHARGE: February 1993 to September 1995.
TOTAL PHOSPHORUS DISCHARGE: February 1993 to current year.
DISSOLVED ORTHO-PHOSPHORUS DISCHARGE: February 1993 to current year.

INSTRUMENTATION.--Automatic pumping sampler since February 1993. Continuous water temperature recorder since October 1999.

REMARKS.--Records good. Records represent water temperature at sensor within 0.5°C.

COOPERATION.--Observer furnished by Delavan Lake Sanitary District.

EXTREMES OUTSIDE PERIOD OF DAILY RECORD.--
TOTAL AMMONIA PLUS ORGANIC NITROGEN CONCENTRATIONS: Maximum observed, 2.1 mg/L, July 10, 1985; minimum observed, 0.30 mg/L, Jan. 24, 1985.
TOTAL PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.55 mg/L, July 10, 1985; minimum observed, 0.03 mg/L, Apr. 2, 1985.
DISSOLVED ORTHO-PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.20 mg/L, Nov. 20, 1984 and May 22, 1985; minimum observed, <0.01 mg/L, July 10, 23, 1985.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 35.0°C, July 24, 2001 and July 4, 2002; minimum, 0.0°C on many days.
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 1,420 mg/L, June 17, 1996; minimum observed, 2 mg/L, Sept. 16, 1993, July 25, 1995, July 18, 1996, and June 4, 2000.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 1,030 tons, June 17, 1996; minimum daily, 0.01 ton, Aug. 25-28 and Sept. 11, 1993, July 19, 22, 1995, and many days in 1994, 1996, 1997, 1998, 1999, and 2004 water years.
DISSOLVED AMMONIA NITROGEN CONCENTRATIONS: Maximum observed, 1.70 mg/L, Mar. 5, 1993; minimum observed, 0.01 mg/L, Aug. 1, 29, and Sept. 25, 1994.
DISSOLVED AMMONIA NITROGEN DISCHARGE: Maximum daily, 1,410 lb, Feb. 20, 1994; minimum daily, 0.07 lb, July 31, 1995.
TOTAL AMMONIA PLUS ORGANIC NITROGEN CONCENTRATIONS: Maximum observed, 4.6 mg/L, Mar. 5, 1993; minimum observed,0.40 mg/L, Oct. 6 and Dec. 15, 1993, and Jan. 14, Mar. 28-29, 1995.
TOTAL AMMONIA PLUS ORGANIC NITROGEN DISCHARGE: Maximum daily, 4,900 lb, Apr. 20, 1993; minimum daily, 1.5 lb, June 19, 1994.
DISSOLVED NITRITE PLUS NITRATE CONCENTRATIONS: Maximum observed, 13.0 mg/L, Apr. 30, 1995; minimum observed, <0.05 mg/L, Sept. 2, 1993, and many days in 1994 and 1995 water years.
DISSOLVED NITRITE PLUS NITRATE DISCHARGE: Maximum daily, 5,310 lb, Apr. 20, 1993; minimum daily, 0.16 lb, July 19, 1995.
TOTAL PHOSPHORUS CONCENTRATIONS: Maximum observed, 1.6 mg/L, June 17, 1996; minimum observed, <0.01 mg/L, Mar. 19, 1997.
TOTAL PHOSPHORUS DISCHARGE: Maximum daily, 2,630 lb, Apr. 20, 1993; minimum daily, 0.13 lb, Feb. 6-7, 2000.
DISSOLVED ORTHO-PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.63 mg/L, Feb. 19, 1997; minimum observed, 0.009 mg/L, June 2, 2001.
DISSOLVED ORTHO-PHOSPHORUS DISCHARGE: Maximum daily, 700 lb, Feb. 9, 2001; minimum daily, 0.03 lb, Sept. 15-19, 23, 26, 1999 and Sept. 15-18, 2002.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 29.5°C, Sept. 2; minimum, 0.0°C on many days.
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 262 mg/L, May 22; minimum observed, 1 mg/L, Mar. 8.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 113 tons, May 22; minimum daily, 0.01 ton, many days.
TOTAL PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.69 mg/L, May 22; minimum observed, 0.04 mg/L, Dec. 1, Jan. 28.
TOTAL PHOSPHORUS DISCHARGE: Maximum daily, 625 lb, May 22; minimum daily, 0.15 lb, Feb. 14-16.
DISSOLVED ORTHO-PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.26 mg/L, Nov. 4; minimum observed, 0.01 mg/L, many days.
DISSOLVED ORTHO-PHOSPHORUS DISCHARGE: Maximum daily, 253 lb, May 22; minimum daily, 0.04 lb, Oct. 1-3, Sept. 13-15, 30.

05431016 JACKSON CREEK AT MOUND ROAD NEAR ELKHORN, WI—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	11.5	6.5	9.0	12.0	9.0	10.0	2.5	0.5	2.0	2.0	1.0	1.5
2	11.0	5.0	8.0	10.5	8.5	9.5	3.5	2.0	3.0	4.0	1.0	2.0
3	9.5	6.5	8.0	9.5	8.0	9.0	4.5	3.0	3.5	4.0	1.0	2.5
4	13.0	6.0	9.5	12.5	8.0	10.0	4.0	3.0	3.5	1.0	0.5	0.5
5	15.5	7.5	11.0	11.0	7.0	8.5	4.5	3.0	3.5	1.0	0.5	0.5
6	17.0	9.0	12.5	9.0	4.0	6.5	4.0	3.0	3.5	2.0	0.5	1.0
7	18.5	11.0	14.5	6.5	1.5	3.5	4.5	3.0	3.5	1.0	0.5	1.0
8	20.5	14.0	17.0	5.5	1.5	3.5	3.5	3.0	3.5	1.0	0.5	0.5
9	18.5	15.5	17.0	5.5	3.0	4.5	4.5	3.0	3.5	1.0	0.5	1.0
10	22.0	14.5	18.0	6.0	3.5	4.5	5.0	2.5	4.0	1.0	0.0	0.5
11	20.5	16.0	18.5	9.5	5.0	7.5	2.5	1.0	1.0	1.0	0.0	0.5
12	18.0	13.0	16.0	11.5	3.5	8.0	2.0	1.0	1.5	1.0	0.5	0.5
13	17.0	11.5	15.0	4.0	0.0	2.0	2.0	1.0	1.5	1.0	0.5	1.0
14	16.5	10.5	13.0	5.5	3.0	4.5	2.5	1.0	1.5	1.0	0.5	0.5
15	13.0	7.0	10.5	6.0	5.0	5.5	2.0	1.0	1.5	1.0	0.5	0.5
16	12.0	7.5	9.5	7.5	6.0	6.5	1.5	0.0	1.0	1.0	0.5	1.0
17	11.0	5.0	8.0	10.0	6.0	8.0	1.0	0.0	0.5	0.5	0.5	0.5
18	14.5	8.0	11.0	12.0	10.0	11.0	1.5	0.5	1.0	1.0	0.0	0.5
19	17.0	11.0	13.5	11.0	8.0	9.5	2.0	0.5	1.0	1.0	0.0	0.5
20	18.0	12.0	15.0	11.0	6.5	8.5	2.0	1.0	1.0	0.5	0.0	0.5
21	16.5	12.5	14.0	9.5	6.5	8.0	2.0	1.0	1.5	0.5	0.0	0.0
22	13.5	8.5	11.5	7.5	6.0	6.5	2.5	1.0	2.0	1.0	0.0	0.5
23	12.0	9.5	11.0	12.0	7.5	9.5	2.0	1.5	2.0	0.0	0.0	0.0
24	10.5	6.5	9.0	7.5	2.0	3.5	2.0	1.0	1.5	0.0	0.0	0.0
25	14.5	9.5	11.5	3.5	2.0	3.0	2.0	1.0	1.5	0.0	0.0	0.0
26	11.5	6.5	7.5	4.5	3.5	4.0	1.5	1.0	1.0	0.0	0.0	0.0
27	7.5	5.5	6.5	5.0	4.0	4.5	1.5	1.0	1.5	0.0	0.0	0.0
28	8.5	5.5	6.5	4.5	2.0	3.0	2.5	0.5	1.5	1.0	0.0	0.5
29	8.0	4.5	6.0	3.5	2.0	3.0	3.0	1.5	2.0	1.0	0.5	0.5
30	14.5	6.0	10.0	4.5	2.5	3.0	2.5	0.5	1.5	0.5	0.0	0.5
31	15.0	12.0	14.0	---	---	---	2.5	0.5	1.5	0.5	0.5	0.5
MONTH	22.0	4.5	11.7	12.5	0.0	6.3	5.0	0.0	2.0	4.0	0.0	0.6
		FEBRUARY			MARCH			APRIL			MAY	
1	0.5	0.5	0.5	4.5	3.5	4.0	9.0	6.0	7.0	14.5	13.0	13.5
2	0.5	0.5	0.5	4.0	3.0	3.5	10.0	7.0	8.0	15.0	12.0	13.0
3	0.5	0.5	0.5	3.5	3.0	3.5	9.0	7.0	8.0	16.5	11.5	13.5
4	0.5	0.5	0.5	4.0	3.5	3.5	9.0	5.5	7.0	18.0	13.0	15.0
5	0.5	0.5	0.5	3.5	3.0	3.0	10.0	6.5	8.0	19.0	14.5	16.5
6	0.5	0.5	0.5	3.0	2.5	2.5	11.5	7.5	9.0	19.0	16.0	17.5
7	0.5	0.5	0.5	3.0	2.5	3.0	13.5	9.0	10.5	19.0	15.5	17.0
8	0.5	0.5	0.5	3.0	2.0	2.5	13.0	9.5	10.5	19.0	14.5	16.0
9	0.5	0.5	0.5	4.0	2.5	3.5	12.0	8.0	10.0	21.0	18.0	19.0
10	0.5	0.5	0.5	5.0	3.0	4.0	11.5	9.0	10.0	21.0	19.5	20.5
11	0.5	0.5	0.5	5.0	2.0	3.5	10.5	7.5	8.0	21.0	19.0	20.0
12	0.5	0.5	0.5	3.0	1.5	2.5	8.0	5.5	7.0	22.5	20.0	21.0
13	0.5	0.5	0.5	3.0	2.5	3.0	10.5	5.0	7.0	22.5	21.5	22.0
14	0.5	0.5	0.5	3.0	2.5	2.5	14.0	6.5	9.5	21.5	19.0	20.5
15	0.5	0.5	0.5	3.0	1.5	2.5	14.0	9.5	12.0	19.0	17.0	18.0
16	0.5	0.5	0.5	3.0	2.0	2.5	16.5	11.5	13.5	18.5	17.0	18.0
17	0.5	0.0	0.5	3.5	2.5	3.0	19.5	14.0	16.5	20.0	18.0	18.5
18	0.5	0.0	0.5	3.0	2.5	3.0	18.0	14.5	16.5	20.0	18.5	19.5
19	0.5	0.0	0.5	6.0	2.5	3.5	17.5	15.0	16.0	18.5	17.0	18.0
20	0.5	0.5	0.5	8.0	5.0	6.0	15.0	12.0	12.5	20.5	18.5	19.0
21	0.5	0.5	0.5	6.0	3.5	4.5	13.0	12.0	12.5	20.5	18.5	19.5
22	0.5	0.5	0.5	6.0	4.0	4.5	12.5	11.0	12.0	19.0	18.0	18.5
23	0.5	0.5	0.5	7.5	4.0	5.5	15.0	10.0	12.0	19.5	18.5	19.0
24	0.5	0.5	0.5	8.0	6.5	7.0	14.5	11.5	12.5	19.5	18.5	19.0
25	1.5	0.5	1.0	9.5	7.5	8.5	12.5	11.5	12.0	18.5	17.0	17.5
26	2.5	1.0	1.5	9.5	9.0	9.5	13.5	11.0	12.0	18.5	17.0	18.0
27	3.0	1.5	2.0	9.0	8.0	8.5	14.0	10.0	12.0	19.5	17.5	18.5
28	3.5	1.5	2.5	10.5	9.0	9.5	16.5	11.0	13.5	20.0	18.0	19.0
29	4.0	2.0	3.0	10.0	8.5	9.0	17.5	14.5	16.0	20.0	17.5	18.5
30	---	---	---	8.5	7.5	8.0	17.5	14.5	15.5	17.5	16.5	17.0
31	---	---	---	7.5	6.5	7.0	---	---	---	18.0	17.0	17.5
MONTH	4.0	0.0	0.8	10.5	1.5	4.7	19.5	5.0	11.2	22.5	11.5	18.0

05431016 JACKSON CREEK AT MOUND ROAD NEAR ELKHORN, WI—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	18.0	17.5	18.0	24.5	21.0	22.5	25.0	22.0	24.0	27.0	19.0	22.5
2	18.0	17.5	18.0	25.0	21.5	23.0	25.0	23.0	24.0	29.5	18.5	24.0
3	19.0	17.0	18.0	24.5	21.5	23.0	26.0	23.5	24.5	29.0	21.5	25.0
4	20.0	17.5	18.5	24.0	22.0	23.0	25.5	21.5	22.5	29.0	22.0	25.5
5	20.5	18.5	19.5	24.0	22.0	23.0	22.0	18.5	20.5	27.5	23.0	25.0
6	22.0	19.5	20.5	23.5	21.0	22.5	22.0	18.0	20.0	25.5	21.5	23.0
7	23.5	21.0	22.0	23.5	20.5	21.5	22.0	19.5	20.0	24.0	17.5	21.0
8	25.0	22.5	23.5	23.5	19.0	21.0	21.0	18.0	19.5	22.0	17.0	19.5
9	25.0	24.0	24.5	23.0	20.5	21.5	21.5	19.5	20.5	25.0	17.0	20.5
10	25.0	21.0	22.5	26.0	20.5	22.5	21.5	17.5	19.0	25.0	18.0	21.5
11	21.0	20.0	20.0	26.5	22.5	24.5	17.5	15.5	16.0	25.0	19.5	22.5
12	20.5	19.0	19.5	26.5	24.0	25.0	15.5	14.0	15.0	27.0	19.5	23.0
13	21.5	20.0	20.5	28.5	23.5	25.5	18.0	14.5	16.0	25.5	21.0	23.5
14	21.5	20.5	21.0	27.5	23.0	25.0	19.0	16.5	17.5	25.5	20.5	23.0
15	22.0	20.5	21.0	27.5	23.0	25.0	20.5	16.5	18.5	24.5	21.5	23.0
16	22.0	20.5	21.0	27.5	24.0	25.5	20.5	18.5	19.5	24.0	18.5	21.5
17	22.0	21.0	21.5	26.0	22.5	24.0	21.0	19.0	20.0	23.0	16.5	19.5
18	21.5	21.5	21.5	26.5	21.5	23.5	22.0	18.5	20.0	24.0	17.0	20.0
19	21.5	19.5	20.0	26.5	23.0	24.5	22.0	19.5	21.0	23.0	18.0	20.5
20	20.5	19.0	20.0	28.0	23.5	25.5	22.0	19.5	21.0	23.0	17.0	20.0
21	20.5	19.0	19.5	28.0	25.0	26.0	22.5	20.0	21.5	23.0	17.0	20.0
22	19.0	18.0	18.5	26.5	23.5	24.5	22.5	20.5	21.5	23.0	16.5	20.0
23	19.5	18.5	19.0	26.0	22.0	23.5	23.5	22.0	22.5	23.0	18.5	21.0
24	19.5	18.0	18.5	24.5	20.5	22.0	23.5	22.5	23.0	22.0	19.0	20.5
25	18.5	16.5	17.5	23.5	19.5	21.5	24.5	21.0	23.5	19.0	15.5	17.5
26	19.5	17.5	18.5	23.5	20.0	21.0	26.5	20.5	23.0	21.5	13.5	17.0
27	20.5	18.0	19.0	23.5	20.0	21.5	29.0	22.5	25.5	21.5	14.5	18.0
28	21.5	19.0	20.0	24.5	21.0	22.5	26.5	17.0	21.0	19.0	13.5	16.5
29	22.0	19.5	20.5	24.5	22.0	23.0	26.0	14.5	20.0	18.5	12.0	15.0
30	23.0	20.5	21.5	24.0	22.0	23.0	24.5	15.5	20.0	18.0	12.0	15.0
31	---	---	---	24.5	22.0	23.0	27.5	17.0	22.5	---	---	---
MONTH	25.0	16.5	20.1	28.5	19.0	23.3	29.0	14.0	20.7	29.5	12.0	20.8
YEAR	29.5	0.0	11.7									

05431016 JACKSON CREEK AT MOUND ROAD NEAR ELKHORN, WI—Continued

SUSPENDED SEDIMENT DISCHARGE, TONS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.05	0.07	0.22	0.09	e0.01	e0.28	0.44	0.30	6.6	1.1	0.10	0.24
2	0.05	e1.7	0.20	0.09	e0.01	e0.33	0.40	0.25	3.6	0.84	0.08	0.25
3	0.05	e8.3	0.18	0.09	e0.01	e0.28	0.35	0.23	2.3	0.72	0.08	0.26
4	0.06	e6.2	0.17	0.09	e0.01	0.45	0.30	0.20	1.6	1.4	0.54	0.23
5	0.06	e3.6	0.19	0.08	e0.01	8.9	0.27	0.19	1.2	1.2	0.45	0.19
6	0.05	e1.4	0.20	e0.08	e0.01	1.3	0.24	0.18	0.94	0.79	0.28	0.17
7	0.04	e1.0	0.18	e0.07	e0.01	0.78	0.23	0.16	0.73	0.84	0.23	0.17
8	0.04	0.51	0.17	e0.07	e0.01	0.07	0.21	0.17	0.57	0.86	0.18	0.14
9	0.04	0.45	0.23	e0.06	e0.01	0.06	0.19	1.6	0.50	0.82	0.15	0.13
10	0.04	0.43	5.3	e0.06	e0.01	0.05	0.17	1.8	0.80	0.96	0.12	0.12
11	0.05	0.43	1.1	e0.06	e0.01	e0.05	0.16	1.5	2.1	0.87	0.12	0.11
12	0.05	0.37	0.37	e0.05	e0.01	e0.04	0.15	1.1	7.4	0.85	0.12	0.09
13	0.06	0.36	0.23	e0.05	e0.01	0.04	0.15	4.3	3.1	0.77	0.13	0.06
14	0.08	0.33	0.19	e0.05	e0.01	0.05	0.15	19	2.7	0.64	0.13	0.06
15	0.13	0.29	0.16	e0.04	e0.01	0.05	0.14	8.6	1.7	0.53	0.13	0.06
16	0.10	0.24	0.15	e0.04	e0.01	0.05	0.13	3.6	0.70	0.44	0.12	0.12
17	0.08	0.21	0.14	e0.04	e0.01	0.05	0.16	1.3	12	0.41	0.12	0.11
18	0.08	1.6	0.12	e0.03	e0.01	0.06	0.15	2.7	14	0.37	0.25	0.11
19	0.07	0.99	0.10	e0.03	e0.01	0.07	0.12	1.7	3.3	0.31	e0.20	0.10
20	0.06	0.47	0.09	e0.03	e0.08	e0.07	0.29	3.5	1.2	0.25	0.19	0.09
21	0.05	0.39	0.09	e0.03	e0.13	e0.08	2.1	4.3	1.5	0.29	0.21	0.09
22	0.05	0.34	0.09	e0.02	e0.12	0.08	0.93	113	3.7	0.47	0.24	0.09
23	0.05	0.38	0.09	e0.02	e0.30	0.09	0.53	26	2.9	0.34	0.30	0.08
24	0.06	0.37	0.08	e0.02	e0.33	e0.28	0.45	8.4	3.5	0.29	0.32	0.07
25	0.16	e0.34	0.08	e0.02	e0.15	e0.35	e1.4	4.0	3.1	0.26	0.34	0.07
26	0.13	0.31	0.07	e0.02	0.08	2.6	e1.2	2.6	2.6	0.23	0.37	0.08
27	0.08	0.28	0.07	e0.02	0.09	2.0	e1.0	2.1	2.3	0.21	e0.44	0.08
28	0.08	0.25	e0.90	e0.02	0.09	1.2	0.32	1.7	2.3	0.19	e0.67	0.08
29	0.08	0.22	e0.80	e0.02	e0.18	1.4	0.30	1.5	1.8	0.16	e0.87	0.08
30	0.09	0.22	e0.11	e0.01	---	0.71	0.27	8.1	1.4	0.14	0.33	0.08
31	0.07	---	0.10	e0.01	---	0.51	---	15	---	0.13	0.26	---
TOTAL	2.14	32.05	12.17	1.41	1.74	22.33	12.90	239.08	92.14	17.68	8.07	3.61

WTR YR 2004 TOTAL 445.32

e Estimated

05431016 JACKSON CREEK AT MOUND ROAD NEAR ELKHORN, WI—Continued

PHOSPHORUS, WATER, UNFILTERED, POUNDS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.40	0.65	0.76	2.02	e0.18	e13.2	4.95	2.08	64.6	2.28	1.49	2.35
2	0.38	e13.0	0.71	1.89	e0.18	e15.6	4.01	1.73	26.2	1.81	1.36	2.32
3	0.37	e65.0	0.65	1.96	e0.18	e13.0	3.42	1.63	12.7	1.63	1.14	2.17
4	0.47	e49.0	0.61	1.93	e0.17	3.81	2.90	1.50	8.39	6.26	6.86	1.79
5	0.47	e28.0	0.68	1.70	e0.17	113	2.57	1.46	6.05	5.50	5.14	1.39
6	0.41	e11.0	0.69	e1.55	e0.17	58.1	2.34	1.40	4.64	4.76	2.85	1.17
7	0.37	e7.60	0.64	e1.40	e0.16	20.7	2.21	1.33	3.53	5.03	2.29	1.08
8	0.35	7.04	0.61	e1.29	e0.16	11.0	2.02	1.44	2.65	4.84	1.82	0.99
9	0.35	5.28	0.89	e1.17	e0.16	8.16	1.79	e21.9	2.25	4.37	1.47	0.98
10	0.37	4.20	84.3	e1.08	e0.16	6.27	1.59	e19.2	4.13	4.79	1.20	0.96
11	0.39	3.60	72.5	e1.06	e0.16	e5.45	1.50	e16.0	18.2	4.12	1.09	0.90
12	0.44	2.68	18.5	e0.99	e0.16	e4.08	1.43	e12.7	67.7	3.85	1.10	0.80
13	0.49	2.23	7.94	e0.91	e0.16	3.49	1.41	22.6	39.5	3.62	1.11	0.60
14	e1.10	2.09	6.03	e0.84	e0.15	3.72	1.34	160	21.3	3.20	1.12	0.53
15	e1.60	1.86	5.10	e0.71	e0.15	3.12	1.27	149	20.0	2.75	1.08	0.53
16	e1.30	1.64	4.70	e0.67	e0.15	2.74	1.21	36.1	7.21	2.42	0.92	0.94
17	0.69	1.46	4.10	e0.65	e0.16	2.54	1.46	15.0	145	2.37	0.91	0.82
18	0.66	11.2	3.41	e0.56	e0.17	2.45	1.32	20.9	113	2.22	e1.40	0.74
19	0.61	9.08	3.02	e0.51	e0.19	2.32	1.09	16.6	29.8	1.95	e1.10	0.64
20	0.51	4.56	2.69	e0.45	e3.60	e2.16	1.50	8.50	10.8	1.51	e1.00	0.54
21	0.45	3.44	2.42	e0.42	e6.00	e2.01	9.70	21.1	16.2	e2.20	1.23	0.51
22	0.44	2.75	2.39	e0.32	e5.50	1.85	4.82	625	43.4	e3.60	1.31	0.46
23	0.46	2.75	2.30	e0.30	e14.0	1.69	3.26	335	12.5	e2.50	1.58	0.36
24	0.52	2.45	2.12	e0.27	e16.0	e7.30	2.80	121	15.0	2.35	e1.70	0.34
25	1.40	e2.08	1.96	e0.26	e7.30	e9.10	e2.90	39.7	11.3	1.81	e1.90	0.31
26	1.10	1.71	1.76	e0.24	1.18	36.8	e2.60	20.4	7.60	1.50	e2.20	0.33
27	0.74	1.40	1.66	e0.24	1.22	28.8	2.64	12.2	5.53	1.58	e2.50	0.31
28	0.67	1.15	e11.2	e0.21	1.24	14.0	2.14	7.45	4.56	1.60	e3.80	0.27
29	0.72	0.93	e10.0	e0.21	e8.50	39.0	2.00	5.35	3.59	1.54	e4.90	0.21
30	0.76	0.85	e2.62	e0.19	---	14.9	1.82	56.8	2.83	1.61	3.78	0.18
31	0.66	---	2.27	e0.19	---	6.85	---	166	---	1.66	2.77	---
TOTAL	19.65	250.68	259.23	26.19	67.68	457.21	76.01	1,921.07	730.16	91.23	64.12	25.52

WTR YR 2004 TOTAL 3,988.75

e Estimated

05431016 JACKSON CREEK AT MOUND ROAD NEAR ELKHORN, WI—Continued

ORTHOPHOSPHATE, WATER, FILTERED, POUNDS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.04	0.07	0.37	1.04	e0.09	1.13	1.49	0.40	33.9	0.54	0.36	0.18
2	0.04	e10.6	0.33	0.97	e0.08	1.16	0.88	0.34	14.7	0.41	0.36	0.19
3	0.04	e53.1	0.27	1.01	e0.08	0.77	0.70	0.33	7.64	0.34	0.31	0.20
4	0.07	e39.8	0.24	1.00	e0.08	0.78	0.60	0.30	4.46	0.96	2.08	0.18
5	0.08	e23.2	0.24	0.88	e0.07	51.6	0.53	0.29	2.75	0.88	1.19	0.15
6	0.08	e9.30	0.23	e0.80	e0.07	33.8	0.48	0.28	1.80	0.69	0.61	0.14
7	0.07	e6.20	0.20	e0.72	e0.07	9.91	0.46	0.27	1.17	0.71	0.51	0.14
8	0.07	1.75	0.17	e0.67	e0.07	3.43	0.42	0.30	0.75	0.68	0.43	0.12
9	0.07	1.26	0.19	e0.60	e0.06	2.44	0.37	2.99	0.55	0.60	0.36	0.11
10	0.07	0.97	42.2	e0.56	e0.06	1.83	0.33	0.93	1.00	0.65	0.24	0.09
11	0.07	0.80	43.8	e0.55	e0.06	e1.55	0.31	0.65	6.03	0.56	0.18	0.08
12	0.07	0.57	12.6	e0.51	e0.06	e1.13	0.29	0.52	34.6	0.51	0.15	0.06
13	0.08	0.45	4.28	e0.47	e0.06	0.95	0.29	2.85	16.2	0.44	0.12	0.04
14	e0.20	0.37	3.11	e0.43	e0.05	0.98	0.28	57.4	10.4	0.36	0.10	0.04
15	e0.32	0.28	2.63	e0.37	e0.05	0.80	0.26	85.1	6.15	0.29	0.08	0.04
16	e0.25	0.22	2.42	e0.34	e0.05	0.69	0.25	19.3	1.67	0.23	0.06	0.07
17	0.10	0.17	2.11	e0.34	e0.05	0.62	0.30	4.17	57.4	0.21	0.07	0.06
18	0.10	2.12	1.76	e0.29	e0.05	0.58	0.27	6.01	54.1	0.18	e0.21	0.06
19	0.09	1.95	1.56	e0.26	e0.06	0.54	0.22	4.63	13.9	0.15	e0.16	0.05
20	0.07	0.82	1.39	e0.23	e1.70	e0.49	0.30	1.36	4.77	0.14	0.15	0.05
21	0.06	0.65	1.25	e0.22	e2.90	e0.44	1.62	4.66	4.60	e0.35	0.18	0.05
22	0.06	0.58	1.23	e0.17	e2.60	0.40	0.72	253	20.7	e0.56	0.23	0.05
23	0.06	0.64	1.19	e0.15	e6.90	0.35	0.49	150	3.75	e0.38	0.32	0.05
24	0.07	0.62	1.09	e0.14	e7.50	e5.80	0.44	62.5	3.79	e0.30	0.40	0.05
25	e0.41	e0.58	1.01	e0.14	e3.50	e7.20	e0.70	21.3	2.60	e0.24	0.51	0.06
26	e0.33	0.53	0.91	e0.13	0.32	14.0	e0.60	7.90	1.85	0.22	0.63	0.07
27	0.09	0.48	0.85	e0.12	0.33	12.0	0.45	2.64	1.46	0.25	0.72	0.08
28	0.08	0.43	e1.40	e0.11	0.33	4.09	0.37	1.02	1.28	0.28	1.28	0.06
29	0.08	0.38	e1.35	e0.11	0.42	19.3	0.36	0.89	0.97	0.29	1.40	0.05
30	0.08	0.39	e1.30	e0.09	---	7.52	0.34	20.7	0.72	0.33	0.28	0.04
31	0.07	---	1.17	e0.09	---	2.87	---	83.6	---	0.37	0.19	---
TOTAL	3.37	159.28	132.85	13.51	27.72	189.15	15.12	796.63	315.66	13.10	13.87	2.61

WTR YR 2004 TOTAL 1,682.87

e Estimated

05431016 JACKSON CREEK AT MOUND ROAD NEAR ELKHORN, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Discharge, cfs (00060)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)
OCT							
01...	1130	--	.65	70	E.01	.12	27
06...	1340	--	.72	10	<.02	.10	24
NOV							
03...	0805	80	--	10	.02	.18	36
04...	0715	60	--	50	--	.36	22
04...	1020	60	--	10	.26	.38	21
13...	1115	--	4.5	50	<.02	.10	29
18...	1215	--	13	50	<.18	.16	35
18...	1515	--	18	50	<.18	.22	61
18...	1815	--	19	50	.04	.18	41
19...	0015	--	18	50	<.18	.18	49
19...	0830	--	13	10	<.18	.13	24
DEC							
01...	0910	--	3.4	10	<.02	.04	82
10...	0115	--	16	50	E.01	.16	54
10...	0715	--	45	50	.06	.17	31
10...	1315	--	91	50	.11	.25	36
10...	1615	--	100	50	.14	.25	26
10...	2215	--	89	50	.16	.28	12
11...	0415	--	71	50	.17	.28	8
11...	1000	--	54	10	.04	.10	16
11...	1015	--	54	50	.14	.27	8
11...	1915	--	39	50	.15	.23	4
12...	0925	--	24	10	.10	.14	6
JAN							
28...	1345	1.0	--	70	<.02	E.04	74
FEB							
02...	0850	.84	--	10	--	--	411
MAR							
01...	0755	--	11	10	E.02	.12	55
04...	2145	--	14	50	<.02	.10	21
05...	0345	--	56	50	.04	.18	50
05...	0645	--	81	50	.07	.27	79
05...	0945	--	102	50	.09	.25	23
05...	0946	--	102	10	.07	.20	49
05...	1545	--	104	50	.15	.30	28
05...	2145	--	85	50	.16	.26	14
06...	0940	--	55	10	.13	.21	7
06...	0945	--	54	50	.11	.20	5
06...	2145	--	39	50	.08	.17	9
07...	0925	--	30	10	.07	.13	16
08...	0345	--	23	50	.03	.10	1
26...	0715	--	41	50	E.01	.08	13
26...	0915	--	51	10	.05	.14	41
26...	1315	--	64	50	.05	.15	21
26...	1915	--	64	50	.08	.17	20
27...	0115	--	53	50	.07	.17	20
27...	0940	--	40	10	.06	.13	15
27...	1915	--	34	50	.04	.12	20
28...	0930	--	26	10	.03	.07	12
28...	1615	--	25	50	E.02	.12	50
28...	1915	--	30	50	E.01	.08	18
28...	2215	--	47	50	E.02	.08	13
29...	0415	--	64	50	.06	.14	10
29...	0915	--	64	10	.10	.17	26
29...	1615	--	51	50	--	.12	7
30...	1315	--	33	50	--	.08	7
31...	1315	--	23	50	--	.05	7
APR							
01...	1315	--	18	50	--	.05	8
02...	1315	--	15	50	--	.05	9
21...	0850	--	20	10	.02	.12	46

05431016 JACKSON CREEK AT MOUND ROAD NEAR ELKHORN, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)
MAY						
03...	0825	6.2	10	--	.05	111
10...	0935	13	10	E.01	.09	50
13...	0850	18	10	.02	.15	66
13...	1545	25	50	<.02	.20	59
13...	2145	56	50	.02	.16	52
14...	0645	81	50	.05	.22	53
14...	1545	142	50	.10	.28	65
14...	1845	165	50	.12	.31	58
15...	0045	161	50	.15	.29	49
15...	0850	120	10	--	.26	22
15...	1845	77	50	.15	.26	19
16...	0840	50	10	--	.12	81
16...	1845	40	50	.05	.15	32
17...	0830	31	10	.03	.08	9
18...	0045	27	50	E.01	.10	29
18...	0840	40	10	E.01	.08	55
18...	1245	41	50	.04	.11	13
18...	2145	39	50	.05	.13	15
19...	0835	31	10	--	--	14
20...	0830	24	10	E.01	.07	70
21...	1730	35	50	.04	.17	42
22...	0230	66	50	.07	.36	149
22...	0645	229	50	.10	.50	217
22...	0920	364	10	.19	.69	262
22...	1230	440	50	--	--	141
22...	1830	290	50	.20	.30	116
23...	0030	206	50	.20	.44	85
23...	0840	158	10	.16	.29	59
23...	1830	154	50	.17	.50	37
24...	0845	97	10	.13	.23	34
25...	0840	48	10	.09	.16	32
26...	0830	33	10	.05	.12	29
28...	0800	19	10	E.01	.08	36
30...	1500	45	50	.04	.19	61
30...	2100	114	50	.12	.30	64
31...	0001	134	50	.14	.31	60
31...	0600	142	50	.14	.28	49
31...	0945	134	10	.13	.27	46
31...	1800	100	50	.12	.23	28
JUN						
01...	0950	65	10	--	--	42
11...	0940	30	10	.05	.14	32
12...	0630	40	50	--	.14	14
12...	1530	81	50	--	.28	80
13...	0030	64	50	--	.23	27
13...	1230	40	50	--	.17	24
14...	0850	26	10	.03	.06	22
15...	0805	35	10	.03	.11	17
17...	1045	79	50	.07	.35	151
17...	1500	170	50	.10	.26	54
17...	2100	193	50	.13	.28	8
18...	0815	100	10	.12	.25	96
19...	0950	35	10	.08	.17	35
21...	1930	51	50	.02	.12	22
22...	0130	64	50	.09	.19	16
22...	0905	54	10	.09	.17	29
23...	0900	27	10	.03	.10	41
24...	0915	31	10	.03	.11	43
25...	0815	24	10	E.02	.09	--
28...	1120	13	10	<.02	.07	72
JUL						
04...	0830	9.4	10	<.02	.14	43
05...	0700	8.9	10	<.02	.12	59
06...	1030	6.2	10	<.02	.14	44
12...	0850	4.8	10	.02	.15	67
19...	0945	2.9	10	E.01	.13	41
22...	0805	5.8	10	.07	.18	33
26...	0750	2.0	10	E.02	.14	45

05431016 JACKSON CREEK AT MOUND ROAD NEAR ELKHORN, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)
AUG						
02...	0850	1.4	10	.05	.19	22
04...	0905	4.2	10	.10	.25	44
09...	1125	1.8	10	.04	.16	32
16...	0805	1.1	10	E.01	.17	98
23...	0810	2.0	10	.03	.15	58
30...	1020	4.2	10	E.01	.16	28
SEP						
07...	0815	1.4	10	<.02	.15	47
13...	1335	.72	10	E.01	.14	29
20...	1015	.83	10	E.01	.12	41
27...	1340	.72	10	.02	.08	--

05431017 DELAVAN LAKE INLET AT STATE HIGHWAY 50 AT LAKE LAWN, WI

LOCATION.--Lat 42°37'16", long 88°34'57", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.22, T.2 N., R.16 E., Walworth County, Hydrologic Unit 07090001, on downstream headwall of State Highway 50 bridge, and 1.0 mi east of Lake Lawn.

DRAINAGE AREA.--21.8 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--1984 and 1985 water years (unpublished) to current year. Published as "at U.S. Highway 50" prior to October 1988.

GAGE.--Nonrecording gage. Datum of gage is 922.94 ft above NGVD of 1929 (Wisconsin Department of Transportation bench mark). Previously published datum of 914.48 ft in 1989-91 annual data reports was in error.

REMARKS.--Daily mean discharges were estimated based on discharges upstream at Jackson Creek near Elkhorn (05431014) and Jackson Creek Tributary near Elkhorn (054310157) for Oct. 1, 1983 to Jan. 31, 1993. Also during this period, an acoustical velocity meter was used to measure discharges equal to or greater than 20 ft^3/s from Oct. 1, 1985 to May 7, 1987. Daily mean discharges were estimated based on discharges upstream at Jackson Creek at Mound Road near Elkhorn (05431016) from Feb. 1, 1993 to present. Records poor (see page 11).

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.84	1.6	4.5	7.3	1.1	14	25	9.5	81	9.6	1.9	3.6
2	0.81	21	4.3	7.0	1.1	17	20	8.2	46	8.2	1.8	3.6
3	0.82	104	3.9	7.4	1.1	14	17	7.8	30	7.8	1.7	3.4
4	1.1	78	3.8	7.4	1.1	14	14	7.3	23	12	6.4	2.9
5	1.1	46	4.2	6.6	1.0	109	13	7.2	18	11	5.3	2.2
6	0.97	18	4.2	6.2	1.0	69	12	6.9	16	8.3	3.6	1.8
7	0.88	12	3.9	5.7	0.99	39	11	6.5	13	8.6	3.1	1.7
8	0.86	9.8	3.8	5.3	0.99	27	10	7.2	11	8.2	2.6	1.6
9	0.86	8.2	4.4	4.9	0.99	21	8.8	21	10	7.3	2.2	1.6
10	0.90	7.4	88	4.7	0.99	17	7.9	18	16	7.8	1.8	1.6
11	0.94	7.2	69	4.7	0.96	16	7.4	16	38	6.6	1.6	1.6
12	1.1	5.8	31	4.4	0.96	12	7.2	12	77	6.2	1.6	1.3
13	1.2	5.5	18	4.2	0.96	11	7.0	34	56	6.0	1.6	1.0
14	1.7	5.2	16	3.9	0.94	12	6.6	151	46	5.3	1.6	0.94
15	2.6	4.5	13	3.4	0.91	11	6.2	139	43	4.7	1.6	0.95
16	2.1	4.0	12	3.2	0.91	9.8	6.0	61	26	4.2	1.3	1.7
17	1.7	3.6	11	3.2	0.96	9.4	7.3	39	136	4.2	1.3	1.6
18	1.6	17	9.4	2.9	1.0	9.5	6.5	48	112	4.0	2.6	1.4
19	1.4	16	8.4	2.6	1.2	9.4	5.5	39	44	3.6	1.9	1.3
20	1.2	9.4	7.7	2.3	3.9	9.1	7.0	30	29	3.2	1.8	1.1
21	1.1	7.8	7.0	2.2	6.5	8.8	23	36	40	4.2	1.9	1.1
22	1.1	6.9	7.2	1.8	6.0	8.4	16	347	65	6.8	2.1	1.0
23	1.1	7.7	7.0	1.7	16	8.1	12	212	34	4.5	2.5	0.87
24	1.3	7.5	6.5	1.6	17	16	11	117	38	3.6	3.0	0.84
25	3.4	7.0	6.1	1.6	7.9	20	14	61	30	3.0	3.5	0.84
26	2.7	6.4	5.6	1.4	7.3	64	13	42	22	2.6	4.2	0.92
27	1.8	5.7	5.5	1.4	7.5	52	11	31	17	2.6	4.5	0.94
28	1.7	5.2	12	1.3	7.7	39	9.0	23	16	2.5	7.0	0.94
29	1.8	4.7	10	1.3	9.2	73	8.6	21	13	2.3	9.1	0.84
30	1.9	4.7	9.1	1.2	---	44	8.1	64	11	2.3	5.6	0.84
31	1.7	---	8.1	1.2	---	31	---	155	---	2.3	4.2	---
TOTAL	44.28	447.8	404.6	114.0	108.16	814.5	331.1	1,777.6	1,157	173.5	94.9	46.02
MEAN	1.43	14.9	13.1	3.68	3.73	26.3	11.0	57.3	38.6	5.60	3.06	1.53
MAX	3.4	104	88	7.4	17	109	25	347	136	12	9.1	3.6
MIN	0.81	1.6	3.8	1.2	0.91	8.1	5.5	6.5	10	2.3	1.3	0.84
CFSM	0.07	0.68	0.60	0.17	0.17	1.21	0.51	2.63	1.77	0.26	0.14	0.07
IN.	0.08	0.76	0.69	0.19	0.18	1.39	0.56	3.03	1.97	0.30	0.16	0.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2004, BY WATER YEAR (WY)

MEAN	7.77	13.3	10.3	7.98	18.8	23.2	23.6	17.9	22.2	7.99	4.64	7.41
MAX	29.2	54.5	30.3	28.0	69.9	68.3	100	57.3	86.0	29.3	30.5	37.4
(WY)	(2002)	(1986)	(1992)	(1999)	(2001)	(1986)	(1993)	(2004)	(1996)	(1993)	(1995)	(1986)
MIN	0.67	1.14	1.12	1.11	1.15	3.57	3.28	1.44	0.76	0.61	0.50	0.61
(WY)	(1989)	(1990)	(1990)	(1991)	(2003)	(2003)	(1989)	(1989)	(1988)	(1988)	(1988)	(1988)

05431017 DELAVAN LAKE INLET AT STATE HIGHWAY 50 AT LAKE LAWN, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1984 - 2004	
ANNUAL TOTAL	2,417.96		5,513.46			
ANNUAL MEAN	6.62		15.1		13.7	
HIGHEST ANNUAL MEAN					30.3	1993
LOWEST ANNUAL MEAN					4.90	2003
HIGHEST DAILY MEAN	134	Jul 15	347	May 22	751	Apr 20, 1993
LOWEST DAILY MEAN	0.44	Sep 12	0.81	Oct 2	0.22	Sep 15, 1988
ANNUAL SEVEN-DAY MINIMUM	0.61	Sep 6	0.88	Sep 24	0.25	Sep 9, 1988
ANNUAL RUNOFF (CFSM)	0.304		0.691		0.628	
ANNUAL RUNOFF (INCHES)	4.13		9.41		8.54	
10 PERCENT EXCEEDS	13		39		31	
50 PERCENT EXCEEDS	3.1		6.4		5.1	
90 PERCENT EXCEEDS	0.94		1.1		0.92	

05431017 DELAVAN LAKE INLET AT STATE HIGHWAY 50 AT LAKE LAWN, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: 1984 and 1985 water years (unpublished), October 1989 to September 1995.
TOTAL-PHOSPHORUS DISCHARGE: 1984 and 1985 water years (unpublished) to current year.
DISSOLVED ORTHO-PHOSPHORUS DISCHARGE: April 1994 to current year.

REMARKS.--Records poor. Daily mean discharges are estimated based on discharges from upstream stations 05431014 and 054310157 from Oct. 1, 1992 to Jan. 31, 1993, and from station 05431016 from Feb. 1, 1993 to present.

COOPERATION.--Observer furnished by Delavan Lake Sanitary District.

EXTREMES FOR PERIOD OF RECORD.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 345 mg/L, Apr. 16, 1984; minimum observed, 0 mg/L, Sept. 23, 1991, July 17, Sept. 26, 1992, and Nov. 16, 1994.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 468 tons, Apr. 20, 1993; minimum daily, 0.00 ton, Sept. 26, 1990, many days during 1992 to 1994 water years, and July 14, 15, 18, 19, 1995.
TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 3.8 mg/L, May 27, 1985; minimum observed, 0.01 mg/L, Mar. 7, 1990, Dec. 15, 1994, Apr. 17, 1995, Oct. 6, 1995, Feb. 5, 1997, and Mar. 19, 1998.
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 1,910 lb, Apr. 20, 1993; minimum daily, 0.10 lb, Dec. 28, 1989.
DISSOLVED ORTHO-PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.851 mg/L, Aug. 3, 2000; minimum observed, <0.01 mg/L, Apr. 14, 1994, many days during 1995 water year, Nov. 22, 1995, several days in 1997-1999 water years, and many days in 2000 water year.
DISSOLVED ORTHO-PHOSPHORUS DISCHARGE: Maximum daily, 503 lb, June 26, 1998; minimum daily, 0.02 lb, Sept. 26, 1999.
DISSOLVED CHLORIDE CONCENTRATIONS: Maximum observed, 130 mg/L, Aug. 8, 1995; minimum observed, 18 mg/L, June 1, 1995.

EXTREMES FOR CURRENT YEAR.--
TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.53 mg/L, May 22; minimum observed, 0.04 mg/L, on several days.
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 721 lb, May 22; minimum daily, 0.33 lb, Feb. 16-18.
DISSOLVED ORTHO-PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.33 mg/L, Aug. 5; minimum observed, 0.01 mg/L, on several days.
DISSOLVED ORTHO-PHOSPHORUS DISCHARGE: Maximum daily, 167 lb, May 22; minimum daily, 0.10 lb, Feb. 11-17.

PHOSPHORUS, WATER, UNFILTERED, POUNDS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.78	0.92	0.82	2.05	0.72	4.47	8.54	6.71	71.2	4.74	3.91	6.62
2	0.70	16.9	0.77	2.01	0.76	6.16	4.56	5.29	28.3	4.24	3.57	6.61
3	0.63	65.6	0.69	2.17	0.73	4.48	3.68	4.65	16.4	4.30	3.33	6.24
4	0.76	45.6	0.66	2.21	0.70	4.09	3.03	4.25	12.3	7.52	14.8	5.33
5	0.67	33.4	0.72	2.01	0.61	44.5	2.81	4.11	9.34	6.77	13.3	4.05
6	0.54	9.55	0.71	1.93	0.58	35.0	2.59	3.87	8.00	5.74	8.86	3.31
7	0.48	3.53	0.65	1.81	0.55	23.2	2.38	3.58	6.27	6.32	7.13	3.12
8	0.46	2.42	0.62	1.72	0.52	12.0	2.16	4.11	5.12	7.42	5.58	2.91
9	0.46	1.85	0.74	1.62	0.50	7.84	1.90	15.9	4.48	7.26	4.43	2.88
10	0.49	1.52	21.7	1.59	0.47	5.56	1.71	12.8	7.51	8.37	3.51	2.85
11	0.51	1.35	31.9	1.62	0.44	5.11	1.60	9.90	26.5	7.65	3.04	2.82
12	0.59	0.99	12.1	1.55	0.42	3.79	1.56	7.30	49.2	7.73	2.96	2.27
13	0.65	0.86	5.09	1.51	0.40	3.42	1.51	30.4	31.3	7.92	2.88	1.73
14	0.92	0.74	4.16	1.43	0.37	3.68	1.43	120	22.5	7.40	2.81	1.60
15	1.40	0.58	3.26	1.27	0.34	3.34	1.34	147	19.6	6.94	2.74	1.58
16	1.14	0.47	2.90	1.22	0.33	2.94	1.30	63.8	17.1	6.55	2.18	2.77
17	0.92	0.44	2.56	1.24	0.33	2.78	1.58	27.1	192	6.92	2.15	2.57
18	0.86	3.49	2.11	1.15	0.33	2.77	1.40	26.2	148	6.97	4.25	2.20
19	0.76	3.45	1.83	1.05	0.37	2.71	1.19	19.9	40.2	6.67	3.09	2.01
20	0.65	2.01	1.70	0.95	1.15	2.59	1.97	14.4	18.5	6.45	2.90	1.67
21	0.59	1.64	1.58	0.93	1.84	2.47	23.0	20.2	19.5	9.23	3.03	1.65
22	0.59	1.43	1.65	0.77	1.73	2.33	20.5	721	28.9	16.1	3.32	1.49
23	0.59	1.57	1.64	0.75	6.40	2.22	16.4	397	16.1	10.9	3.92	1.29
24	0.70	1.51	1.56	0.72	6.36	4.41	14.8	140	16.2	8.77	4.74	1.23
25	1.83	1.39	1.49	0.73	2.61	6.45	17.1	56.2	11.6	7.39	5.57	1.23
26	1.46	1.25	1.40	0.65	2.26	23.8	14.5	34.0	8.73	6.42	6.74	1.39
27	0.97	1.10	1.40	0.67	2.22	20.1	11.2	22.8	7.04	6.24	7.36	1.46
28	0.92	0.99	3.10	0.63	2.18	16.7	8.38	13.8	6.91	5.82	12.4	1.46
29	0.97	0.88	2.65	0.68	2.55	28.0	7.30	12.2	5.88	5.19	17.3	1.29
30	1.03	0.87	2.46	0.68	---	17.0	6.27	54.5	5.20	5.03	10.4	1.26
31	0.92	---	2.23	0.73	---	10.5	---	171	---	4.87	7.72	---
TOTAL	24.94	208.30	116.85	40.05	38.77	314.41	187.69	2,173.97	859.88	219.84	179.92	78.89

WTR YR 2004 TOTAL 4,443.51

05431017 DELAVAN LAKE INLET AT STATE HIGHWAY 50 AT LAKE LAWN, WI—Continued

ORTHOPHOSPHATE, WATER, FILTERED, POUNDS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.44	0.47	0.32	0.79	0.12	1.85	2.25	1.03	21.5	1.04	2.34	4.04
2	0.36	9.36	0.30	0.76	0.12	2.51	1.16	0.89	5.16	0.89	2.11	4.01
3	0.31	20.6	0.26	0.80	0.12	1.33	0.92	0.84	1.97	0.84	1.97	3.76
4	0.35	17.7	0.24	0.80	0.12	0.81	0.76	0.79	2.38	1.29	10.1	3.19
5	0.29	17.7	0.26	0.71	0.11	6.38	0.70	0.78	1.95	1.19	9.33	2.41
6	0.22	4.87	0.25	0.67	0.11	7.55	0.65	0.75	1.73	0.81	6.10	1.96
7	0.19	2.06	0.23	0.62	0.11	5.21	0.59	0.70	1.41	0.64	4.62	1.82
8	0.19	1.43	0.21	0.57	0.11	1.67	0.54	0.78	1.19	1.63	3.38	1.62
9	0.19	1.07	0.26	0.53	0.11	1.14	0.48	2.26	1.08	2.01	2.53	1.53
10	0.20	0.87	9.72	0.51	0.11	0.92	0.43	1.95	1.72	2.71	1.98	1.44
11	0.21	0.75	13.5	0.51	0.10	0.87	0.40	1.73	4.09	2.90	1.71	1.36
12	0.25	0.55	4.86	0.48	0.10	0.65	0.39	1.30	8.29	3.34	1.65	1.05
13	0.27	0.46	2.05	0.45	0.10	0.60	0.38	3.66	6.06	3.61	1.60	0.76
14	0.39	0.39	1.73	0.42	0.10	0.65	0.36	20.2	4.97	3.52	1.56	0.68
15	0.61	0.30	1.41	0.37	0.10	0.60	0.33	38.6	4.65	3.44	1.51	0.65
16	0.49	0.24	1.30	0.35	0.10	0.54	0.32	13.0	3.88	3.40	1.20	1.11
17	0.40	0.22	1.19	0.35	0.10	0.52	0.39	5.43	57.9	3.75	1.19	1.00
18	0.38	1.68	1.02	0.31	0.11	0.52	0.35	4.91	33.9	3.94	2.38	0.84
19	0.34	1.74	0.91	0.28	0.13	0.52	0.30	2.91	7.32	3.95	1.75	0.74
20	0.29	1.00	0.83	0.25	0.42	0.50	0.42	2.04	3.39	4.10	1.65	0.59
21	0.27	0.80	0.76	0.24	0.70	0.49	2.33	5.98	4.31	6.31	1.74	0.54
22	0.27	0.68	0.78	0.19	0.71	0.47	1.73	167	7.01	11.5	1.93	0.44
23	0.27	0.73	0.76	0.18	3.09	0.45	1.30	133	3.69	7.58	2.31	0.35
24	0.33	0.69	0.70	0.17	3.16	1.03	1.19	47.2	4.10	5.91	2.87	0.30
25	0.86	0.62	0.66	0.17	1.29	3.19	1.51	12.6	3.24	4.80	3.49	0.28
26	0.69	0.55	0.61	0.15	1.07	18.1	1.40	4.31	2.38	4.05	4.35	0.32
27	0.47	0.47	0.59	0.15	0.99	6.32	1.19	2.01	1.84	3.89	4.90	0.35
28	0.44	0.41	1.29	0.14	0.92	4.22	0.97	2.36	1.73	3.60	8.44	0.33
29	0.47	0.36	1.08	0.14	1.03	7.37	0.93	2.47	1.41	3.19	11.8	0.26
30	0.50	0.35	0.98	0.13	---	3.43	0.88	13.3	1.19	3.06	6.50	0.24
31	0.46	---	0.88	0.13	---	1.94	---	44.4	---	2.94	4.74	---
TOTAL	11.40	89.12	49.94	12.32	15.46	82.35	25.55	539.18	205.44	105.83	113.73	37.97

WTR YR 2004 TOTAL 1,288.29

05431017 DELAVAN LAKE INLET AT STATE HIGHWAY 50 AT LAKE LAWN, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Dis-charge, cfs (00060)	Sam-pling method, code (82398)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, unfltrd mg/L (00665)
OCT					
01...	1100	.84	30	.10	.18
06...	1440	.97	10	.04	.10
NOV					
02...	0935	21	10	.09	.15
02...	1545	21	10	.09	.17
03...	0915	104	10	.06	.12
03...	1425	104	10	E.01	.11
04...	1120	78	10	.03	.09
04...	1425	78	10	.06	.12
05...	1035	46	10	.08	.14
05...	1445	46	10	.07	.14
18...	0830	17	10	<.18	E.04
19...	0905	16	10	<.18	.04
DEC					
10...	0910	88	10	--	E.04
11...	1050	69	10	.04	.09
11...	1340	69	10	.04	.10
19...	1115	8.4	30	--	.04
JAN					
28...	1330	1.3	30	E.02	.09
FEB					
02...	0945	1.1	30	<.02	.13
MAR					
05...	1330	109	10	E.01	.08
06...	1000	69	10	E.02	.09
07...	1000	39	10	.03	.12
08...	1135	27	10	E.01	.08
09...	1010	21	10	E.01	.07
10...	0840	17	10	E.01	.06
26...	0935	64	10	.07	.07
27...	0950	52	10	<.02	.07
28...	0950	39	10	<.02	.08
29...	1025	73	10	<.02	.08
29...	1410	73	10	<.02	.06
30...	1015	44	10	E.01	.07
30...	1405	44	10	<.02	.08
31...	0935	31	10	E.01	.06
31...	1350	31	10	E.01	.06
APR					
01...	1035	25	10	<.02	.07
02...	1005	20	10	E.01	E.04
21...	0955	23	10	<.02	.20
21...	1315	23	10	<.02	.21
22...	0930	16	10	<.02	.25
22...	1415	16	10	<.02	.23
23...	0905	12	10	<.02	.24
23...	1350	12	10	<.02	.27
MAY					
03...	0925	7.8	10	<.02	.11
13...	1010	34	10	<.02	.20
13...	1425	34	10	--	.16
14...	1000	151	10	E.02	.14
14...	1435	151	10	--	.14
15...	0920	139	10	.06	.20
16...	0920	61	10	.04	.21
17...	0940	39	10	.03	.13
17...	1430	39	10	.02	.12
18...	1030	48	10	<.02	.10
20...	0920	30	10	E.01	.09
22...	1120	347	10	.07	.41
22...	1555	347	10	.13	.53
23...	0850	212	10	.13	.36
23...	1355	212	10	.11	.33
24...	1000	117	10	.08	.22
25...	0925	61	10	.04	.17
26...	0910	42	10	E.02	.15
27...	1045	31	10	E.01	.14
28...	0935	23	10	<.02	.11
31...	1045	155	10	.07	.24
31...	1500	155	10	.04	.19

05431017 DELAVAN LAKE INLET AT STATE HIGHWAY 50 AT LAKE LAWN, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Time	Discharge, cfs (00060)	Sampling method, code (82398)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)
JUN					
01...	1050	81	10	.06	.17
02...	1040	46	10	.02	.11
03...	0945	30	10	E.01	.10
04...	0840	23	10	<.02	.10
11...	1020	38	10	<.02	.14
12...	0920	77	10	<.02	.12
15...	0935	43	10	<.02	.08
16...	0910	26	10	<.02	.10
18...	0900	112	10	.06	.26
19...	1015	44	10	.03	.17
20...	1600	29	10	<.02	.11
21...	0950	40	10	<.02	.09
22...	1010	65	10	<.02	.08
23...	0955	34	10	<.02	.09
24...	1005	38	10	<.02	.08
25...	0950	30	10	<.02	.07
28...	1225	16	10	<.02	.08
JUL					
04...	1000	12	10	<.02	.12
05...	0940	11	10	<.02	.11
06...	1100	8.3	10	<.02	.13
07...	0950	8.6	10	E.01	.13
08...	1100	8.2	10	.04	.17
12...	0950	6.2	10	.10	.23
19...	1045	3.6	10	.20	.34
22...	0900	6.8	10	.32	.44
26...	0850	2.6	10	.29	.46
AUG					
02...	0945	1.8	10	.22	.37
04...	0955	6.4	10	.30	.43
05...	0910	5.3	10	.33	.47
06...	0915	3.6	10	.32	.46
09...	1215	2.2	10	.21	.37
16...	0850	1.3	10	.17	.31
23...	1040	2.5	10	.17	.29
30...	1115	5.6	10	.21	.34
SEP					
07...	0855	1.7	10	.20	.34
13...	1410	1.0	10	.14	.32
20...	1330	1.1	10	.10	.28
27...	1445	.94	10	.07	.29

423556088365001 DELAVAN LAKE AT CENTER NEAR DELAVAN LAKE, WI

LOCATION.--Lat 42°35'56", long 88°36'50", in SE 1/4 SW 1/4 sec.28, T.2 N., R.16 E., Walworth County, Hydrologic Unit 07090001, 2.6 mi southeast of Delavan.

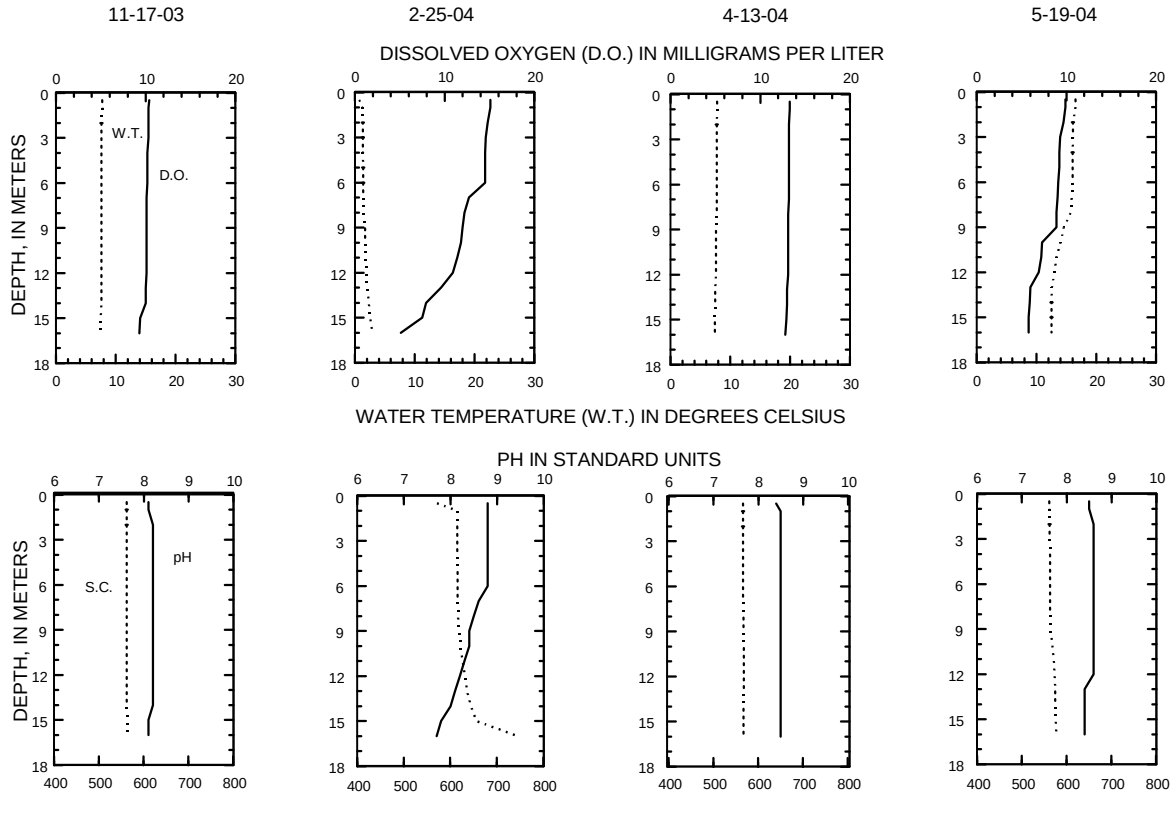
DRAINAGE AREA.--41.4 mi^2, of which 2.3 mi^2 is non-contributing. Area of Delavan Lake, 2,072 acres.

PERIOD OF RECORD.--October 1983 to current year.

REMARKS.--Lake ice-covered during February measurements. Water-quality analyses done by the U.S. Geological Survey National Water Quality Laboratory. Samples for determination of chlorophyll-a concentration are collected from the top 1.5 ft of the lake.

WATER-QUALITY DATA, NOVEMBER 17, 2003 TO MAY 19, 2004
(Milligrams per liter unless otherwise indicated)

date	Nov-17		Feb-25				Apr-13		May-19	
Lake stage (ft)	4.65		5.03				4.93		5.13	
Secchi-depth (m)	3.0		4.9				3.4		5.0	
Depth of sample (m)	0.5	16	0.5	5	10	16	0.5	16	0.5	16
Chlorophyll a, phytoplankton (µg/L)	3.4	--	6.2	--	--	--	8.2	--	8.8	--
Water temperature (°C)	7.7	7.4	0.7	1.4	1.7	2.9	7.8	7.4	16.5	12.5
Specific conductance (µS/cm)	562	564	571	616	622	746	566	567	561	577
pH	8.1	8.1	8.8	8.8	8.4	7.7	8.4	8.5	8.5	8.4
Dissolved oxygen (mg/L)	10.4	9.3	15.1	14.5	11.8	5.1	13.3	12.8	9.9	5.8
Phosphorus, total (as P)	0.102	0.116	0.086	0.087	0.088	0.175	0.046	0.051	0.059	0.086
Phosphorus, ortho, dissolved (as P)	0.074	0.074	0.052	--	--	0.143	0.009	<0.006	0.020	0.050
Nitrogen, NO_2 + NO_3, diss. (as N)	0.072	--	0.206	--	--	--	0.059	0.059	0.063	--
Nitrogen, ammonia, dissolved (as N)	0.133	--	0.051	--	--	--	<0.010	<0.010	0.024	--
Nitrogen, amm. + org., total (as N)	0.78	--	0.66	--	--	--	0.65	0.68	0.69	--
Nitrogen, total (as N)	0.85	--	0.87	--	--	--	0.71	0.74	0.75	--
Hardness, as $CaCO_3$	--	--	--	--	--	--	230	230	--	--
Calcium, dissolved (Ca)	--	--	--	--	--	--	34.9	34.9	--	--
Magnesium, dissolved (Mg)	--	--	--	--	--	--	33.6	33.6	--	--
Soduim, dissolved (Na)	--	--	--	--	--	--	27	27	--	--
Potassium, dissolved (K)	--	--	--	--	--	--	2.73	2.76	--	--
Sulfate, dissolved (SO_4)	--	--	--	--	--	--	23.2	23.5	--	--
Chloride, dissolved (Cl)	--	--	--	--	--	--	58.7	60.1	--	--
Silica, dissolved (SiO_2)	--	--	--	--	--	--	0.1	0.2	--	--
Solids, dissolved, at 180°C	--	--	--	--	--	--	335	333	--	--
Iron, dissolved (Fe) (µg/L)	--	--	--	--	--	--	<6	<6	--	--
Manganese, dissolved, (Mn) (µg/L)	--	--	--	--	--	--	1	0.9	--	--

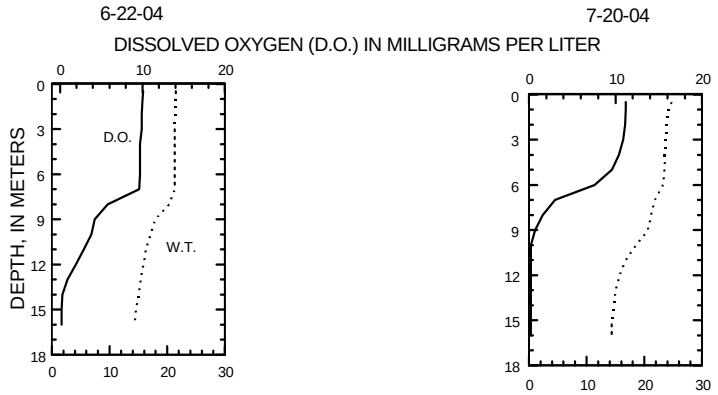


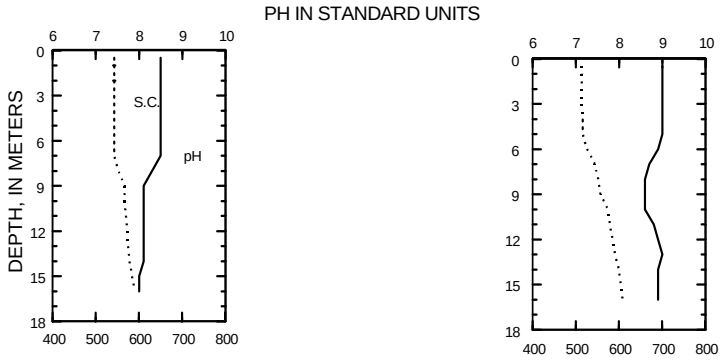
423556088365001 DELAVAN LAKE AT CENTER NEAR DELAVAN LAKE, WI--Continued

WATER-QUALITY DATA, JUNE 22 TO JULY 20, 2004

(Milligrams per liter unless otherwise indicated)

date	Jun-22				Jul-20			
Lake stage (ft)	5.03				4.93			
Secchi-depth (m)	2.2				1.4			
Depth of sample (m)	0.5	8	12	16	0.5	6	13	16
Chlorophyll a, phytoplankton (µg/L)	30.3	--	--	--	10.4	--	--	--
Water temperature (°C)	21.5	20.3	15.9	14.3	24.7	23.2	15	14.3
Specific conductance (µS/cm)	543	552	573	591	513	526	591	608
pH	8.5	8.3	8.1	8.0	9.0	8.9	9.0	8.9
Dissolved oxygen (mg/L)	10.1	5.8	1.9	0.2	11.2	7.6	0.2	0.2
Phosphorus, total (as P)	0.063	0.068	0.132	0.260	0.031	0.026	0.360	0.470
Phosphorus, ortho, dissolved (as P)	0.005	0.034	0.099	0.213	<0.006	0.003	0.305	0.387
Nitrogen, NO_2 + NO_3, diss. (as N)	0.097	--	--	--	<0.016	--	--	--
Nitrogen, ammonia, dissolved (as N)	0.042	--	--	--	0.017	--	--	--
Nitrogen, amm. + org., total (as N)	0.96	--	--	--	0.82	--	--	--
Nitrogen, total (as N)	1.1	--	--	--	--	--	--	--



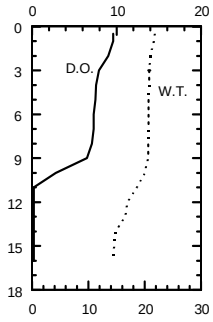


WATER-QUALITY DATA, AUGUST 19, 2004
(Milligrams per liter unless otherwise indicated)

date				Aug-19				
Lake stage (ft)				4.77				
Secchi-depth (m)				1.5				
Depth of sample (m)	0.5	5	9	11	13	14	15	16
Chlorophyll a, phytoplankton (µg/L)	20.6	--	--	--	--	--	--	--
Water temperature (°C)	21.8	20.7	20.6	18.6	16.5	14.8	14.6	14.4
Specific conductance (µS/cm)	526	529	533	563	587	607	611	620
pH	8.6	8.4	8.4	7.9	7.7	7.7	7.7	7.7
Dissolved oxygen (mg/L)	9.6	7.5	6.5	0.2	0.2	0.2	0.2	0.2
Phosphorus, total (as P)	0.088	0.072	0.069	0.155	0.360	0.490	0.520	0.560
Phosphorus, ortho, dissolved (as P)	0.012	--	0.028	--	--	0.459	--	0.554
Nitrogen, NO_2 + NO_3, diss. (as N)	0.008	--	--	--	--	--	--	--
Nitrogen, ammonia, dissolved (as N)	0.042	--	--	--	--	--	--	--
Nitrogen, amm. + org., total (as N)	0.82	--	--	--	--	--	--	--

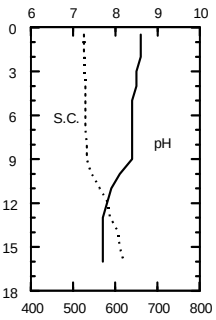
8-19-04

DISSOLVED OXYGEN (D.O.) IN MILLIGRAMS PER LITER



WATER TEMPERATURE (W.T.) IN DEGREES CELSIUS

PH IN STANDARD UNITS



SPECIFIC CONDUCTANCE (S.C.) IN MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS

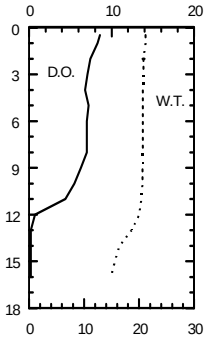
423556088365001 DELAVAN LAKE AT CENTER NEAR DELAVAN LAKE, WI--Continued

WATER-QUALITY DATA, SEPTEMBER 22, 2004
(Milligrams per liter unless otherwise indicated)

date		Sep-22		
Lake stage (ft)		4.68		
Secchi-depth (m)		1.7		
Depth of sample (m)	0.5	12	14	16
Chlorophyll a, phytoplankton (µg/L)	25.0	--	--	--
Water temperature (°C)	21.2	20.0	16.4	14.9
Specific conductance (µS/cm)	525	545	600	636
pH	8.8	8.2	7.9	7.8
Dissolved oxygen (mg/L)	8.6	0.7	0.2	0.2
Phosphorus, total (as P)	0.107	0.156	0.380	0.710
Phosphorus, ortho, dissolved (as P)	0.044	0.097	0.355	0.683
Nitrogen, NO_2 + NO_3, diss. (as N)	0.011	--	--	--
Nitrogen, ammonia, dissolved (as N)	0.041	--	--	--
Nitrogen, amm. + org., total (as N)	0.94	--	--	--

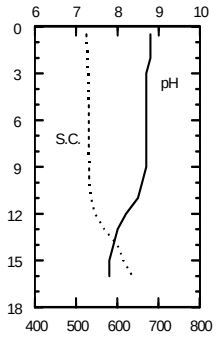
9-22-04

DISSOLVED OXYGEN (D.O.) IN MILLIGRAMS PER LITER



WATER TEMPERATURE (W.T.) IN DEGREES CELSIUS

PH IN STANDARD UNITS



SPECIFIC CONDUCTANCE (S.C.) IN MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS

423556088365001 DELAVAN LAKE AT CENTER NEAR DELAVAN LAKE, WI--Continued

ADDITIONAL WATER-QUALITY DATA, OCTOBER 1, 2003 TO SEPTEMBER 30, 2004*
(Milligrams per liter unless otherwise indicated)

	Oct. 1	Oct. 8	Oct. 17	Oct. 22	Oct. 30
Lake stage (ft)	4.26	4.20	4.20	4.17	4.17
Secchi-depth (meters)	1.5	2.0	2.4	3.0	3.2
Depth of sample (meters)	0.5	0.5	0.5	0.5	0.5
Water temperature (°C)	15.0	14.0	14.0	13.5	12.0
Phosphorus, total (as P)	0.116	0.121	0.118	0.109	0.108

	Nov. 6	Nov. 14	April 1	April 7	April 22
Lake stage (ft)	4.68	4.65	4.97	4.95	5.04
Secchi-depth (meters)	3.0	3.0	3.5	3.7	5.3
Depth of sample (meters)	0.5	0.5	0.5	0.5	0.5
Water temperature (°C)	10.0	7.5	6.5	8.0	11.0
Phosphorus, total (as P)	0.103	0.105	0.068	0.059	0.067

	April 27	May 4	May 11	May 26	June 4
Lake stage (ft)	4.97	4.97	5.05	5.39	5.01
Secchi-depth (meters)	6.4	6.1	4.9	3.4	4.4
Depth of sample (meters)	0.5	0.5	0.5	0.5	0.5
Water temperature (°C)	11.0	12.0	15.0	17.8	18.0
Phosphorus, total (as P)	0.051	0.050	0.051	0.054	0.066

	June 9	June 18	June 22	July 1	July 9
Lake stage (ft)	5.06	5.17	5.03	4.99	4.99
Secchi-depth (meters)	3.0	1.2	2.6	2.0	1.5
Depth of sample (meters)	0.5	0.5	0.5	0.5	0.5
Water temperature (°C)	22.0	24.5	21.5	23.0	22.0
Phosphorus, total (as P)	0.051	0.182	0.056	0.065	0.074

	July 15	July 28	Aug. 2	Aug. 13	Aug. 18
Lake stage (ft)	4.97	4.90	4.85	4.81	4.78
Secchi-depth (meters)	2.0	1.5	1.8	1.2	1.7
Depth of sample (meters)	0.5	0.5	0.5	0.5	0.5
Water temperature (°C)	24.0	24.0	24.0	21.0	21.5
Phosphorus, total (as P)	0.026	0.048	0.050	0.148	0.077

	Aug. 27	Aug. 31	Sept. 9	Sept. 17	Sept. 30
Lake stage (ft)	4.78	4.83	4.75	4.71	4.58
Secchi-depth (meters)	2.4	2.4	1.5	1.7	1.7
Depth of sample (meters)	0.5	0.5	0.5	0.5	0.5
Water temperature (°C)	22.0	23.0	23.0	21.0	22.8
Phosphorus, total (as P)	0.099	0.111	0.095	0.103	0.100

* Measurements and samples collected by the Delavan Lake Sanitary District.

ROCK RIVER BASIN

423659088354401 DELAVAN LAKE, AT NORTH END, NEAR LAKE LAWN, WI

LOCATION.--Lat 42°36'59", long 88°35'44", in NW 1/4 SW 1/4, sec.22, T.2 N., R.16 E., Walworth County, Hydrologic Unit 07090001, 2.6 mi southeast of Delavan.
DRAINAGE AREA.--41.4 mi^2, of which 2.3 mi^2 is non-contributing.
PERIOD OF RECORD.--October 1983 to current year.

WATER-QUALITY DATA, APRIL 13 TO AUGUST 19, 2004

	April 13	May 19	June 22	July 20	Aug. 19
Secchi-depth (meters)	3.4	5.3	2.2	1.3	1.3

423526088380101 DELAVAN LAKE, AT SW END, NEAR DELAVAN LAKE, WI

LOCATION.--Lat 42°35'26", long 88°38'01", in SE 1/4 NW 1/4, sec.32, T.2 N., R.16 E., Walworth County, Hydrologic Unit 07090001, 2.6 mi southeast of Delavan.
DRAINAGE AREA.--41.4 mi^2, of which 2.3 mi^2 is non-contributing.
PERIOD OF RECORD.--October 1983 to current year.

WATER-QUALITY DATA, APRIL 13 TO AUGUST 19, 2004

	April 13	May 19	June 22	July 20	Aug. 19
Secchi-depth (meters)	3.0	3.8	2.2	1.4	1.7

423706088363400 DELAVAN LAKE NEAR DELAVAN, WI

LOCATION.--Lat 42°36'27", long 88°36'19", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.28, T.2 N., R.16 E., Walworth County, Hydrologic Unit 07090001, at Delavan Lake Sanitary District Lift Station No. 2 at Delavan Lake Yacht Club, 1.0 mi southeast of outlet, and 2.7 mi southeast of Delavan.

DRAINAGE AREA.--41.4 mi^2, of which 2.3 mi^2 is non-contributing. Area of Delavan Lake, 2,072 acres.

PERIOD OF RECORD.--October 1983 to current year. October 1983 to September 1985 data published in Water Resources Investigation series report "Water Quality and Hydrology of Delavan Lake in Southeastern Wisconsin" by Stephen J. Field and Marvin D. Duerk.

GAGE.--Water-stage recorder. Datum of gage is 922.92 ft above NGVD of 1929. Prior to Sept. 5, 1989, staff gage at bridge on North Shore Drive at same datum.

REMARKS.--Lake was ice covered from Jan. 9 to Mar. 24. Lake levels controlled by Delavan Lake Sanitary District.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height observed, 6.19 ft, Feb. 21, 1994; minimum daily, -4.44 ft Nov. 6, 1989 (lake drawn down for lake rehabilitation program).

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 5.69 ft, May 23; minimum, 4.15 ft, Oct. 24.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.26	4.17	4.78	5.00	4.96	4.93	4.97	4.98	5.11	4.99	4.85	4.82
2	4.24	4.28	4.77	5.00	4.96	4.95	4.96	4.98	5.04	4.99	4.85	4.80
3	4.23	4.42	4.77	5.00	4.98	4.95	4.96	4.98	5.00	4.99	4.86	4.79
4	4.23	4.57	4.77	5.00	4.98	4.95	4.96	4.97	5.01	5.05	4.93	4.79
5	4.22	4.66	4.79	4.99	4.98	5.07	4.95	4.97	5.03	5.03	4.91	4.78
6	4.21	4.68	4.78	4.98	5.00	5.03	4.94	4.98	5.05	5.00	4.89	4.78
7	4.20	4.67	4.79	4.97	5.00	4.96	4.95	4.97	5.06	5.01	4.88	4.77
8	4.20	4.67	4.79	4.95	5.00	4.95	4.96	4.99	5.06	5.00	4.88	4.76
9	4.19	4.66	4.81	4.95	4.99	4.95	4.96	5.03	5.06	4.99	4.87	4.75
10	4.19	4.66	5.00	4.94	4.99	4.94	4.96	5.05	5.08	4.98	4.85	4.75
11	4.19	4.66	5.09	4.94	4.99	4.94	4.96	5.05	5.11	4.96	4.84	4.74
12	4.21	4.66	5.11	4.93	4.99	4.94	4.96	5.04	5.09	4.97	4.82	4.73
13	4.20	4.65	5.11	4.93	4.99	4.93	4.95	5.11	5.02	4.97	4.81	4.73
14	4.23	4.65	5.12	4.94	4.98	4.94	4.95	5.23	4.97	4.97	4.80	4.72
15	4.23	4.64	5.12	4.93	4.98	4.94	4.95	5.29	5.01	4.97	4.79	4.72
16	4.21	4.64	5.11	4.93	4.98	4.93	4.95	5.24	5.03	4.98	4.78	4.72
17	4.20	4.65	5.11	4.96	4.97	4.93	4.98	5.18	5.12	4.96	4.78	4.71
18	4.19	4.72	e5.10	4.97	4.97	4.94	4.98	5.16	5.17	4.95	4.78	4.70
19	4.18	4.76	5.09	4.96	4.97	4.94	4.98	5.13	5.09	4.94	4.77	4.69
20	4.18	4.76	5.08	4.96	4.98	4.94	5.00	5.15	5.00	4.93	4.76	4.68
21	4.18	4.77	5.06	4.96	5.00	4.94	5.07	5.18	4.98	4.95	4.75	4.66
22	4.17	4.77	5.05	4.96	5.01	4.93	5.04	5.46	5.03	4.98	4.73	4.65
23	4.16	4.79	5.04	4.96	5.03	4.93	5.00	5.66	5.00	4.98	4.73	4.64
24	4.17	4.79	5.03	4.96	5.04	4.97	4.98	5.65	5.00	4.96	4.74	4.63
25	4.20	4.79	5.02	4.96	5.03	5.00	4.98	5.54	5.01	4.94	4.76	4.62
26	4.19	4.78	5.01	4.96	5.01	5.10	4.98	5.39	5.02	4.92	4.76	4.61
27	4.18	4.79	5.00	4.97	4.97	5.12	4.97	5.27	5.03	4.91	4.78	4.61
28	4.18	4.79	5.02	4.97	4.94	5.11	4.94	5.14	5.03	4.90	4.82	4.59
29	4.17	4.79	5.03	4.97	4.92	5.14	4.94	5.05	5.02	4.89	4.83	4.58
30	4.17	4.78	5.02	4.97	---	5.09	4.96	5.02	5.01	4.88	4.83	4.58
31	4.18	---	5.01	4.97	---	5.03	---	5.12	---	4.87	4.83	---
MEAN	4.20	4.67	4.98	4.96	4.99	4.98	4.97	5.16	5.04	4.96	4.81	4.70
MAX	4.26	4.79	5.12	5.00	5.04	5.14	5.07	5.66	5.17	5.05	4.93	4.82
MIN	4.16	4.17	4.77	4.93	4.92	4.93	4.94	4.97	4.97	4.87	4.73	4.58

(e) Estimated due to ice effect or missing record

05431022 DELAVAN LAKE OUTLET AT BORG ROAD NEAR DELAVAN, WI

LOCATION.--Lat 42°36'53", long 88°37'29", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.20, T.2 N., R.16 E., Walworth County, Hydrologic Unit 07090001, on right bank 50 ft upstream from bridge on Borg Road, 1.4 mi southeast of Delavan, and 0.2 mi downstream from Delavan Lake dam outlet.

DRAINAGE AREA.--42.1 mi^2, of which 2.3 mi^2 is non-contributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1983 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 914.50 ft above NGVD of 1929 (Public Service Commission bench mark).

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	0.63	1.3	14	e2.8	19	55	1.5	133	11	0.90	1.3
2	1.8	1.1	1.4	14	e2.8	20	24	1.5	107	7.5	0.88	1.4
3	1.8	1.2	1.4	14	e2.8	20	14	2.5	36	7.4	0.98	1.3
4	2.0	2.1	1.4	14	e2.8	28	14	3.7	0.83	22	0.54	1.1
5	2.3	3.0	1.5	e12	e2.7	107	11	3.7	0.93	30	0.42	0.96
6	2.0	2.8	1.4	11	e2.7	162	7.8	3.5	2.6	17	0.48	0.74
7	2.0	2.4	1.3	11	e2.6	70	5.8	5.1	7.3	5.3	0.25	0.47
8	2.0	2.2	1.4	10	e2.4	27	4.9	10	14	12	0.10	0.77
9	2.0	2.0	1.3	10	e2.4	28	4.3	17	16	16	0.17	0.80
10	1.9	1.8	11	9.6	e2.4	24	4.0	27	18	21	0.31	0.60
11	1.7	1.7	e16	8.1	e2.5	22	3.2	35	95	14	0.36	0.62
12	1.6	1.8	e16	7.7	e2.5	20	2.9	36	150	6.5	3.4	0.72
13	1.5	1.8	16	5.3	e2.5	18	4.4	61	139	6.1	3.1	0.71
14	1.7	1.7	15	3.6	e2.5	17	4.9	113	54	6.2	0.77	0.56
15	1.9	1.7	15	3.3	e2.4	17	4.6	132	5.5	6.4	0.37	0.43
16	1.7	1.6	15	3.2	e2.3	17	4.5	117	12	5.8	1.6	0.95
17	1.3	1.5	15	e3.2	e2.5	18	4.5	117	90	2.8	1.5	1.0
18	0.97	1.6	15	e3.2	e2.6	18	4.4	119	140	2.0	1.1	0.80
19	1.00	1.5	15	e3.2	e2.7	20	4.1	43	122	3.8	1.2	0.81
20	1.0	1.5	15	e3.0	e2.9	17	3.8	11	89	5.0	0.77	0.78
21	0.80	1.5	15	e2.9	3.2	15	33	82	53	4.2	0.29	0.80
22	0.59	1.5	15	e2.8	3.1	10	54	161	59	6.4	0.17	0.74
23	0.54	1.5	15	e2.7	8.5	7.4	38	181	69	6.8	1.1	0.69
24	0.58	1.5	15	e2.7	18	21	28	184	35	5.5	1.8	0.80
25	0.74	1.4	15	e2.7	29	29	28	190	9.2	5.1	1.1	0.82
26	0.88	1.4	15	e2.8	40	50	20	175	2.3	2.0	2.2	0.61
27	0.96	1.5	15	e2.8	41	74	14	152	12	3.6	3.3	0.95
28	0.95	1.5	15	e3.0	39	83	9.4	141	18	3.4	2.1	1.2
29	0.85	1.7	15	e2.9	26	105	3.9	118	17	1.6	1.3	1.0
30	0.67	1.5	14	e2.8	---	116	1.7	120	18	1.3	1.2	0.91
31	0.71	---	13	e2.8	---	93	---	130	---	1.2	1.3	---
TOTAL	42.04	50.63	338.4	194.3	259.6	1,292.4	416.1	2,493.5	1,524.66	248.9	35.06	25.34
MEAN	1.36	1.69	10.9	6.27	8.95	41.7	13.9	80.4	50.8	8.03	1.13	0.84
MAX	2.3	3.0	16	14	41	162	55	190	150	30	3.4	1.4
MIN	0.54	0.63	1.3	2.7	2.3	7.4	1.7	1.5	0.83	1.2	0.10	0.43
AC-FT	83	100	671	385	515	2,560	825	4,950	3,020	494	70	50
CFSM	0.03	0.04	0.27	0.16	0.22	1.05	0.35	2.02	1.28	0.20	0.03	0.02
IN.	0.04	0.05	0.32	0.18	0.24	1.21	0.39	2.33	1.43	0.23	0.03	0.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2004, BY WATER YEAR (WY)

MEAN	20.1	17.7	17.8	17.3	29.7	29.5	35.5	24.6	30.3	11.1	4.84	14.5
MAX	127	93.1	51.1	44.7	97.8	71.2	145	80.4	105	53.7	32.6	110
(WY)	(1990)	(1986)	(1986)	(1993)	(1994)	(1986)	(1993)	(2004)	(1996)	(1993)	(1995)	(1989)
MIN	0.00	0.00	0.00	0.31	0.71	0.41	0.00	0.01	0.01	0.03	0.01	0.02
(WY)	(1991)	(1991)	(1990)	(1990)	(1990)	(1990)	(1990)	(1990)	(1990)	(1990)	(1991)	(1990)

05431022 DELAVAN LAKE OUTLET AT BORG ROAD NEAR DELAVAN, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1984 - 2004	
ANNUAL TOTAL	2,955.10		6,920.93			
ANNUAL MEAN	8.10		18.9		21.0	
HIGHEST ANNUAL MEAN					42.6	1993
LOWEST ANNUAL MEAN					7.59	2003
HIGHEST DAILY MEAN	132	Jul 16	190	May 25	406	Feb 22, 1994
LOWEST DAILY MEAN	0.02	Jun 18	0.10	Aug 8	0.00	(a)Jun 21-22, 1989
ANNUAL SEVEN-DAY MINIMUM	0.35	Jun 23	0.30	Aug 5	0.00	(b)Nov 14, 1989
MAXIMUM PEAK FLOW			219	May 25	473	Feb 22, 1994
MAXIMUM PEAK STAGE			7.79	May 25	8.35	Aug 5, 1998
ANNUAL RUNOFF (AC-FT)	5,860		13,730		15,190	
ANNUAL RUNOFF (CFSM)	0.203		0.475		0.527	
ANNUAL RUNOFF (INCHES)	2.76		6.47		7.16	
10 PERCENT EXCEEDS	18		56		58	
50 PERCENT EXCEEDS	2.3		3.2		7.2	
90 PERCENT EXCEEDS	0.77		0.80		0.13	

(a) Also occurred many days during 1990 and 1991 water years (lake drawn down for lake rehabilitation program)
(b) Also occurred in 1991 water year
(e) Estimated due to ice effect or missing record

05431022 DELAVAN LAKE OUTLET AT BORG ROAD NEAR DELAVAN, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1983 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: Water years 1984-85, 1990-91.
TOTAL-PHOSPHORUS DISCHARGE: October 1983 to current year.

INSTRUMENTATION.--Automatic pumping sampler from October to December 1983. Manual samples collected from January 1984 to present.

REMARKS.--Records good.

COOPERATION.--Observer furnished by Delavan Lake Sanitary District.

EXTREMES FOR PERIOD OF RECORD.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 238 mg/L, Feb. 22, 1985; minimum observed, 1 mg/L, on many days.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 29 tons, Feb. 25, 1985; minimum daily, 0.00 ton, on many days during 1990 and 1991 water years.
DISSOLVED CHLORIDE CONCENTRATIONS: Maximum observed, 71 mg/L, June 5, 1995; minimum observed, 40 mg/L, July 5, 1995.
TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 6.00 mg/L, Jan. 5, 1990; minimum observed, <0.01 mg/L, Mar. 9-10, 1990, several days during 1992, 1994, and 1995 water years, and Oct. 2, 1995.
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 585 lb, Feb. 22, 1994; minimum daily, 0.00 lb, Aug. 9, 13, 1987, and many days during 1990, 1991, and 1994 water years, Dec. 4, 1994, July 10-11, 1995, Oct. 1-5, 1995, and Sept. 27, 1996.

EXTREMES FOR CURRENT YEAR.--
TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.12 mg/L, Nov. 4; minimum observed, 0.02 mg/L, Oct. 1.
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 74.6 lb, June 12; minimum daily, 0.03 lb, Aug. 8.

PHOSPHORUS, WATER, UNFILTERED, POUNDS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.17	0.10	0.43	5.34	e1.22	5.21	8.91	0.33	43.0	3.56	0.34	0.32
2	0.20	0.21	0.46	5.34	e1.22	5.30	3.97	0.33	34.7	2.40	0.33	0.32
3	0.20	0.42	0.44	5.20	e1.20	5.34	2.24	0.53	11.7	2.42	0.36	0.30
4	0.23	1.26	0.45	5.21	e1.18	7.44	2.23	0.80	0.27	7.27	0.20	0.25
5	0.26	1.67	0.48	e4.52	e1.11	30.4	1.74	0.81	0.30	10.1	0.15	0.21
6	0.23	1.27	0.44	4.16	e1.09	51.7	1.26	0.75	0.85	5.72	0.17	0.16
7	0.23	0.92	0.43	4.11	e1.05	22.2	0.94	1.12	2.36	1.83	0.09	0.10
8	0.23	0.70	0.45	4.00	e0.92	6.02	0.80	2.34	4.57	4.14	0.03	0.17
9	0.24	0.51	0.43	3.96	e0.90	5.97	0.69	4.24	5.29	5.82	0.06	0.17
10	0.23	0.40	4.22	3.70	e0.89	5.13	0.65	7.38	5.68	7.80	0.10	0.13
11	0.21	0.35	e5.89	3.16	e0.92	4.59	0.52	10.1	48.9	5.31	0.12	0.13
12	0.19	0.37	e5.25	3.02	e0.91	4.07	0.46	11.0	74.6	2.46	1.10	0.16
13	0.19	0.35	5.26	2.08	e0.89	3.74	0.71	19.8	64.5	2.32	0.99	0.15
14	0.22	0.32	5.45	1.42	e0.88	3.40	0.79	36.7	23.6	2.35	0.24	0.12
15	0.24	0.31	5.60	1.32	e0.82	3.37	0.75	39.8	2.18	2.43	0.11	0.10
16	0.22	0.29	5.81	1.29	e0.78	3.36	0.73	26.1	4.53	2.18	0.47	0.21
17	0.18	0.26	6.03	e1.26	e0.84	3.34	0.73	25.2	30.7	1.05	0.46	0.24
18	0.13	0.26	6.28	e1.27	e0.86	3.36	0.71	25.7	44.1	0.75	0.33	0.19
19	0.14	0.25	6.49	e1.28	e0.88	3.72	0.66	9.30	33.6	1.42	0.35	0.19
20	0.14	0.26	6.48	e1.22	e0.91	3.14	0.62	2.41	24.0	1.90	0.22	0.19
21	0.11	0.27	6.31	e1.19	1.02	2.67	8.76	19.9	14.2	1.60	0.08	0.20
22	0.08	0.29	6.20	e1.16	0.97	1.77	14.1	48.8	16.1	2.43	0.05	0.18
23	0.08	0.30	6.15	e1.13	2.58	1.26	8.35	51.5	19.0	2.57	0.30	0.18
24	0.08	0.32	6.22	e1.14	5.34	3.54	5.95	60.6	9.82	2.07	0.47	0.20
25	0.11	0.32	6.21	e1.14	8.38	4.76	5.98	68.9	2.61	1.92	0.28	0.21
26	0.13	0.34	6.18	e1.18	11.6	8.13	4.35	57.4	0.67	0.76	0.56	0.16
27	0.14	0.39	6.14	e1.19	11.7	12.1	3.00	49.1	3.51	1.37	0.84	0.26
28	0.14	0.41	6.21	e1.26	10.9	13.4	2.04	45.6	5.32	1.30	0.53	0.32
29	0.13	0.49	5.91	e1.24	7.23	17.6	0.83	38.2	5.18	0.59	0.31	0.27
30	0.10	0.46	5.46	e1.20	---	23.3	0.36	38.9	5.42	0.48	0.30	0.24
31	0.11	---	5.15	e1.21	---	15.9	---	42.2	---	0.45	0.32	---
TOTAL	5.29	14.07	132.91	75.90	79.19	285.23	83.83	745.84	541.26	88.77	10.26	6.03

WTR YR 2004 TOTAL 2,068.58

e Estimated

05431022 DELAVAN LAKE OUTLET AT BORG ROAD NEAR DELAVAN, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Dis-charge, cfs (00060)	Instan-taneous dis-charge, cfs (00061)	Sam-pling method, code (82398)	Phos-phorus, water, unfltrd mg/L (00665)
OCT					
01...	1045	--	1.3	70	E.02
NOV					
02...	0920	--	2.9	10	E.03
04...	1405	--	.45	10	.12
19...	0845	--	1.5	10	E.03
DEC					
01...	0950	--	1.3	10	.06
10...	0855	--	1.8	10	.07
11...	1030	16	--	10	.07
12...	0940	16	--	10	.06
19...	1155	--	15	70	.08
JAN					
05...	1345	12	--	10	.07
FEB					
02...	0920	2.8	--	10	.08
MAR					
01...	0840	--	19	10	.05
05...	1010	--	32	10	.05
06...	0850	--	163	10	.06
07...	0850	--	32	10	.06
08...	1120	--	27	10	.04
10...	0840	--	24	10	.04
26...	0830	--	44	10	E.03
27...	0925	--	62	10	E.03
29...	0945	--	82	10	E.03
29...	1340	--	133	10	E.03
30...	1340	--	116	10	E.04
31...	1335	--	79	10	E.03
APR					
01...	1010	--	75	10	E.03
02...	0945	--	39	10	E.03
22...	0905	--	54	10	.05
23...	0830	--	53	10	.04
MAY					
13...	0930	--	35	10	.06
14...	0915	--	86	10	.06
15...	0910	--	140	10	.06
16...	0905	--	124	10	.04
17...	0915	--	108	10	E.04
18...	0900	--	128	10	.04
22...	1040	--	180	10	.06
23...	0705	--	189	10	.05
25...	0900	--	66	10	.07
26...	0850	--	189	10	.06
28...	0910	--	157	10	.06
31...	1000	--	127	10	.06
JUN					
11...	0950	--	54	10	.10
18...	0840	--	147	10	.06
19...	1000	--	128	10	.05
22...	0935	--	42	10	.05
JUL					
12...	0925	--	6.7	10	.07
AUG					
02...	0925	--	1.0	10	.07
SEP					
07...	0845	--	.42	10	E.04
13...	1400	--	.75	10	E.04
27...	1440	--	.51	10	.05

05431032 TURTLE CREEK AT DELAVAN, WI

LOCATION.--Lat 42°38'13", long 88°39'27", in NW ¼ NW ¼ sec.18, T.2 N., R.16 E., Walworth County, Hydrologic Unit 07090001, on left bank 0.1 mi downstream from bridge on County Highway P, 0.7 mi northwest of Post Office at Delavan.

DRAINAGE AREA.--83.3 mi^2, of which 2.33 mi^2 is noncontributing.

PERIOD OF RECORD.--June 1996 to current year.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 873.00 ft above NGVD of 1929 (levels by U.S. Geological Survey).

REMARKS.--Records good (see page 11). Some seasonal regulation caused by dams used to maintain levels of Comus and Delavan Lakes and Delavan Millpond. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	12	17	28	13	46	112	23	179	39	17	17
2	10	32	16	28	13	49	63	21	174	29	17	16
3	11	58	16	28	14	48	33	19	140	30	21	16
4	10	84	16	27	14	67	32	19	60	36	24	16
5	10	80	16	26	14	146	30	18	33	48	20	16
6	10	42	15	24	14	192	27	16	32	46	19	15
7	9.6	24	15	23	14	192	25	19	34	35	19	15
8	9.5	22	15	23	14	98	24	20	41	35	18	15
9	9.5	21	21	23	14	65	23	33	46	41	18	15
10	9.1	20	85	22	14	52	22	37	56	45	18	15
11	8.8	19	82	21	15	46	22	49	80	47	18	15
12	9.8	18	70	21	15	41	21	53	159	36	17	14
13	8.9	18	64	20	15	41	21	82	177	32	18	14
14	15	17	57	17	15	38	21	153	166	30	18	14
15	11	17	34	16	15	37	19	177	89	28	16	14
16	10	16	24	16	14	36	20	172	62	27	16	14
17	10	16	27	17	15	36	23	157	138	26	16	14
18	9.8	28	26	16	15	36	20	139	210	25	15	15
19	9.6	23	30	15	15	36	20	104	221	24	15	13
20	9.1	22	30	15	19	36	27	49	194	23	15	12
21	9.3	23	30	14	19	31	50	63	168	29	15	12
22	9.0	22	30	14	20	28	86	192	135	25	14	12
23	8.8	23	30	14	30	24	80	289	126	25	14	12
24	11	21	29	14	43	35	61	291	100	24	14	11
25	12	20	29	14	51	48	57	250	62	22	15	12
26	12	20	28	14	63	91	49	216	48	21	15	12
27	12	19	28	14	66	109	37	196	44	20	16	12
28	12	19	32	14	62	135	31	184	49	20	24	12
29	12	17	31	14	54	157	26	168	44	19	18	12
30	13	17	30	13	---	165	23	168	41	17	17	13
31	12	---	28	13	---	152	---	172	---	17	16	---
TOTAL	323.8	790	1,001	578	699	2,313	1,105	3,549	3,108	921	533	415
MEAN	10.4	26.3	32.3	18.6	24.1	74.6	36.8	114	104	29.7	17.2	13.8
MAX	15	84	85	28	66	192	112	291	221	48	24	17
MIN	8.8	12	15	13	13	24	19	16	32	17	14	11
CFSM	0.13	0.33	0.40	0.23	0.30	0.92	0.45	1.41	1.28	0.37	0.21	0.17
IN.	0.15	0.36	0.46	0.27	0.32	1.06	0.51	1.63	1.43	0.42	0.24	0.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2004, BY WATER YEAR (WY)

MEAN	32.7	32.0	32.7	37.3	67.6	61.8	69.6	67.6	92.6	32.7	25.3	30.8
MAX	74.1	56.3	48.2	72.4	122	103	106	114	171	62.6	68.3	72.7
(WY)	(2002)	(2002)	(2002)	(1999)	(2001)	(2001)	(1999)	(2004)	(1996)	(2000)	(1998)	(2001)
MIN	10.4	17.2	18.0	16.3	16.7	27.4	26.9	41.8	19.5	16.5	11.4	10.2
(WY)	(2004)	(1998)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2003)	(2002)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1996 - 2004	
ANNUAL TOTAL	9,086.9		15,335.8			
ANNUAL MEAN	24.9		41.9		47.7	
HIGHEST ANNUAL MEAN					61.2	2001
LOWEST ANNUAL MEAN					24.3	2003
HIGHEST DAILY MEAN	146	Jul 17	291	May 24	404	Jun 15, 1999
LOWEST DAILY MEAN	6.6	Sep 10, 11	8.8	Oct 11, 23	6.6	Sep 10, 11, 2003
ANNUAL SEVEN-DAY MINIMUM	7.3	Sep 5	9.3	Oct 7	7.3	Sep 5, 2003
MAXIMUM PEAK FLOW			330	May 23	493	Feb 21, 1997
MAXIMUM PEAK STAGE			3.28	May 23	3.78	Feb 21, 1997
INSTANTANEOUS LOW FLOW			8.2	Oct 11	6.5	Sep 9-12, 2003
ANNUAL RUNOFF (CFSM)	0.307		0.517		0.590	
ANNUAL RUNOFF (INCHES)	4.17		7.05		8.01	
10 PERCENT EXCEEDS	46		110		106	
50 PERCENT EXCEEDS	17		22		30	
90 PERCENT EXCEEDS	10		12		15	

05431486 TURTLE CREEK AT CARVERS ROCK ROAD NEAR CLINTON, WI

LOCATION.--Lat 42°35'50", long 88°49'45", in SE ¼ SW ¼ sec.27, T.2 N., R.14 E., Rock County, Hydrologic Unit 07090001, on left bank 25 ft downstream from bridge on Carvers Rock Road, 3.3 mi northeast of Clinton, 13 mi northeast of Beloit, and 17.8 mi upstream from mouth.

DRAINAGE AREA.--199 mi^2, of which 2.33 mi^2 is noncontributing.

PERIOD OF RECORD.--September 1939 to current year. Prior to January 1980, all records published as "Turtle Creek near Clinton" (05431500).

REVISED RECORDS.--WSP 955: 1940. WSP 1308: 1950(M). WDR WI-71-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 823 ft above NGVD of 1929, from topographic map. Prior to January 17, 1940, non-recording gage, and January 17, 1940 to December 31, 1979, water-stage recorder at site 1.8 mi downstream at a different datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Some seasonal regulation caused by dams used to maintain levels of Comus and Delavan Lakes and Delavan Millpond. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	45	67	82	e42	128	238	89	422	117	76	70
2	41	78	64	84	e43	140	187	85	337	111	75	69
3	43	188	63	85	e43	125	131	81	288	133	77	67
4	44	272	63	81	e43	122	112	77	214	322	123	66
5	42	261	66	78	e44	563	108	77	143	185	106	65
6	42	175	65	e78	e44	465	101	72	127	160	88	65
7	42	110	64	e78	e44	363	95	71	120	152	82	63
8	41	92	64	e78	e44	294	93	77	116	133	81	64
9	41	84	67	e78	e43	178	89	86	118	127	78	61
10	41	79	280	e78	e44	152	87	90	129	129	78	61
11	41	80	344	e77	e44	136	83	99	188	128	78	60
12	43	78	218	e78	e44	120	81	107	524	126	76	59
13	43	73	182	e77	e43	114	80	124	539	116	74	59
14	50	71	145	e70	e44	114	79	237	346	106	73	58
15	51	69	130	e59	e44	108	78	337	280	101	73	59
16	44	69	102	e56	e43	104	76	282	182	98	71	59
17	43	67	96	e58	e44	104	84	252	265	95	73	59
18	43	92	96	e57	e45	104	81	259	309	94	73	58
19	42	115	89	e54	e46	103	77	226	317	92	70	60
20	43	95	89	e50	e53	109	85	172	310	92	69	57
21	42	86	116	e47	e54	105	177	168	298	97	68	56
22	42	82	91	e45	e60	97	163	638	313	127	67	56
23	42	85	88	e45	e90	92	163	757	238	107	66	56
24	43	83	85	e45	e120	116	140	614	228	98	66	56
25	53	77	94	e44	124	159	136	488	189	94	68	55
26	47	74	282	e45	120	284	127	400	150	93	70	57
27	45	74	91	e45	125	286	113	351	134	90	70	58
28	46	72	91	e45	122	267	102	304	130	84	76	57
29	46	70	94	e44	123	357	93	285	129	82	88	56
30	46	69	89	e44	---	316	87	314	122	80	77	58
31	45	---	85	e43	---	286	---	453	---	77	71	---
TOTAL	1,358	2,965	3,560	1,928	1,822	6,011	3,346	7,672	7,205	3,646	2,381	1,804
MEAN	43.8	98.8	115	62.2	62.8	194	112	247	240	118	76.8	60.1
MAX	53	272	344	85	125	563	238	757	539	322	123	70
MIN	41	45	63	43	42	92	76	71	116	77	66	55
CFSM	0.22	0.50	0.58	0.32	0.32	0.99	0.57	1.26	1.22	0.60	0.39	0.31
IN.	0.26	0.56	0.67	0.36	0.34	1.14	0.63	1.45	1.36	0.69	0.45	0.34

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2004, BY WATER YEAR (WY)

MEAN	102	109	105	106	143	223	176	133	129	98.7	86.7	95.8
MAX	312	388	343	315	518	664	758	486	407	458	278	482
(WY)	(1974)	(1986)	(1983)	(1946)	(1949)	(1959)	(1973)	(1973)	(1993)	(1978)	(1972)	(1972)
MIN	30.1	37.9	34.5	24.5	30.4	55.4	52.7	31.6	35.2	24.8	21.5	19.6
(WY)	(1958)	(1950)	(1965)	(1959)	(1959)	(1954)	(1958)	(1958)	(1965)	(1958)	(1958)	(1958)

05431486 TURTLE CREEK AT CARVERS ROCK ROAD NEAR CLINTON, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1939 - 2004	
ANNUAL TOTAL	30,121		43,698			
ANNUAL MEAN	82.5		119		125	
HIGHEST ANNUAL MEAN					289	1973
LOWEST ANNUAL MEAN					43.0	1958
HIGHEST DAILY MEAN	449	Jul 15	757	May 23	6,400	Apr 21, 1973
LOWEST DAILY MEAN	34	Sep 7	41	(a)Oct 1	16	Sep 13, 1958
ANNUAL SEVEN-DAY MINIMUM	34	Sep 5	41	Oct 5	17	Sep 9, 1958
MAXIMUM PEAK FLOW			858	May 23	(b)16,500	Apr 21, 1973
MAXIMUM PEAK STAGE			6.37	May 23	(c)12.85	Apr 21, 1973
INSTANTANEOUS LOW FLOW			(d)24	Jan 6, 18	(f)8.0	Dec 29, 1956
ANNUAL RUNOFF (CFSM)	0.420		0.607		0.637	
ANNUAL RUNOFF (INCHES)	5.70		8.27		8.66	
10 PERCENT EXCEEDS	124		280		231	
50 PERCENT EXCEEDS	68		84		85	
90 PERCENT EXCEEDS	42		44		44	

(a) Also occurred Oct. 2, 8-11
(b) From rating curve extended above 6,500 ft^3/s on basis of slope-area measurement of peak flow
(c) Site and datum then in use
(d) Ice affected
(e) Estimated due to ice effect or missing record
(f) Result of freezeup

LOCATION.--Lat 42°40'40", long 90°07'07", in NE $^1/_4$ sec.3, T.2 N., R.3 E., Lafayette County, Hydrologic Unit 07090003, on right bank in Darlington, 0.3 mi downstream from Vinegar Branch, and 3.6 mi upstream from Otter Creek.

DRAINAGE AREA.--273 mi^2.

PERIOD OF RECORD.--September 1939 to current year.

REVISED RECORDS.--WDR WI-76-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 802.42 ft above NGVD of 1929. Prior to Dec. 19, 1939, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	71	159	130	e100	292	309	167	1,130	321	225	178
2	64	107	141	163	e110	311	284	165	795	314	219	173
3	64	200	146	153	e110	235	264	162	653	313	229	170
4	69	708	142	118	e110	201	249	160	566	473	343	168
5	68	810	145	73	e110	645	236	159	518	391	304	165
6	67	282	143	e150	e110	620	231	157	506	338	229	164
7	67	204	137	e140	e110	313	225	160	491	393	216	164
8	66	174	140	e130	e110	253	218	190	445	362	213	162
9	65	154	147	e130	e110	227	210	174	411	323	213	161
10	64	148	217	e120	e110	213	202	178	410	381	208	160
11	64	146	228	e120	e110	207	196	222	654	332	203	158
12	66	142	162	e120	e110	178	192	190	766	408	200	156
13	71	131	201	e120	e110	193	189	185	558	330	195	153
14	79	121	195	e120	e100	199	186	221	584	296	190	153
15	89	120	180	e120	e100	200	183	205	512	276	186	164
16	77	119	178	e110	e100	179	182	183	454	267	184	211
17	70	116	165	e110	e100	179	204	176	884	364	189	179
18	68	118	161	e110	e100	183	208	217	735	328	193	162
19	68	117	156	e110	e110	186	190	219	545	277	190	157
20	68	111	121	e110	e150	181	188	187	480	269	185	151
21	69	108	154	e100	e300	176	228	194	465	317	178	148
22	68	105	159	e100	e350	169	239	993	493	388	175	147
23	67	296	149	e100	e420	169	200	2,600	435	302	177	146
24	70	491	108	e100	e700	192	189	2,350	416	265	178	148
25	85	265	138	e100	e500	233	190	1,480	442	252	215	148
26	82	215	143	e100	e330	436	195	823	393	243	211	144
27	74	194	146	e110	e350	601	182	639	367	235	237	142
28	73	182	179	e110	319	450	176	550	365	230	212	141
29	74	171	240	e100	319	466	173	582	351	229	214	140
30	75	165	171	e100	---	377	168	1,040	332	241	197	139
31	73	---	160	e100	---	337	---	1,280	---	239	186	---
TOTAL	2,188	6,291	5,011	3,577	5,768	8,801	6,286	16,208	16,156	9,697	6,494	4,752
MEAN	70.6	210	162	115	199	284	210	523	539	313	209	158
MAX	89	810	240	163	700	645	309	2,600	1,130	473	343	211
MIN	64	71	108	73	100	169	168	157	332	229	175	139
CFSM	0.26	0.77	0.59	0.42	0.73	1.04	0.77	1.92	1.97	1.15	0.77	0.58
IN.	0.30	0.86	0.68	0.49	0.79	1.20	0.86	2.21	2.20	1.32	0.88	0.65

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2004, BY WATER YEAR (WY)

MEAN	131	142	124	154	214	362	244	209	251	204	153	143
MAX	302	674	338	546	738	951	731	780	810	1,796	610	487
(WY)	(1985)	(1962)	(1983)	(1960)	(1953)	(1959)	(1959)	(1960)	(2000)	(1993)	(1993)	(1942)
MIN	39.9	43.8	34.6	31.6	38.3	60.9	69.8	51.1	42.2	32.7	42.1	38.3
(WY)	(1965)	(1965)	(1959)	(1959)	(1959)	(1957)	(1957)	(1958)	(1965)	(1965)	(1958)	(1958)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1939 - 2004	
ANNUAL TOTAL	42,838		91,229			
ANNUAL MEAN	117		249		194	
HIGHEST ANNUAL MEAN					534	1993
LOWEST ANNUAL MEAN					66.5	1958
HIGHEST DAILY MEAN	810	Nov 5	2,600	May 23	11,200	Jul 16, 1950
LOWEST DAILY MEAN	54	Sep 10, 11	64	(a)Oct 1-3	24	(b)Jul 25, 1965
ANNUAL SEVEN-DAY MINIMUM	55	Sep 6	66	Oct 6	25	Jul 24, 1965
MAXIMUM PEAK FLOW			3,200	May 23	(c)22,000	Jul 16, 1950
MAXIMUM PEAK STAGE			13.80	May 23	20.71	Jul 16, 1950
INSTANTANEOUS LOW FLOW			(d)54	Jan 5	(d)17	Nov 29, 1966
ANNUAL RUNOFF (CFSM)	0.430		0.913		0.711	
ANNUAL RUNOFF (INCHES)	5.84		12.43		9.67	
10 PERCENT EXCEEDS	190		468		335	
50 PERCENT EXCEEDS	96		182		128	
90 PERCENT EXCEEDS	65		100		58	

(a) Also occurred Oct. 10, 11
(b) Also occurred July 26, 27, 30, 1965
(c) From rating curve extended above 11,000 ft^3/s on basis of slope-area determination of peak flow
(d) Result of freezeup
(e) Estimated due to ice effect or missing record

05433000 EAST BRANCH PECATONICA RIVER NEAR BLANCHARDVILLE, WI

620

LOCATION.--Lat 42°47'08" long 89°51'40", in SE ¼ SE ¼ sec. 26, T.4 N., R.5 E., Lafayette County, Hydrologic Unit 07090003, on left bank at downstream side of bridge on State Highway 78, 1.8 mi south of Blanchardville and 4.5 mi upstream from Sawmill Creek.

DRAINAGE AREA.--221 mi^2.

PERIOD OF RECORD.--September 1939 to September 1986, October 1987 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 796.8 ft above NGVD of 1929. Prior to Dec. 20, 1939, nonrecording gage at bridge 50 ft upstream at same datum.

REMARKS.--Records good except those for periods of discharge over 500 ft^3/s, which are fair, and estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	76	115	106	e95	192	221	135	444	185	154	133
2	71	100	107	117	e98	209	210	132	356	182	151	141
3	74	162	108	113	e98	158	200	130	317	182	160	131
4	74	513	106	105	e98	140	191	129	290	220	248	128
5	74	456	110	e100	e98	391	184	127	276	199	189	126
6	73	168	108	e110	e98	322	181	126	271	189	160	126
7	72	131	106	e100	e98	203	177	126	263	209	153	125
8	71	116	108	e100	e98	174	172	126	252	192	152	123
9	72	105	110	e100	e99	159	167	129	242	184	152	123
10	72	105	197	e100	e99	150	162	132	239	192	148	123
11	72	105	215	e100	e99	151	156	169	307	180	146	121
12	75	104	e170	e100	e98	133	153	139	339	181	146	120
13	78	97	e180	e100	e98	140	150	135	290	174	142	118
14	86	95	e160	e100	e97	146	149	171	257	167	140	118
15	86	95	e140	e100	e97	141	147	159	245	162	138	123
16	77	95	e120	e98	e97	132	147	139	232	169	136	153
17	76	94	e110	e96	e97	134	165	134	335	283	140	131
18	77	98	e110	e96	e97	137	162	194	274	200	143	123
19	77	97	e110	e96	e100	136	150	175	241	180	143	120
20	76	93	e100	e95	e130	136	149	154	226	175	139	118
21	77	91	e120	e94	e240	131	193	182	225	185	134	118
22	76	90	e110	e94	e230	126	177	860	242	209	132	117
23	76	277	e110	e92	e270	127	154	1,660	220	180	133	117
24	77	333	e100	e92	e400	141	147	1,760	218	169	135	117
25	89	169	e100	e92	e230	160	154	926	226	165	152	117
26	82	144	e110	e91	e200	432	158	554	210	160	146	116
27	78	133	e120	e91	e200	402	145	399	202	157	173	116
28	79	128	e120	e92	184	292	142	342	200	154	150	115
29	78	120	e120	e93	187	314	140	333	195	154	150	114
30	78	118	118	e93	---	257	134	488	189	169	141	115
31	78	---	115	e93	---	236	---	587	---	168	136	---
TOTAL	2,372	4,508	3,833	3,049	4,130	6,102	4,937	10,952	7,823	5,675	4,662	3,686
MEAN	76.5	150	124	98.4	142	197	165	353	261	183	150	123
MAX	89	513	215	117	400	432	221	1,760	444	283	248	153
MIN	71	76	100	91	95	126	134	126	189	154	132	114
CFSM	0.35	0.68	0.56	0.45	0.64	0.89	0.74	1.60	1.18	0.83	0.68	0.56
IN.	0.40	0.76	0.65	0.51	0.70	1.03	0.83	1.84	1.32	0.96	0.78	0.62

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2004, BY WATER YEAR (WY)

MEAN	113	120	110	125	165	255	197	169	176	153	122	119
MAX	252	311	278	354	597	574	547	584	450	885	303	332
(WY)	(1985)	(1962)	(1983)	(1960)	(1948)	(1950)	(1959)	(1973)	(2000)	(1993)	(1993)	(1981)
MIN	54.9	55.8	47.6	46.4	52.1	62.7	71.5	54.5	59.6	48.2	43.7	44.6
(WY)	(1965)	(1965)	(1959)	(1959)	(1959)	(1957)	(1957)	(1958)	(1958)	(1958)	(1958)	(1958)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1939 - 2004	
ANNUAL TOTAL	37,186		61,729			
ANNUAL MEAN	102		169		152	
HIGHEST ANNUAL MEAN					338	1993
LOWEST ANNUAL MEAN					70.4	1958
HIGHEST DAILY MEAN	513	Nov 4	1,760	May 24	7,560	Feb 28, 1948
LOWEST DAILY MEAN	68	Aug 28	71	Oct 1, 2, 8	41	(a)Aug 18, 19, 1958
ANNUAL SEVEN-DAY MINIMUM	69	Sep 5	72	Oct 5	42	Oct 1, 1958
MAXIMUM PEAK FLOW			1,980	May 24	(b)11,700	Feb 28, 1948
MAXIMUM PEAK STAGE			13.62	May 24	16.54	Jul 6, 1993
INSTANTANEOUS LOW FLOW			70	(c)Oct 1, 2	(d)18	Nov 29, 1966
ANNUAL RUNOFF (CFSM)	0.461		0.763		0.687	
ANNUAL RUNOFF (INCHES)	6.26		10.39		9.34	
10 PERCENT EXCEEDS	138		257		237	
50 PERCENT EXCEEDS	91		136		113	
90 PERCENT EXCEEDS	73		92		66	

(a) Also occurred Sept. 1, 22, 23, 29, Oct. 2, 6, 1958, and Dec. 19, 20, 1964
(b) Gage height, 15.74 ft
(c) Also occurred Oct. 7-11
(d) Result of freezeup
(e) Estimated due to ice effect or missing record

05434500 PECATONICA RIVER AT MARTINTOWN, WI

LOCATION.--Lat 42°30'34", long 89°47'58", in NE ¼ SE ¼ sec.32, T.1 N., R.6 E., Green County, Hydrologic Unit 07090003, on right bank about 400 ft downstream from highway bridge in Martintown, 0.3 mi upstream from Wisconsin-Illinois State line and 8.8 mi downstream from Skinner Creek.

DRAINAGE AREA.--1,034 mi^2.

PERIOD OF RECORD.--October 1939 to current year.

REVISED RECORDS.--WSP 1308: 1949-50(M). WDR WI-71-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 757.83 ft above NGVD of 1929. Prior to Jan. 6, 1940, nonrecording gage at same site and datum. Auxiliary wire-weight gage 1.2 mi downstream, at same datum.

REMARKS.--Records good except those for periods of discharge above 2,000 ft^3/s, which are fair, and estimated daily discharges, which are poor (see page 11). Diurnal fluctuation at low flow may occur from powerplant operations in Argyle, 28.2 mi upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	267	322	571	549	e370	1,100	1,250	632	2,930	1,130	868	682
2	265	346	547	519	e380	1,070	1,140	619	3,010	1,090	836	654
3	272	499	521	520	e400	1,040	1,060	609	3,030	1,090	813	642
4	274	1,030	506	526	e400	923	1,000	596	2,880	1,300	882	626
5	281	1,470	509	464	e400	1,410	949	584	2,610	1,330	1,030	610
6	283	1,660	516	e430	e400	1,880	905	576	2,230	1,300	1,030	604
7	286	1,320	518	e470	e390	1,870	875	572	1,900	1,320	885	599
8	284	855	508	e450	e390	1,450	844	602	1,690	1,340	809	586
9	281	658	509	e440	e390	1,120	820	649	1,550	1,240	789	580
10	278	571	743	e430	e390	966	790	659	1,460	1,170	781	585
11	274	536	1,090	e420	e390	883	762	689	1,540	1,180	764	577
12	280	522	1,010	e420	e390	816	737	719	2,020	1,200	747	568
13	288	505	744	e420	e390	762	715	714	2,080	1,190	736	560
14	316	484	955	e420	e390	735	700	707	2,000	1,130	718	551
15	332	469	1,030	e420	e380	741	690	760	1,870	1,050	700	550
16	338	460	873	e410	e380	739	677	761	1,760	998	687	606
17	326	455	722	e400	e380	702	677	680	2,040	998	680	660
18	302	471	729	e400	e380	691	711	675	2,190	1,090	684	654
19	299	491	689	e400	e380	699	732	718	2,200	1,110	685	591
20	299	476	600	e400	e410	696	703	783	2,040	1,010	691	560
21	300	455	707	e390	e600	682	849	719	1,800	1,000	674	550
22	300	438	755	e380	e1,000	662	917	1,420	1,700	1,150	653	540
23	300	466	641	e370	e1,600	639	888	2,340	1,600	1,170	639	534
24	298	851	571	e370	e1,800	665	794	2,830	1,500	1,070	647	529
25	316	1,250	546	e370	e1,900	767	743	4,140	1,430	974	659	527
26	341	1,030	735	e370	e1,900	981	733	5,380	1,390	921	701	530
27	347	798	851	e370	e1,800	1,370	729	5,320	1,320	888	736	527
28	331	694	632	e380	e1,600	1,640	703	4,570	1,260	865	786	514
29	324	640	589	e380	1,410	1,630	668	3,680	1,220	837	819	514
30	326	602	651	e370	---	1,540	647	3,070	1,180	862	766	523
31	325	---	604	e370	---	1,410	---	2,920	---	887	725	---
TOTAL	9,333	20,824	21,172	13,028	21,390	32,279	24,408	49,693	57,430	33,890	23,620	17,333
MEAN	301	694	683	420	738	1,041	814	1,603	1,914	1,093	762	578
MAX	347	1,660	1,090	549	1,900	1,880	1,250	5,380	3,030	1,340	1,030	682
MIN	265	322	506	370	370	639	647	572	1,180	837	639	514
CFSM	0.29	0.67	0.66	0.41	0.71	1.01	0.79	1.55	1.85	1.06	0.74	0.56
IN.	0.34	0.75	0.76	0.47	0.77	1.16	0.88	1.79	2.07	1.22	0.85	0.62

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2004, BY WATER YEAR (WY)

MEAN	538	590	520	579	802	1,349	966	833	879	795	587	575
MAX	1,226	2,429	1,492	2,049	2,512	3,155	2,943	3,200	2,804	5,190	1,752	1,920
(WY)	(1987)	(1962)	(1983)	(1960)	(1953)	(1950)	(1960)	(1973)	(2000)	(1993)	(1993)	(1965)
MIN	187	211	162	147	182	259	328	234	233	181	167	166
(WY)	(1957)	(1965)	(1959)	(1959)	(1959)	(1957)	(1957)	(1958)	(1965)	(1965)	(1958)	(1958)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1940 - 2004	
ANNUAL TOTAL	173,784		324,400			
ANNUAL MEAN	476		886		751	
HIGHEST ANNUAL MEAN					1,720	1993
LOWEST ANNUAL MEAN					292	1964
HIGHEST DAILY MEAN	1,660	Nov 6	5,380	May 26	14,600	Jul 1, 1969
LOWEST DAILY MEAN	251	Sep 11	265	Oct 2	132	Nov 7, 1949
ANNUAL SEVEN-DAY MINIMUM	255	Sep 6	275	Oct 1	140	Jan 18, 1959
MAXIMUM PEAK FLOW			5,530	May 26	15,100	Jul 1, 1969
MAXIMUM PEAK STAGE			16.41	May 26	21.46	Jul 1, 1969
INSTANTANEOUS LOW FLOW					0.00	Dec 14, 1939
ANNUAL RUNOFF (CFSM)	0.460		0.857		0.726	
ANNUAL RUNOFF (INCHES)	6.25		11.67		9.86	
10 PERCENT EXCEEDS	786		1,630		1,330	
50 PERCENT EXCEEDS	430		691		540	
90 PERCENT EXCEEDS	280		370		261	

(e) Estimated due to ice effect or missing record

05435943 BADGER MILL CREEK AT VERONA, WI

LOCATION.--Lat 42°58'37", long 89°32'22", in NW $^1/_4$ SW $^1/_4$ sec.22, T.6 N., R.8 E., Dane County, Hydrologic Unit 07090004, on left bank 60 ft downstream of Bruce Street, 0.8 mi southwest of intersection of State Highway 69 and County Trunk Highway M, at Verona.

DRAINAGE AREA.--20.3 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1996 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 930 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair (see page 11). Gage-height and water-quality telemeter at station. Effluent discharged into creek continuously at an average rate of 3.0 ft^3/s (data provided by Madison Metropolitan Sewerage District).

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	5.6	7.5	7.2	7.0	16	9.2	8.6	14	10	14	21
2	5.4	21	7.5	7.3	7.1	13	9.1	8.4	10	10	13	14
3	5.5	48	7.6	7.1	7.0	9.7	8.9	8.4	8.7	16	16	10
4	5.4	204	7.6	7.1	7.0	10	8.8	8.3	8.1	31	20	9.6
5	5.3	44	7.7	7.1	7.0	67	8.9	8.1	7.8	15	15	9.4
6	5.4	13	7.5	7.1	7.0	22	9.1	8.1	7.7	13	13	9.6
7	5.4	9.8	7.6	7.1	6.9	12	9.0	8.0	7.5	13	12	9.3
8	5.5	8.5	7.6	7.1	7.0	9.4	8.8	8.3	7.2	12	12	9.2
9	5.6	8.1	8.9	7.1	7.0	8.8	9.1	13	7.2	15	11	9.2
10	5.7	8.1	48	7.0	6.9	8.5	9.2	12	8.8	15	11	9.4
11	6.0	8.0	19	7.2	6.9	8.2	9.4	14	14	14	11	9.5
12	6.2	7.9	11	7.0	6.9	8.0	9.4	9.7	11	13	11	9.6
13	6.1	7.6	9.1	6.9	6.8	8.0	9.3	10	8.9	13	11	9.9
14	7.1	7.6	8.6	7.0	6.8	8.0	9.6	11	8.2	13	11	10
15	6.1	7.3	8.4	7.0	6.7	7.8	9.9	10	7.6	13	11	12
16	5.9	7.4	8.1	7.0	6.7	7.8	10	9.0	8.7	20	11	11
17	6.0	7.5	7.8	7.1	6.7	8.0	11	10	15	24	12	10
18	6.1	8.8	7.7	6.9	6.8	7.9	10	15	10	16	13	9.7
19	5.9	7.7	7.6	6.8	6.8	7.9	9.9	10	8.4	14	13	9.6
20	5.9	7.6	7.6	6.9	11	7.9	11	9.0	7.7	14	12	9.7
21	6.0	7.5	7.6	7.0	9.4	7.7	12	47	8.3	16	11	9.5
22	5.7	7.4	7.5	6.9	10	7.7	11	285	7.8	15	11	9.3
23	5.7	72	7.3	6.8	13	7.8	10	325	8.8	14	11	9.4
24	7.1	32	7.2	6.7	16	8.1	10	40	12	13	12	9.3
25	6.0	12	7.2	6.8	13	9.3	10	18	12	13	11	9.1
26	5.6	9.2	7.2	6.9	15	46	9.7	14	11	13	11	9.2
27	5.7	8.3	7.3	6.8	14	16	9.2	13	11	13	15	9.1
28	5.7	7.9	7.5	6.8	14	12	9.3	10	11	13	13	9.0
29	5.7	7.8	7.2	6.8	15	12	8.9	11	11	13	12	8.9
30	5.7	7.8	7.3	6.9	---	10	8.5	31	10	18	11	8.8
31	5.5	---	7.2	6.9	---	9.4	---	25	---	17	10	---
TOTAL	180.4	619.4	292.9	216.3	261.4	401.9	288.2	1,017.9	289.4	462	381	303.3
MEAN	5.82	20.6	9.45	6.98	9.01	13.0	9.61	32.8	9.65	14.9	12.3	10.1
MAX	7.1	204	48	7.3	16	67	12	325	15	31	20	21
MIN	5.3	5.6	7.2	6.7	6.7	7.7	8.5	8.0	7.2	10	10	8.8
CFSM	0.29	1.02	0.47	0.34	0.44	0.64	0.47	1.62	0.48	0.73	0.61	0.50
IN.	0.33	1.14	0.54	0.40	0.48	0.74	0.53	1.87	0.53	0.85	0.70	0.56

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

MEAN	8.34	9.75	7.60	7.55	10.2	10.3	10.9	13.7	13.4	10.6	10.6	9.71
MAX	12.5	20.6	10.1	9.24	17.7	13.6	19.3	32.8	29.8	14.9	19.7	15.2
(WY)	(2002)	(2004)	(2002)	(2001)	(1997)	(1997)	(1999)	(2004)	(2000)	(2004)	(2001)	(2001)
MIN	3.55	3.28	3.25	3.67	4.74	7.30	6.34	6.39	6.93	7.94	4.53	3.76
(WY)	(1998)	(1998)	(1998)	(1998)	(1998)	(2000)	(1997)	(1997)	(1997)	(1997)	(1997)	(1997)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1997 - 2004	
ANNUAL TOTAL	3,373.3		4,714.1			
ANNUAL MEAN	9.24		12.9		10.2	
HIGHEST ANNUAL MEAN					12.9	2004
LOWEST ANNUAL MEAN					7.66	1997
HIGHEST DAILY MEAN	204	Nov 4	325	May 23	325	May 23, 2004
LOWEST DAILY MEAN	5.3	Oct 5	5.3	Oct 5	2.9	Nov 23, 1997
ANNUAL SEVEN-DAY MINIMUM	5.4	Sep 30	5.4	Oct 1	3.1	Nov 21, 1997
MAXIMUM PEAK FLOW			567	May 23	567	May 23, 2004
MAXIMUM PEAK STAGE			8.68	May 23	8.86	Jun 2, 2000
ANNUAL RUNOFF (CFSM)	0.455		0.634		0.503	
ANNUAL RUNOFF (INCHES)	6.18		8.64		6.83	
10 PERCENT EXCEEDS	10		15		12	
50 PERCENT EXCEEDS	7.6		9.1		8.7	
90 PERCENT EXCEEDS	5.9		6.8		4.8	

05435943 BADGER MILL CREEK AT VERONA, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: November 1996 to current year.
DISSOLVED OXYGEN: May 1998 to current year.

INSTRUMENTATION.--Continuous water temperature recorder since November 1996. Dissolved-oxygen recorder since May 1998.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Effluent discharged continuously into creek after Aug. 28, 1998.

EXTEMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum, 26.5°C, Aug. 20, 21, and 26, 2003; minimum 0.0°C on many days during winter periods of 1996-98 water years.
DISSOLVED OXYGEN: Maximum, 28.1 mg/L, Apr. 15, 2004; minimum, 1.3 mg/L, Oct. 5, 1998.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 22.5°C, July 3; minimum 0.5°C, Jan. 30.
DISSOLVED OXYGEN: Maximum, 28.1 mg/L, Apr. 15; minimum, 2.3 mg/L, Oct. 12.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	15.5	11.0	13.0	14.0	12.0	13.0	8.5	6.5	7.5	8.5	6.0	7.5
2	15.5	10.0	12.5	12.5	8.5	10.5	8.5	6.0	7.5	10.0	7.5	8.5
3	15.5	12.0	13.5	9.5	7.0	8.5	9.5	7.5	8.5	9.5	6.5	8.0
4	16.5	12.0	14.0	7.5	6.0	7.0	10.0	8.0	9.0	6.5	4.5	5.5
5	17.5	12.0	14.0	8.0	7.0	7.5	9.5	8.0	9.0	6.0	2.5	5.0
6	18.0	12.0	14.5	9.5	7.5	8.0	9.5	7.5	8.5	3.5	1.5	2.5
7	19.5	13.0	16.0	9.5	7.0	8.0	10.0	8.5	9.0	6.5	2.5	4.0
8	20.0	14.0	17.0	9.0	6.0	7.5	11.0	9.0	10.0	7.0	3.5	5.0
9	19.5	14.5	17.0	10.0	6.5	8.0	10.5	6.0	9.5	7.5	4.5	5.5
10	20.0	14.5	17.0	10.5	8.0	9.5	6.5	2.5	4.0	7.5	5.0	6.0
11	20.0	15.5	17.5	13.0	10.5	11.5	4.0	2.5	3.5	8.5	6.0	7.5
12	18.0	13.5	15.5	12.5	8.5	11.0	5.5	3.0	4.0	8.5	7.0	7.5
13	18.5	13.0	15.5	9.5	7.5	8.5	7.0	4.0	5.5	8.0	5.5	7.0
14	17.0	13.0	15.0	11.5	8.0	10.0	8.5	6.5	7.5	7.0	5.5	6.0
15	16.5	11.5	13.5	11.5	10.5	11.0	8.5	7.0	7.5	7.0	4.0	5.5
16	14.5	11.5	13.0	12.5	11.5	11.5	8.5	6.5	8.0	8.0	5.5	6.5
17	15.5	10.5	12.5	13.0	10.0	11.5	8.0	6.0	7.0	8.5	6.0	7.0
18	18.0	12.5	14.5	13.5	11.0	12.5	8.0	6.0	7.0	6.0	2.5	4.0
19	17.5	12.0	14.5	12.0	9.5	10.5	7.5	5.5	6.5	5.0	2.0	3.5
20	19.0	13.5	15.5	13.0	9.0	11.0	7.5	5.0	6.0	6.0	3.5	4.5
21	16.5	13.5	15.0	11.0	9.5	10.0	9.0	5.5	7.5	6.5	3.5	5.0
22	16.0	11.5	13.5	10.5	9.5	10.0	9.5	8.0	8.5	3.5	1.5	2.5
23	16.0	11.0	13.5	10.5	5.5	7.0	8.5	6.0	8.0	5.0	2.5	4.0
24	14.0	10.5	12.0	5.5	4.5	5.0	7.0	5.5	6.0	5.5	3.0	4.0
25	15.0	12.0	13.5	7.0	4.5	6.0	8.0	5.0	6.0	6.5	3.5	4.5
26	12.5	11.0	12.0	9.5	6.0	7.5	9.0	5.5	7.0	6.0	4.0	5.0
27	13.5	11.0	12.0	10.5	8.5	9.0	9.5	7.5	8.5	6.5	3.5	5.0
28	13.0	11.0	12.0	8.5	7.5	7.5	10.5	7.5	9.0	5.0	2.0	3.5
29	13.5	11.0	12.0	8.5	7.0	7.5	9.0	7.0	8.0	4.5	1.0	2.5
30	16.5	11.5	14.0	10.5	8.0	9.0	8.5	6.5	7.0	3.5	0.5	1.5
31	15.5	13.0	14.5	---	---	---	7.5	6.0	7.0	5.5	1.0	3.0
MONTH	20.0	10.0	14.2	14.0	4.5	9.2	11.0	2.5	7.3	10.0	0.5	5.1

05435943 BADGER MILL CREEK AT VERONA, WI—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	7.0	4.0	5.5	7.5	5.0	6.0	15.0	7.0	10.0	15.0	11.0	12.5
2	8.0	5.5	6.5	7.0	5.5	6.0	15.5	7.0	10.5	15.5	9.5	12.0
3	7.5	3.5	6.0	7.5	6.5	7.0	13.5	7.5	9.5	18.5	8.5	12.5
4	7.0	2.0	4.5	9.0	4.0	7.5	15.0	7.0	10.0	19.5	10.5	14.0
5	7.0	3.5	5.5	4.0	2.5	3.0	16.0	7.0	10.5	18.0	10.0	13.5
6	8.0	3.5	6.0	6.5	3.5	5.0	17.5	9.0	12.0	16.5	12.0	14.0
7	8.5	3.5	6.5	6.5	5.5	6.0	17.5	9.0	12.5	18.0	11.5	14.0
8	7.0	2.5	4.5	8.5	5.5	7.0	13.5	9.5	11.0	19.0	11.5	14.5
9	7.5	4.5	5.5	11.5	5.5	8.0	15.5	8.0	11.0	19.0	13.5	16.0
10	7.5	4.0	5.5	11.5	6.0	8.0	15.5	8.5	11.0	17.5	14.5	15.5
11	9.0	4.0	6.0	7.5	4.5	6.5	13.0	7.5	9.5	17.5	15.0	16.0
12	8.5	4.5	6.0	10.5	3.5	6.5	13.0	7.0	9.5	22.0	14.5	17.5
13	7.0	2.5	4.5	8.5	5.0	6.5	16.0	6.5	10.5	19.5	15.0	16.5
14	8.5	4.0	5.5	8.0	6.0	7.0	18.5	8.0	12.0	15.0	13.0	14.0
15	7.5	2.5	4.5	9.0	5.5	7.0	17.0	9.0	12.5	19.5	11.5	14.5
16	8.0	2.0	4.5	12.5	6.0	8.0	20.0	11.0	14.5	20.0	11.5	15.0
17	9.0	3.5	5.5	10.0	6.0	7.5	20.5	12.0	15.5	19.5	13.5	16.5
18	10.0	4.0	6.5	8.5	6.5	7.5	18.0	12.0	15.0	17.0	14.5	16.0
19	10.0	6.5	8.0	13.0	6.0	9.0	16.0	11.5	14.0	19.0	12.5	15.5
20	8.0	3.0	5.5	14.0	6.0	10.0	13.5	9.5	11.5	21.0	15.0	17.5
21	8.5	3.5	5.5	11.5	5.0	7.5	13.0	11.0	12.0	18.0	10.5	15.0
22	7.0	3.5	5.0	12.5	4.5	7.5	15.0	9.5	12.0	18.0	15.5	16.5
23	7.0	3.0	5.0	14.5	6.5	10.0	16.5	9.0	12.0	17.5	15.0	16.5
24	4.5	3.0	4.0	12.0	9.0	10.5	15.0	9.5	11.5	17.5	15.0	16.0
25	8.0	3.5	5.0	13.0	11.0	12.0	13.0	10.5	11.5	17.0	14.0	15.0
26	7.5	3.0	4.5	12.5	10.0	11.5	16.0	9.5	12.0	18.0	13.0	15.0
27	8.0	3.0	5.0	12.5	10.5	11.5	16.5	8.0	11.5	18.5	13.0	15.5
28	8.0	3.5	5.5	13.0	9.5	11.5	20.0	9.5	14.0	19.0	13.0	15.5
29	8.5	4.0	6.0	15.0	8.5	11.0	18.5	12.5	15.0	14.5	11.5	13.0
30	---	---	---	12.0	8.5	9.5	14.0	11.5	12.0	16.5	13.0	14.5
31	---	---	---	12.0	7.5	9.5	---	---	---	16.5	15.0	15.5
MONTH	10.0	2.0	5.4	15.0	2.5	8.1	20.5	6.5	11.9	22.0	8.5	15.0
		JUNE			JULY			AUGUST			SEPTEMBER	
1	16.0	14.0	15.0	20.0	14.5	17.0	20.5	17.0	18.5	20.5	15.5	18.0
2	17.5	13.0	15.0	20.5	14.5	17.5	19.0	17.0	18.0	21.0	18.5	19.5
3	19.0	12.0	15.0	22.5	15.0	17.5	21.5	16.5	18.5	19.5	17.0	18.0
4	19.0	11.5	15.0	21.0	19.0	20.5	21.5	18.0	20.0	19.0	16.0	17.5
5	17.5	12.0	14.5	20.5	18.0	19.0	20.0	17.0	18.0	19.5	16.0	17.5
6	20.0	13.0	16.0	18.0	16.5	17.0	19.5	15.0	17.0	18.5	16.5	17.5
7	20.5	13.5	17.0	18.0	15.5	16.5	17.0	15.0	16.0	17.5	14.5	16.0
8	21.0	15.0	18.0	18.5	14.0	16.0	19.0	15.0	17.0	17.0	14.0	15.5
9	20.0	14.5	17.0	18.5	14.5	16.0	19.5	16.0	17.5	16.5	14.0	15.5
10	16.5	13.5	15.0	21.0	16.0	18.0	17.5	15.5	16.0	18.0	14.0	16.0
11	18.0	14.5	16.5	19.0	16.0	17.5	15.5	14.5	15.0	18.5	15.0	17.0
12	21.5	15.0	17.5	20.0	16.0	17.5	16.5	13.5	15.0	18.5	15.0	17.0
13	20.5	15.5	17.5	20.5	15.5	18.0	17.0	13.5	15.0	18.5	15.5	17.0
14	19.5	14.5	16.5	20.0	15.5	17.5	17.0	13.5	15.0	19.0	16.0	17.5
15	20.0	13.5	16.5	19.5	15.0	17.0	18.0	13.5	15.5	19.0	17.0	18.0
16	21.5	13.5	16.0	20.5	15.5	17.5	17.0	14.0	15.5	17.5	15.5	16.5
17	21.0	16.5	19.0	19.5	18.0	19.5	17.0	15.5	16.0	17.5	14.0	15.5
18	18.0	15.0	17.0	20.0	16.5	18.0	21.0	14.5	17.0	17.5	14.5	16.0
19	18.5	13.0	15.5	19.5	16.0	18.0	18.0	14.5	16.5	18.0	15.0	16.5
20	18.0	12.0	15.0	20.0	16.5	18.0	18.0	15.0	16.5	17.5	14.5	16.0
21	15.5	13.0	14.0	20.0	16.5	18.0	17.5	13.5	15.5	17.5	14.0	16.0
22	17.5	11.5	14.5	20.0	17.0	18.5	18.0	13.5	16.0	17.5	14.0	15.5
23	16.0	12.5	14.0	19.0	16.0	17.5	18.0	16.0	17.0	18.0	14.5	16.0
24	15.5	13.0	14.0	17.0	15.0	16.0	18.5	15.5	16.5	17.5	15.5	16.5
25	18.0	12.5	15.0	19.0	14.5	16.5	19.0	16.0	17.0	16.5	14.0	15.5
26	18.5	13.0	15.5	18.5	14.0	16.5	19.0	16.5	17.5	16.5	13.0	15.0
27	18.5	13.0	15.5	19.0	14.5	16.5	20.5	17.5	19.0	16.5	13.0	15.0
28	19.0	14.0	16.0	19.5	15.0	17.0	19.0	16.5	17.5	16.0	14.0	15.0
29	20.0	13.5	16.5	19.0	15.5	17.0	18.0	15.5	16.5	15.5	12.0	14.0
30	20.0	14.0	17.0	19.5	16.5	18.0	18.0	15.0	16.5	15.5	12.0	14.0
31	---	---	---	21.0	17.5	19.0	18.0	14.5	16.5	---	---	---
MONTH	21.5	11.5	15.9	22.5	14.0	17.5	21.5	13.5	16.7	21.0	12.0	16.4
YEAR	22.5	0.5	11.9									

05435943 BADGER MILL CREEK AT VERONA, WI—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	12.9	8.2	9.8	13.0	7.1	9.0	12.3	10.1	10.8	13.7	9.5	11.0
2	12.8	8.2	9.8	10.3	7.0	8.8	12.1	9.9	10.7	12.8	8.8	10.4
3	11.8	7.8	9.1	10.5	8.8	9.5	12.6	9.8	10.6	12.8	8.8	10.1
4	13.1	7.8	9.6	---	---	---	11.9	9.7	10.3	12.0	9.5	10.3
5	12.9	7.9	9.5	---	---	---	13.0	9.7	10.7	13.4	9.6	10.9
6	13.2	8.0	9.6	11.0	10.0	10.4	12.1	9.7	10.4	12.9	10.3	11.1
7	13.1	7.6	9.5	10.9	9.5	10.1	13.1	9.6	10.7	12.7	10.0	10.9
8	13.2	7.4	9.4	10.3	9.5	9.8	12.0	9.4	10.2	12.2	9.8	10.6
9	13.9	5.9	9.6	10.4	9.3	9.8	11.7	9.4	9.9	12.7	9.6	10.5
10	13.8	6.6	9.2	10.2	8.7	9.4	12.5	11.2	12.1	12.2	9.4	10.3
11	11.4	3.4	7.8	9.9	8.6	8.9	12.3	11.6	12.0	12.7	9.0	10.2
12	12.2	2.3	7.1	10.2	8.5	9.1	12.0	11.0	11.5	13.0	8.9	10.2
13	14.5	6.5	9.0	11.0	9.2	9.8	11.6	10.2	10.9	13.1	9.0	10.3
14	11.4	5.8	7.6	10.7	8.7	9.5	11.3	9.7	10.3	11.2	9.0	9.7
15	11.8	6.1	8.1	9.9	8.7	9.0	10.8	9.5	10.0	13.9	9.3	10.6
16	13.2	6.2	8.4	10.4	8.6	9.1	10.8	9.3	9.9	14.3	9.1	10.7
17	12.4	6.7	8.6	11.9	8.4	9.6	11.7	9.9	10.4	12.5	8.9	10
18	12.0	6.3	8.1	9.6	7.8	8.4	11.5	9.4	10.2	13.9	9.0	10.8
19	11.6	6.3	8.0	11.7	8.4	9.5	11.7	9.5	10.2	12.7	9.8	10.8
20	11.9	6.1	7.9	12.2	8.6	9.7	12.3	9.8	10.6	12.2	9.8	10.6
21	12.0	6.1	8.0	13.1	8.6	10.1	12.2	9.3	10.4	11.6	9.6	10.3
22	13.0	6.6	8.5	11.0	8.8	9.5	12.8	9.2	10.3	12.1	10.0	10.8
23	13.2	6.7	8.9	11.4	8.8	10.6	12.5	9.4	10.4	11.3	9.7	10.3
24	11.3	6.7	8.2	11.5	10.9	11.3	13.0	9.8	10.8	11.6	9.8	10.5
25	12.2	6.4	8.4	11.6	10.5	11.1	13.1	10.0	11.0	12.2	9.8	10.7
26	11.2	7.2	8.3	11.5	9.9	10.6	14.2	9.8	11.3	11.9	9.7	10.5
27	12.8	7.4	9.0	11.5	9.7	10.2	13.9	9.6	10.9	12.0	9.6	10.6
28	11.4	7.2	8.6	11.5	9.8	10.4	14.5	9.5	10.8	12.0	10.0	10.9
29	13.0	7.1	8.9	12.2	9.8	10.7	13.8	9.4	11.0	12.0	10.4	11.1
30	12.7	6.4	8.4	11.8	9.7	10.3	15.3	9.8	11.6	12.0	10.4	11.2
31	9.2	6.4	7.6	---	---	---	14.6	9.7	11.4	12.2	10.2	11.1
MONTH	14.5	2.3	8.7	13.1	7.0	9.8	15.3	9.2	10.7	14.3	8.8	10.6
		FEBRUARY			MARCH			APRIL			MAY	
1	12.5	10.1	10.9	13.1	11.0	11.5	19.4	8.6	12.5	12.5	7.5	9.3
2	12.5	9.8	10.8	13.7	11.3	12.2	21.1	8.3	12.9	11.9	7.7	9.1
3	12.7	9.9	11.1	15.2	11.8	12.8	21.3	8.3	13.0	12.5	8.0	9.6
4	13.1	10.4	11.4	16.7	11.8	13.5	23.9	8.1	13.8	11.8	7.6	9.0
5	12.3	10.1	10.9	---	---	---	24.8	7.3	14.0	11.9	7.7	9.2
6	12.4	9.5	10.5	---	---	---	26.2	7.2	13.2	9.8	7.4	8.2
7	13.4	9.5	10.8	---	---	---	24.1	7.0	13.3	12.1	7.4	9.1
8	12.9	10.1	11.1	---	---	---	22.8	6.8	12.3	11.5	7.7	8.9
9	13.0	10.0	11.0	---	---	---	25.7	8.0	14.3	10.7	7.3	8.6
10	13.3	10.0	11.1	---	---	---	25.4	7.8	14.3	10.0	7.5	8.3
11	13.9	10.2	11.3	---	---	---	24.7	8.4	14.5	9.9	7.9	8.7
12	14.5	10.0	11.4	---	---	---	26.1	8.8	15.1	11.1	7.7	9.0
13	14.3	10.2	11.7	---	---	---	26.9	8.7	15.2	9.4	7.6	8.3
14	15.0	10.2	11.7	---	---	---	27.1	7.9	15.0	10.6	8.0	9.2
15	14.5	10.3	11.8	---	---	---	28.1	7.2	14.7	12.4	8.8	10.2
16	15.6	10.4	12.2	19.0	9.3	12.7	28.0	6.9	14.4	12.7	8.6	10.2
17	15.8	10.4	12.1	18.9	9.3	12.6	25.9	6.7	13.3	12.3	6.6	9.2
18	16.4	9.7	12.1	16.0	9.1	11.7	20.1	6.6	11.0	8.7	6.4	7.4
19	16.7	9.3	11.8	21.7	9.2	14.0	18.6	6.5	11.2	10.7	7.0	8.5
20	12.4	9.2	10.8	20.9	9.0	13.1	20.4	8.1	11.5	10.6	6.8	8.3
21	15.5	10.2	11.8	22.5	10.0	14.6	17.1	7.7	10.7	10.1	6.6	7.6
22	13.7	10.7	11.6	23.2	10.2	14.6	19.2	8.3	12.3	8.0	5.8	6.4
23	14.1	10.6	11.8	24.6	9.5	15.0	19.5	7.8	12.3	7.9	6.1	6.7
24	11.9	11.1	11.4	18.6	7.8	11.8	20.1	8.1	12.1	7.8	6.4	7.4
25	13.4	11.2	11.8	15.7	7.7	10.6	13.9	8.1	10.2	8.6	7.8	8.2
26	13.0	11.1	11.7	9.4	8.6	9.0	17.2	8.6	12.0	9.2	8.2	8.6
27	13.4	10.4	11.5	10.7	8.6	9.3	17.0	8.6	11.7	9.4	8.2	8.6
28	13.0	10.6	11.4	11.4	8.6	9.4	15.4	7.2	10.6	9.5	8.2	8.8
29	13.2	10.8	11.6	14.1	8.9	10.7	14.2	7.3	9.7	9.9	8.4	9.0
30	---	---	---	15.4	8.9	11.0	10.9	7.2	8.6	9.3	7.3	8.2
31	---	---	---	18.2	8.6	12.2	---	---	---	8.4	7.4	7.9
MONTH	16.7	9.2	11.4	24.6	7.7	12.1	28.1	6.5	12.7	12.7	5.8	8.6

05435943 BADGER MILL CREEK AT VERONA, WI—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	9.4	8.0	8.6	14.4	8.3	10.6	13.8	6.7	9.5	9.4	5.9	7.3
2	10.0	8.5	9.0	15.0	8.2	11.0	10.6	6.6	8.1	10.6	5.9	7.6
3	10.7	8.5	9.5	13.6	7.2	9.6	11.8	5.8	8.3	12.0	6.2	8.4
4	11.1	9.1	10	8.1	6.4	7.1	10.1	5.3	7.1	12.1	6.7	8.8
5	11.7	9.4	10.4	11.4	7.3	9.1	11.6	5.8	8.1	12.7	6.8	9.1
6	11.8	9.4	10.4	11.7	7.8	9.6	12.3	6.3	8.7	10.6	6.4	7.8
7	12.5	9.3	10.6	12.2	7.8	9.8	10.8	6.5	8.3	11.8	6.5	8.5
8	12.9	9.1	10.7	13.3	8.6	10.6	12.9	7.0	9.4	11.9	6.9	8.8
9	13.8	9.2	11.1	11.2	8.1	9.6	12.4	6.4	9.0	12.2	6.9	8.8
10	12.5	8.9	10.3	12.6	7.7	9.6	12.4	6.8	9.1	12.4	7.1	9.0
11	10.3	8.5	9.1	12.4	7.4	9.4	12.6	6.9	9.6	12.5	6.7	8.9
12	12.8	8.3	10.1	12.6	7.5	9.5	14.0	6.8	10.2	12.4	6.6	8.8
13	12.4	8.2	9.8	12.5	7.5	9.4	13.6	6.9	10.0	12.3	6.7	8.9
14	12.0	8.3	9.8	12.9	7.4	9.5	13.7	7.4	9.8	12.2	6.4	8.6
15	12.3	8.4	10.0	11.8	7.2	9.1	14.3	7.3	10.1	8.7	5.8	6.5
16	11.9	7.0	9.6	9.6	7.0	8.0	13.3	7.2	9.8	11.0	5.9	7.9
17	9.8	6.9	8.1	9.8	6.7	8.0	12.9	6.3	9.2	11.4	6.2	8.0
18	11.1	7.4	9.4	13.3	7.6	9.8	12.8	5.9	8.8	11.0	5.8	7.8
19	12.9	8.7	10.4	13.5	7.8	10.1	11.9	5.7	8.3	10.9	5.9	7.8
20	12.5	8.9	10.4	13.2	7.7	9.7	12.3	6.1	8.6	10.6	5.9	7.8
21	10.1	8.6	9.3	10.6	7.3	8.2	12.5	6.3	8.7	10.9	6.2	7.9
22	11.7	8.6	9.9	11.5	6.8	8.7	12.5	6.4	8.7	11.0	6.1	8.0
23	11.9	7.9	9.8	12.0	6.7	8.9	11.8	5.9	8.2	11.2	6.0	8.0
24	11.9	7.8	9.4	12.0	6.9	9.1	9.5	6.1	7.5	11.0	5.8	7.9
25	12.8	8.5	10.1	12.5	7.2	9.4	10.6	5.5	7.4	11.1	6.2	8.1
26	12.9	8.5	10.3	13.3	7.2	9.6	11.4	5.9	7.9	11.3	6.5	8.3
27	13.1	8.2	10.0	13.6	7.2	9.8	9.9	5.2	7.2	11.8	6.5	8.6
28	13.7	7.8	10.5	13.8	7.1	9.8	8.2	5.4	6.7	11.4	6.4	8.4
29	14.0	8.6	10.8	13.0	6.3	9.0	11.3	6.4	8.3	11.5	6.8	8.7
30	14.0	8.2	10.7	10.3	6.2	7.7	11.9	6.3	8.3	11.6	6.9	8.8
31	---	---	---	12.8	6.5	9.0	11.9	6.4	8.5	---	---	---
MONTH	14.0	6.9	9.9	15.0	6.2	9.3	14.3	5.2	8.6	12.7	5.8	8.3
YEAR	28.1	2.3	10.0									

05436500 SUGAR RIVER NEAR BRODHEAD, WI

LOCATION.--Lat 42°36'42", long 89°23'53", in SW $^1/_4$ sec.26, T.2 N., R.9 E., Green County, Hydrologic Unit 07090004, on left bank at downstream side of highway bridge, 1.2 mi southwest of Brodhead, and 1.9 mi upstream from Sylvester Creek.

DRAINAGE AREA.--523 mi^2.

PERIOD OF RECORD.--January 1914 to current year. Monthly discharge only for January and February 1914 published in WSP 1308.

REVISED RECORDS.--WSP 1238: 1914-16, 1918, 1922, 1927, 1933. WSP 1508: 1916-17(M), 1919(M), 1920, 1921(M), 1927-28(M), 1930(M), 1931, 1936(M), 1943(M). WDR WI-73-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 768.14 ft above NGVD of 1929. Prior to Oct. 17, 1938, nonrecording gage 20 ft upstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Some regulation from dam and non-operational powerplant upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	164	198	332	314	e200	453	551	323	1,540	449	454	331
2	162	233	320	310	e200	501	492	319	1,630	421	409	319
3	169	347	309	311	e210	536	453	312	1,360	434	392	320
4	173	670	306	306	e220	496	422	305	1,040	661	503	317
5	176	879	310	e260	e220	747	402	296	817	810	546	304
6	183	985	309	e300	e220	945	387	293	699	853	520	300
7	199	1,000	305	e280	e220	1,060	375	290	640	802	443	303
8	175	760	304	e260	e220	976	368	298	603	675	378	298
9	173	482	308	e250	e220	656	359	299	567	592	381	291
10	170	395	442	e240	e220	499	352	321	560	599	374	286
11	169	361	646	e230	e220	455	336	392	627	596	365	286
12	171	355	646	e230	e220	420	332	417	769	536	355	281
13	192	338	610	e230	e220	392	329	393	861	492	349	275
14	198	325	515	e230	e220	389	324	376	901	460	341	269
15	203	314	497	e230	e220	378	319	393	893	434	336	278
16	203	310	466	e230	e210	369	313	399	743	457	329	296
17	191	302	406	e230	e210	363	324	364	756	540	329	303
18	187	318	380	e220	e220	363	355	368	784	573	332	293
19	186	357	365	e220	e230	361	353	410	765	514	331	279
20	186	373	334	e210	e240	364	342	417	670	453	328	270
21	185	344	339	e210	e270	355	464	393	597	432	322	264
22	184	323	378	e210	e350	349	515	1,090	612	469	315	260
23	183	339	341	e210	e500	340	491	1,890	603	493	309	257
24	186	407	330	e210	e600	351	414	3,230	560	450	309	255
25	205	512	292	e210	e680	368	394	4,080	539	419	314	251
26	225	527	306	e210	e750	447	386	2,860	532	401	326	250
27	218	452	339	e210	e650	598	374	1,950	506	387	334	248
28	209	392	339	e210	e550	755	354	1,390	480	372	359	246
29	203	359	337	e200	464	839	337	1,060	496	358	384	244
30	203	344	336	e200	---	737	325	969	467	396	373	245
31	202	---	327	e200	---	639	---	1,250	---	477	352	---
TOTAL	5,833	13,301	11,774	7,371	9,174	16,501	11,542	27,147	22,617	16,005	11,492	8,419
MEAN	188	443	380	238	316	532	385	876	754	516	371	281
MAX	225	1,000	646	314	750	1,060	551	4,080	1,630	853	546	331
MIN	162	198	292	200	200	340	313	290	467	358	309	244
CFSM	0.36	0.85	0.73	0.45	0.60	1.02	0.74	1.67	1.44	0.99	0.71	0.54
IN.	0.41	0.95	0.84	0.52	0.65	1.17	0.82	1.93	1.61	1.14	0.82	0.60

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2004, BY WATER YEAR (WY)

MEAN	286	309	273	293	428	651	462	381	380	305	261	297
MAX	788	836	597	1,168	1,690	1,698	1,159	1,368	1,320	1,248	694	1,579
(WY)	(1928)	(1962)	(1929)	(1916)	(1938)	(1929)	(1993)	(1973)	(2000)	(1993)	(1924)	(1938)
MIN	126	127	120	89.4	127	181	198	140	113	117	105	106
(WY)	(1965)	(1965)	(1956)	(1956)	(1959)	(1934)	(1938)	(1934)	(1934)	(1958)	(1934)	(1958)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1914 - 2004	
ANNUAL TOTAL	97,065		161,176			
ANNUAL MEAN	266		440		360	
HIGHEST ANNUAL MEAN					694	1993
LOWEST ANNUAL MEAN					172	1934
HIGHEST DAILY MEAN	1,000	Nov 7	4,080	May 25	10,800	Mar 14, 1929
LOWEST DAILY MEAN	112	Sep 8	162	Oct 2	51	Jun 13, 1934
ANNUAL SEVEN-DAY MINIMUM	121	Sep 6	175	Oct 1	71	Jun 28, 1934
MAXIMUM PEAK FLOW			4,360	May 25	(a)14,800	Sep 13, 1915
MAXIMUM PEAK STAGE			8.30	May 25	(b)11.40	Sep 13, 1915
INSTANTANEOUS LOW FLOW					35	Sep 19, 1959
ANNUAL RUNOFF (CFSM)	0.508		0.842		0.689	
ANNUAL RUNOFF (INCHES)	6.90		11.46		9.36	
10 PERCENT EXCEEDS	406		744		587	
50 PERCENT EXCEEDS	232		350		264	
90 PERCENT EXCEEDS	163		210		151	

(a) From rating curve extended above 7,500 ft^3/s
(b) From floodmarks
(e) Estimated due to ice effect or missing record

05437500 ROCK RIVER AT ROCKTON, IL

LOCATION.--Lat 42°26'55", long 89°04'11", in SW ¼ NE ¼ sec.24, T.46 N., R.1 E., Winnebago County, Hydrologic Unit 07090005, on right bank 750 ft downstream from State Highway 75 in Rockton, 1.0 mi downstream from Pecatonica River, and at mile 156.1.

DRAINAGE AREA.--6,363 mi^2.

PERIOD OF RECORD.--June 1903 to July 1906, October 1906 to November 1907, January 1908 to March 1909, July 1914 to September 1919, October 1939 to current year. Published as "below mouth of Pecatonica River at Rockton" 1903-9; as "at Rockford" 1914-19. Monthly discharge only for some periods, for 1903-1950, published in WSP 1308.

REVISED RECORD.--WSP 325: 1903-9. WSP 895: 1904(M). WSP 1508: 1915, 1916-17(M). WDR IL-75-1: Drainage area. WDR IL-97-1: 1996 (Dec. 10-23).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 707.94 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1906, nonrecording gage at site 800 ft upstream at datum about 1 ft higher. Oct. 1, 1906, to Mar. 31, 1909, nonrecording gage at site 800 ft upstream at datum about 2 ft higher. July 30, 1914, to Apr. 30, 1919, nonrecording gage at site at Rockford about 21 mi downstream, at different datum. Oct. 1, 1939, to Aug. 10, 1973, at site 800 ft upstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 11). Low flow regulated by powerplant upstream from station. Gage-height telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in February 1937 reached a stage of 14.6 ft (backwater from ice), from floodmark.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,050	1,820	3,750	3,830	e1,900	5,530	9,140	4,850	18,000	11,900	5,630	3,930
2	1,370	2,170	3,600	3,820	e1,900	5,670	8,830	4,730	18,200	11,500	5,660	3,820
3	1,180	2,810	3,620	3,400	e1,900	5,270	8,420	4,560	18,500	11,200	5,460	3,740
4	1,140	3,790	3,710	3,250	e1,900	5,170	7,920	4,330	18,600	11,700	5,870	3,510
5	1,150	4,450	3,630	3,030	1,980	6,500	7,450	4,140	18,300	12,300	5,850	3,390
6	1,150	4,680	3,650	1,870	2,620	7,950	7,040	4,060	17,900	11,900	5,830	3,330
7	1,200	4,860	3,580	3,000	2,490	8,020	6,830	3,990	17,300	11,700	5,760	3,170
8	1,260	5,190	3,520	2,850	2,430	8,410	6,590	3,710	16,600	11,400	5,520	3,280
9	1,200	5,280	3,380	2,720	2,390	8,790	6,350	3,580	16,000	11,000	5,320	2,740
10	1,220	4,730	4,340	e2,700	2,360	8,780	6,130	3,700	15,600	10,700	5,020	2,670
11	1,200	4,130	5,280	e2,700	2,340	8,310	5,910	4,030	15,600	10,300	5,060	2,710
12	1,200	3,780	5,260	e2,600	2,180	7,480	5,760	4,530	16,700	9,930	4,940	2,530
13	1,030	3,350	e4,500	e2,600	2,120	7,130	5,590	4,740	16,800	9,620	4,930	2,690
14	1,450	3,800	e4,100	e2,500	2,040	6,880	5,400	5,130	16,300	9,250	4,620	2,860
15	1,540	3,630	e4,200	e2,400	1,980	6,570	5,240	5,360	16,100	8,920	3,790	2,740
16	1,550	3,510	e4,200	e2,300	2,010	6,590	5,070	5,340	15,800	8,630	3,760	2,730
17	1,620	3,440	e4,000	e2,200	2,020	6,570	5,090	5,350	16,000	8,620	3,700	2,830
18	1,720	3,430	e3,900	e2,200	1,960	6,420	4,980	5,640	16,300	8,520	3,830	2,840
19	1,660	3,790	e3,800	e2,100	1,950	6,140	4,610	5,890	15,900	8,220	3,700	2,730
20	1,660	3,540	e3,900	e2,100	2,000	6,260	4,800	5,980	15,600	8,000	3,680	2,700
21	1,590	3,810	4,190	e2,000	2,080	6,160	5,380	6,260	15,500	7,900	3,270	2,450
22	1,570	3,810	4,190	2,090	2,280	6,040	5,520	8,990	15,600	7,790	3,340	2,250
23	1,590	3,690	3,820	e2,100	3,030	5,850	5,790	11,900	15,200	7,820	3,220	2,220
24	1,600	3,330	3,690	e2,100	3,970	5,980	5,780	13,100	14,900	7,580	3,030	2,100
25	1,660	3,280	3,330	e2,100	4,170	6,140	5,740	13,500	14,700	7,380	2,890	1,980
26	1,690	3,700	3,320	e2,100	4,440	7,050	5,440	14,400	14,200	7,000	3,260	2,250
27	1,460	4,340	3,450	e2,000	4,570	8,100	5,280	15,700	13,700	6,680	3,420	2,260
28	2,020	4,390	3,660	e2,000	4,830	8,430	5,060	16,200	13,300	6,340	3,720	2,250
29	2,070	4,120	3,670	e1,900	5,290	8,810	4,800	16,200	12,800	6,040	3,810	2,260
30	2,090	3,890	3,960	e1,900	---	9,010	4,780	16,400	12,300	5,840	3,790	2,190
31	2,060	---	3,950	e1,900	---	9,240	---	17,200	---	5,730	4,040	---
TOTAL	45,950	114,540	121,150	76,360	77,130	219,250	180,720	243,490	478,300	281,410	135,720	83,150
MEAN	1,482	3,818	3,908	2,463	2,660	7,073	6,024	7,855	15,940	9,078	4,378	2,772
MAX	2,090	5,280	5,280	3,830	5,290	9,240	9,140	17,200	18,600	12,300	5,870	3,930
MIN	1,030	1,820	3,320	1,870	1,900	5,170	4,610	3,580	12,300	5,730	2,890	1,980
CFSM	0.23	0.60	0.61	0.39	0.42	1.11	0.95	1.23	2.51	1.43	0.69	0.44
IN.	0.27	0.67	0.71	0.45	0.45	1.28	1.06	1.42	2.80	1.65	0.79	0.49

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2003, BY WATER YEAR (WY)

MEAN	3,113	3,529	3,296	3,199	3,859	7,192	7,279	5,426	4,731	3,770	2,909	2,878
MAX	13,340	11,320	9,049	9,432	8,365	13,920	18,530	17,770	16,960	17,000	9,039	7,753
(WY)	(1987)	(1986)	(1983)	(1960)	(1997)	(1974)	(1993)	(1973)	(2000)	(1993)	(1993)	(1972)
MIN	857	1,100	1,004	800	1,000	1,692	2,476	1,103	1,248	1,056	793	780
(WY)	(1965)	(1940)	(1959)	(1940)	(1940)	(1954)	(1958)	(1958)	(1977)	(1965)	(1958)	(1958)

05437500 ROCK RIVER AT ROCKTON, IL—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1940 - 2004	
ANNUAL TOTAL	1,043,806		2,057,170			
ANNUAL MEAN	2,860		5,621		4,265	
HIGHEST ANNUAL MEAN					9,484	1993
LOWEST ANNUAL MEAN					1,568	1958
HIGHEST DAILY MEAN	7,930	May 16	18,600	Jun 4	29,700	Mar 25, 1975
LOWEST DAILY MEAN	741	Sep 8	1,030	Oct 13	501	Sep 14, 1958
ANNUAL SEVEN-DAY MINIMUM	850	Sep 6	1,180	Oct 1	622	Oct 2, 1958
MAXIMUM PEAK FLOW			18,600	Jun 3	30,000	Mar 25, 1975
MAXIMUM PEAK STAGE			11.11	Jun 4	15.54	Mar 25, 1975
INSTANTANEOUS LOW FLOW			708	Oct 13		
ANNUAL RUNOFF (CFSM)	0.449		0.883		0.670	
ANNUAL RUNOFF (INCHES)	6.10		12.03		9.11	
10 PERCENT EXCEEDS	4,640		12,900		8,400	
50 PERCENT EXCEEDS	2,600		4,120		3,240	
90 PERCENT EXCEEDS	1,200		1,940		1,310	

(e) Estimated due to ice effect or missing record

LOCATION.--Lat 42°31'18", long 88°39'39", in NE ¼ NE ¼ sec.25, T.1 N., R.15 E., Walworth County, Hydrologic Unit 07090006, on right bank 0.9 mi upstream from County Trunk Highway B bridge, 3.2 mi southwest of Walworth.

DRAINAGE AREA.--9.58 mi^2.

PERIOD OF RECORD.--September 1992 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 935 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.99	1.1	1.00	0.96	0.80	1.5	2.2	1.6	6.2	2.7	1.2	1.0
2	0.99	1.7	1.0	0.95	0.80	1.5	1.9	1.6	3.9	2.7	1.2	0.99
3	1.1	2.5	1.0	0.92	0.81	1.3	1.9	1.6	3.4	3.1	1.3	0.99
4	1.0	3.4	1.0	0.92	0.80	3.0	1.7	1.6	3.1	3.0	1.6	0.96
5	1.1	2.9	1.0	0.89	0.83	17	1.6	1.5	3.2	2.7	1.6	0.97
6	1.1	1.9	0.99	0.89	0.83	3.7	1.6	1.4	3.5	2.7	1.6	0.99
7	1.1	1.6	0.99	0.89	0.80	2.8	1.7	1.3	3.6	2.4	1.7	0.97
8	1.1	1.4	0.99	0.89	0.80	2.3	1.6	1.4	4.1	2.0	1.8	0.99
9	1.1	1.4	1.1	0.89	0.81	2.1	1.6	1.4	5.9	2.1	1.8	1.1
10	1.2	1.3	5.4	0.89	0.80	1.8	1.6	1.4	6.9	2.0	1.4	1.1
11	1.3	1.2	3.1	0.89	0.80	1.6	1.5	1.4	7.7	2.0	1.4	1.1
12	1.4	1.3	2.2	0.89	0.80	1.4	1.5	1.7	48	2.0	1.4	1.0
13	1.4	1.2	1.8	0.89	0.80	1.4	1.5	4.2	5.3	1.9	1.2	1.0
14	1.4	1.2	1.5	0.89	0.80	1.4	1.5	10	3.7	1.9	1.2	0.99
15	1.4	1.2	1.4	0.88	0.80	1.2	1.5	6.3	3.3	1.9	1.1	1.0
16	1.4	1.2	1.3	0.90	0.81	1.2	1.6	3.6	3.2	1.8	1.1	1.1
17	1.4	1.2	1.2	0.98	0.83	1.2	1.6	3.1	3.3	1.8	1.1	1.1
18	1.4	1.6	1.2	0.90	0.87	1.2	1.6	6.3	3.2	1.8	1.3	1.0
19	1.4	1.6	1.1	0.90	0.89	1.2	1.6	4.1	3.0	1.8	1.1	0.93
20	1.4	1.4	1.1	0.89	2.5	1.2	1.8	6.7	2.9	1.8	1.1	0.91
21	1.4	1.3	1.1	0.89	3.0	1.2	1.9	16	4.3	1.9	1.1	0.86
22	1.4	1.2	1.1	0.86	3.7	1.1	1.7	102	3.6	1.8	1.1	0.86
23	1.3	1.2	0.99	0.85	15	1.2	1.7	31	3.1	1.7	1.1	0.88
24	1.4	1.1	0.97	0.81	3.9	2.0	1.7	8.6	3.0	1.7	1.1	0.95
25	1.3	1.1	0.91	0.82	1.7	1.9	1.8	5.2	3.2	1.6	1.4	0.95
26	1.2	1.1	0.89	0.82	1.6	6.3	1.7	4.2	3.2	1.4	1.3	0.95
27	1.2	1.1	0.91	0.83	1.4	3.6	1.7	3.7	2.5	1.4	1.2	0.95
28	1.2	1.1	1.1	0.86	1.3	3.4	1.7	3.3	2.4	1.4	1.3	0.98
29	1.1	1.1	1.00	0.89	1.4	6.0	1.6	3.2	2.8	1.4	1.3	1.00
30	1.2	1.00	0.99	0.87	---	3.5	1.6	7.2	2.7	1.3	1.2	1.1
31	1.1	---	0.96	0.81	---	2.6	---	15	---	1.3	1.1	---
TOTAL	38.48	43.60	41.29	27.41	50.98	82.8	50.2	261.6	158.2	61.0	40.4	29.67
MEAN	1.24	1.45	1.33	0.88	1.76	2.67	1.67	8.44	5.27	1.97	1.30	0.99
MAX	1.4	3.4	5.4	0.98	15	17	2.2	102	48	3.1	1.8	1.1
MIN	0.99	1.0	0.89	0.81	0.80	1.1	1.5	1.3	2.4	1.3	1.1	0.86
CFSM	0.13	0.15	0.14	0.09	0.18	0.28	0.17	0.88	0.55	0.21	0.14	0.10
IN.	0.15	0.17	0.16	0.11	0.20	0.32	0.19	1.02	0.61	0.24	0.16	0.12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2004, BY WATER YEAR (WY)

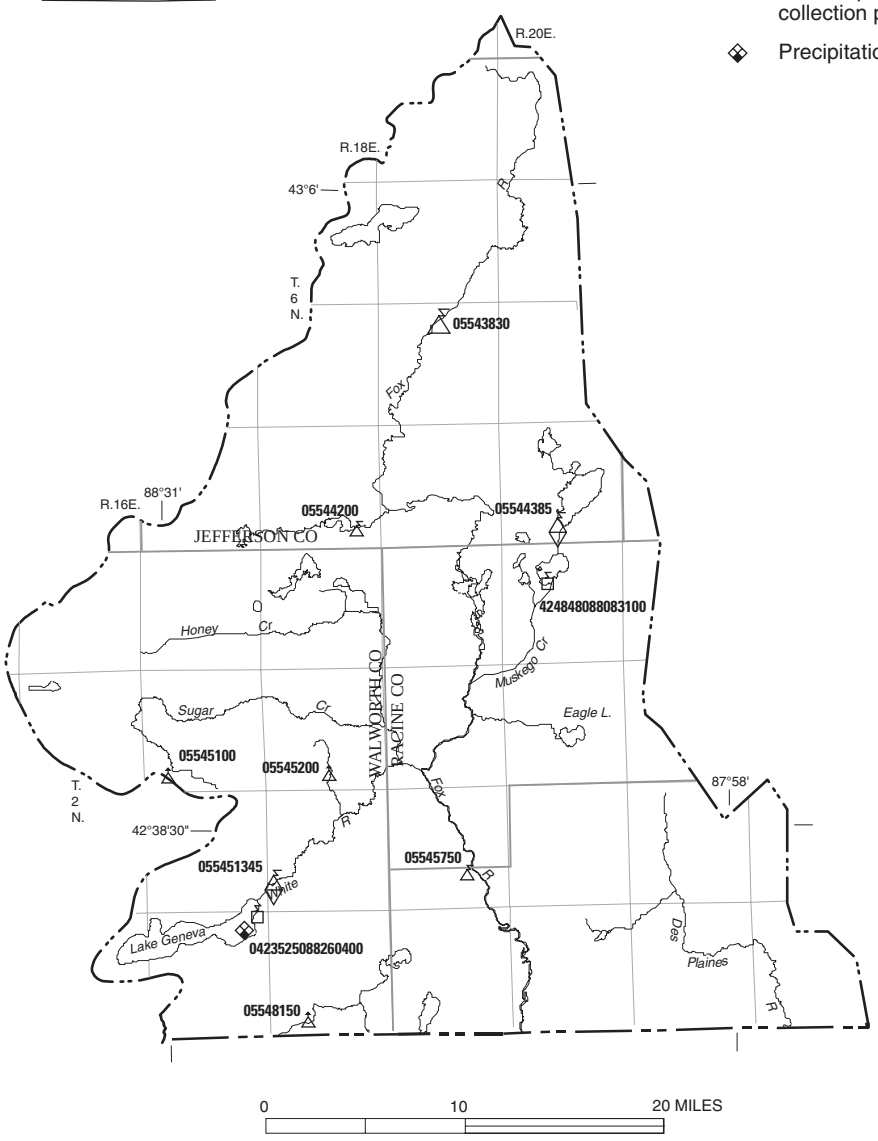
MEAN	2.14	2.00	1.93	2.21	4.33	3.85	3.70	3.72	8.17	2.90	2.00	2.03
MAX	3.68	3.29	4.54	5.85	13.1	12.0	12.4	8.44	17.2	6.22	4.27	4.48
(WY)	(1994)	(1993)	(1993)	(1993)	(1997)	(1993)	(1993)	(2004)	(1999)	(1993)	(1993)	(1993)
MIN	1.24	1.08	0.99	0.88	1.23	0.69	1.00	1.95	1.38	1.07	1.02	0.89
(WY)	(1996)	(1997)	(1998)	(2004)	(1995)	(1996)	(1996)	(1995)	(1995)	(1995)	(1995)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1992 - 2004	
ANNUAL TOTAL	552.02		885.63			
ANNUAL MEAN	1.51		2.42		3.23	
HIGHEST ANNUAL MEAN					6.41	1993
LOWEST ANNUAL MEAN					1.32	1995
HIGHEST DAILY MEAN	27	Jul 15	102	May 22	251	Feb 21, 1997
LOWEST DAILY MEAN	0.78	Sep 9, 10	0.80	(a)Feb 1	0.58	Mar 10, 1996
ANNUAL SEVEN-DAY MINIMUM	0.79	Sep 4	0.80	Feb 7	0.62	Mar 9, 1996
MAXIMUM PEAK FLOW			345	May 22	(b)571	Jun 13, 1999
MAXIMUM PEAK STAGE			8.51	May 22	(c)10.05	Jun 30, 1993
INSTANTANEOUS LOW FLOW			0.58	Mar 20	0.58	(d)Mar 9, 1996
ANNUAL RUNOFF (CFSM)	0.158		0.253		0.337	
ANNUAL RUNOFF (INCHES)	2.14		3.44		4.58	
10 PERCENT EXCEEDS	1.8		3.6		4.6	
50 PERCENT EXCEEDS	1.3		1.4		2.0	
90 PERCENT EXCEEDS	0.97		0.89		1.0	

(a) Also occurred Feb. 2, 4, 7, 8, 10-15
(b) Gage height, 9.69 ft
(c) Discharge, 322 ft^3/s
(d) Also occurred Mar. 10-12, 1996 and Mar. 20, 2004

EXPLANATION

- 05543830 Station number
- △ Stream gage
- ▽ Surface water-quality station
- Stream gage equipped with telephone or data collection platform
- Crest-stage partial-record station
- Lake gage equipped with telephone or data collection platform
- Precipitation gage



Base from U.S. Geological Survey 1:100,000 digital data; modified by Wisconsin Department of Natural Resources. Wisconsin Transverse Mercator projection.

ILLINOIS RIVER BASIN

05527800 DES PLAINES RIVER AT RUSSELL, IL

LOCATION.--Lat 42°29'21", long 87°55'35", in SE $^1/_4$ sec.3, T.46 N., R.11 E., Lake County, Hydrologic Unit 07120004, on right bank at upstream side of Russell Road bridge, 0.3 mi west of Russell, 7.2 mi upstream from Mill Creek, and at mile 109.3.

DRAINAGE AREA.--123 mi^2.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1961-63, and annual maximum, water years 1962-66. June 1967 to current year.

REVISED RECORDS.--WDR IL-75-1: Drainage area. WDR IL-76-1: 1960-68(M), 1973(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 662.00 ft above NGVD of 1929. Oct. 17, 1961, to June 29, 1967, crest-stage gage at left downstream side of bridge at datum 4.29 ft higher.

REMARKS.--Records good except those estimated daily discharges, which are poor (see page 11). Recording rain gage and gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.13	1.7	22	e44	e7.8	195	328	60	679	130	11	9.6
2	0.13	6.4	18	e43	e7.8	224	311	55	622	86	9.0	6.5
3	0.15	54	16	e41	e8.0	241	289	49	508	65	9.0	4.8
4	0.16	87	14	e38	e8.4	253	261	45	418	136	21	3.6
5	0.15	112	15	e37	e8.6	353	234	39	357	223	32	3.1
6	0.15	117	16	e36	e8.8	483	206	35	313	290	31	2.6
7	0.15	100	16	e34	e8.6	573	174	31	270	357	20	1.9
8	0.13	72	16	e32	e8.4	630	139	29	233	387	14	1.6
9	0.11	50	16	e30	e8.2	661	106	36	196	360	12	1.4
10	0.09	36	89	e29	e7.8	640	84	64	191	316	9.3	1.1
11	0.08	28	191	e29	e7.6	568	72	107	274	265	8.0	1.1
12	0.07	23	218	e28	e7.6	463	64	154	334	216	7.2	1.1
13	0.18	20	224	e27	e7.8	387	58	213	369	151	6.5	0.96
14	0.59	19	214	e25	e8.2	338	54	274	354	92	5.8	0.77
15	0.56	21	201	e23	e8.8	290	51	340	322	66	5.0	0.77
16	0.82	22	190	e21	e12	245	48	386	283	55	4.2	1.7
17	1.4	25	174	e19	e15	205	53	412	248	48	6.1	3.5
18	1.8	39	150	e17	e20	167	58	492	229	41	9.7	3.0
19	1.3	68	120	e16	e25	138	57	543	233	36	8.0	2.5
20	1.0	83	108	e16	30	120	51	540	246	31	7.6	2.2
21	0.84	85	90	e15	36	105	80	635	273	34	6.0	1.7
22	0.70	75	71	e14	45	92	100	2,020	315	44	4.6	1.2
23	0.63	65	62	e13	65	82	102	3,190	326	46	4.0	0.63
24	0.65	62	61	e12	102	91	93	3,260	332	39	4.0	0.32
25	0.77	55	62	e11	128	135	96	2,540	328	30	4.3	0.18
26	0.73	48	56	e11	148	183	99	1,850	311	24	4.6	0.10
27	0.72	43	44	e10	165	220	95	1,310	283	20	6.1	0.08
28	0.94	37	43	e9.6	176	239	88	946	250	17	17	0.03
29	1.3	32	e43	e9.0	179	306	77	712	217	15	23	0.01
30	1.5	28	e44	e8.6	---	335	66	575	179	13	18	0.03
31	1.8		e45	e8.2	---	336	---	604	---	12	15	---
TOTAL	19.73	1,514.1	2,649	706.4	1,268.4	9,298	3,594	21,546	9493	3,645	343.0	58.08
MEAN	0.64	50.5	85.5	22.8	43.7	300	120	695	316	118	11.1	1.94
MAX	1.8	117	224	44	179	661	328	3260	679	387	32	9.6
MIN	0.07	1.7	14	8.2	7.6	82	48	29	179	12	4.0	0.01
CFSM	0.01	0.41	0.69	0.19	0.36	2.44	0.97	5.65	2.57	0.96	0.09	0.02
IN.	0.01	0.46	0.80	0.21	0.38	2.81	1.09	6.52	2.87	1.10	0.10	0.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2004, BY WATER YEAR (WY)

MEAN	41.6	67.8	85.4	66.1	105	208	219	142	109	54.3	38.4	50.8
MAX	364	390	382	279	327	673	718	695	642	363	417	410
(WY)	(1987)	(1986)	(1983)	(1993)	(1974)	(1979)	(1993)	(2004)	(2000)	(1978)	(1978)	(1972)
MIN	0.06	1.60	3.06	1.46	1.19	14.9	33.4	6.15	1.90	0.78	0.23	0.060
(WY)	(1995)	(2000)	(1977)	(1977)	(2003)	(1968)	(1977)	(1977)	(1988)	(1988)	(1999)	(1994)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1967 - 2004	
ANNUAL TOTAL	13,753.49		54,134.71			
ANNUAL MEAN	37.7		148		99.0	
HIGHEST ANNUAL MEAN					206	1993
LOWEST ANNUAL MEAN					9.24	1977
HIGHEST DAILY MEAN	238	May 11	3,260	May 24	3,260	May 24, 2004
LOWEST DAILY MEAN	0.00	(a)	0.01	Sep 29	0.00	(b)
ANNUAL SEVEN-DAY MINIMUM	0.00	Sep 18	0.11	Sep 24	0.00	Jul 27, 1988
MAXIMUM PEAK FLOW			3,500	May 23	3,500	May 23, 2004
MAXIMUM PEAK STAGE			11.09	May 23	11.09	May 23, 2004
ANNUAL RUNOFF (CFSM)	0.306		1.20		0.805	
ANNUAL RUNOFF (INCHES)	4.16		16.37		10.94	
10 PERCENT EXCEEDS	93		339		271	
50 PERCENT EXCEEDS	16		43		34	
90 PERCENT EXCEEDS	0.21		1.1		2.7	

(a) Several days
(b) At times in most years
(e) Estimated due to ice effect or missing record

05543830 FOX RIVER AT WAUKESHA, WI

LOCATION.--Lat 43°00'17", long 88°14'37", in SW ¼ SW ¼ sec.3, T.6 N., R.19 E., Waukesha County, Hydrologic Unit 07120006, on left bank 40 ft downstream from Prairie Street bridge in Waukesha, 1.0 mi downstream from dam and 3.2 mi downstream from Pewaukee River.

DRAINAGE AREA.--126 mi^2.

PERIOD OF RECORD.--January 1963 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 793.04 ft above NGVD of 1929 (levels by City of Waukesha).

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). There is occasional regulation from mill dam 1.0 mi upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	29	55	61	e34	140	244	105	534	129	31	32
2	21	96	50	65	e34	186	212	98	472	117	31	36
3	24	177	50	66	e33	182	181	93	402	109	139	39
4	23	220	49	66	e33	189	154	87	357	145	230	37
5	23	222	48	e56	e33	351	132	86	315	143	168	36
6	21	180	46	e55	e33	391	115	86	273	128	92	34
7	20	132	44	e54	e33	343	107	89	239	145	68	33
8	18	105	46	e52	e33	300	102	97	208	125	56	30
9	18	89	65	e51	e33	266	94	149	183	105	55	24
10	20	81	217	51	e33	233	80	173	222	94	60	26
11	20	79	254	51	e33	204	71	270	355	84	49	27
12	20	75	159	57	e33	162	70	296	388	99	46	26
13	23	71	136	58	e33	138	71	487	361	91	42	29
14	39	62	115	54	e33	137	70	722	379	76	37	24
15	33	58	101	47	e33	129	69	832	415	68	34	24
16	26	53	99	50	e33	116	62	795	376	62	33	27
17	22	56	93	e44	e33	112	83	678	412	56	33	31
18	19	103	88	e40	e34	113	86	614	382	51	39	38
19	18	107	82	e37	35	114	86	536	320	45	39	37
20	19	88	63	e39	39	119	120	460	266	43	38	34
21	22	80	70	e40	41	120	279	553	257	42	34	29
22	22	69	69	e40	43	113	301	886	263	47	33	24
23	22	72	69	e40	53	110	249	1,150	233	50	34	23
24	39	81	60	e37	63	112	226	1,270	221	39	34	24
25	52	73	57	e36	64	108	218	1,100	213	37	30	23
26	41	68	57	e35	69	198	200	853	186	37	32	24
27	32	66	58	e35	80	219	174	679	168	36	61	26
28	32	64	83	e35	87	237	147	549	162	31	68	28
29	33	58	87	e34	98	316	128	463	151	37	71	26
30	29	54	80	e34	---	321	114	484	141	37	50	22
31	27	---	71	e34	---	279	---	565	---	33	38	---
TOTAL	799	2,768	2,621	1,454	1,269	6,058	4,245	15,305	8,854	2,341	1,805	873
MEAN	25.8	92.3	84.5	46.9	43.8	195	142	494	295	75.5	58.2	29.1
MAX	52	222	254	66	98	391	301	1,270	534	145	230	39
MIN	18	29	44	34	33	108	62	86	141	31	30	22
CFSM	0.20	0.73	0.67	0.37	0.35	1.55	1.12	3.92	2.34	0.60	0.46	0.23
IN.	0.24	0.82	0.77	0.43	0.37	1.79	1.25	4.52	2.61	0.69	0.53	0.26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2004, BY WATER YEAR (WY)

MEAN	74.8	81.8	80.7	64.9	95.1	186	206	144	109	80.3	66.0	75.7
MAX	346	303	207	188	247	451	598	494	370	271	217	385
(WY)	(1987)	(1986)	(1992)	(1973)	(2001)	(1974)	(1993)	(2004)	(1996)	(1993)	(1998)	(1986)
MIN	6.44	8.14	4.80	6.35	6.26	22.5	53.4	26.6	19.0	9.33	8.23	6.44
(WY)	(1964)	(1964)	(1964)	(1964)	(1964)	(1968)	(1963)	(1977)	(1964)	(1963)	(1963)	(1963)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1963 - 2004	
ANNUAL TOTAL	23,318		48,392			
ANNUAL MEAN	63.9		132		107	
HIGHEST ANNUAL MEAN					193	1993
LOWEST ANNUAL MEAN					31.6	1964
HIGHEST DAILY MEAN	418	May 12	1,270	May 24	2,160	Apr 22, 1973
LOWEST DAILY MEAN	(a)18	Aug 24, 31	(b)18	Oct 8, 9	(c)3.2	(d)Dec 29-31, 1963
ANNUAL SEVEN-DAY MINIMUM	19	Aug 27	20	Oct 6	(c)3.3	Dec 26, 1963
MAXIMUM PEAK FLOW			1,300	May 24	2,260	Apr 22, 1973
MAXIMUM PEAK STAGE			6.97	May 24	7.42	Apr 22, 1973
ANNUAL RUNOFF (CFSM)	0.507		1.05		0.848	
ANNUAL RUNOFF (INCHES)	6.88		14.29		11.53	
10 PERCENT EXCEEDS	122		317		236	
50 PERCENT EXCEEDS	44		68		67	
90 PERCENT EXCEEDS	22		27		21	

(a) Also occurred Oct. 8, 9 and 19
(b) Also occurred Oct. 19
(c) Ice affected
(d) Also occurred Jan. 1, 1964
(e) Estimated due to ice effect or missing record

LOCATION.--Lat 42°51'24", long 88°19'40", in NE ¼ NE ¼ sec.35, T.5 N ., R.18 E., Waukesha County, Hydrologic Unit 07120006, on left bank 100 ft upstream from bridge on State Highway 83 in Mukwonago, 100 ft downstream from railroad bridge, and 800 ft downstream from dam.

DRAINAGE AREA.--74.1 mi^2.

PERIOD OF RECORD.--June 1973 to current year.

REVISED RECORDS.--WDR WI-79-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 779.23 ft above NGVD of 1929 (Southeastern Wisconsin Regional Planning Commission bench mark). Prior to Oct. 19, 1981, at datum 0.85 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Discharge affected by manipulation of gates at dams 800 ft and 11.4 mi upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	18	24	39	24	35	67	49	135	66	34	33
2	13	35	22	50	24	49	55	38	140	66	46	26
3	13	53	23	52	26	54	49	32	109	63	54	28
4	13	81	25	48	27	56	29	32	77	62	74	32
5	13	106	26	46	27	98	20	29	61	57	76	48
6	13	106	27	e43	28	129	23	29	60	57	68	51
7	14	96	27	24	29	131	25	27	61	78	58	47
8	14	83	27	18	29	89	43	27	64	85	48	31
9	14	47	29	20	29	59	45	44	69	80	45	26
10	14	21	97	21	28	52	39	96	75	61	34	26
11	15	19	110	24	28	61	37	122	104	55	32	25
12	15	25	92	26	29	61	22	116	115	70	33	26
13	15	24	87	27	29	44	17	112	111	72	34	28
14	18	25	83	28	28	40	19	117	106	65	34	28
15	18	25	40	28	28	27	20	118	91	56	34	27
16	18	26	27	28	e28	25	22	110	81	46	33	26
17	17	29	30	29	e28	28	36	104	104	42	50	35
18	18	53	32	30	e29	31	43	99	132	43	54	30
19	17	67	34	29	e44	38	52	95	152	44	46	24
20	18	56	34	28	48	50	48	94	149	44	44	24
21	18	51	34	28	44	47	97	103	148	45	44	24
22	17	50	44	e27	41	44	102	179	141	46	42	24
23	18	60	46	27	24	42	83	231	107	47	28	25
24	20	61	44	27	20	41	71	231	96	46	23	23
25	23	28	42	27	23	43	44	224	97	43	24	20
26	23	17	32	27	26	73	32	178	97	41	26	21
27	26	19	23	28	29	95	35	98	96	39	47	25
28	40	22	30	28	30	98	37	78	88	27	55	25
29	50	23	35	e27	31	96	49	78	77	22	59	24
30	39	24	39	e27	---	71	50	81	67	29	57	24
31	23	---	40	e25	---	63	---	101	---	34	53	---
TOTAL	600	1,350	1,305	936	858	1,870	1,311	3,072	3,010	1,631	1,389	856
MEAN	19.4	45.0	42.1	30.2	29.6	60.3	43.7	99.1	100	52.6	44.8	28.5
MAX	50	106	110	52	48	131	102	231	152	85	76	51
MIN	13	17	22	18	20	25	17	27	60	22	23	20
CFSM	0.26	0.61	0.57	0.41	0.40	0.81	0.59	1.34	1.35	0.71	0.60	0.39
IN.	0.30	0.68	0.66	0.47	0.43	0.94	0.66	1.54	1.51	0.82	0.70	0.43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2004, BY WATER YEAR (WY)

MEAN	47.4	54.9	52.6	45.1	53.3	72.5	75.0	64.4	55.0	42.2	44.4	45.0
MAX	98.7	110	83.7	77.8	83.8	151	150	155	138	80.8	83.5	88.7
(WY)	(1987)	(1986)	(1983)	(1974)	(1974)	(1974)	(1993)	(1975)	(1975)	(1993)	(1979)	(1986)
MIN	19.0	29.2	26.2	22.8	29.6	40.6	36.6	16.9	14.4	13.3	15.2	11.7
(WY)	(1998)	(1977)	(1990)	(1977)	(2004)	(2003)	(2003)	(1977)	(1988)	(1988)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1973 - 2004	
ANNUAL TOTAL	11,780.6		18,188			
ANNUAL MEAN	32.3		49.7		54.2	
HIGHEST ANNUAL MEAN					90.3	1974
LOWEST ANNUAL MEAN					30.8	1977
HIGHEST DAILY MEAN	145	May 12	231	May 23, 24	275	Mar 6, 1974
LOWEST DAILY MEAN	8.2	Sep 7, 8	13	Oct 1-6	1.8	Dec 23, 1975
ANNUAL SEVEN-DAY MINIMUM	8.3	Sep 5	13	Oct 1	6.8	Oct 31, 1988
MAXIMUM PEAK FLOW			240	May 23	(a)300	Mar 5, 1976
MAXIMUM PEAK STAGE			3.58	May 23	3.58	May 23, 2004
ANNUAL RUNOFF (CFSM)	0.436		0.671		0.731	
ANNUAL RUNOFF (INCHES)	5.91		9.13		9.93	
10 PERCENT EXCEEDS	59		98		99	
50 PERCENT EXCEEDS	26		38		46	
90 PERCENT EXCEEDS	14		21		21	

(a) Gage height, 2.50 ft, datum then in use
(e) Estimated due to ice effect or missing record

LOCATION.--Lat 42°51'09", long 88°07'50", in SE $^1/_4$ NE $^1/_4$ sec.33, T.5 N ., R.20 E., Waukesha County, Hydrologic Unit 07120006, on right bank at dam outlet of Muskego Lake, 700 ft north of Muskego Dam Drive, 2 mi northeast of Wind Lake.

DRAINAGE AREA.--33.9 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1987 to September 1989, October 1995 to current year. Prior to October 1996, published under station number 425109088075000. Prior to October 2000 published as "Muskego Lake Outlet near Wind Lake".

GAGE.--Water-stage recorder. Datum of gage is 760.00 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 18, 1987, nonrecording gage at same site and datum, October 1989 to September 1995, nonrecording gage at same datum.

REMARKS.--Flows for the water year were based on upstream-stage/downstream-stage-discharge ratings for flow through the variably-opened gate or upstream-stage-discharge rating for the dam crest or combination of gate and crest overflow. Records fair except for estimated daily disicharges, which are poor (see page 11).

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	3.5	4.2	10	9.8	13	24	e5.7	110	12	0.00	0.00
2	3.3	3.5	4.5	10	9.9	18	21	e5.7	113	12	0.00	0.00
3	3.2	3.6	4.5	11	11	21	27	e5.7	101	12	0.00	0.00
4	3.3	3.5	4.8	11	10	24	15	e5.7	87	12	0.00	0.00
5	3.3	3.6	5.1	11	10	71	8.9	e5.7	76	14	0.00	0.00
6	3.3	3.6	5.0	10	11	85	8.2	e5.7	69	13	0.00	0.00
7	3.3	3.6	5.2	9.7	10	83	49	5.3	49	17	0.00	0.00
8	3.3	3.6	5.4	9.7	10	79	72	5.1	32	39	0.00	0.00
9	3.3	3.6	6.8	9.7	9.7	74	70	5.1	39	65	0.00	0.00
10	3.3	3.6	24	9.6	8.8	61	69	5.1	40	66	0.00	0.00
11	3.3	3.6	19	9.6	8.7	56	68	5.2	41	65	0.00	0.00
12	3.3	3.6	19	8.8	8.1	55	51	5.1	41	65	0.00	0.00
13	3.3	3.6	19	8.7	7.9	49	39	5.2	39	63	0.00	0.00
14	3.3	3.6	18	8.8	7.4	43	38	14	39	63	0.00	0.00
15	3.3	3.6	17	8.8	7.0	47	37	25	36	47	0.00	0.00
16	3.3	3.6	17	8.8	6.5	57	27	26	39	17	0.00	0.00
17	3.3	3.6	16	9.5	6.5	52	22	33	40	4.9	0.00	0.00
18	3.3	3.8	15	9.4	6.3	40	21	44	39	4.8	0.00	0.00
19	3.3	3.9	13	8.9	6.3	39	14	43	39	4.8	0.00	0.00
20	3.2	3.8	12	8.8	6.6	39	5.6	42	37	4.8	0.00	0.00
21	3.3	6.7	12	8.9	7.1	39	5.5	48	37	11	0.00	0.00
22	3.3	6.0	12	8.9	6.9	17	5.8	80	36	15	0.00	0.00
23	3.3	3.8	11	9.7	7.5	0.00	5.7	132	38	15	0.00	0.00
24	3.3	3.6	10	10	8.1	0.00	5.9	163	38	14	0.00	0.00
25	3.4	4.2	9.9	10	8.0	0.00	5.8	167	38	14	0.00	0.00
26	3.4	4.5	9.6	10	8.1	2.0	e5.6	160	38	14	0.00	0.00
27	3.4	4.9	9.5	11	8.7	3.6	e5.6	147	37	14	0.00	0.00
28	3.4	5.2	11	10	9.1	2.9	e5.6	136	37	4.6	0.00	0.00
29	3.4	4.5	12	10	10	15	e5.6	119	37	0.00	0.00	0.00
30	3.4	4.5	11	10	---	35	e5.7	116	22	0.00	0.00	0.00
31	3.4	---	11	10	---	30	---	116	---	0.00	0.00	---
TOTAL	102.8	120.3	353.5	300.3	245.0	1,150.50	743.5	1,681.3	1,464	702.90	0.00	0.00
MEAN	3.32	4.01	11.4	9.69	8.45	37.1	24.8	54.2	48.8	22.7	0.00	0.00
MAX	3.4	6.7	24	11	11	85	72	167	113	66	0.00	0.00
MIN	3.2	3.5	4.2	8.7	6.3	0.00	5.5	5.1	22	0.00	0.00	0.00
CFSM	0.10	0.12	0.34	0.29	0.25	1.09	0.73	1.60	1.44	0.67	0.00	0.00
IN.	0.11	0.13	0.39	0.33	0.27	1.26	0.82	1.84	1.61	0.77	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2004, BY WATER YEAR (WY)

MEAN	14.7	12.2	12.4	16.4	33.9	26.1	28.8	27.4	29.2	9.44	3.67	6.47
MAX	44.2	45.6	44.2	43.9	88.6	51.8	55.6	69.7	69.7	39.6	14.8	32.0
(WY)	(1996)	(1996)	(1988)	(1988)	(2001)	(2001)	(1999)	(2000)	(1999)	(2000)	(1998)	(2000)
MIN	0.00	0.00	0.46	0.51	0.00	3.57	0.00	0.01	0.00	0.00	0.00	0.00
(WY)	(1989)	(2000)	(2001)	(2003)	(2003)	(2003)	(1997)	(1997)	(1989)	(1988)	(1988)	(1988)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1988 - 2004	
ANNUAL TOTAL	2,401.00		6,864.10			
ANNUAL MEAN	6.58		18.8		18.3	
HIGHEST ANNUAL MEAN					28.3	1999
LOWEST ANNUAL MEAN					6.25	2003
HIGHEST DAILY MEAN	72	May 12	167	May 25	198	Jun 15, 1999
LOWEST DAILY MEAN	0.00	many days	0.00	many days	0.00	many days
ANNUAL SEVEN-DAY MINIMUM	0.00	many periods	0.00	many periods	0.00	many periods
ANNUAL RUNOFF (CFSM)	0.194		0.553		0.541	
ANNUAL RUNOFF (INCHES)	2.63		7.53		7.35	
10 PERCENT EXCEEDS	13		51		53	
50 PERCENT EXCEEDS	3.3		8.1		7.2	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

(e) Estimated due to ice effect or missing record

423525088260400 GENEVA LAKE AT LAKE GENEVA, WI

LOCATION.--Lat 42°35'25", long 88°26'04" in SE $^1/_4$ NW $^1/_4$ sec.36, T.2 N., R.17 E., Walworth County, Hydrologic Unit 07120006, at Geneva Lake dam at Center Street at Lake Geneva.

DRAINAGE AREA.--28.7 mi^2. Area of Lake Geneva, 5,262 acres.

PERIOD OF RECORD.--October 1997 to August 2002, December 2002 to current year.

GAGE.--Water-stage recorder. Datum of gage is 862.08 ft above NGVD of 1929. Intermittent staff-gage readings October to March.

REMARKS.--Gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 3.29 ft, June 13, 2000; minimum gage height, 1.50 ft, Oct. 11, 2003 (affected by wind).

EXTREMES FOR CURRENT YEAR.--Maximum gage height observed, 3.28 ft, May 22; minimum gage height, 1.50 ft, Oct. 11 (affected by wind).

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.75	1.67	1.99	2.19	---	2.46	2.56	2.51	2.92	2.59	2.36	2.27
2	1.73	1.77	1.97	2.20	---	2.48	2.55	2.50	2.87	2.56	2.35	2.27
3	1.74	1.87	1.96	2.21	---	2.48	2.54	2.49	2.83	2.56	2.34	2.27
4	1.71	1.96	1.95	2.20	e2.27	2.49	2.53	2.50	2.80	2.62	2.39	2.27
5	1.70	2.02	1.97	2.22	---	2.62	2.52	2.48	2.77	2.59	2.37	2.28
6	1.69	2.02	1.97	---	---	2.60	2.52	2.48	2.75	2.60	2.36	2.29
7	1.69	2.01	1.97	---	---	2.59	2.51	2.45	2.74	2.58	2.35	2.26
8	1.70	1.98	1.97	---	---	2.56	2.51	2.48	2.73	2.55	2.34	2.23
9	1.69	1.98	1.98	---	---	2.53	2.50	2.50	2.71	2.53	2.34	2.22
10	1.69	1.98	2.15	---	---	2.51	2.49	2.51	2.71	2.54	2.32	2.22
11	1.70	1.98	2.19	---	---	2.50	2.48	2.51	2.74	2.54	2.29	2.21
12	1.71	2.01	2.18	---	---	2.47	2.47	2.54	2.78	2.54	2.26	2.21
13	1.70	1.97	2.17	---	---	2.44	2.46	2.71	2.78	2.54	2.24	2.21
14	1.74	1.96	2.18	---	---	2.46	2.46	2.79	2.76	2.52	2.23	2.20
15	1.74	1.94	2.19	---	---	2.42	2.46	2.81	2.74	2.51	2.23	2.22
16	1.72	1.94	2.21	---	---	2.40	2.46	2.79	2.71	2.50	2.23	2.20
17	1.71	1.94	2.19	---	---	2.40	2.47	2.78	2.75	2.47	2.22	2.17
18	1.71	2.02	2.18	---	---	2.39	2.50	2.84	2.76	2.47	2.23	2.16
19	1.69	2.05	2.18	---	---	2.38	2.51	2.81	2.71	2.47	2.21	2.16
20	1.71	2.05	2.18	---	---	2.38	2.48	2.81	2.69	2.46	2.19	2.15
21	1.69	2.02	2.19	---	---	2.35	2.56	2.85	2.70	2.47	2.18	2.14
22	1.68	2.02	2.17	---	---	2.34	2.53	3.01	2.73	2.49	2.19	2.12
23	1.67	2.07	2.17	---	---	2.32	2.53	3.06	2.71	2.46	2.16	2.12
24	1.67	2.09	2.17	---	---	2.36	2.51	3.04	2.71	2.44	2.17	2.11
25	1.70	2.04	2.17	---	e2.42	2.38	2.55	2.99	2.70	2.42	2.21	2.08
26	1.70	2.01	2.16	---	---	2.48	2.55	2.95	2.68	2.41	2.22	2.08
27	1.68	2.01	2.16	---	2.42	2.49	2.53	2.91	2.65	2.40	2.24	2.07
28	1.70	2.02	2.20	e2.28	2.42	2.53	2.54	2.85	2.64	2.39	2.25	2.04
29	1.67	2.02	2.21	---	2.45	2.58	2.53	2.82	2.62	2.38	2.28	2.03
30	1.67	2.00	2.21	---	---	2.57	2.50	2.87	2.61	2.37	2.28	2.02
31	1.68	---	2.21	---	---	2.57	---	2.95	---	2.36	2.27	---
MEAN	1.70	1.98	2.12	2.22	2.40	2.47	2.51	2.73	2.73	2.49	2.27	2.18
MAX	1.75	2.09	2.21	2.28	2.45	2.62	2.56	3.06	2.92	2.62	2.39	2.29
MIN	1.67	1.67	1.95	2.19	2.27	2.32	2.46	2.45	2.61	2.36	2.16	2.02

(e) Estimated due to ice effect or missing record

055451345 WHITE RIVER AT CENTER STREET AT LAKE GENEVA, WI

LOCATION.--Lat 42°35'26", long 88°26'01", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.36, T.2 N., R.17 E., Walworth County, Hydrologic Unit 07120006, on left bank at downstream end of Center Street culvert crossing at Lake Geneva.

DRAINAGE AREA.--28.7 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1997 to August 12, 2002, December 24, 2002 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 848.22 ft above NGVD of 1929.

REMARKS.--Records fair except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.06	0.08	0.02	0.06	e0.02	14	35	27	133	35	2.1	0.05
2	0.06	0.15	0.02	0.21	e0.02	17	34	25	99	29	2.0	0.05
3	0.06	0.10	0.02	0.03	e0.02	17	33	23	83	29	2.5	0.04
4	0.05	0.20	0.02	e0.02	e0.02	20	30	26	73	44	5.8	0.04
5	0.05	0.04	0.03	e0.02	e0.02	49	29	22	68	34	2.8	0.04
6	0.05	0.04	0.02	e0.02	e0.02	52	29	21	67	35	1.4	0.06
7	0.05	0.04	0.03	e0.02	e0.02	53	27	15	67	29	0.75	0.03
8	0.05	0.04	0.03	e0.02	e0.02	53	25	19	65	23	0.37	0.04
9	0.05	0.05	0.12	e0.02	e0.02	55	24	22	62	19	0.52	0.04
10	0.06	0.06	0.16	e0.02	e0.02	53	23	26	63	18	0.18	0.04
11	0.06	0.06	0.03	e0.03	e0.02	49	20	26	68	18	0.08	0.04
12	0.06	0.05	0.03	e0.03	e0.02	43	18	30	77	23	0.09	0.05
13	0.06	0.04	0.03	e0.02	e0.02	41	17	55	76	25	0.10	0.04
14	0.12	0.04	0.03	e0.02	e0.02	43	17	62	71	22	0.11	0.04
15	0.06	0.04	0.03	e0.02	e0.02	39	17	63	63	19	0.12	0.05
16	0.05	0.03	0.04	e0.02	e0.02	40	17	63	60	18	0.15	0.03
17	0.05	0.09	0.04	e0.02	e0.02	41	19	64	71	13	0.18	0.03
18	0.05	0.03	0.04	e0.02	e0.03	40	25	77	72	11	0.14	0.03
19	0.05	0.02	0.04	e0.02	e0.06	40	27	67	61	13	0.17	0.04
20	0.05	0.02	0.03	e0.02	0.13	41	22	71	58	11	0.18	0.04
21	0.05	0.02	0.03	e0.02	0.84	41	35	83	62	14	0.20	0.03
22	0.05	0.02	0.04	e0.02	3.8	41	30	173	66	17	0.19	0.04
23	0.05	0.05	0.04	e0.02	6.9	41	29	244	61	12	0.20	0.04
24	0.08	0.02	0.04	e0.02	7.5	41	25	201	63	8.6	0.31	0.04
25	0.05	0.02	0.04	e0.02	7.7	27	34	142	60	5.2	0.12	0.04
26	0.05	0.02	0.04	e0.02	8.3	21	33	114	56	4.4	0.11	0.04
27	0.05	0.02	0.05	e0.02	9.0	22	27	101	52	3.9	0.22	0.04
28	0.06	0.02	0.07	e0.02	9.4	29	31	87	49	3.7	0.16	0.04
29	0.05	0.02	0.05	e0.02	9.9	37	32	79	45	3.0	0.04	0.04
30	0.05	0.02	0.05	e0.02	---	37	25	106	40	3.2	0.05	0.04
31	0.05	---	0.06	e0.02	---	36	---	164	---	2.4	0.05	---
TOTAL	1.74	1.45	1.32	0.88	63.90	1,173	789	2,298	2,011	545.4	21.39	1.21
MEAN	0.06	0.05	0.04	0.03	2.20	37.8	26.3	74.1	67.0	17.6	0.69	0.04
MAX	0.12	0.20	0.16	0.21	9.9	55	35	244	133	44	5.8	0.06
MIN	0.05	0.02	0.02	0.02	0.02	14	17	15	40	2.4	0.04	0.03
CFSM	0.00	0.00	0.00	0.00	0.08	1.32	0.92	2.58	2.34	0.61	0.02	0.00
IN.	0.00	0.00	0.00	0.00	0.08	1.52	1.02	2.98	2.61	0.71	0.03	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2004, BY WATER YEAR (WY)

MEAN	5.01	6.59	16.4	24.4	31.0	23.5	29.5	56.2	74.4	21.0	3.84	5.91
MAX	18.9	21.3	36.6	50.7	64.2	61.8	47.6	79.8	127	51.0	10.8	26.4
(WY)	(2002)	(2002)	(2002)	(2001)	(1999)	(2001)	(2002)	(1999)	(1999)	(2000)	(2001)	(2001)
MIN	0.06	0.05	0.04	0.03	0.57	0.58	9.50	32.7	19.1	5.44	0.40	0.04
(WY)	(2004)	(2004)	(2004)	(2004)	(2003)	(2003)	(2003)	(2001)	(2003)	(2002)	(1998)	(2004)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1998 - 2004	
ANNUAL TOTAL	2,999.33		6,908.29			
ANNUAL MEAN	8.22		18.9		27.8	
HIGHEST ANNUAL MEAN					34.5	1999
LOWEST ANNUAL MEAN					18.9	2004
HIGHEST DAILY MEAN	75	May 11	244	May 23	342	Jun 14, 1999
LOWEST DAILY MEAN	0.02	(b)Nov 19	0.02	many days	(e)0.02	(a)Aug 3, 1998
ANNUAL SEVEN-DAY MINIMUM	0.02	Nov 24	0.02	Nov 24	0.02	Nov 24, 2003
MAXIMUM PEAK FLOW			336	May 21	561	Jun 13, 1999
MAXIMUM PEAK STAGE			10.35	May 21	11.60	Mar 10, 2002
ANNUAL RUNOFF (CFSM)	0.286		0.658		0.969	
ANNUAL RUNOFF (INCHES)	3.89		8.95		13.17	
10 PERCENT EXCEEDS	32		62		68	
50 PERCENT EXCEEDS	0.56		0.16		15	
90 PERCENT EXCEEDS	0.04		0.02		0.08	

(a) Also occurred Aug. 12, 21, 1998
(b) Also occurred Nov. 20-22, 24-30, Dec. 1-4, 6, 2003
(e) Estimated due to ice effect or missing record

055451345 WHITE RIVER AT CENTER STREET AT LAKE GENEVA, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1997 to September 1999, October 2000 to August 2002, December 2002 to September 2004.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: October 1997 to September 1999.
TOTAL-PHOSPHORUS DISCHARGE: October 1997 to September 1999, October 2000 to August 2002, December 2002 to September 2004.

REMARKS.--Records fair. Samples collected by Geneva Lake Environmental Agency using equal-width increment (EWI) method unless otherwise noted.

EXTREMES FOR PERIOD OF RECORD.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 16 mg/L, APR. 26, 1999; minimum observed, 1 mg/L, on several days.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 3.0 ton, APR. 26, 1999; minimum daily, 0.0 ton, on many days in 1998 and 1999 water years.
TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.40 mg/L, Sept. 8; minimum observed, <0.005 mg/L, Jan. 6 and Feb. 12, 1998, and May 19, 2003.
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 8.86 lb, June 13, 2001; minimum daily, 0.00 lb, on several days in 1998 and 1999 water years, and many days in 2002 and 2004 water years.

EXTREMES FOR CURRENT YEAR.--
TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.126 mg/L, Aug. 25; minimum observed, <0.009 mg/L, May 10 and June 4.
TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 14.3 lb, May 23; minimum daily, 0.00 lb, on many days.

PHOSPHORUS, WATER, UNFILTERED, POUNDS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.02	0.03	0.00	0.02	e0.00	1.25	1.96	1.41	6.80	2.77	0.16	0.00
2	0.02	0.06	0.00	0.07	e0.00	1.51	1.85	1.27	4.97	2.34	0.16	0.00
3	0.02	0.04	0.00	0.01	e0.00	1.45	1.78	1.18	4.09	2.37	0.19	0.00
4	0.02	0.07	0.00	e0.00	e0.00	1.68	1.63	1.31	3.58	3.57	0.43	0.00
5	0.02	0.02	0.01	e0.00	e0.00	3.98	1.55	1.10	3.33	2.77	0.21	0.00
6	0.02	0.02	0.00	e0.00	e0.00	3.93	1.56	1.06	3.33	2.82	0.10	0.00
7	0.02	0.02	0.01	e0.00	e0.00	3.75	1.43	0.76	3.36	2.32	0.06	0.00
8	0.02	0.02	0.01	e0.00	e0.00	3.49	1.36	0.94	3.26	1.84	0.03	0.00
9	0.02	0.02	0.05	e0.00	e0.00	3.57	1.29	1.10	3.14	1.50	0.04	0.00
10	0.02	0.02	0.06	e0.00	e0.00	3.49	1.22	1.26	3.21	1.45	0.01	0.00
11	0.02	0.02	0.01	e0.00	e0.00	3.23	1.07	1.30	3.48	1.47	0.00	0.00
12	0.02	0.02	0.01	e0.00	e0.00	2.86	0.96	1.52	3.97	1.87	0.00	0.00
13	0.02	0.02	0.00	e0.00	e0.00	2.74	0.92	2.77	3.94	2.00	0.00	0.00
14	0.04	0.01	0.01	e0.00	e0.00	2.88	0.89	3.19	3.73	1.80	0.00	0.00
15	0.02	0.01	0.01	e0.00	e0.00	2.68	0.91	3.31	3.33	1.54	0.00	0.00
16	0.02	0.01	0.02	e0.00	e0.00	2.73	0.93	3.33	3.20	1.42	0.01	0.00
17	0.02	0.04	0.01	e0.00	e0.00	2.81	1.01	3.45	3.80	1.03	0.01	0.00
18	0.02	0.01	0.02	e0.00	e0.00	2.81	1.37	4.19	3.90	0.92	0.00	0.00
19	0.02	0.00	0.01	e0.00	e0.00	2.83	1.47	3.70	3.39	1.02	0.01	0.00
20	0.02	0.00	0.01	e0.00	0.01	2.83	1.19	3.97	3.33	0.91	0.01	0.00
21	0.02	0.00	0.01	e0.00	0.09	2.78	1.88	4.75	3.67	1.12	0.01	0.00
22	0.02	0.00	0.01	e0.00	0.40	2.73	1.63	9.98	4.00	1.31	0.01	0.00
23	0.02	0.02	0.02	e0.00	0.71	2.67	1.57	14.3	3.82	0.94	0.01	0.00
24	0.03	0.00	0.02	e0.00	0.76	2.62	1.37	11.9	4.05	0.68	0.02	0.00
25	0.02	0.00	0.02	e0.00	0.76	1.72	1.79	8.25	3.95	0.40	0.00	0.00
26	0.02	0.00	0.02	e0.00	0.80	1.28	1.75	6.53	3.79	0.34	0.00	0.00
27	0.02	0.00	0.02	e0.00	0.85	1.35	1.44	5.69	3.64	0.31	0.01	0.00
28	0.02	0.00	0.03	e0.00	0.87	1.75	1.63	4.81	3.51	0.29	0.01	0.00
29	0.02	0.00	0.02	e0.00	0.90	2.18	1.65	4.26	3.34	0.23	0.00	0.00
30	0.02	0.00	0.02	e0.00	---	2.11	1.31	5.61	3.07	0.25	0.00	0.00
31	0.02	---	0.02	e0.00	---	2.03	---	8.59	---	0.19	0.00	---
TOTAL	0.65	0.48	0.46	0.10	6.15	79.72	42.37	126.79	111.98	43.79	1.50	0.00

WTR YR 2004 TOTAL 413.99

e Estimated

055451345 WHITE RIVER AT CENTER STREET AT LAKE GENEVA, WI--CONTINUED—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Phosphorus, water, unfltrd mg/L (00665)
OCT				
01...	1400	.06	70	.058
NOV				
17...	1150	.03	70	.074
DEC				
19...	1050	.04	70	.070
JAN				
28...	1000	.08	70	.050
MAR				
05...	1447	66	10	.013
08...	1250	56	10	.012
19...	1600	39	10	.013
APR				
02...	1445	36	10	.010
23...	1425	34	10	.010
MAY				
10...	1103	28	10	.009
24...	1042	196	10	.011
JUN				
04...	1027	75	10	.009
18...	1029	66	10	.010
JUL				
02...	1150	32	10	.015
16...	1200	17	10	.015
AUG				
04...	1230	4.0	10	.014
25...	1200	.11	10	.126

05545750 FOX RIVER NEAR NEW MUNSTER, WI

LOCATION.--Lat 42°36'39", long 88°13'33", in NW ¼ NW ¼ sec.26, T.2 N., R.19 E., Kenosha County, Hydrologic Unit 07120006, on right bank 40 ft downstream from bridge on County Trunk Highway JB, 2.2 mi north of New Munster, and 17.0 mi upstream from Fox Chain of Lakes.

DRAINAGE AREA.--811 mi^2.

PERIOD OF RECORD.--October 1939 to current year. Prior to October 1993, published as "at Wilmot" under station number 05546500.

REVISED RECORDS.--WSP 1308: 1943(M), 1945(M). WDR WI-67-1: Drainage area. WDR WI-92-1: 1991.

GAGE.--Water-stage recorder. Datum of gage is 735.72 ft above NGVD of 1929 (Racine County Surveyor bench mark). Prior to Sept. 2 1965, nonrecording gage at bridge 400 ft above dam in Wilmot 11 mi downstream at datum 0.50 ft lower, and Sept. 2 1965 to Sept. 30, 1993, recording gage 100 ft downstream from bridge at the lower datum. Removal of dam due to damage was completed by Sept. 15, 1992.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 11). Gage-height telemeter and data-collection platform at station. Occasional regulation from several dams upstream from gage.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	99	167	282	412	e180	e470	1,250	715	3,020	958	268	342
2	115	268	236	378	e180	e560	1,100	582	2,900	858	263	270
3	106	438	257	313	e180	e680	978	446	2,700	650	256	246
4	105	701	254	e300	e180	e740	906	318	2,460	779	401	231
5	100	785	260	e290	e180	1,260	811	356	2,150	945	525	232
6	99	741	259	e260	e180	1,760	654	339	1,820	835	435	225
7	100	612	256	e240	e180	1,750	536	410	1,650	726	491	227
8	118	563	250	e240	e170	1,630	639	367	1,450	774	490	238
9	115	486	260	e240	e170	1,490	667	560	1,420	771	431	230
10	112	422	595	e230	e170	1,340	582	1,050	1,370	825	267	205
11	91	320	1,250	e220	e170	1,190	503	1,020	1,430	751	298	175
12	104	357	890	e220	e170	1,050	502	993	1,490	691	297	197
13	109	317	752	e220	e160	899	511	1,260	1,480	718	269	205
14	144	309	691	e220	e160	804	471	2,050	1,390	636	274	184
15	152	230	644	e220	e160	726	369	2,740	1,400	633	271	179
16	110	283	710	e210	e160	710	330	2,750	1,390	541	248	188
17	147	255	665	e210	e160	676	348	2,460	1,840	430	270	197
18	125	371	510	e210	e160	558	406	2,370	2,790	432	276	177
19	120	546	453	e210	e170	570	394	2,450	2,780	416	273	177
20	119	498	446	e210	e180	641	478	2,430	2,470	398	268	176
21	104	417	505	e210	e190	621	476	2,450	2,240	422	258	175
22	132	448	418	e210	e200	607	690	3,100	2,310	447	250	169
23	119	382	399	e200	e220	558	801	4,100	2,210	429	232	170
24	105	335	423	e200	e240	515	652	4,470	2,140	391	241	165
25	158	358	403	e200	e280	578	800	4,350	2,140	353	272	158
26	157	344	e390	e200	e330	770	786	3,990	1,810	338	305	148
27	161	352	359	e200	e360	1,130	768	3,660	1,560	346	258	149
28	195	296	337	e200	e400	1,070	683	3,350	1,410	346	275	150
29	146	352	410	e190	e430	1,340	430	3,060	1,300	276	367	161
30	188	232	384	e190	---	1,520	545	2,920	1,160	292	345	147
31	181	---	391	e190	---	1,420	---	3,010	---	271	377	---
TOTAL	3,936	12,185	14,339	7,243	6,070	29,633	19,066	64,126	57,680	17,678	9,751	5,893
MEAN	127	406	463	234	209	956	636	2,069	1,923	570	315	196
MAX	195	785	1,250	412	430	1,760	1,250	4,470	3,020	958	525	342
MIN	91	167	236	190	160	470	330	318	1,160	271	232	147
CFSM	0.16	0.50	0.57	0.29	0.26	1.18	0.78	2.55	2.37	0.70	0.39	0.24
IN.	0.18	0.56	0.66	0.33	0.28	1.36	0.87	2.94	2.65	0.81	0.45	0.27

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2004, BY WATER YEAR (WY)

MEAN	387	476	450	420	537	1,092	1,059	737	587	393	331	341
MAX	1,931	1,536	1,755	1,818	1,386	2,434	3,591	2,078	1,923	1,382	902	1,763
(WY)	(1987)	(1986)	(1983)	(1960)	(2001)	(1979)	(1993)	(1973)	(2004)	(1969)	(1952)	(1972)
MIN	79.5	113	91.4	87.7	105	252	256	108	124	69.2	57.2	62.7
(WY)	(1957)	(1950)	(1964)	(1940)	(1940)	(1968)	(1958)	(1958)	(1988)	(1958)	(1958)	(1946)

05545750 FOX RIVER NEAR NEW MUNSTER, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1940 - 2004	
ANNUAL TOTAL	112,331		247,600			
ANNUAL MEAN	308		677		567	
HIGHEST ANNUAL MEAN					1,240	1993
LOWEST ANNUAL MEAN					174	1958
HIGHEST DAILY MEAN	1,360	May 10	4,470	May 24	7,100	Apr 1, 1960
LOWEST DAILY MEAN	83	Sep 8	91	Oct 11	35	Sep 9, 1958
ANNUAL SEVEN-DAY MINIMUM	92	Sep 2	103	Oct 1	41	Sep 7, 1958
MAXIMUM PEAK FLOW			4,510	May 24	(a)7,520	Mar 31, 1960
MAXIMUM PEAK STAGE			13.73	May 24	(b)14.10	Feb 21, 1994
INSTANTANEOUS LOW FLOW			82	Oct 11, 12	0.00	(c)Oct 26, 1945
ANNUAL RUNOFF (CFSM)	0.379		0.834		0.699	
ANNUAL RUNOFF (INCHES)	5.15		11.36		9.50	
10 PERCENT EXCEEDS	562		1,680		1,270	
50 PERCENT EXCEEDS	239		374		370	
90 PERCENT EXCEEDS	109		160		128	

(a) Gage height, 9.25 ft, from graph based on gage readings, site and datum then in use
(b) Ice affected
(c) Also occurred Aug. 10, 1990
(e) Estimated due to ice effect or missing record

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or flood-flow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at crest-stage partial-record stations are presented in the following table. Discharge measurements made at miscellaneous sites for both low flows and high flows are given in separate tables.

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Maximum discharge at crest-stage partial-record stations

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 2004 Maximum			Period of Record Maximum		
			Date	Gage height (feet)	Discharge (ft^3/s)	Date	Gage height (feet)	Discharge (ft^3/s)
STREAMS TRIBUTARY TO LAKE SUPERIOR								
04024400 Stony Brook near Superior	Lat 46°35'01", long 92°07'10" in SE 1/4 sec. 4, T.47 N., R.14 W., Douglas County, Hydrologic Unit 04010301, at box culvert on State Highway 35, 12.5 mi south of toll bridge on U.S. Highways 2 and 35 at St. Louis River at Superior; drainage area, 1.86 mi^2.	1959-04	04-19-04	14.43	154	09-02-85	35.23	595
04025200 Pearson Creek near Maple	Lat 46°38'51", long 91°42'55" on common boundary of secs. 11 and 14, T.48 N., R.11 W., Douglas County, Hydrologic Unit 04010301, at box culvert on State Highway 13, 4.0 mi north of Maple; drainage area, 4.07 mi^2.	1957-04	03-28-04 05-31-04	G8.64 8.05	B 453	09-02-85	31.83	1,440
04026200 Sand River Tributary near Red Cliff	Lat 46°53'53", long 90°56'47" in NE 1/4 section 14, T.51 N., R.5 W., Bayfield County, Hydrologic Unit 04010301, at box culvert on State Highway 13, 8.0 mi northwest of Red Cliff; drainage area, 1.09 mi^2.	1959-04	03-28-04	G10.91	<48	05-23-64	16.86	624
04026300 Sioux River near Washburn	Lat 46°41'20", long 90°57'02" in NE 1/4 sec. 35, T.49 N., R.5 W., Bayfield County, Hydrologic Unit 04010301, on County Trunk Highway C, 2.5 mi west of Washburn; drainage area, 33.9 mi^2.	1959-65 1966# 1967-04	04-19-04	11.63	384	09-02-85 04-23-01	29.45 21.70	2,200 2,670

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 2004 Maximum			Period of Record Maximum		
			Date	Gage height (feet)	Dis-charge (ft^3/s)	Date	Gage height (feet)	Dis-charge (ft^3/s)
STREAMS TRIBUTARY TO LAKE SUPERIOR--CONTINUED								
04026450 Bad River near Mellen	Lat 46°16'14", long 90°42'26" in NE 1/4 NW 1/4 sec.26, T.44 N., R.3 W., Ashland County, Hydrologic Unit 04010302, on left bank 150 ft downstream from bridge on U.S. Forest Service Road, 4.4 mi southwest of Mellen; drainage area, 82.0 mi^2.	1971-75# 1976-04	04-20-04	6.66	1,410	05-12-03	9.59	2,880
04027200 Pearl Creek at Grandview	Lat 46°22'05", long 91°05'27" in NE 1/4 sec.22, T.45 N., R.6 W., Bayfield County, Hydrologic Unit 04010302, at bbox culvert on U.S. Highway 63, 0.8 mi east of Grandview; drainage area, 16.9 mi^2.	1960-04	04-19-04	12.08	188	07-02-92	28.47	1,920
STREAMS TRIBUTARY TO LAKE MICHIGAN								
04059900 Allen Creek Tributary near Alvin	Lat 45°58'05", long 88°47'24" on north boundary sec. 7, T.40 N., R.14 E., Forest County, Hydrologic Unit 04030106, at culvert on State Highway 70, 2.2 mi southeast of Alvin; drainage area, 1.22 mi^2.	1960-04	04-21-04	9.44	8.03	05-22-83	11.38	40
04063640 North Branch Pine River at Windsor Dam near Alvin	Lat 45°55'43", long 88°51'38" in SE 1/4 sec.21,T.40 Nl, R.13 E., Forest County, Hydrologic Unit 04030108, at bridge on country road, at Windsor Dam, 3.8 mi upstream from confluence of North and South Forks, 4.0 mi southwest of Alvin; drainage area, 27.8 mi^2.	1967-68# 1970-04	04-21-04	2.57	B	04-09-80	3.89	165
04067760 Peshtigo River near Cavour	Lat 45°39'20", long 88°38'52" in SW 1/4 sec.29, T.37 N., R.15 E., Forest County, Hydrologic Unit 04040105, at bridge on U.S. Highway 8, 0.7 mi northwest of Cavour; drainage area, 150 mi^2.	1970-04	04-01-04	G13.49	E731	04-21-96	15.78	1,600
04069700 North Branch Oconto River near Wabeno	Lat 45°26'19", long 88°37'40" in SW 1/4 sec.9, T.34 N., R.15 E., Forest County, Hydrologic Unit 04030104, at pipe arch culvert on County Trunk Highway C, 0.6 mi east of intersection with State Highway 32 at Wabeno; drainage area, 34.1 mi^2.	1970-04	04-02-04	12.01	136	04-20-96	14.21	621

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 2004 Maximum			Period of Record Maximum		
			Date	Gage height (feet)	Dis-charge (ft^3/s)	Date	Gage height (feet)	Dis-charge (ft^3/s)
STREAMS TRIBUTARY TO LAKE MICHIGAN--CONTINUED								
04071700 North Branch Little River near Coleman	Lat 45°00'37", long 88°02'43" on common boundary of secs. 2 and 3, T.29 N., R.20 E., Oconto County, Hydrologic Unit 04030104, at bridge on U.S. Highway 141, 3.8 mi south of Coleman; drainage area, 21.4 mi^2.	1958-04	03-28-04	14.69	656	03-28-04	14.69	656
04071800 Pensaukee River near Pulaski	Lat 44°45'48" long 88°15'07" in NE 1/4 sec.1, T.26 N., R.18 E., Shawano County, Hydrologic Unit 04030103, at bridge on State Highway 32, 6.1 mi north of Pulaski; drainage area, 48.80 mi^2.	1961-04	03-26-04	14.71	1,065	06-18-96	16.96	1,810
04072792 Tagatz Creek near Westfield	Lat 43°57'22" long 89°29'38" in SE 1/4 sec.12, T.17 N., R.8 E., Marquette County, Hydrologic Unit 04030201, at culvert on County Trunk Highway H, 5.2 mi north of Westfield.	1996-04	06-11-04	17.26	86	06-11-04	17.26	86
04073400 Bird Creek at Wautoma	Lat 44°04'06", long 89°18'08" in S 1/2 section 34, T.19 N., R.10 E., Waushara County, Hydrologic Unit 04030201, at concrete culvert on State Highway 21, 0.2 mi west of Wautoma; drainage area, 4.14 mi^2.	1959-04	06-11-04	13.31	116	06-20-02 06-11-04	15.97 13.31	B 116
04074850 Lily River near Lily	Lat 45°20'59", long 88°49'52" in SE 1/4 sec.11, T.33 N., R.13 E., Langlade County, Hydrologic Unit 04030202, at culvert on County Trunk Highway A, 3.2 mi north from junction of State Highways 55 and 52 at Lily; drainage area, 45.6 mi^2.	1970-04	06-14-04	10.91	B	09-15-94 06-14-04	10.55 J10.91	173
04075200 Evergreen Creek near Langlade	Lat 45°10'11", long 88°48'12" in NW 1/4 sec.18, T.31 N., R.14 E., Langlade County, Hydrologic Unit 04030202, on culvert on State Highway 64, 3.5 mi southest of Langlade; drainage area, 8.09 mi^2.	1959-65 1966-72# 1973-04	03-29-04	10.43	29.6	07-11-82	11.66	80
04078891 Maple Creek near Sugar Bush	Lat 44°27'54", long 88°43'20" in NW 1/4 SE 1/4 sec.18, T.23 N., R.15 E., Outagamie County, Hydrologic Unit 04030202, at bridge on County Trunk Highway D, 1.3 mi southeast of Sugar Bush; drainage area, 22.1 mi^2.	1996-04	03-26-04	12.80	159	1996	13.65	360

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 2004 Maximum			Period of Record Maximum		
			Date	Gage height (feet)	Discharge (ft^3/s)	Date	Gage height (feet)	Discharge (ft^3/s)
STREAMS TRIBUTARY TO LAKE MICHIGAN--CONTINUED								
04079700 Spaulding Creek near Big Falls	Lat 44°38'13", long 89°01'20" on common boundary of secs. 14 and 15, T.25 N., R.12 E., Waupaca County, Hydrologic Unit 04030202, at culvert on County Trunk Highway E, 1.5 mi north of Big Falls; drainage area, 5.57 mi^2.	1959-65 1966# 1967-04	03-28-04	<10.94	<58.7	05-07-60	11.64	101
04081900 Sawyer Creek at Oshkosh	Lat 44°02'00", long 88°35'00" in SW 1/4 sec.15, T.18 N., R.16 E., Winnebago County, Hydrologic Unit 04030201, at bridge on U.S. Highway 41, 1.0 mi southwest of bridge on Algoma Street at Fox River, at Oshkosh; drainage area, 12.10 mi^2.	1961-04	06-11-04	17.40	B	09-11-86	17.47	2,350
04085145 Red River near Dykesville	Lat 44°38'59", long 87°42'47" in SW 1/4 SE 1/4 sec.9, T.25 N., R.23 E., Kewaunee County, Hydrologic Unit 04030102, at upstream crossing of County Highway A, 2.5 mi east of Dykesville; drainage area,11.8 mi^2.	1996-04	05-24-04	12.46	225	04-01-98	12.49	215
04085400 Killsnake River near Chilton	Lat 44°03'33", long 88°08'36" in E 1/2 sec.6, T.18 N., R.20 E., Calumet County, Hydrologic Unit 04030101, at bridge on country road, 2.4 mi northeast of Cilton; drainage area, 29.4 mi^2.	1961-04	06-01-04	12.24	1,450	03-30-79	14.37	1,840
040854105 Mud Creek near Valders	Lat 44°02'20", long 87°54'07" in SW 1/4 SW 1/4 sec.8, T.18 N., R.22 E., Manitowoc County, Hydrologic Unit 04030101, at culvert on Marken Road, 0.8 mi south of intersection with State Highway 151, and 1.7 mi southeast of Valders.	1996-04	05-24-04	13.82	158	06-17-96 05-24-04	13.94 K13.82	145 158
04086310 Mink Creek near Beechwood	Lat 43°36'15", long 88°06'01" in SE 1/4 SE 1/4 sec.9, T.13 N., R.20 E., Sheboygan County, Hydrologic Unit 04040003, at bridge on County Trunk Highway S, 1.2 mi northeast of Beechwood; drainage area, 9.84 mi^2.	1996-04	06-13-04	18.39	60	06-13-04	18.39	60
04087100 Honey Creek at Milwaukee	Lat 42°58'44", long 87°59'56" in NE 1/4 SW 1/4, sec.15, T.6 N., R.21 E., Milwaukee County, Hydrologic Unit 04040003, 400 ft upstream from bridge on S. 68th Street, 6.0 mi southwest of mouth of Milwaukee River, at Milwaukee; drainage area, 3.26 mi^2.	1959-04	07-03-04	22.03	834	08-13-02	25.12	2,290

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 2004 Maximum			Period of Record Maximum		
			Date	Gage height (feet)	Dis-charge (ft^3/s)	Date	Gage height (feet)	Dis-charge (ft^3/s)
STREAMS TRIBUTARY TO LAKE MICHIGAN--CONTINUED								
04087200 Oak Creek near South Milwaukee	Lat 42°52'58", long 87°53'31" on common boundary of sec. 21 and 22, T.5 N., R.22 E., Milwaukee County, Hydrologic Unit 04040002, at bridge on West Nicholson Road, 3.0 mi southest of South Milwaukee; drainage area, 13.8 mi^2.	1958-04	05-14-04	15.79	446	07-02-00	17.74	1,360
04087250 Pike Creek near Kenosha	Lat 42°36'12", long 87°53'41" in W 1/2 sec.27, T.2 N., R.22 E., Kenosha County, Hydrologic Unit 04040002, at box culvert on State Highway 43, 3.0 mi northest of Kenosha; drainage area, 7.25 mi^2.	1960-04	05-23-04	D18.20	E127	06-12-00 05-23-04	18.07 D18.20	235
ST. CROIX RIVER BASIN								
05340300 Trade River near Frederic	Lat 45°37'41", long 92°29'19" in SW 1/4 sec.4, T.36 N., R.17 W., Polk County, Hydrologic Unit 07030005, at box culvert on State Highways 35 and 48, 2.5 mi southwest of Frederic; drainage area, 6.34 mi^2.	1958-04	05-28-04	10.31	80.0	06-12-84	18.89	1,050
05341313 Bull Brook near Amery	Lat 45°17'03", long 92°19"00" in SW 1/4 SE 1/4, sec.2, T.32 N., R.16 W., Polk County, Hydrologic Unit 07030005, on right bank just upstream from 32-ft concrete box culvert on County Trunk Highway F, 1.8 mi south of junction of County Trunk Highway J, and about 2.5 mi southeast of Amery; drainage area, 9.62 mi^2.	1995-04	03-25-04	11.68	215	04-23-01	12.83	433
05341900 Kinnickinnic River Tributary at River Falls	Lat 44°49'57", long 92°38'23" in NE 1/4 sec.14, T.27 N., R.19 W., Pierce County, Hydrologic Unit 07030005, at bridge on County Trunk Highway FF, 1.6 mi southwest of River Falls; drainage area, 7.26 mi^2.	1959-04	03-02-04	12.00	76.0	08-09-88	15.99	5,200
05346294 Goose Creek at Beldenville	Lat 44°46'27", long 92°31'29" in NW 1/4 NE 1/4 sec.2, T.26 N., R.18 W., Pierce County, Hydrologic Unit 07040001, at bridge on 790th Street, 1.0 mi west of Beldenville; drainage area, 10.8 mi^2.	2000-04	03-20-04	H9.95	<167	05-11-03	12.87	1,480

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 2004 Maximum			Period of Record Maximum		
			Date	Gage height (feet)	Dis-charge (ft^3/s)	Date	Gage height (feet)	Dis-charge (ft^3/s)
			ST. CROIX RIVER BASIN--CONTINUED					
05355315 Lost Creek near Waverly	Lat 44°42'10", long 92°20'16" in SE 1/4 SE 1/4 sec.29, T.26 N., R.16 W., Pierce County, Hydrologic Unit 07040001, at bridge on 465th Ave., 4.4 mi southwest of Waverly; drainage area, 25.2 mi^2.	2000-04	03-26-04	10.49	280	04-12-01	12.97	1,200
			CHIPPEWA RIVER BASIN					
05357360 Bear River near Powell	Lat 46°04'40", long 90°00'52" in NE 1/4 sec.32, T.42 N., R.4 E., Iron County, Hydrologic Unit 07050002, at bridge on State Highway 182, 3.0 mi west of Powell; drainage area, 120 mi^2.	1970-04	04-03-04 04-20-04	G12.78 12.22	B 457	05-11-02 04-21-96	13.08 G13.18	799
05359600 Price Creek near Phillips	Lat 45°43'33", long 90°40'12" in SW 1/4 sec.31, T.38 N., R.2 W., Price County, Hydrologic Unit 07050002, at culvert on County Trunk Highway W, 13.0 mi west of Phillips; drainage area, 16.9 mi^2.	1958-65 1966# 1967-04	10-14-04 06-01-04	D11.27 10.69	B 65.6	09-15-94	17.43	552
05361400 Hay Creek near Prentice	Lat 45°32'32", long 90°21'37" in SE 1/4 sec.4, T.35 N., R.1 E., Price County, Hydrologic Unit 07050004, at culvert on U.S. Highway 8, 3.5 mi west of Prentice; drainage area, 22.6 mi^2.	1961-04	03-29-04	13.30	715	09-16-94	15.39	1,650
05361420 Douglas Creek near Prentice	Lat 45°31'06", long 90°15'28" in NE 1/4 sec.17, T.35 N., R.2 E., Price County, Hydrologic Unit 07050004, at culvert on County Trunk Highway C, 2.3 mi southeast of intersection with State Highway 13 at Prentice; drainage area, 25.2 mi^2.	1970-04	03-29-04	14.46	797	09-15-94	17.66	1,620
05361989 Jump River Tributary near Jump River	Lat 45°21'08", long 90°49'23" in SW 1/4 SW 1/4 sec.12, T.33 N., R.4 W., Taylor County, Hydrologic Unit 07050004, on left bank just upstream from a 23-ft concrete box culvert at a cut-off road at Junction of Hwys 73 and I-94, 1 mi west of Jump River and 7.5 mi northeast of Sheldon; drainage area, 6.77 mi^2.	1995-04	03-29-04	11.23	129	04-11-02 10-07-02	11.66 G12.07	205

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 2004 Maximum			Period of Record Maximum		
			Date	Gage height (feet)	Dis-charge (ft^3/s)	Date	Gage height (feet)	Dis-charge (ft^3/s)
CHIPPEWA RIVER BASIN--CONTINUED								
05363775 Babit Creek at Gilman	Lat 45°10'00", long 90°47'49" in NW 1/4 SW 1/4 sec.18, T.31 N., R.3 W., Taylor County, Hydrologic Unit 07050005, on right bank just upstream from a 30 ft concrete culvert on State Highway 64 at east side of Gilman; drainage area, 8.49 mi^2.	1995-04	03-28-04	G13.63	265	03-28-98 03-28-04	12.87 G13.63	367
05364000 Yellow River at Cadott	Lat 44°57'21", long 91°08'48" in NE 1/4 sec.31, T.29 N., R.6 W., Chippewa County, Hydrologic Unit 07050005, at bridge on State Highway 27, at Cadott; drainage area, 364 mi^2.	1943-61# 1962-04	03-27-04	14.00	11,700	09-22-86	15.82	16,600
05364100 Seth Creek near Cadott	Lat 44°59'24", long 91°08'48" in SW 1/4 sec.17, T.29 N., R.6 W., Chippewa County, Hydrologic Unit 07050005, at culvert on State Highway 27, 3.1 mi north of Cadott; drainage area, 3.25 mi^2.	1962-04	03-26-04	13.96	316	08-01-01	19.13	1,540
05364500 Duncan Creek at Bloomer	Lat 45°07'00", long 91°30'00" in sec.8, T.30 N., R.9 W., Chippewa County, Hydrologic Unit 07070005, 0.2 mi below Bloomer dam, at Bloomer; drainage area, 50.3 mi^2.	1945-51# 1958-04	03-28-04	8.82	1,570	06-29-79	11.81	5,400
05366500 Eau Claire River near Fall Creek	Lat 44°48'35", long 91°16'50" in NW 1/4 sec.19, T.27 N., R.7 W., Eau Claire County, Hydrologic Unit 07050006, 500 ft east of County Trunk Highway K, 3.2 mi north of Fall Creek; drainage area, 760 mi^2.	1943-55# 1958-04	06-01-04	13.82	12,800	06-20-93	19.38	24,500
05367030 Willow Creek near Eau Claire	Lat 44°44'11", long 91°26'48" on common boundary of secs. 14 and 15, T.26 N., R.9 W., Eau Claire County, Hydrologic Unit 07050005, at box culvert on State Highway 93, 4.0 mi south of Eau Claire; drainage area, 3.83 mi^2.	1958-04	03-26-04	10.95	93.8	07-08-59	14.12	400
053674588 Rock Creek Tributary near Canton	Lat 45°27'06", long 90°36'08" in SW 1/4 SW 1/4 sec.3, T.34 N., R.10 W., Barron County, Hydrologic Unit 07050007, 3 mi north of U.S. Hwy 8 on 27th Street, about 40 ft north of intersection of 27th Street and 17th Avenue, and 2.5 mi east and 1.7 mi north of Canton; drainage area, 6.34 mi^2.	1995-04	03-26-04	G11.56	<159	08-01-01	12.87	340

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 2004 Maximum			Period of Record Maximum		
			Date	Gage height (feet)	Discharge (ft^3/s)	Date	Gage height (feet)	Discharge (ft^3/s)
CHIPPEWA RIVER BASIN--CONTINUED								
05367700 Lightning Creek at Almena	Lat 45°25'17", long 92°01'57" in NW 1/4 sec.19, T.34 N., R.13 W., Barron County, Hydrologic Unit 07050007, at bridge on County Trunk Highway P, at Almena; drainage area, 19.0 mi^2.	1958-04	03-28-04	12.45	549	03-30-67 03-28-04	12.39 J12.45	1,550
05370900 Spring Creek near Durand	Lat 44°34'13", long 91°57'48" in S 1/2 sec.9, T.24 N., R.13 W., Buffalo County, Hydrologic Unit 07050005, at bridge on country road, 4.0 mi south of bridge on Chippewa River at Durand; drainage area, 6.45 mi^2.	1962-04	05-24-04	<13.14	<188	08-23-75	15.71	860
BUFFALO RIVER BASIN								
05371800 Buffalo River Tributary near Osseo	Lat 44°35'01" long 91°05'40" in S 1/2 sec.3, T.24 N., R.6 W., Jackson County, Hydrologic Unit 07040003, at culvert on U.S. Highway 10, 6.5 mi east of Osseo; drainage area, 1.44 mi^2.	1960-04	06-09-04	12.17	130	09-12-78	12.85	188
05371920 Buffalo River near Mondovi	Lat 44°31'36" long 91°41'46" in SW 1/4 SE 1/4 sec.27, T.24 N., R.11 W., Buffalo County, Hydrologic Unit 07040003, at bridge on State Highway 88, 4.0 mi south of Mondovi; drainage area, 279 mi^2.	1974-04	03-01-04 06-09-04	G12.68 12.23	B 788	09-10-75	15.39	5,180
TREMPEALEAU RIVER BASIN								
05379187 Pine Creek near Taylor	Lat 44°20'07", long 91°05'17" in NE 1/4 NE 1/4 sec.3, T.21 N., R.6 W., Jackson County, Hydrologic Unit 07040005, at bridge on Taylor Road, about 2 mi northeast of Taylor; drainage area, 10.9 mi^2.	1996-04	03-01-04 05-20-04	G10.59 10.13	B 92	06-27-98	13.69	405
05379288 Bruce Valley Creek near Pleasantville	Lat 44°26'45", long 91°21'40" in SE 1/4 NW 1/4 sec.28, T.23 N., R.8 W., Trempealeau County, Hydrologic Unit 07040005, on left bank, 100 ft upstream from bridge on CTH D, 0.9 mi upstream from Elk Creek, and 2.9 mi west of Pleasantville; drainage area, 10.1 mi^2.	1996-04	03-01-04 06-09-04	G6.89 6.65	B 112	06-27-98	8.18	225

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 2004 Maximum			Period of Record Maximum		
			Date	Gage height (feet)	Dis-charge (ft^3/s)	Date	Gage height (feet)	Dis-charge (ft^3/s)
			BLACK RIVER BASIN					
05380900 Poplar River near Owen	Lat 44°53'10", long 90°34'17" in NW 1/4 sec.25, T.28 N., R.2 W., Clark County, Hydrologic Unit 07040007, at bridge on County Trunk Highway N, 4.2 mi south of Owen; drainage area, 157 mi^2.	1958-65 1966# 1967-04	03-26-04	17.84	4,540	06-06-80 06-22-02	20.12 J20.14	12,500 5,900
05380970 Cawley Creek near Neills-ville	Lat 44°35'42", long 90°34'31" in SW 1/4 sec.25, T.25 N., R.2 W., Clark County, Hydrologic Unit 07040007, at bridge on State High-way 73, 3.7 mi north of Neillsville; drainage area, 38.6 mi^2.	1961-04	03-29-04 05-31-04 06-01-00	G16.72 15.69 17.47	B 1,490 F3,070	09-22-86	20.62	7,880
05382200 French Creek near Ettrick	Lat 44°11'04", long 91°18'45"(revised) in NW 1/4 NW 1/4 sec.26 (revised), T.20 N., R.8 W., Trempealeau County, Hydro-logic Unit 07040007, at bridge on County Trunk Highways D and T, 2.5 mi west of Ettrick; drainage area, 14.7 mi^2.	1960-04	06-09-04	9.94	834	06-12-01	12.58	2,950
			BAD AXE RIVER BASIN					
05387100 North Fork Bad Axe River near Genoa	Lat 43°33'10", long 91°08'58" in SW 1/4 sec.36, T.13 N., R.7 W., Vernon County, Hydrologic Unit 07060001, at bridge on State High-way 56, 4.1 mi southeast of Genoa; drainage area, 80.8 mi^2.	1959-65 1966# 1967-04	05-21-04	12.74	750	08-27-59	19.59	10,000
			WISCONSIN RIVER BASIN					
05391260 Gudegast Creek near Starks	Lat 45°41'41", long 89°15'42" in NW 1/4 sec.16, T.37 N., R.10 E., Oneida County, Hydrologic Unit 07070001, at corrugated culvert on country road, 3.0 mi northwest of Starks; drainage area, 14.0 mi^2.	1970-04	03-28-04	11.94	67	05-09-90 04-19-02	13.33 13.36	130 126
05391950 Squaw Creek near Harrison	Lat 45°32'47" long 89°29'16" in SW 1/4 sec.3, T.35 N., R.8 E., Lincoln County, Hydrologic Unit 07070001, at culvert on County Trunk Highway A, 5.0 mi northeast of Harrison.; drainage area, 3.23 mi^2.	1970-04	06-14-04	10.80	28.3	03-03-87	11.35	F51

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 2004 Maximum			Period of Record Maximum		
			Date	Gage height (feet)	Dis-charge (ft^3/s)	Date	Gage height (feet)	Dis-charge (ft^3/s)
WISCONSIN RIVER BASIN--CONTINUED								
05392150 Mishon-agon Creek near Woodruff	Lat 45°54'41", long 89°45'30" in NE 1/4 sec.32, T.40 N., R.6 E., Vilas County, Hydrologic Unit 07070001, at Twin culverts on Stte Highway 47, 3.0 mi northwest of Woodruff; drainage area, 17.6 mi^2.	1958-04	04-20-04	10.41	74.4	08-17-72	11.33	117
05392350 Bearskin Creek near Harshaw	Lat 45°38'43", long 89°41'12" in SW 1/4 sec.36, T.37 N., R.6 E., Oneida County, Hydrologic Unit 07070001, at culvert on County Trunk Highway K, 2.1 mi south-west of Harshaw; drainage area, 31.1 mi^2.	1958-65 1966# 1967-04	03-29-04	9.62	73.1	06-14-81	10.97	180
05393640 Little Pine Creek near Irma	Lat 45°23'37", long 89°40'20" in NW 1/4 sec.31, T.34 N., R.7 E., Lincoln County, Hydrologic Unit 07070002, at box culvert on U.S. Highway 51, 3.0 mi north of Irma; drainage area, 22.0 mi^2.	1970-04	03-30-04	14.07	60	06-14-81	14.38	310
05394200 Devil Creek near Merrill	Lat 45°08'56", long 89°47'13" in N 1/2 sec.30, T.31 N., R.6 E., Lincoln County, Hydrologic Unit 07070002, at culvert on County Trunk Highway F, 5.8 mi southwest of Merrill; drainage area, 9.58 mi^2.	1961-04	06-14-04	12.35	181	06-13-90	17.98	1,600
05395020 Lloyd Creek near Doering	Lat 45°13'57", long 89°22'04" in SE 1/4, T.32 N., R.9 E., Langlade County, Hydrologic Unit 07070002, at bridge on County Trunk Highway C, 4.5 mi east of Doering; drainage area, 7.80 mi^2.	1970-04	06-14-04	13.32	428	06-13-90	>16.00	>1,000
05395100 Trappe River Tributary near Merrill	Lat 45°08'07" long 89°30'08" in SW 1/4 sec.28, T.31 N., R.8 E., Lincoln County, Hydrologic Unit 07070002, at culvert on County Trunk Highway P, 9.5 mi southeast of Merrill; drainage area, 1.58 mi^2.	1959-04	03-28-04	D12.55	B	08-15-95	17.79	396

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 2004 Maximum			Period of Record Maximum		
			Date	Gage height (feet)	Discharge (ft^3/s)	Date	Gage height (feet)	Discharge (ft^3/s)
WISCONSIN RIVER BASIN--CONTINUED								
05396300 Wisconsin River Tributary at Wausau	Lat 44°57'28", long 89°39'52" in NE 1/4 NW 1/4 sec.34, T.29 N., R.7 E., Marathon County, Hydrologic Unit 07070002, on road right-of-way of 24th Avenue opposite the Ace Motel, 300 ft east of U.S. Highway 51, at Wausau; drainage area, 1.10 mi^2.	1982-04	06-12-04	H2.60	B	06-12 or 13-90	9.11	740
05397600 Big Sandy Creek near Wausau	Lat 45°01'55", long 89°27'00" in SE 1/4 sec.31, T.30 N., R.9 E., Marathon County, Hydrologic Unit 07070002, at bridge on State Highway 52, 10.0 mi northeast of Wausau; drainage area, 11.5 mi^2.	1959-04	03-28-04	12.28	431	09-27-59	15.18	2,120
05400025 Johnson Creek near Knowlton	Lat 44°44'19", long 89°36'39" in SE 1/4 NE 1/4 sec.13, T.26 N., R.7 E., Marathon County, Hydrologic Unit 07070002, at bridge on County Trunk Highway X, 2.7 mi east of Knowlton; drainage area, 25.1 mi^2.	1973-04	03-27-04 03-29-04	G14.10 14.04	B 518	06-06-80	21.78	3,700
05401800 Yellow River Tributary near Pittsville	Lat 44°28'58", long 90°07'05" on common boundary of secs.11 and 14, T.23 N., R.3 E., Wood County, Hydrologic Unit 07070003, at bridge on County Trunk Highway C, 2.0 mi north of Pittsville; drainage area, 7.23 mi^2.	1959-04	06-09-04	11.62	139	05-02-73	13.82	810
05403700 Dell Creek near Lake Delton	Lat 43°33'05" long 89°51'55" in NW 1/4 sec.2, T.12 N., R.5 E., Sauk County, Hydrologic Unit 07070003, on right bank 50 ft upstream from highway bridge, 6.0 mi southwest of Lake Delton, and 7.0 mi upstream from mouth; drainage area, 44.9 mi^2.	1957-65# 1966-70 1971-80# 1983-04	06-11-04	7.55	458	09-14-92	9.80	1,200
05405600 Rowan Creek at Poynette	Lat 43°23'13", long 89°23'25" in S 1/2 sec.35, T.11 N., R.9 E., Columbia County, Hydrologic Unit 07070005, at bridge on U.S. Highway 51, at Poynette; drainage area, 10.4 mi^2.	1961-04	05-22-04	12.59	265	09-09-65	17.90	2,260
054062391 Otter Creek near Prairie du Sac	Lat 43°22'22", long 89°47'47" in SW 1/4 NW 1/4 sec.4, T.10 N., R.6 E., Sauk County, Hydrologic Unit 07070005, at bridge on Kings Corner Road, 6.0 mi north, northwest of Prairie du Sac; drainage area, 4.75 mi^2.	1996-04	06-11-04	18.02	1190	06-01-00	19.90	3,680

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 2004 Maximum			Period of Record Maximum		
			Date	Gage height (feet)	Discharge (ft^3/s)	Date	Gage height (feet)	Discharge (ft^3/s)
			WISCONSIN RIVER BASIN--CONTINUED					
05406605 Lowery Creek near Spring Green	Lat 43°08'00", long 90°03'52" in SE 1/4 SE 1/4 SW 1/4 sec.30, T.8 N., R.4 E., Iowa County, Hydrologic Unit 07070005, on CTH T, 3.0 mi south of Spring Green; drainage area, 8.76 mi^2.	1996-04	05-21-04	12.69	198	06-01-00	16.42	780
05407039 Fennimore Fork near Fennimore	Lat 43°01'40", long 90°33'47" in NE 1/4 SW 1/4 NW 1/4 sec.1, T.6 N., R.2 W., Grant County, Hydrologic Unit 07070005, on Blue School Road, 5.6 mi northeast of Fennimore; drainage area, 15.3 mi^2.	1996-04	06-16-04	13.99	523	06-01-00	16.70	1,160
			GRANT RIVER BASIN					
05413400 Pigeon Creek near Lancaster	Lat 42°49'00", long 90°43'20" in SW 1/4 sec.15, T.4 N., R.3 W., Grant County, Hydrologic Unit 07060003, at culvert on country road, 2.0 mi south of Lancaster; drainage area, 6.93 mi^2.	1960-65 1966# 1967-04	06-16-04	11.35	480	01-24-67	20.85	2,800
			PLATTE RIVER BASIN					
05414213 Little Platte River near Platteville	Lat 42°43'23", long 90°31'41" in NE 1/4 NE 1/4 sec.19, T.3 N., R.1 W., Grant County, Hydrologic Unit 07060003, on left bank 150 ft upstream from Stumptown Road, 2.6 mi southwest of Post Office in Platteville; drainage area, 79.7 mi^2.	1987-90# 1991-04	11-04-03	12.91	2,380	06-01-00	17.60	9,200
			GALENA RIVER BASIN					
05414900 Pats Creek near Elk Grove	Lat 42°40'03", long 90°22'40" in SW 1/4 sec.4, T.2 N., R.1 E., Lafayette County, Hydrologic Unit 07060005, at bridge on State Highway 81, 7.0 mi southeast of Platteville; drainage area, 8.50 mi^2.	1960-04	06-16-04	12.63	408	06-29-69	17.32	7,040
			ROCK RIVER BASIN					
05425806 Mud Creek near Danville	Lat 43°17'06", long 88°56'54" in NW 1/4 NW 1/4 NW 1/4 sec.3, T.9 N., R.13 E., Dodge County, Hydrologic Unit 07090002, at bridge on Burr Oak Road, 2.5 mi south of Danville; drainage area, 12.3 mi^2.	1995-04	05-20-04	15.41	282	06-02-00	16.33	396

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 2004 Maximum			Period of Record Maximum		
			Date	Gage height (feet)	Discharge (ft^3/s)	Date	Gage height (feet)	Discharge (ft^3/s)
		ROCK RIVER BASIN--CONTINUED						
05430403 Fisher Creek Tributary at Janesville	Lat 42°40'18", long 89°03'31" in SW 1/4 SE 1/4 sec.34, T.3 N., R.12 E., Rock County, Hydrologic Unit 07090001, at culvert on Rockport Road, 0.4 mi west of South Crosby Avenue and 0.6 mi upstream from County Trunk Highway D, at Janesville; drainage area, 1.42 mi^2.	1982-04	05-22-04	H4.53	304	06-25-98	8.23	419
05431400 Little Turtle Creek at Allens Grove	Lat 42°34'46", long 88°45'33" in NE 1/4 sec.6, T.1 N., R.15 E., Walworth County, Hydrologic Unit 07090001, at bridge on country road, 0.2 mi south of Allens Grove; drainage area, 42.4 mi^2.	1962-04	05-22-04	11.46	817	04-21-73	18.28	8,400
05432055 Livingston Branch Pecatonica River near Livingston	Lat 42°54'01", long 90°22'23", in SW 1/4 SE 1/4 sec.16, T.5 N., R.1 E., Iowa County, Hydrologic Unit 07090003, on the left bank 75 ft upstream from Enloe Road and 2.7 mi east of Livingston; drainage area, 16.4 mi^2.	1987-91# 1996-04	06-16-04	7.89	826	06-29-90	13.49	6,260
05432300 Rock Branch near Mineral Point	Lat 42°50'02", long 90°09'15" in SE 1/4 sec.8, T.4 N., R.3 E., Iowa County, Hydrologic Unit 07090003, at box culvert on State Highway 23, 2.5 mi south of Mineral Point; drainage area, 4.83 mi^2.	1959-04	05-22-04	H10.74	E28	07-05-93	22.63	3,100
05433500 Yellowstone River near Blanchardville	Lat 42°46'55", long 89°59'50" in NE 1/4 sec.34, T.4 N., R.4 E., Lafayette County, Hydrologic Unit 07090003, 0.6 mi upstream from bridge on County Trunk Highway F, 7.0 mi west-southwest of Blanchardville; drainage area, 28.5 mi^2.	1954-65# 1966-77 1978-79# 1980-04	05-22-04	9.47	2,380	06-29-90	11.40	8,500
05436200 Gill Creek near Brooklyn	Lat 42°49'38", long 89°26'43" in NW 1/4 sec.16, T.4 N., R.9 E., Green County, Hydrologic Unit 07090004, at culvert on State Highway 92, 4.3 mi west of Brooklyn; drainage area, 3.33 mi^2.	1961-04	05-21-04	14.14	168	05-17-99	17.85	960
		ILLINOIS RIVER BASIN						
05545100 Sugar Creek at Elkhorn	Lat 42°41'05", long 88″30'50" in SW 1/4 sec.29, T.3 N., R.17 E., Walworth County, Hydrologic Unit 07120006, at culvert on State Highway 11, 2.0 mi northeast of Elkhorn; drainage area, 6.63 mi^2.	1962-04	05-22-04	12.83	208	04-21-73	17.47	900

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 2004 Maximum			Period of Record Maximum		
			Date	Gage height (feet)	Discharge (ft^3/s)	Date	Gage height (feet)	Discharge (ft^3/s)
ILLINOIS RIVER BASIN--CONTINUED								
05545200 White River Tributary near Burlington	Lat 42°41'01", long 88°21'41"(revised) in SW 1/4 SW 1/4, sec. 27 (revised), T.3 N., R.18 E., Walworth County, Hydrologic Unit 07120006, at box culvert on State Highway 11, 4.5 mi west of Burlington; drainage area, 2.42 mi^2.	1958-04	06-17-04	14.25	310	06-13-99	14.77	354
05548150 North Branch Nippersink Creek near Genoa City	Lat 42°30'15", long 88°23'01" in SW 1/4 NW 1/4 sec.33, T.1 N., R.18 E., Walworth County, Hydrologic Unit 07120006, at bridge on County Trunk Highway B, 3.0 mi west of Genoa City; drainage area, 13.6 mi^2.	1962-04	05-22-04	11.97	238	06-12-00	14.18	563

Operated as a continuous-record station
B Discharge not determined
C Peak not recorded
D Backwater
E Estimated
F Revised
G Backwater from ice
H Downstream gage
J At different datum
K Rating change

Measurements of streamflow at points other than gaging stations or partial-record stations are given in the following table.

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
CHIPPEWA RIVER BASIN						
04071500 Oconto River	Lake Michigan	Lat 44°51'31", long 88°03'00", in SE 1/4 NE 1/4 sec.34, T.28 N., R.20 E., Oconto County, Hydrologic Unit 04030104, at Town Road bridge and at Stiles.	771	1906 1981 1983-89	10/07/03 10/07/03 10/07/03 10/07/03	400 629 252 303
05357213 Little John Lake Tributary	Allequash Creek	Lat 46°01'29", long 89°39'00", in NE 1/4 NW 1/4 sec.20, T.41 N., R.7 E., Vilas County, Hydrologic Unit 07050002, at confluence with Allequash Creek, near Boulder Junction.	--	1992-2003	11/05/03 05/15/04 07/21/04	1.44 1.07 0.98
05357230 North Creek	Trout River	Lat 46°04'43", long 89°40'02", in SW 1/4 NE 1/4 sec.31, T.42 N., R.7 E., Vilas County, Hydrologic Unit 07050002, at inlet to Trout Lake, 2.6 mi southwest of Boulder Junction.	3.58	1992-96 1998-2003	11/06/03 05/15/04 06/08/04 07/21/04 08/17/04 09/02/04	3.75 5.56 1.55 3.32 3.50 1.52
05357239 Mann Creek	Trout River	Lat 46°00'41", long 89°40'33", in NW 1/4 NW 1/4 sec.30, T.41 N., R.7 E., Vilas County, Hydrologic Unit 07050002, at County Trunk Highway N, near Boulder Junction.	--	1991-96 1998-2003	05/15/04 06/08/04 07/21/04 08/17/04 09/02/04	2.39 8.86 1.25 3.04 1.89

MISCELLANEOUS WATER-QUALITY DATA

MISCELLANEOUS STATION ANALYSES

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)
04072050 DUCK CREEK AT SEMINARY ROAD NEAR ONEIDA, WI (LAT 44 27 57N LONG 088 13 08W)													
OCT 2003													
08...	1440	5.5	40	748	11.0	103	7.9	1,040	11.4	--	--	--	--
NOV													
05...	1345	116	40	756	10.9	87	7.6	699	5.6	--	--	--	--
DEC													
02...	1315	30	10	762	16.7	114	7.9	916	-.2	--	--	--	--
JAN 2004													
07...	1545	44	10	755	14.5	100	7.5	914	-.3	--	--	--	--
FEB													
04...	1530	2.1	40	762	13.4	92	7.6	1,350	-.3	--	--	--	--
APR													
08...	1430	64	10	746	12.0	109	7.9	790	10.2	--	--	--	--
MAY													
03...	1555	18	10	753	11.8	112	8.4	860	12.4	--	--	--	--
JUN													
02...	1210	349	10	740	8.6	88	7.7	680	15.0	--	--	--	--
JUL													
12...	1115	12	30	750	7.9	87	7.7	895	19.3	--	--	--	--
AUG													
11...	1030	.52	40	749	9.0	96	7.8	1,040	17.1	82.3	38.3	6.59	69.1
040869415 LINCOLN CREEK AT 47TH STREET AT MILWAUKEE, WI (LAT 43 05 49N LONG 087 58 20W)													
OCT 2003													
01...	0915	1.4	40	755	8.6	75	7.8	1,050	9.2	--	--	--	--
NOV													
06...	0920	3.9	10	759	12.1	98	7.6	935	6.3	--	--	--	--
DEC													
03...	1000	1.6	40	763	15.9	112	7.9	1,520	1.0	--	--	--	--
JAN 2004													
06...	1330	2.0	40	756	18.2	128	8.0	7,970	-.3	--	--	--	--
FEB													
03...	1320	3.9	70	751	11.1	80	7.5	12,800	-.6	--	--	--	--
17...	1545	4.2	70	763	11.2	76	7.5	2,670	-.2	76.2	25.9	4.04	406
MAR													
05...	0930	5.4	10	740	14.7	117	8.6	1,160	4.3	44.8	14.4	2.83	160
APR													
14...	0940	3.2	40	752	12.6	107	7.9	2,010	7.4	--	--	--	--
MAY													
10...	1520	1,300	70	--	--	--	7.3	120	15.4	--	--	--	--
11...	1300	34	10	741	10.3	103	8.2	958	14.3	63.4	23.1	2.98	86.4
JUN													
01...	1320	16	40	741	13.2	143	8.2	1,290	17.7	--	--	--	--
JUL													
07...	1420	9.9	10	745	11.5	129	8.1	941	19.8	--	--	--	--
14...	1530	7.6	--	--	15.7	--	8.6	1,190	25.8	--	--	--	--
27...	0845	2.6	40	--	4.5	--	7.5	1,620	19.4	84.8	43.2	3.64	158
AUG													
02...	1240	2.6	40	752	8.3	102	7.7	1,480	24.8	--	--	--	--
04...	1345	7.5	40	743	9.4	117	8.0	656	25.2	46.6	16.9	2.80	58.8
18...	1113	2.4	--	--	7.1	--	8.1	907	21.2	--	--	--	--
25...	1535	3.5	40	740	5.9	71	7.5	628	22.5	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
04072050 DUCK CREEK AT SEMINARY ROAD NEAR ONEIDA, WI (LAT 44 27 57N LONG 088 13 08W)													
OCT 2003													
08...	--	275	329	3	114	--	--	88.3	--	--	--	<.04	1.23
NOV													
05...	--	198	240	<1	58.4	--	--	57.7	--	--	--	<.04	.73
DEC													
02...	--	286	345	2	66.3	--	--	97.0	--	--	--	E.03	4.98
JAN 2004													
07...	--	299	361	2	70.8	--	--	94.6	--	--	--	.05	5.59
FEB													
04...	--	337	407	2	170	--	--	108	--	--	--	.22	4.73
APR													
08...	--	259	308	4	54.2	--	--	72.7	--	--	--	<.04	2.92
MAY													
03...	--	292	340	8	67.6	--	--	65.1	--	--	--	<.04	.72
JUN													
02...	--	241	290	2	38.7	--	--	42.5	--	--	--	.05	3.87
JUL													
12...	--	284	340	3	61.8	--	--	84.6	--	--	--	<.04	1.79
AUG													
11...	--	283	332	6	135	.2	2.35	57.6	596	.76	1.0	<.04	.54
040869415 LINCOLN CREEK AT 47TH STREET AT MILWAUKEE, WI (LAT 43 05 49N LONG 087 58 20W)													
OCT 2003													
01...	--	162	196	<1	197	--	--	57.0	--	--	--	<.04	E.04
NOV													
06...	--	165	199	1	158	--	--	62.2	--	--	--	<.04	1.33
DEC													
03...	--	235	282	2	303	--	--	88.2	--	--	--	<.04	.69
JAN 2004													
06...	--	225	269	2	2,440	--	--	106	--	--	--	.08	.76
FEB													
03...	--	162	195	1	4,040	--	--	112	--	--	--	.56	.80
17...	--	175	--	--	694	.7	5.01	75.2	1,440	--	--	<.04	<.06
MAR													
05...	102	113	--	--	273	<.2	4.16	35.0	629	--	--	<.04	1.66
APR													
14...	--	E218	258	3	443	--	--	78.5	--	--	--	<.04	.53
MAY													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	184	161	--	--	152	<.2	6.42	44.6	560	--	--	<.04	2.21
JUN													
01...	--	241	284	4	201	--	--	63.8	--	--	--	<.04	.96
JUL													
07...	--	165	194	3	154	--	--	42.0	--	--	--	<.04	.66
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	228	213	--	--	320	.4	.30	96.9	881	--	--	<.04	<.06
AUG													
02...	--	236	282	3	269	--	--	92.8	--	--	--	E.04	<.06
04...	131	126	--	--	106	.2	3.09	36.0	366	--	--	<.04	.15
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	116	140	--	92.6	--	--	39.5	--	--	--	<.04	.26

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, wat unf by analysis, mg/L (62855)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	COD, low level, water, unfltrd mg/L (00335)	Chlorophyll a wat unf trichr. method, uncorr, ug/L (32210)
04072050 DUCK CREEK AT SEMINARY ROAD NEAR ONEIDA, WI (LAT 44 27 57N LONG 088 13 08W)													
OCT 2003													
08...	<.008	.03	.153	--	.22	2.44	.3	<.1	.3	17.5	--	--	--
NOV													
05...	.010	.48	.270	--	.35	3.19	3.4	<.1	3.4	21.7	--	--	--
DEC													
02...	.017	.04	.065	--	.084	5.49	.4	<.1	.4	14.7	--	--	--
JAN 2004													
07...	.021	.05	.098	--	.135	6.94	.4	<.1	.4	14.9	--	--	--
FEB													
04...	.034	.03	.165	--	.18	5.81	.2	<.1	.2	7.9	--	--	--
APR													
08...	.011	.04	.050	--	.084	3.82	.4	<.1	.4	14.2	--	--	--
MAY													
03...	E.007	.04	.047	--	.095	1.88	.4	<.1	.4	16.4	--	--	--
JUN													
02...	.091	.18	.110	--	.180	5.35	1.4	<.1	1.3	15.0	--	--	--
JUL													
12...	.009	.10	.149	--	.22	2.94	1.0	<.1	1.0	16.2	--	--	--
AUG													
11...	E.004	.29	.09	.123	.189	1.65	2.0	<.1	2.0	9.3	--	--	--
040869415 LINCOLN CREEK AT 47TH STREET AT MILWAUKEE, WI (LAT 43 05 49N LONG 087 58 20W)													
OCT 2003													
01...	<.008	<.02	.105	--	.136	.26	.1	<.1	.1	4.1	--	--	--
NOV													
06...	.018	.03	.118	--	.153	1.66	.4	<.1	.4	3.8	--	--	--
DEC													
03...	E.005	<.02	.191	--	.22	.89	.2	<.1	.2	2.9	--	--	--
JAN 2004													
06...	.041	.13	.186	--	.22	1.00	.5	<.1	.5	3.7	--	--	--
FEB													
03...	.065	.09	.416	--	--	--	1.1	<.1	1.1	4.5	--	--	--
17...	.008	.04	.420	--	.50	1.05	.4	<.1	.3	2.5	>22.2	60	.340
MAR													
05...	.040	.24	.052	--	.154	2.38	3.3	<.1	3.3	4.8	10.4	49	5.88
APR													
14...	.016	.04	.071	--	.093	.82	.4	<.1	.4	3.5	--	--	--
MAY													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	.040	.12	.041	--	.100	2.94	.9	<.1	.9	5.1	6.0	35	6.00
JUN													
01...	.055	.06	.013	--	.048	1.65	.4	<.1	.4	4.1	--	--	--
JUL													
07...	.008	.04	.057	--	.095	1.03	.3	<.1	.3	4.7	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	<.008	.16	.078	--	.134	.54	1.1	<.1	1.1	4.2	2.5	42	19.3
AUG													
02...	<.008	.09	.170	--	.23	.58	.8	<.1	.7	5.4	--	--	--
04...	.015	.10	.109	--	.164	.62	.8	<.1	.8	5.9	3.4	23	3.22
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	.013	.06	.155	--	E.19	.65	.4	<.1	.4	5.9	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	Mercury water fltrd, ng/L (50287)	1,4-Dichlorobenzene water, fltrd, ug/L (34572)	1,4-Naphthoquinone, water, fltrd, ug/L (61611)	1-Methylnaphthalene, water, fltrd, ug/L (62054)	1-Naphthol, water, fltrd 0.7u GF ug/L (49295)	2-(4-t-Butylphenoxy)cyclohexanol wat flt ug/L (61637)	2,5-Dichloroaniline water, fltrd, ug/L (61614)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	2,6-Dimethylnaphthalene, water, fltrd, ug/L (62055)	2-[(2-Et-6-Me-Ph)-amino]propan-1-ol, ug/L (61615)	2Amino-N-isopropylbenzamide, wat flt ug/L (61617)
04072050 DUCK CREEK AT SEMINARY ROAD NEAR ONEIDA, WI (LAT 44 27 57N LONG 088 13 08W)													
OCT 2003													
08...	--	--	--	--	--	--	--	--	--	<.006	--	--	--
NOV													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
02...	--	--	--	--	--	--	--	--	--	<.006	--	--	--
JAN 2004													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
04...	--	--	--	--	--	--	--	--	--	<.006	--	--	--
APR													
08...	--	--	--	--	--	--	--	--	--	<.006	--	--	--
MAY													
03...	--	--	--	--	--	--	--	--	--	<.006	--	--	--
JUN													
02...	--	--	--	--	--	--	--	--	--	<.006	--	--	--
JUL													
12...	--	--	--	--	--	--	--	--	--	<.006	--	--	--
AUG													
11...	12	17.4	--	--	--	--	--	--	--	<.006	--	--	--
040869415 LINCOLN CREEK AT 47TH STREET AT MILWAUKEE, WI (LAT 43 05 49N LONG 087 58 20W)													
OCT 2003													
01...	--	--	--	--	--	--	--	--	--	<.006	--	--	--
NOV													
06...	--	--	--	--	<.05	--	--	<.01	<.03	--	--	<.1	<.005
DEC													
03...	--	--	--	--	--	--	--	--	--	<.006	--	--	--
JAN 2004													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
03...	--	--	--	--	<.05	--	--	<.01	<.03	<.006	--	--	<.005
17...	35	19.6	--	<.5	--	<.5	--	--	--	--	M	--	--
MAR													
05...	17	19.2	--	<.5	--	M	--	--	--	--	M	--	--
APR													
14...	--	--	--	--	<.05	--	<.09	<.01	<.03	<.006	--	--	<.005
MAY													
10...	--	--	--	--	--	--	--	--	--	<.006	--	--	--
11...	21	5.9	--	<.5	--	E.1	<.09	--	--	<.006	E.1	--	--
JUN													
01...	--	--	--	--	<.05	--	--	--	<.03	<.006	--	--	<.005
JUL													
07...	--	--	--	--	--	--	--	--	--	<.006	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	79	27.5	.76	<.5	--	<.5	--	--	--	--	<.5	--	--
AUG													
02...	--	--	--	--	--	--	--	--	--	<.006	--	--	--
04...	32	11.7	1.66	<.5	--	<.5	<.09	--	--	<.006	<.5	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	<.09	--	--	<.006	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	2Chloro -2,6'-' diethyl acet- anilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl -6- methyl- aniline water, fltrd, ug/L (61620)	2- Methyl- naphth- alene, water, fltrd, ug/L (62056)	3-(Tri- fluoro- methyl) aniline water, fltrd, ug/L (61630)	3,4-Di- chloro- aniline water fltrd, ug/L (61625)	3,5-Di- chloro- aniline water, fltrd, ug/L (61627)	3-beta- Copros- tanol, water, fltrd, ug/L (62057)	3- Methyl- 1H- indole, water, fltrd, ug/L (62058)	3-tert- Butyl- 4-hy- droxy- anisole wat flt ug/L (62059)	4,4-Di' chloro- benzo- phen- one, wat flt ug/L (61631)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	4Chloro phenyl- methyl sulfone water, fltrd, ug/L (61634)
04072050 DUCK CREEK AT SEMINARY ROAD NEAR ONEIDA, WI (LAT 44 27 57N LONG 088 13 08W)													
OCT 2003													
08...	--	E.019	--	--	--	--	--	--	--	--	--	--	--
NOV													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
02...	--	E.010	--	--	--	--	--	--	--	--	--	--	--
JAN 2004													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
04...	--	E.017	--	--	--	--	--	--	--	--	--	--	--
APR													
08...	--	E.027	--	--	--	--	--	--	--	--	--	--	--
MAY													
03...	--	E.023	--	--	--	--	--	--	--	--	--	--	--
JUN													
02...	--	E.034	--	--	--	--	--	--	--	--	--	--	--
JUL													
12...	--	E.081	--	--	--	--	--	--	--	--	--	--	--
AUG													
11...	--	E.030	--	--	--	--	--	--	--	--	--	--	--
040869415 LINCOLN CREEK AT 47TH STREET AT MILWAUKEE, WI (LAT 43 05 49N LONG 087 58 20W)													
OCT 2003													
01...	--	E.010	--	--	--	--	--	--	--	--	--	--	--
NOV													
06...	<.005	--	<.004	--	<.01	<.004	<.005	--	--	--	<.003	<.006	<.03
DEC													
03...	--	E.005	--	--	--	--	--	--	--	--	--	--	--
JAN 2004													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
03...	<.005	<.006	<.004	--	<.01	<.004	<.005	--	--	--	<.003	<.006	<.03
17...	--	--	--	<.5	--	--	--	<2	<1	<5	--	--	--
MAR													
05...	--	--	--	M	--	--	--	<2	<1	<5	--	--	--
APR													
14...	<.005	E.011	<.004	--	<.01	<.004	<.005	--	--	--	<.003	<.006	<.03
MAY													
10...	--	E.060	--	--	--	--	--	--	--	--	--	--	--
11...	<.005	E.046	<.004	E.1	--	.054	--	<2	<1	<5	--	E.008	--
JUN													
01...	<.005	E.010	<.004	--	<.01	.187	<.005	--	--	--	<.003	--	<.01
JUL													
07...	--	E.016	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	<.5	--	--	--	<2	<1	<5	--	--	--
AUG													
02...	--	E.008	--	--	--	--	--	--	--	--	--	--	--
04...	<.005	E.015	<.004	<.5	--	<.011	--	E1	<1	<5	--	E.007	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.005	<.006	<.004	--	--	.055	--	--	--	--	--	E.005	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	4-Cumyl-phenol, water, fltrd, ug/L (62060)	4-Octyl-phenol, water, fltrd, ug/L (62061)	4-Nonyl-phenol, water, fltrd, ug/L (62085)	4-tert-Octyl-phenol, water, fltrd, ug/L (62062)	5-Methyl-1H-benzo-triazole, wat flt ug/L (62063)	9,10-Anthra-quinone water, fltrd, ug/L (62066)	Aceto-chlor, water, fltrd, ug/L (49260)	Aceto-phenone water, fltrd, ug/L (62064)	AHTN, water, fltrd, ug/L (62065)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-Endo-sulfan, water, fltrd, ug/L (34362)	alpha-HCH, water, fltrd, ug/L (34253)	alpha-HCH-d6, sur2002/9002, wat unf percent recovry (99224)
04072050 DUCK CREEK AT SEMINARY ROAD NEAR ONEIDA, WI (LAT 44 27 57N LONG 088 13 08W)													
OCT 2003													
08...	--	--	--	--	--	--	<.006	--	--	<.004	--	<.005	--
NOV													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
02...	--	--	--	--	--	--	E.006	--	--	<.005	--	<.005	--
JAN 2004													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
04...	--	--	--	--	--	--	<.006	--	--	<.005	--	<.005	--
APR													
08...	--	--	--	--	--	--	<.006	--	--	<.005	--	<.005	--
MAY													
03...	--	--	--	--	--	--	<.010	--	--	<.005	--	<.005	--
JUN													
02...	--	--	--	--	--	--	.243	--	--	<.005	--	<.005	--
JUL													
12...	--	--	--	--	--	--	.057	--	--	<.005	--	<.005	--
AUG													
11...	--	--	--	--	--	--	<.006	--	--	<.005	--	<.005	--
040869415 LINCOLN CREEK AT 47TH STREET AT MILWAUKEE, WI (LAT 43 05 49N LONG 087 58 20W)													
OCT 2003													
01...	--	--	--	--	--	--	<.006	--	--	<.004	--	<.005	--
NOV													
06...	--	--	--	--	--	--	--	--	--	--	<.005	--	99.1
DEC													
03...	--	--	--	--	--	--	<.006	--	--	<.005	--	<.005	--
JAN 2004													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
03...	--	--	--	--	--	--	<.006	--	--	<.005	<.005	<.005	85.3
17...	<1	<1	E1	<1	M	E.1	--	E.1	E.1	--	--	--	--
MAR													
05...	<1	<1	<5	<1	<2	E.3	--	E.1	M	--	--	--	--
APR													
14...	--	--	--	--	--	--	<.006	--	--	<.005	<.005	<.005	80.3
MAY													
10...	--	--	--	--	--	--	.138	--	--	<.009	--	<.005	--
11...	<1	<1	E2	<1	<2	E.1	.043	<.5	E.1	<.005	--	--	--
JUN													
01...	--	--	--	--	--	--	.014	--	--	<.005	<.005	<.005	87.9
JUL													
07...	--	--	--	--	--	--	.011	--	--	<.005	--	<.005	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	<1	<1	<5	<1	M	<.5	--	<.5	<.5	--	--	--	--
AUG													
02...	--	--	--	--	--	--	<.006	--	--	<.005	--	<.005	--
04...	<1	<1	<5	<1	<2	E.4	<.006	E.2	<.5	<.005	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	<.006	--	--	<.005	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	alpha-HCH-d6, surrog, Sch2003 wat flt percent recovry (99995)	alpha-HCH-d6, surrog, wat flt 0.7u GF percent recovry (91065)	Anthracene, water, fltrd, ug/L (34221)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl oxon, water, fltrd, ug/L (61635)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Benzo[a]pyrene, water, fltrd, ug/L (34248)	Benzophenone water, fltrd, ug/L (62067)	beta-Endosulfan, water, fltrd, ug/L (34357)	beta-Sitosterol, water, fltrd, ug/L (62068)	beta-Stigmastanol, water, fltrd, ug/L (62086)	Bifenthrin, water, fltrd, ug/L (61580)
04072050 DUCK CREEK AT SEMINARY ROAD NEAR ONEIDA, WI (LAT 44 27 57N LONG 088 13 08W)													
OCT 2003													
08...	--	114	--	.044	--	<.050	<.010	--	--	--	--	--	--
NOV													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
02...	--	76.0	--	.034	--	<.050	<.010	--	--	--	--	--	--
JAN 2004													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
04...	--	102	--	.027	--	<.050	<.010	--	--	--	--	--	--
APR													
08...	--	100	--	.047	--	<.050	<.010	--	--	--	--	--	--
MAY													
03...	--	97.7	--	.063	--	<.050	<.010	--	--	--	--	--	--
JUN													
02...	--	91.9	--	1.35	--	<.050	<.010	--	--	--	--	--	--
JUL													
12...	--	102	--	.681	--	<.050	<.010	--	--	--	--	--	--
AUG													
11...	--	81.9	--	.153	--	<.050	<.010	--	--	--	--	--	--
040869415 LINCOLN CREEK AT 47TH STREET AT MILWAUKEE, WI (LAT 43 05 49N LONG 087 58 20W)													
OCT 2003													
01...	--	99.0	--	.022	--	<.050	<.010	--	--	--	--	--	--
NOV													
06...	--	--	--	--	<.02	--	--	--	--	<.01	--	--	<.005
DEC													
03...	--	88.5	--	.013	--	<.050	<.010	--	--	--	--	--	--
JAN 2004													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
03...	--	104	--	.022	<.02	<.050	<.010	--	--	<.01	--	--	<.005
17...	--	--	M	--	--	--	--	<.5	E.2	--	<2	<2	--
MAR													
05...	--	--	<.5	--	--	--	--	<.5	E.1	--	<2	<2	--
APR													
14...	--	87.6	--	.016	<.02	<.050	<.010	--	--	<.01	--	--	<.005
MAY													
10...	--	95.5	--	.236	--	<.050	E.006	--	--	--	--	--	--
11...	92.9	--	E.1	.148	<.02	<.050	E.004	<.5	<.5	--	<2	<2	--
JUN													
01...	--	93.8	--	.070	<.02	<.050	<.010	--	--	<.01	--	--	<.005
JUL													
07...	--	96.4	--	.037	--	<.050	<.010	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	<.5	--	--	--	--	<.5	E.1	--	<20	<20	--
AUG													
02...	--	84.5	--	.021	--	<.050	<.010	--	--	--	--	--	--
04...	81.2	--	<.5	.025	<.07	<.050	<.010	<.5	<.5	--	<2	<2	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	73.4	--	--	.011	<.07	<.050	<.010	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Bisphenol A, water, fltrd, ug/L (62069)	Bisphenol A-d3 sur Sch 2033 & 8033, wat flt pct rcv (99583)	Bromacil, water, fltrd, ug/L (04029)	Butylate, water, fltrd, ug/L (04028)	Caffeine, water, fltrd, ug/L (50305)	Caffeine-13C sur Sch 2033 & 8033, wat flt pct rcv (99584)	Camphor water, fltrd, ug/L (62070)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbazole, water, fltrd, ug/L (62071)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chlorpyrifos oxon, water, fltrd, ug/L (61636)	Chlorpyrifos water, fltrd, ug/L (38933)	Cholesterol, water, fltrd, ug/L (62072)
04072050 DUCK CREEK AT SEMINARY ROAD NEAR ONEIDA, WI (LAT 44 27 57N LONG 088 13 08W)													
OCT 2003													
08...	--	--	--	<.002	--	--	--	<.041	--	<.020	--	<.005	--
NOV													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
02...	--	--	--	<.004	--	--	--	<.041	--	<.020	--	<.005	--
JAN 2004													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
04...	--	--	--	<.004	--	--	--	<.041	--	<.020	--	<.005	--
APR													
08...	--	--	--	<.004	--	--	--	<.041	--	<.020	--	<.005	--
MAY													
03...	--	--	--	<.004	--	--	--	<.041	--	<.020	--	<.005	--
JUN													
02...	--	--	--	<.004	--	--	--	<.041	--	<.020	--	<.005	--
JUL													
12...	--	--	--	<.004	--	--	--	<.041	--	<.020	--	<.005	--
AUG													
11...	--	--	--	<.004	--	--	--	<.041	--	<.020	--	<.005	--
040869415 LINCOLN CREEK AT 47TH STREET AT MILWAUKEE, WI (LAT 43 05 49N LONG 087 58 20W)													
OCT 2003													
01...	--	--	--	<.002	--	--	--	E.025	--	<.020	--	<.005	--
NOV													
06...	--	--	--	--	--	--	--	--	--	--	<.06	--	--
DEC													
03...	--	--	--	<.004	--	--	--	E.005	--	<.020	--	<.005	--
JAN 2004													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
03...	--	--	--	<.004	--	--	--	<.041	--	<.020	<.06	<.005	--
17...	M	81.8	<.5	--	E.3	105	<.5	<1	<.5	--	--	<.5	<2
MAR													
05...	<1	95.5	<.5	--	E.3	114	<.5	<1	E.1	--	--	<.5	<2
APR													
14...	--	--	--	<.004	--	--	--	<.041	--	<.020	<.06	<.005	--
MAY													
10...	--	--	--	<.004	--	--	--	E.044	--	<.020	--	<.005	--
11...	<1	95.5	1.1	--	E.2	127	E.1	E.004	E.1	--	<.06	<.005	<2
JUN													
01...	--	--	--	<.006	--	--	--	E.008	--	<.020	<.06	<.005	--
JUL													
07...	--	--	--	<.004	--	--	--	<.041	--	<.020	--	<.005	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	<1	169	<.5	--	E.1	110	<.5	<1	<.5	--	--	<.5	<20
AUG													
02...	--	--	--	<.004	--	--	--	E.021	--	<.020	--	<.005	--
04...	<1	51.0	<.5	--	E.2	81.6	<.5	E.047	<.5	--	<.06	<.005	2
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	<.041	--	--	<.06	<.005	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	cis-Propiconazole, water, fltrd, ug/L (79846)	Cotinine, water, fltrd, ug/L (62005)	Cyanazine, water, fltrd, ug/L (04041)	Cycloate, water, fltrd, ug/L (04031)	Cyfluthrin, water, fltrd, ug/L (61585)	lambda-Cyhalothrin, water, fltrd, ug/L (61595)	Cypermethrin water, fltrd, ug/L (61586)	DCPA, water fltrd 0.7u GF ug/L (82682)	DecaFbiphenl sur Sch 2033 & 8033, wat flt pct rcv (99585)	DEET, water, fltrd, ug/L (62082)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon oxon, water, fltrd, ug/L (61638)
04072050 DUCK CREEK AT SEMINARY ROAD NEAR ONEIDA, WI (LAT 44 27 57N LONG 088 13 08W)													
OCT 2003													
08...	<.006	--	--	<.018	--	--	--	--	<.003	--	--	<.004	--
NOV													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
02...	<.006	--	--	<.018	--	--	--	--	<.003	--	--	<.012	--
JAN 2004													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
04...	<.006	--	--	<.018	--	--	--	--	<.003	--	--	<.012	--
APR													
08...	<.006	--	--	<.018	--	--	--	--	<.003	--	--	<.012	--
MAY													
03...	<.006	--	--	<.018	--	--	--	--	<.003	--	--	<.012	--
JUN													
02...	<.006	--	--	<.018	--	--	--	--	<.003	--	--	<.012	--
JUL													
12...	<.006	--	--	<.018	--	--	--	--	<.003	--	--	E.002	--
AUG													
11...	<.006	--	--	<.018	--	--	--	--	<.003	--	--	E.002	--
040869415 LINCOLN CREEK AT 47TH STREET AT MILWAUKEE, WI (LAT 43 05 49N LONG 087 58 20W)													
OCT 2003													
01...	<.006	--	--	<.018	--	--	--	--	<.003	--	--	<.004	--
NOV													
06...	--	<.008	--	--	<.005	<.008	<.009	<.009	--	--	--	--	--
DEC													
03...	<.006	--	--	<.018	--	--	--	--	E.003	--	--	<.012	--
JAN 2004													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
03...	<.006	<.008	--	<.018	<.005	<.008	<.009	<.009	<.003	--	--	<.012	--
17...	--	--	E.2400	--	--	--	--	--	--	54.5	E.1	--	--
MAR													
05...	--	--	E.2300	--	--	--	--	--	--	63.6	E.1	--	--
APR													
14...	<.006	<.008	--	<.018	<.005	<.008	<.009	<.009	<.003	--	--	<.012	--
MAY													
10...	<.006	--	--	<.018	--	--	--	--	.003	--	--	<.012	--
11...	<.006	--	<1.00	--	--	<.008	--	<.009	<.003	86.4	E.1	<.012	<.01
JUN													
01...	<.006	<.008	--	<.018	<.005	<.008	<.009	<.009	<.003	--	--	<.012	--
JUL													
07...	<.006	--	--	<.018	--	--	--	--	<.003	--	--	<.012	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	<1.00	--	--	--	--	--	--	53.7	E.3	--	--
AUG													
02...	<.006	--	--	<.018	--	--	--	--	<.003	--	--	<.012	--
04...	<.006	--	<1.00	--	--	<.008	--	<.009	.004	48.9	E.4	E.006	<.01
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.006	--	--	--	--	<.008	--	<.009	<.003	--	--	<.012	<.01

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Diazinon, water, fltrd, ug/L (39572)	Diazinon-d10 sur2002 /9002, wat unf percent recovry (99223)	Diazinon-d10 surrog, Sch2003 wat flt percent recovry (99994)	Diazinon-d10 surrog. wat flt 0.7u GF percent recovry (91063)	Dicrotophos, water fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)	Diethoxynonylphenol, water, fltrd, ug/L (62083)	Diethoxyoctylphenol, water, fltrd ug/L (61705)	Dimethoate, water, fltrd 0.7u GF ug/L (82662)	Disulfoton sulfone water, fltrd, ug/L (61640)	Disulfoton sulfoxide, water, fltrd, ug/L (61641)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	D-Limonene, water, fltrd, ug/L (62073)
04072050 DUCK CREEK AT SEMINARY ROAD NEAR ONEIDA, WI (LAT 44 27 57N LONG 088 13 08W)													
OCT 2003													
08...	<.005	--	--	123	--	<.005	--	--	--	--	--	<.02	--
NOV													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
02...	<.005	--	--	112	--	<.009	--	--	--	--	--	<.02	--
JAN 2004													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
04...	<.005	--	--	110	--	<.009	--	--	--	--	--	<.02	--
APR													
08...	<.005	--	--	118	--	<.009	--	--	--	--	--	<.02	--
MAY													
03...	<.005	--	--	115	--	<.009	--	--	--	--	--	<.02	--
JUN													
02...	<.005	--	--	107	--	<.009	--	--	--	--	--	<.02	--
JUL													
12...	<.005	--	--	119	--	<.009	--	--	--	--	--	<.02	--
AUG													
11...	<.005	--	--	98.3	--	<.009	--	--	--	--	--	<.02	--
040869415 LINCOLN CREEK AT 47TH STREET AT MILWAUKEE, WI (LAT 43 05 49N LONG 087 58 20W)													
OCT 2003													
01...	.012	--	--	104	--	<.005	--	--	--	--	--	<.02	--
NOV													
06...	--	94.7	--	--	<.08	--	--	--	<.006	<.02	<.002	--	--
DEC													
03...	E.005	--	--	123	--	<.009	--	--	--	--	--	<.02	--
JAN 2004													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
03...	<.005	105	--	117	<.08	<.009	--	--	<.006	<.02	<.002	<.02	--
17...	<.5	--	--	--	--	--	E2	<1	--	--	--	--	<.5
MAR													
05...	<.5	--	--	--	--	--	<5	<1	--	--	--	--	<.5
APR													
14...	<.005	94.1	--	110	<.08	<.009	--	--	<.006	<.02	<.002	<.02	--
MAY													
10...	.017	--	--	122	--	<.009	--	--	--	--	--	<.02	--
11...	.009	--	106	--	<.08	<.009	<5	<1	<.006	--	--	--	E.1
JUN													
01...	.005	65.1	--	110	<.08	<.009	--	--	<.006	<.02	<.002	<.02	--
JUL													
07...	.017	--	--	108	--	<.009	--	--	--	--	--	<.02	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	<.5	--	--	--	--	--	E4	<1	--	--	--	--	<.5
AUG													
02...	.008	--	--	96.3	--	<.009	--	--	--	--	--	<.02	--
04...	.021	--	128	--	<.08	<.009	<5	M	<.006	--	--	--	<.5
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.020	--	115	--	<.08	<.009	--	--	<.006	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	(E)-Dimethomorph, water, fltrd, ug/L (79844)	Endosulfan ether, water, fltrd, ug/L (61642)	Endosulfan sulfate water, fltrd, ug/L (61590)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfluralin, water, fltrd 0.7u GF ug/L (82663)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Ethoxyoctylphenol, water, fltrd ug/L (61706)	Fenamiphos sulfone water, fltrd, ug/L (61645)	Fenamiphos sulfoxide, water, fltrd, ug/L (61646)	Fenamiphos, water, fltrd, ug/L (61591)	Fenthion sulfoxide, water, fltrd, ug/L (61647)
04072050 DUCK CREEK AT SEMINARY ROAD NEAR ONEIDA, WI (LAT 44 27 57N LONG 088 13 08W)													
OCT 2003													
08...	--	--	--	.002	<.009	--	--	<.005	--	--	--	--	--
NOV													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
02...	--	--	--	<.004	<.009	--	--	<.005	--	--	--	--	--
JAN 2004													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
04...	--	--	--	<.004	<.009	--	--	<.005	--	--	--	--	--
APR													
08...	--	--	--	<.004	<.009	--	--	<.005	--	--	--	--	--
MAY													
03...	--	--	--	<.004	<.009	--	--	<.005	--	--	--	--	--
JUN													
02...	--	--	--	<.004	<.009	--	--	<.005	--	--	--	--	--
JUL													
12...	--	--	--	<.004	<.009	--	--	<.005	--	--	--	--	--
AUG													
11...	--	--	--	<.004	<.009	--	--	<.005	--	--	--	--	--
040869415 LINCOLN CREEK AT 47TH STREET AT MILWAUKEE, WI (LAT 43 05 49N LONG 087 58 20W)													
OCT 2003													
01...	--	--	--	<.002	<.009	--	--	<.005	--	--	--	--	--
NOV													
06...	<.02	<.004	<.006	--	--	<.03	<.004	--	--	<.008	<.03	<.03	<.008
DEC													
03...	--	--	--	<.004	<.009	--	--	<.005	--	--	--	--	--
JAN 2004													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
03...	<.02	<.004	<.006	<.004	<.009	<.03	<.004	<.005	--	<.008	<.03	<.03	<.008
17...	--	--	--	--	--	--	--	--	<1	--	--	--	--
MAR													
05...	--	--	--	--	--	--	--	--	<1	--	--	--	--
APR													
14...	<.02	<.004	<.006	<.004	<.009	<.03	<.004	<.005	--	<.008	<.03	<.03	<.008
MAY													
10...	--	--	--	<.005	<.009	--	--	<.005	--	--	--	--	--
11...	--	--	--	--	--	<.03	<.004	--	<1	<.008	<.03	<.03	--
JUN													
01...	<.02	<.004	<.006	<.004	<.009	<.03	<.004	<.005	--	<.008	<.03	<.03	<.008
JUL													
07...	--	--	--	<.004	<.009	--	--	<.005	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	<1	--	--	--	--
AUG													
02...	--	--	--	<.010	<.009	--	--	<.005	--	--	--	--	--
04...	--	--	--	--	--	<.0020	<.004	--	M	<.049	<.04	<.03	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	<.0020	<.004	--	--	<.049	<.04	<.03	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Fenthion, water, fltrd, ug/L (38801)	Desulfinylfipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Flumetralin, water, fltrd, ug/L (61592)	Fluoranthene water, fltrd, ug/L (34377)	Fluoranthene-d10, sur Sch 20/8033 wat flt pct rcv (99586)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	HHCB, water, fltrd, ug/L (62075)	Hexazinone, water, fltrd, ug/L (04025)	Indole, water, fltrd, ug/L (62076)
04072050 DUCK CREEK AT SEMINARY ROAD NEAR ONEIDA, WI (LAT 44 27 57N LONG 088 13 08W)													
OCT 2003													
08...	--	<.009	<.005	<.005	E.006	--	--	--	--	<.003	--	--	--
NOV													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
02...	--	<.029	<.013	<.024	<.016	--	--	--	--	<.003	--	--	--
JAN 2004													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
04...	--	<.029	<.013	<.024	<.016	--	--	--	--	<.003	--	--	--
APR													
08...	--	<.029	<.013	<.024	<.016	--	--	--	--	<.003	--	--	--
MAY													
03...	--	<.029	<.013	<.024	<.016	--	--	--	--	<.003	--	--	--
JUN													
02...	--	<.029	<.013	<.024	<.016	--	--	--	--	<.003	--	--	--
JUL													
12...	--	<.029	<.013	<.024	<.016	--	--	--	--	<.003	--	--	--
AUG													
11...	--	<.029	E.003	E.004	<.016	--	--	--	--	<.003	--	--	--
040869415 LINCOLN CREEK AT 47TH STREET AT MILWAUKEE, WI (LAT 43 05 49N LONG 087 58 20W)													
OCT 2003													
01...	--	<.009	<.005	<.005	<.007	--	--	--	--	<.003	--	--	--
NOV													
06...	<.02	--	--	--	--	<.004	--	--	<.002	--	--	<.013	--
DEC													
03...	--	<.029	<.013	<.024	<.016	--	--	--	--	<.003	--	--	--
JAN 2004													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
03...	<.02	<.029	<.013	<.024	<.016	<.004	--	--	<.002	<.003	--	<.013	--
17...	--	--	--	--	--	--	M	100	--	--	E.1	--	<.5
MAR													
05...	--	--	--	--	--	--	E.3	95.5	--	--	<.5	--	<.5
APR													
14...	<.02	<.029	<.013	<.024	<.016	<.004	--	--	<.002	<.003	--	<.013	--
MAY													
10...	--	<.029	<.013	<.024	<.016	--	--	--	--	<.003	--	--	--
11...	--	<.029	<.013	<.024	<.016	--	E.1	123	<.002	<.003	<.5	<.013	<.5
JUN													
01...	<.02	<.029	<.013	<.024	<.016	<.004	--	--	<.002	<.003	--	<.013	--
JUL													
07...	--	<.029	<.013	<.024	<.016	--	--	--	--	<.003	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	<.5	155	--	--	<.5	--	<.5
AUG													
02...	--	<.029	<.013	<.024	<.016	--	--	--	--	<.003	--	--	--
04...	--	<.029	<.013	<.024	<.016	--	<.5	84.0	<.003	<.003	<.5	<.013	<.5
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	<.029	<.013	<.024	<.016	--	--	--	<.003	<.003	--	<.013	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Iprodione, water, fltrd, ug/L (61593)	Isoborneol, water, fltrd, ug/L (62077)	Isofenphos, water, fltrd, ug/L (61594)	Isophorone water, fltrd, ug/L (34409)	Isopropylbenzene water, fltrd, ug/L (62078)	Isoquinoline, water, fltrd, ug/L (62079)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Malaoxon, water, fltrd, ug/L (61652)	Malathion, water, fltrd, ug/L (39532)	Menthol water, fltrd, ug/L (62080)	Metalaxyl, water, fltrd, ug/L (50359)	Metalaxyl, water, fltrd, ug/L (61596)
04072050 DUCK CREEK AT SEMINARY ROAD NEAR ONEIDA, WI (LAT 44 27 57N LONG 088 13 08W)													
OCT 2003													
08...	--	--	--	--	--	--	<.004	<.035	--	<.027	--	--	--
NOV													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
02...	--	--	--	--	--	--	<.004	<.035	--	<.027	--	--	--
JAN 2004													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
04...	--	--	--	--	--	--	<.004	<.035	--	<.027	--	--	--
APR													
08...	--	--	--	--	--	--	<.004	<.035	--	<.027	--	--	--
MAY													
03...	--	--	--	--	--	--	<.004	<.035	--	<.027	--	--	--
JUN													
02...	--	--	--	--	--	--	<.004	<.035	--	<.027	--	--	--
JUL													
12...	--	--	--	--	--	--	<.004	<.035	--	<.027	--	--	--
AUG													
11...	--	--	--	--	--	--	<.004	<.035	--	<.027	--	--	--
040869415 LINCOLN CREEK AT 47TH STREET AT MILWAUKEE, WI (LAT 43 05 49N LONG 087 58 20W)													
OCT 2003													
01...	--	--	--	--	--	--	<.004	<.035	--	<.027	--	--	--
NOV													
06...	<1	--	<.003	--	--	--	--	--	<.008	--	--	--	<.005
DEC													
03...	--	--	--	--	--	--	<.004	<.035	--	<.027	--	--	--
JAN 2004													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
03...	<1	--	<.003	--	--	--	<.004	<.035	<.008	<.027	--	--	<.005
17...	--	<.5	--	M	<.5	<.5	--	--	--	--	E.1	<.5	--
MAR													
05...	--	<.5	--	<.5	<.5	<.5	--	--	--	--	<.5	<.5	--
APR													
14...	<1	--	<.003	--	--	--	<.004	<.035	<.008	<.027	--	--	<.005
MAY													
10...	--	--	--	--	--	--	<.004	<.035	--	<.027	--	--	--
11...	<1	<.5	<.003	E.1	<.5	<.5	--	--	<.008	<.027	E.1	<.5	<.005
JUN													
01...	<1	--	<.003	--	--	--	<.004	<.035	<.008	<.027	--	--	<.005
JUL													
07...	--	--	--	--	--	--	<.004	<.035	--	<.027	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	<.5	--	<.5	<.5	<.5	--	--	--	--	<.5	<.5	--
AUG													
02...	--	--	--	--	--	--	<.004	<.035	--	<.027	--	--	--
04...	<.387	<.5	<.003	<.5	<.5	<.5	--	--	<.030	<.027	<.5	<.5	<.005
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.387	--	<.003	--	--	--	--	--	<.030	<.027	--	--	<.005

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Methi-althion water, fltrd, ug/L (61598)	c-Per-methric acid methyl ester, wat flt ug/L (79842)	Methyl para-oxon, water, fltrd, ug/L (61664)	Methyl para-thion, water, fltrd 0.7u GF ug/L (82667)	Methyl salicy-late, water, fltrd, ug/L (62081)	t-Per-methric acid methyl ester, wat flt ug/L (79843)	Methyl-mercury water fltrd, ng/L (50285)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Moli-nate, water, fltrd 0.7u GF ug/L (82671)	Myclo-butanil water, fltrd, ug/L (61599)	Naphth-alene, water, fltrd, ug/L (34443)	Naprop-amide, water, fltrd 0.7u GF ug/L (82684)
04072050 DUCK CREEK AT SEMINARY ROAD NEAR ONEIDA, WI (LAT 44 27 57N LONG 088 13 08W)													
OCT 2003													
08...	--	--	--	<.006	--	--	--	.043	<.006	<.002	--	--	<.007
NOV													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
02...	--	--	--	<.015	--	--	--	.029	<.006	<.003	--	--	<.007
JAN 2004													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
04...	--	--	--	<.015	--	--	--	.026	<.006	<.003	--	--	<.007
APR													
08...	--	--	--	<.015	--	--	--	.034	<.006	<.003	--	--	<.007
MAY													
03...	--	--	--	<.015	--	--	--	.026	<.006	<.003	--	--	<.007
JUN													
02...	--	--	--	<.015	--	--	--	.695	<.006	<.003	--	--	<.007
JUL													
12...	--	--	--	<.015	--	--	--	.176	<.006	<.003	--	--	<.007
AUG													
11...	--	--	--	<.015	--	--	--	.027	<.006	<.003	--	--	<.007
040869415 LINCOLN CREEK AT 47TH STREET AT MILWAUKEE, WI (LAT 43 05 49N LONG 087 58 20W)													
OCT 2003													
01...	--	--	--	<.006	--	--	--	E.006	<.006	<.002	--	--	<.007
NOV													
06...	<.006	<.04	<.03	--	--	<.03	--	--	--	--	<.008	--	--
DEC													
03...	--	--	--	<.015	--	--	--	E.007	<.006	<.003	--	--	<.007
JAN 2004													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
03...	<.006	<.04	<.03	<.015	--	<.03	--	<.013	<.006	<.003	<.008	--	<.007
17...	--	--	--	--	<.5	--	--	<.5	--	--	--	E.1	--
MAR													
05...	--	--	--	--	<.5	--	--	<.5	--	--	--	E.1	--
APR													
14...	<.006	<.04	<.03	<.015	--	<.03	--	E.006	<.006	<.003	<.008	--	<.007
MAY													
10...	--	--	--	<.015	--	--	--	.049	<.006	<.003	--	--	<.007
11...	<.006	--	<.03	<.015	<.5	--	--	.025	<.006	--	<.008	E.1	--
JUN													
01...	<.006	<.04	<.03	<.015	--	<.03	--	.020	<.006	<.003	<.008	--	<.007
JUL													
07...	--	--	--	<.015	--	--	--	.016	<.006	<.003	--	--	<.007
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	<.5	--	<.04	<.5	--	--	--	<.5	--
AUG													
02...	--	--	--	<.015	--	--	--	E.005	<.006	<.003	--	--	<.007
04...	<.006	--	<.03	<.015	<.5	--	.09	E.012	<.006	--	<.008	<.5	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.006	--	<.03	<.015	--	--	--	<.013	<.006	--	<.008	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	O-Et-O-Me-S-Pr-phos-phoro-thioate wat flt ug/L (61660)	Oxy-fluor-fen, water, fltrd, ug/L (61600)	p,p'-DDE, water, fltrd, ug/L (34653)	Para-oxon, water, fltrd, ug/L (61663)	Para-thion, water, fltrd, ug/L (39542)	p-Cresol, water, fltrd, ug/L (62084)	Peb-ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi-meth-alin, water, fltrd 0.7u GF ug/L (82683)	Penta-chloro-phenol, water, fltrd, ug/L (34459)	Phenan-threne, water, fltrd, ug/L (34462)	Phenol, water, fltrd, ug/L (34466)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)
04072050 DUCK CREEK AT SEMINARY ROAD NEAR ONEIDA, WI (LAT 44 27 57N LONG 088 13 08W)													
OCT 2003													
08...	--	--	<.003	--	<.010	--	<.004	<.022	--	--	--	--	<.011
NOV													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
02...	--	--	<.003	--	<.010	--	<.004	<.022	--	--	--	--	<.011
JAN 2004													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
04...	--	--	<.003	--	<.010	--	<.004	<.022	--	--	--	--	<.011
APR													
08...	--	--	<.003	--	<.010	--	<.004	<.022	--	--	--	--	<.011
MAY													
03...	--	--	<.003	--	<.010	--	<.004	<.022	--	--	--	--	<.011
JUN													
02...	--	--	<.003	--	<.010	--	<.004	<.022	--	--	--	--	<.011
JUL													
12...	--	--	<.003	--	<.010	--	<.004	<.022	--	--	--	--	<.011
AUG													
11...	--	--	<.003	--	<.010	--	<.004	<.022	--	--	--	--	<.011
040869415 LINCOLN CREEK AT 47TH STREET AT MILWAUKEE, WI (LAT 43 05 49N LONG 087 58 20W)													
OCT 2003													
01...	--	--	<.003	--	<.010	--	<.004	<.022	--	--	--	--	<.011
NOV													
06...	<.008	<.007	--	<.008	--	--	--	--	--	--	--	<.10	--
DEC													
03...	--	--	<.003	--	<.010	--	<.004	E.009	--	--	--	--	<.011
JAN 2004													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
03...	<.008	<.007	<.003	<.008	<.010	--	<.004	<.022	--	--	--	<.10	<.011
17...	--	--	--	--	--	<1	--	--	<2	M	E.3	--	--
MAR													
05...	--	--	--	--	--	M	--	--	E2	E.2	.7	--	--
APR													
14...	<.008	<.007	<.003	<.008	<.010	--	<.004	<.022	--	--	--	<.10	<.011
MAY													
10...	--	--	<.003	--	<.010	--	<.004	.072	--	--	--	--	<.011
11...	--	--	--	--	--	<1	--	E.018	E1	E.1	E.4	<.10	<.011
JUN													
01...	<.008	<.007	<.003	<.008	<.010	--	<.004	E.012	--	--	--	<.10	<.011
JUL													
07...	--	--	<.003	--	<.010	--	<.004	<.022	--	--	--	--	<.011
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	<1	--	--	<2	<.5	.9	--	--
AUG													
02...	--	--	<.003	--	<.010	--	<.004	<.022	--	--	--	--	<.011
04...	--	--	--	--	--	<1	--	<.022	<2	<.5	<.5	<.10	<.011
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	<.022	--	--	--	<.10	<.011

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)	Phoste-bupirim water, fltrd, ug/L (61602)	Pro-fenofos water, fltrd, ug/L (61603)	Prome-ton, water, fltrd, ug/L (04037)	Prome-tryn, water, fltrd, ug/L (04036)	Propy-zamide, water, fltrd 0.7u GF ug/L (82676)	Propa-chlor, water, fltrd, ug/L (04024)	Pro-panil, water, fltrd 0.7u GF ug/L (82679)	Propar-gite, water, fltrd 0.7u GF ug/L (82685)	Propet-amphos, water, fltrd, ug/L (61604)	Pyrene, water, fltrd, ug/L (34470)	Sima-zine, water, fltrd, ug/L (04035)
04072050 DUCK CREEK AT SEMINARY ROAD NEAR ONEIDA, WI (LAT 44 27 57N LONG 088 13 08W)													
OCT 2003													
08...	--	--	--	--	E.01	--	<.004	<.010	<.011	<.02	--	--	.008
NOV													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
02...	--	--	--	--	.01	--	<.004	<.025	<.011	<.02	--	--	.064
JAN 2004													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
04...	--	--	--	--	.01	--	<.004	<.025	<.011	<.02	--	--	.024
APR													
08...	--	--	--	--	<.01	--	<.004	<.025	<.011	<.02	--	--	.091
MAY													
03...	--	--	--	--	M	--	<.004	<.025	<.011	<.02	--	--	.093
JUN													
02...	--	--	--	--	.01	--	<.004	<.025	<.011	<.02	--	--	.057
JUL													
12...	--	--	--	--	.01	--	<.007	<.025	<.011	<.02	--	--	.037
AUG													
11...	--	--	--	--	.01	--	<.007	<.025	<.011	<.02	--	--	.013
040869415 LINCOLN CREEK AT 47TH STREET AT MILWAUKEE, WI (LAT 43 05 49N LONG 087 58 20W)													
OCT 2003													
01...	--	--	--	--	.02	--	<.004	<.010	<.011	<.02	--	--	.013
NOV													
06...	<.06	<.008	<.005	<.006	--	<.005	--	--	--	--	<.004	--	--
DEC													
03...	--	--	--	--	.02	--	<.004	<.025	<.011	<.02	--	--	.007
JAN 2004													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
03...	--	--	<.005	<.006	<.01	<.005	<.004	<.025	<.011	<.02	<.004	--	<.005
17...	--	--	--	--	<.5	--	--	--	--	--	--	M	--
MAR													
05...	--	--	--	--	<.5	--	--	--	--	--	--	E.1	--
APR													
14...	<.06	<.008	<.005	<.006	.02	<.005	<.004	<.025	<.011	<.02	<.004	--	<.007
MAY													
10...	--	--	--	--	.10	--	<.004	<.025	<.011	<.02	--	--	<.005
11...	<.06	<.008	--	--	.02	<.005	<.004	--	--	--	--	E.1	.009
JUN													
01...	<.06	<.008	<.005	<.006	.04	<.005	<.004	<.025	<.011	<.02	<.004	--	<.005
JUL													
07...	--	--	--	--	.04	--	<.004	<.025	<.011	<.02	--	--	<.005
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	<.5	--	--	--	--	--	--	<.5	--
AUG													
02...	--	--	--	--	.03	--	<.030	<.025	<.011	<.02	--	--	<.005
04...	--	--	--	--	.05	<.005	<.004	--	--	--	--	<.5	<.013
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.05	<.008	--	--	--	<.005	<.004	--	--	--	--	--	<.005

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Sulfotepp, water, fltrd, ug/L (61605)	Sulprofos, water, fltrd, ug/L (38716)	Tebupirimphos oxon, water, fltrd, ug/L (61669)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Tefluthrin, water, fltrd, ug/L (61606)	Temephos, water, fltrd, ug/L (61607)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Terbufos oxon sulfone water, fltrd, ug/L (61674)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Terbuthylazine, water, fltrd, ug/L (04022)	Tetrachloroethene, water, fltrd, ug/L (34476)	Thiobencarb water fltrd 0.7u GF ug/L (82681)	trans-Propiconazole, water, fltrd, ug/L (79847)
04072050 DUCK CREEK AT SEMINARY ROAD NEAR ONEIDA, WI (LAT 44 27 57N LONG 088 13 08W)													
OCT 2003													
08...	--	--	--	<.02	--	--	<.034	--	<.02	--	--	<.005	--
NOV													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
02...	--	--	--	<.02	--	--	<.034	--	<.02	--	--	<.010	--
JAN 2004													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
04...	--	--	--	<.02	--	--	<.034	--	<.02	--	--	<.010	--
APR													
08...	--	--	--	<.02	--	--	<.034	--	<.02	--	--	<.010	--
MAY													
03...	--	--	--	<.02	--	--	<.034	--	<.02	--	--	<.010	--
JUN													
02...	--	--	--	<.02	--	--	<.034	--	<.02	--	--	<.010	--
JUL													
12...	--	--	--	<.02	--	--	<.034	--	<.02	--	--	<.010	--
AUG													
11...	--	--	--	<.02	--	--	<.034	--	<.02	--	--	<.010	--
040869415 LINCOLN CREEK AT 47TH STREET AT MILWAUKEE, WI (LAT 43 05 49N LONG 087 58 20W)													
OCT 2003													
01...	--	--	--	.02	--	--	<.034	--	<.02	--	--	<.005	--
NOV													
06...	<.003	<.02	<.006	--	<.008	<.3	--	<.07	--	<.01	--	--	<.01
DEC													
03...	--	--	--	.04	--	--	<.034	--	<.02	--	--	<.010	--
JAN 2004													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
03...	<.003	<.02	<.006	.02	<.008	<.3	<.034	<.07	<.02	<.01	--	<.010	<.01
17...	--	--	--	--	--	--	--	--	--	--	<.5	--	--
MAR													
05...	--	--	--	--	--	--	--	--	--	--	E.1	--	--
APR													
14...	<.003	<.02	<.006	.05	<.008	<.3	<.034	<.07	<.02	<.01	--	<.010	<.01
MAY													
10...	--	--	--	<.02	--	--	<.034	--	<.02	--	--	<.010	--
11...	--	--	--	<.02	--	--	--	<.07	<.02	<.01	<.5	--	--
JUN													
01...	<.003	<.02	<.006	.02	<.008	<.3	<.034	<.07	<.02	<.01	--	<.010	<.01
JUL													
07...	--	--	--	.03	--	--	<.034	--	<.02	--	--	<.010	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	<.5	--	--
AUG													
02...	--	--	--	.03	--	--	<.034	--	<.02	--	--	<.010	--
04...	--	--	--	E.05	--	--	--	<.07	<.02	<.01	<.5	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	<.02	--	--	--	<.07	<.02	<.01	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Tri-allate, water, fltrd 0.7u GF ug/L (82678)	Tri-bromo-methane water, fltrd, ug/L (34288)	Tribu-phos, water, fltrd, ug/L (61610)	Tri-butyl phos-phate, water, fltrd, ug/L (62089)	Triclo-san, water, fltrd, ug/L (62090)	Tri-ethyl citrate water, fltrd, ug/L (62091)	Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661)	Tri-phenyl phos-phate, water, fltrd, ug/L (62092)	Tris(2-butoxy-ethyl) phos-phate, water, fltrd, ug/L (62093)	Tris(2-chloro-ethyl) phos-phate, wat flt ug/L (62087)	Tris(di chloro-i-Pr) phos-phate, wat flt ug/L (62088)	(Z)-Di-metho-morph, water, fltrd, ug/L (79845)	Di-chlor-vos, water fltrd, ug/L (38775)
04072050 DUCK CREEK AT SEMINARY ROAD NEAR ONEIDA, WI (LAT 44 27 57N LONG 088 13 08W)													
OCT 2003													
08...	<.002	--	--	--	--	--	<.009	--	--	--	--	--	--
NOV													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
02...	<.002	--	--	--	--	--	<.009	--	--	--	--	--	--
JAN 2004													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
04...	<.002	--	--	--	--	--	<.009	--	--	--	--	--	--
APR													
08...	<.002	--	--	--	--	--	<.009	--	--	--	--	--	--
MAY													
03...	<.002	--	--	--	--	--	<.009	--	--	--	--	--	--
JUN													
02...	<.002	--	--	--	--	--	<.009	--	--	--	--	--	--
JUL													
12...	<.002	--	--	--	--	--	<.009	--	--	--	--	--	--
AUG													
11...	<.002	--	--	--	--	--	<.009	--	--	--	--	--	--
040869415 LINCOLN CREEK AT 47TH STREET AT MILWAUKEE, WI (LAT 43 05 49N LONG 087 58 20W)													
OCT 2003													
01...	<.002	--	--	--	--	--	<.009	--	--	--	--	--	--
NOV													
06...	--	--	<.004	--	--	--	--	--	--	--	--	<.05	<.01
DEC													
03...	<.002	--	--	--	--	--	<.009	--	--	--	--	--	--
JAN 2004													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
03...	<.002	--	<.004	--	--	--	<.009	--	--	--	--	<.05	<.01
17...	--	M	--	E.1	M	E.1	--	E.1	.7	E.1	E.1	--	<1.00
MAR													
05...	--	<.5	--	E.1	<1	<.5	--	E.1	.5	E.2	E.1	--	<1.00
APR													
14...	<.002	--	<.004	--	--	--	<.009	--	--	--	--	<.05	<.01
MAY													
10...	<.002	--	--	--	--	--	E.006	--	--	--	--	--	--
11...	--	<.5	--	<.5	<1	<.5	E.004	E.1	.6	E.2	E.1	--	<.01
JUN													
01...	<.002	--	<.004	--	--	--	<.009	--	--	--	--	<.05	<.01
JUL													
07...	<.002	--	--	--	--	--	<.009	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	<.5	--	E.1	<1	<.5	--	<.5	E.3	E.1	<.5	--	--
AUG													
02...	<.002	--	--	--	--	--	<.009	--	--	--	--	--	--
04...	--	<.5	--	<.5	<1	<.5	<.009	E.1	1.1	<.5	<.5	--	<.01
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	<.009	--	--	--	--	--	<.01

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Methyl-mercury suspnd sedimnt total, ng/L (62977)	Sus-pended sedi-ment concen-tration mg/L (80154)
04072050 DUCK CREEK AT SEMINARY ROAD NEAR ONEIDA, WI (LAT 44 27 57N LONG 088 13 08W)		
OCT 2003		
08...	--	127
NOV		
05...	--	89
DEC		
02...	--	120
JAN 2004		
07...	--	181
FEB		
04...	--	254
APR		
08...	--	100
MAY		
03...	--	72
JUN		
02...	--	94
JUL		
12...	--	98
AUG		
11...	--	100
040869415 LINCOLN CREEK AT 47TH STREET AT MILWAUKEE, WI (LAT 43 05 49N LONG 087 58 20W)		
OCT 2003		
01...	--	61
NOV		
06...	--	65
DEC		
03...	--	66
JAN 2004		
06...	--	438
FEB		
03...	--	697
17...	--	4
MAR		
05...	--	39
APR		
14...	--	146
MAY		
10...	--	--
11...	--	14
JUN		
01...	--	145
JUL		
07...	--	63
14...	--	--
27...	--	5
AUG		
02...	--	108
04...	.034	6
18...	--	--
25...	--	67

MISCELLANEOUS WATER-QUALITY DATA

MISCELLANEOUS STATION ANALYSES

Date	Time	Dis-charge, cfs (00060)	Instan-taneous dis-charge, cfs (00061)	Sam-pling method, code (82398)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (00417)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicar-bonate, wat flt incrm. titr., field, mg/L (00453)
04085046 APPLE CREEK AT SNIDERVILLE, WI (LAT 44 21 18N LONG 088 11 28W)													
AUG 2004													
31...	0835	--	1.9	70	759	8.9	90	7.5	910	15.4	--	203	243
04087030 MENOMONEE RIVER AT MENOMONEE FALLS, WI (LAT 43 10 22N LONG 088 06 14W)													
NOV 2003													
12...	0955	--	15	10	738	12.7	106	8.0	1,110	6.2	--	229	273
JAN 2004													
21...	1500	9.0	--	10	--	--	--	--	--	--	--	--	--
FEB													
11...	1005	38	--	70	749	16.6	115	8.0	1,140	-.3	--	288	345
MAR													
17...	1035	--	35	70	--	--	--	--	--	--	--	--	--
APR													
14...	0800	--	21	10	750	12.6	105	8.0	1,030	7.0	--	263	310
20...	1310	--	29	70	--	--	--	--	--	--	253	--	--
JUN													
07...	1725	--	37	70	--	--	--	--	--	--	264	--	--
10...	1210	--	47	10	750	9.3	93	7.9	850	14.4	--	260	312
29...	1420	--	31	70	--	--	--	--	--	--	264	--	--
JUL													
14...	1213	--	17	--	--	8.5	--	8.2	896	22.5	--	--	--
AUG													
18...	0725	--	5.2	70	--	--	--	--	--	--	225	--	--
18...	0750	--	--	--	747	7.9	86	7.5	847	18.5	--	--	--
24...	1140	--	3.4	40	742	8.4	95	8.3	1,350	19.9	--	234	280
04087258 PIKE RIVER AT CTH A NEAR KENOSHA, WI (LAT 42 39 13N LONG 087 51 01W)													
NOV 2003													
11...	1505	--	14	10	746	12.1	108	7.9	599	9.5	--	137	166
FEB 2004													
10...	1610	7.5	--	40	753	18.2	125	8.0	1,000	-.3	--	162	196
APR													
13...	1315	--	18	10	754	15.8	137	8.4	860	8.4	--	182	207
MAY													
10...	1355	--	117	10	751	9.6	97	7.4	749	15.0	--	162	195
JUN													
16...	1840	--	42	40	752	9.1	100	7.7	744	19.3	--	205	246
JUL													
15...	1519	--	18	--	--	9.4	--	8.3	622	22.5	--	--	--
AUG													
19...	1007	--	15	--	--	8.2	--	8.2	494	19.8	--	--	--
24...	1230	--	17	10	753	8.8	99	7.8	406	20.7	--	116	139
04087118 HONEY CREEK NEAR PORTLAND AVENUE AT WAUWATOSA, WI (LAT 43 02 32N LONG 088 00 38W)													
NOV 2003													
12...	1320	--	1.5	10	--	10.7	95	7.9	1,380	8.9	--	230	274
FEB 2004													
11...	1230	--	1.4	10	751	16.9	120	8.0	6,790	-.2	--	223	266
APR													
14...	1240	--	1.8	10	752	15.9	140	8.3	253	9.1	--	244	288
JUN													
15...	1215	--	13	10	750	9.5	104	8.0	1,190	18.7	--	257	305
JUL													
15...	1127	--	--	--	--	8.5	--	8.0	1,670	19.2	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, wat unf by anal ysis, mg/L (62855)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)
04085046 APPLE CREEK AT SNIDERVILLE, WI (LAT 44 21 18N LONG 088 11 28W)													
AUG 2004													
31...	3	104	92.9	<.04	1.03	<.008	.05	.145	.193	1.65	.9	<.1	.9
04087030 MENOMONEE RIVER AT MENOMONEE FALLS, WI (LAT 43 10 22N LONG 088 06 14W)													
NOV 2003													
12...	3	133	139	.06	3.05	.053	.08	.017	.058	4.03	.7	<.1	.7
JAN 2004													
21...	--	149	--	--	--	--	--	--	--	--	--	--	--
FEB													
11...	4	93.6	94.0	<.04	.28	.029	.20	.011	.079	.75	1.3	<.1	1.3
MAR													
17...	--	400	--	--	--	--	--	--	--	--	--	--	--
APR													
14...	5	134	65.9	<.04	1.07	.008	.07	<.006	.021	1.61	.5	<.1	.5
20...	--	144	--	--	--	--	--	--	--	--	--	--	--
JUN													
07...	--	89.0	--	--	--	--	--	--	--	--	--	--	--
10...	2	91.5	31.9	E.03	1.10	.040	.13	.027	.090	1.83	1.3	<.1	1.3
29...	--	92.2	--	--	--	--	--	--	--	--	--	--	--
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	110	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	224	55.0	<.04	.39	.009	.04	.137	.177	.90	.4	<.1	.4
04087258 PIKE RIVER AT CTH A NEAR KENOSHA, WI (LAT 42 39 13N LONG 087 51 01W)													
NOV 2003													
11...	<1	67.0	53.0	<.04	1.18	.021	.03	.045	.083	1.59	.4	<.1	.4
FEB 2004													
10...	1	189	61.5	<.04	1.45	.016	<.02	.051	.084	1.88	.4	<.1	.4
APR													
13...	7	97.2	73.8	<.04	6.71	.016	.07	.014	.031	7.30	.5	<.1	.5
MAY													
10...	<1	76.4	50.5	.17	11.9	.239	.49	.114	.28	13.6	3.9	.8	3.0
JUN													
16...	2	60.9	48.2	<.04	9.67	.029	.10	.053	.116	10.1	1.2	<.1	1.1
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	1	32.4	35.1	<.04	.53	.010	.04	.084	.122	.77	.5	<.1	.5
04087118 HONEY CREEK NEAR PORTLAND AVENUE AT WAUWATOSA, WI (LAT 43 02 32N LONG 088 00 38W)													
NOV 2003													
12...	3	242	99.5	<.04	.96	.017	.02	.051	.085	1.20	.4	<.1	.4
FEB 2004													
11...	3	611	41.0	<.04	.69	.064	<.02	.070	.110	1.00	.3	<.1	.3
APR													
14...	5	275	130	<.04	.54	.028	.73	.013	.039	.80	12.7	2.6	10.1
JUN													
15...	4	168	49.6	<.04	1.88	.037	.06	.040	.079	2.25	.7	<.1	.7
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Organic carbon, water, fltrd, mg/L (00681)	1-Naphthol, water, fltrd 0.7u GF ug/L (49295)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	2-[(2-Et-6-Me-Ph)--amino]propan-1-ol, ug/L (61615)	2Chloro-2,6'-'diethyl acetanilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl-6-methylaniline water, fltrd, ug/L (61620)	3,4-Dichloroaniline water fltrd, ug/L (61625)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH-d6, surrog, Sch2003 wat flt percent recovry (99995)	Atrazine, water, fltrd, ug/L (39632)
04085046 APPLE CREEK AT SNIDERVILLE, WI (LAT 44 21 18N LONG 088 11 28W)													
AUG 2004													
31...	7.7	<.09	<.006	--	<.005	E.033	<.004	<.004	<.006	.007	<.005	103	.128
04087030 MENOMONEE RIVER AT MENOMONEE FALLS, WI (LAT 43 10 22N LONG 088 06 14W)													
NOV 2003													
12...	11.5	<.09	<.006	<.1	<.005	E.012	<.004	<.004	<.006	<.006	<.005	91.2	.016
JAN 2004													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
11...	142	<.09	<.006	<.1	<.005	E.007	<.004	<.004	<.006	<.006	<.005	96.2	.015
MAR													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
14...	9.0	<.09	<.006	--	<.005	E.012	<.004	<.004	<.006	<.006	<.005	82.5	.012
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	11.3	<.09	<.006	--	<.005	E.049	<.004	.007	<.006	.028	.007	86.1	.122
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	4.3	<.09	<.006	--	<.005	E.016	<.004	<.004	<.006	<.006	<.005	109	.016
04087258 PIKE RIVER AT CTH A NEAR KENOSHA, WI (LAT 42 39 13N LONG 087 51 01W)													
NOV 2003													
11...	4.1	<.09	<.006	<.1	<.005	E.016	<.004	<.004	<.006	<.006	<.005	100	.044
FEB 2004													
10...	3.4	<.09	<.006	<.1	<.005	E.013	<.004	<.004	<.006	<.006	<.005	92.6	.037
APR													
13...	3.3	<.09	<.006	--	<.005	<.015	<.004	<.004	<.006	<.006	<.005	95.6	.026
MAY													
10...	7.0	<.09	<.006	--	<.005	E.094	<.004	.009	E.002	.477	.014	93.3	.611
JUN													
16...	3.8	<.09	<.006	--	<.005	E.053	E.003	.006	<.006	.099	.008	88.6	.536
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	2.2	<.09	<.006	--	<.005	E.019	<.004	.005	<.006	<.006	<.005	82.9	.057
04087118 HONEY CREEK NEAR PORTLAND AVENUE AT WAUWATOSA, WI (LAT 43 02 32N LONG 088 00 38W)													
NOV 2003													
12...	4.0	<.09	<.006	<.1	<.005	<.006	<.004	<.004	<.006	<.006	<.005	89.6	.015
FEB 2004													
11...	3.4	<.09	<.006	<.1	<.005	E.009	<.004	<.004	<.006	<.006	<.005	98.1	.014
APR													
14...	4.2	<.09	<.006	--	<.005	<.006	<.004	<.004	<.006	<.006	<.005	86.1	.009
JUN													
15...	5.9	<.09	<.006	--	<.005	E.030	<.004	.007	<.006	.022	<.005	90.5	.047
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Azinphosmethyl oxon, water, fltrd, ug/L (61635)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Chlorpyrifos oxon, water, fltrd, ug/L (61636)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Cyfluthrin, water, fltrd, ug/L (61585)	Cypermethrin water, fltrd, ug/L (61586)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon oxon, water, fltrd, ug/L (61638)	Diazinon, water, fltrd, ug/L (39572)
04085046 APPLE CREEK AT SNIDERVILLE, WI (LAT 44 21 18N LONG 088 11 28W)													
AUG 2004													
31...	<.07	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
04087030 MENOMONEE RIVER AT MENOMONEE FALLS, WI (LAT 43 10 22N LONG 088 06 14W)													
NOV 2003													
12...	<.03	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
JAN 2004													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
11...	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	E.002
MAR													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
14...	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	<.02	<.050	<.010	E.007	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.009
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	<.07	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
04087258 PIKE RIVER AT CTH A NEAR KENOSHA, WI (LAT 42 39 13N LONG 087 51 01W)													
NOV 2003													
11...	<.03	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
FEB 2004													
10...	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
APR													
13...	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
MAY													
10...	<.02	<.050	<.010	<.041	<.01	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
JUN													
16...	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	.004	<.012	<.01	.009
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	<.07	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
04087118 HONEY CREEK NEAR PORTLAND AVENUE AT WAUWATOSA, WI (LAT 43 02 32N LONG 088 00 38W)													
NOV 2003													
12...	<.03	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
FEB 2004													
11...	<.05	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
APR													
14...	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
JUN													
15...	<.02	<.050	<.010	E.022	<.06	<.005	<.006	<.008	<.009	.004	<.012	<.01	.017
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Diazinon-d10 surrog, Sch2003 wat flt percent recovry (99994)	Dicrotophos, water fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)	Dimethoate, water, fltrd 0.7u GF ug/L (82662)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Fenamiphos sulfone water, fltrd, ug/L (61645)	Fenamiphos sulfoxide, water, fltrd, ug/L (61646)	Fenamiphos, water, fltrd, ug/L (61591)	Desulfinylfipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)
04085046 APPLE CREEK AT SNIDERVILLE, WI (LAT 44 21 18N LONG 088 11 28W)													
AUG 2004													
31...	119	<.08	<.009	<.006	<.0020	<.004	<.049	<.04	<.03	<.029	<.013	<.024	<.016
04087030 MENOMONEE RIVER AT MENOMONEE FALLS, WI (LAT 43 10 22N LONG 088 06 14W)													
NOV 2003													
12...	102	--	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016
JAN 2004													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
11...	106	<.08	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016
MAR													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
14...	85.3	<.08	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	120	<.08	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	128	<.08	<.009	<.006	<.0020	<.004	<.049	<.04	<.03	<.029	<.013	<.024	<.016
04087258 PIKE RIVER AT CTH A NEAR KENOSHA, WI (LAT 42 39 13N LONG 087 51 01W)													
NOV 2003													
11...	104	--	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016
FEB 2004													
10...	101	<.08	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016
APR													
13...	97.3	<.08	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016
MAY													
10...	106	<.08	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016
JUN													
16...	109	<.08	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	92.8	<.08	<.009	<.006	<.0020	<.004	<.049	<.04	<.03	<.029	<.013	<.024	<.016
04087118 HONEY CREEK NEAR PORTLAND AVENUE AT WAUWATOSA, WI (LAT 43 02 32N LONG 088 00 38W)													
NOV 2003													
12...	101	--	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016
FEB 2004													
11...	108	<.08	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016
APR													
14...	91.9	<.08	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016
JUN													
15...	110	<.08	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	Hexazinone, water, fltrd, ug/L (04025)	Iprodione, water, fltrd, ug/L (61593)	Isofenphos, water, fltrd, ug/L (61594)	Malaoxon, water, fltrd, ug/L (61652)	Malathion, water, fltrd, ug/L (39532)	Metalaxyl, water, fltrd, ug/L (61596)	Methialthion water, fltrd, ug/L (61598)	Methyl paraoxon, water, fltrd, ug/L (61664)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)
04085046 APPLE CREEK AT SNIDERVILLE, WI (LAT 44 21 18N LONG 088 11 28W)													
AUG 2004													
31...	<.003	<.003	<.013	<.387	<.003	<.030	<.027	<.005	<.006	<.03	<.015	.102	<.006
04087030 MENOMONEE RIVER AT MENOMONEE FALLS, WI (LAT 43 10 22N LONG 088 06 14W)													
NOV 2003													
12...	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	E.006	<.006
JAN 2004													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
11...	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	E.005	E.005
MAR													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
14...	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	E.005	<.006
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	.049	<.006
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	<.003	<.003	<.013	<.387	<.003	<.030	<.027	<.005	<.006	<.03	<.015	<.013	<.006
04087258 PIKE RIVER AT CTH A NEAR KENOSHA, WI (LAT 42 39 13N LONG 087 51 01W)													
NOV 2003													
11...	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	.020	<.006
FEB 2004													
10...	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	E.007	<.006
APR													
13...	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	.016	<.006
MAY													
10...	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	2.95	<.006
JUN													
16...	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	.280	<.006
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	<.003	<.003	<.013	<.387	<.003	<.030	<.027	<.005	<.006	<.03	<.015	.017	<.006
04087118 HONEY CREEK NEAR PORTLAND AVENUE AT WAUWATOSA, WI (LAT 43 02 32N LONG 088 00 38W)													
NOV 2003													
12...	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	<.013	<.006
FEB 2004													
11...	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	<.013	<.006
APR													
14...	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	E.003	<.006
JUN													
15...	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	.023	<.006
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Myclobutanil water, fltrd, ug/L (61599)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbufos oxon sulfone water, fltrd, ug/L (61674)	Terbufos, water, fltrd 0.7u GF ug/L (82675)
04085046 APPLE CREEK AT SNIDERVILLE, WI (LAT 44 21 18N LONG 088 11 28W)													
AUG 2004													
31...	<.008	<.022	<.10	<.011	<.05	<.008	.05	<.005	<.004	<.005	<.02	<.07	<.02
04087030 MENOMONEE RIVER AT MENOMONEE FALLS, WI (LAT 43 10 22N LONG 088 06 14W)													
NOV 2003													
12...	<.008	<.022	<.10	<.011	--	<.008	E.01	<.005	<.004	<.005	<.02	<.07	<.02
JAN 2004													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
11...	<.008	<.022	<.10	<.011	<.06	<.008	<.01	<.005	<.004	<.005	<.02	<.07	<.02
MAR													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
14...	<.008	<.022	<.10	<.011	<.06	<.008	.01	<.005	<.004	E.004	<.02	<.07	<.02
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	<.008	<.022	<.10	<.011	<.06	<.008	.01	<.005	<.004	.012	<.02	<.07	<.02
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	<.008	<.022	<.10	<.011	<.05	<.008	.02	<.005	<.004	<.005	<.02	<.07	<.02
04087258 PIKE RIVER AT CTH A NEAR KENOSHA, WI (LAT 42 39 13N LONG 087 51 01W)													
NOV 2003													
11...	<.008	<.022	<.10	<.011	--	<.008	E.01	<.005	<.004	.101	E.06	<.07	<.02
FEB 2004													
10...	<.008	<.022	<.10	<.011	<.06	<.008	<.01	<.005	<.004	.040	E.01	<.07	<.02
APR													
13...	<.008	<.022	<.10	<.011	<.06	<.008	.01	<.005	<.004	.032	E.01	<.07	<.02
MAY													
10...	<.008	<.022	<.10	<.011	<.06	<.008	.01	<.005	<.004	.041	<.02	<.07	<.02
JUN													
16...	<.008	<.022	<.10	<.011	<.06	<.008	.02	<.005	<.004	.565	E.02	<.07	<.02
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	E.005	<.022	<.10	<.011	<.05	<.008	.01	<.005	<.004	.015	<.02	<.07	<.02
04087118 HONEY CREEK NEAR PORTLAND AVENUE AT WAUWATOSA, WI (LAT 43 02 32N LONG 088 00 38W)													
NOV 2003													
12...	<.008	<.022	<.10	<.011	--	<.008	E.01	<.005	<.004	<.005	<.02	<.07	<.02
FEB 2004													
11...	<.008	<.022	<.10	<.011	<.06	<.008	.01	<.005	<.004	<.005	<.02	<.07	<.02
APR													
14...	<.008	E.015	<.10	<.011	<.06	<.008	.01	<.005	<.004	<.005	E.01	<.07	<.02
JUN													
15...	<.008	E.009	<.10	<.011	--	<.008	.02	<.005	<.004	<.005	E.02	<.07	<.02
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Ter-buthyl-azine, water, fltrd, ug/L (04022)	Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661)	Di-chlor-vos, water fltrd, ug/L (38775)	Sus-pended sedi-ment concen-tration mg/L (80154)
04085046 APPLE CREEK AT SNIDERVILLE, WI (LAT 44 21 18N LONG 088 11 28W)				
AUG 2004				
31...	<.01	<.009	<.01	86
04087030 MENOMONEE RIVER AT MENOMONEE FALLS, WI (LAT 43 10 22N LONG 088 06 14W)				
NOV 2003				
12...	<.01	<.009	<.01	155
JAN 2004				
21...	--	--	--	5
FEB				
11...	<.01	<.009	<.01	205
MAR				
17...	--	--	--	--
APR				
14...	<.01	<.009	<.01	117
20...	--	--	--	--
JUN				
07...	--	--	--	--
10...	<.01	<.009	<.01	76
29...	--	--	--	--
JUL				
14...	--	--	--	--
AUG				
18...	--	--	--	--
18...	--	--	--	--
24...	<.01	<.009	<.01	103
04087258 PIKE RIVER AT CTH A NEAR KENOSHA, WI (LAT 42 39 13N LONG 087 51 01W)				
NOV 2003				
11...	<.01	<.009	<.01	67
FEB 2004				
10...	<.01	<.009	<.01	80
APR				
13...	<.01	<.009	<.01	71
MAY				
10...	<.01	.018	<.01	--
JUN				
16...	<.01	E.002	<.01	97
JUL				
15...	--	--	--	--
AUG				
19...	--	--	--	--
24...	<.01	<.009	<.01	45
04087118 HONEY CREEK NEAR PORTLAND AVENUE AT WAUWATOSA, WI (LAT 43 02 32N LONG 088 00 38W)				
NOV 2003				
12...	<.01	<.009	<.01	209
FEB 2004				
11...	<.01	<.009	<.01	--
APR				
14...	<.01	<.009	<.01	226
JUN				
15...	<.01	<.009	<.01	109
JUL				
15...	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)
04087118 HONEY CREEK NEAR PORTLAND AVENUE AT WAUWATOSA, WI (LAT 43 02 32N LONG 088 00 38W)													
AUG 2004													
18...	1525	--	--	--	8.0	--	8.1	1,330	19.8	--	--	--	--
25...	1425	6.0	10	750	8.2	94	7.9	849	21.2	148	177	2	132
04081897 SAWYER CREEK AT WESTHAVEN ROAD AT OSHKOSH, WI (LAT 44 00 55N LONG 088 35 40W)													
NOV 2003													
11...	1010	.80	10	742	12.3	101	7.6	934	5.8	256	308	2	59.9
FEB 2004													
10...	1005	.27	70	747	13.6	96	7.5	1,030	.1	332	400	2	157
APR													
13...	0925	1.1	40	752	15.2	115	7.7	1,010	3.1	294	354	2	81.6
MAY													
10...	0945	12	10	746	9.5	95	7.4	788	14.1	241	289	2	55.5
19...	0930	5.6	40	753	10.4	104	7.8	881	14.5	276	332	2	56.9
JUL													
14...	0838	--	--	--	5.9	--	8.0	811	20.7	--	--	--	--
AUG													
28...	1120	1.3	70	752	7.0	78	7.5	591	20.3	160	192	2	26.8
04084429 MUD CREEK AT SPENCER ROAD AT APPLETON, WI (LAT 44 15 31N LONG 088 27 42W)													
NOV 2003													
12...	1100	4.0	40	732	11.3	94	7.8	1,060	5.5	218	265	--	141
FEB 2004													
18...	0930	1.2	40	744	10.5	74	7.4	1,380	-.2	239	292	--	262
APR													
07...	1100	6.2	40	740	15.8	141	8.1	1,510	9.0	252	308	--	267
MAY													
19...	1115	9.8	40	754	11.1	111	7.8	1,290	14.6	306	364	4	174
JUN													
16...	1015	25	10	743	7.9	83	7.6	753	16.5	220	267	--	77.4
JUL													
13...	1935	--	--	--	8.4	--	8.1	1,230	21.7	--	--	--	--
AUG													
28...	0715	4.0	70	752	6.8	75	7.4	874	18.9	163	196	1	128
040853145 BLACK CREEK AT CURRAN ROAD NEAR DENMARK, WI (LAT 44 20 14N LONG 087 44 43W)													
NOV 2003													
12...	1545	2.1	40	734	12.0	98	7.9	798	5.0	254	310	--	43.1
FEB 2004													
18...	1415	1.3	70	740	8.7	61	7.4	752	-.3	289	352	--	32.9
APR													
07...	1415	19	10	740	15.1	140	8.2	575	10.5	206	251	--	30.3
MAY													
18...	0830	23	10	745	8.0	80	7.8	626	14.5	250	303	--	29.1
JUN													
16...	1420	32	10	742	9.3	102	8.0	610	18.5	263	318	--	21.6
JUL													
12...	1422	--	--	--	8.0	--	8.0	720	20.2	--	--	--	--
AUG													
16...	1440	--	--	--	16.0	--	8.4	704	17.4	--	--	--	--
31...	1345	.55	70	757	12.5	129	8.0	706	16.3	274	324	5	29.7

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, wat unf by analysis, mg/L (62855)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	1-Naphthol, water, fltrd 0.7u GF ug/L (49295)
04087118 HONEY CREEK NEAR PORTLAND AVENUE AT WAUWATOSA, WI (LAT 43 02 32N LONG 088 00 38W)													
AUG 2004													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	47.5	<.04	1.12	.013	.11	.039	.096	1.53	.6	<.1	.6	4.9	<.09
04081897 SAWYER CREEK AT WESTHAVEN ROAD AT OSHKOSH, WI (LAT 44 00 55N LONG 088 35 40W)													
NOV 2003													
11...	128	.28	5.69	.313	.18	.078	.171	6.94	1.3	<.1	1.3	7.9	<.09
FEB 2004													
10...	87.0	E.04	1.17	.009	.02	.017	.038	1.61	.4	<.1	.4	5.2	<.09
APR													
13...	93.9	<.04	3.96	.058	.09	.017	.053	4.48	.7	<.1	.7	5.5	<.09
MAY													
10...	54.6	E.03	7.71	.087	.13	.039	.098	9.80	.7	<.1	.7	7.7	<.09
19...	63.5	E.02	8.54	.112	.11	.037	.074	9.52	.5	--	--	7.0	<.09
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
28...	92.2	<.04	<.06	<.008	.14	.066	.150	.81	.9	<.1	.9	4.9	<.09
04084429 MUD CREEK AT SPENCER ROAD AT APPLETON, WI (LAT 44 15 31N LONG 088 27 42W)													
NOV 2003													
12...	91.4	<.04	.49	.013	.06	.019	.061	.96	.5	<.1	.5	5.1	<.09
FEB 2004													
18...	88.7	.21	.59	.015	.03	.055	.096	1.06	.3	<.1	.3	2.7	<.09
APR													
07...	104	<.04	.59	.011	.23	<.006	.052	1.13	1.4	<.1	1.4	5.9	<.09
MAY													
19...	85.9	.07	.76	.022	.09	.027	.082	1.44	1.0	<.1	1.0	7.9	<.09
JUN													
16...	44.9	.05	.84	.020	.08	.097	.188	1.49	.9	<.1	.9	8.1	<.09
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
28...	69.0	<.04	.11	.023	.12	.019	.110	.75	1.1	<.1	1.1	5.1	<.09
040853145 BLACK CREEK AT CURRAN ROAD NEAR DENMARK, WI (LAT 44 20 14N LONG 087 44 43W)													
NOV 2003													
12...	85.3	<.04	2.02	.019	.03	.087	.116	2.82	.2	<.1	.2	9.6	<.09
FEB 2004													
18...	73.7	.11	2.27	.028	<.02	.124	.151	2.96	.1	<.1	.1	9.2	<.09
APR													
07...	39.3	<.04	1.78	.010	.04	<.006	.065	2.69	.3	<.1	.3	14.2	<.09
MAY													
18...	26.6	E.02	1.85	.025	.05	.073	.123	3.03	.3	<.1	.3	20.2	<.09
JUN													
16...	14.5	E.02	1.88	.022	.05	.125	.194	3.07	.4	<.1	.3	18.5	<.09
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	50.4	<.04	2.57	.011	<.02	.25	.31	3.35	.2	<.1	.2	8.5	<.09

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	2,6-Di-ethyl-aniline water fltrd 0.7u GF ug/L (82660)	2-[(2-Et-6-Me-Ph)--amino] propan-1-ol, ug/L (61615)	2Chloro-2,6'-' diethyl acet-anilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl-6-methyl-aniline water, fltrd, ug/L (61620)	3,4-Di-chloro-aniline water fltrd, ug/L (61625)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-HCH-d6, surrog, Sch2003 wat flt percent recovry (99995)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl oxon, water, fltrd, ug/L (61635)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)
04087118 HONEY CREEK NEAR PORTLAND AVENUE AT WAUWATOSA, WI (LAT 43 02 32N LONG 088 00 38W)													
AUG 2004													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.006	--	<.005	E.011	<.004	.017	E.007	<.006	<.005	85.1	.014	<.07	<.050
04081897 SAWYER CREEK AT WESTHAVEN ROAD AT OSHKOSH, WI (LAT 44 00 55N LONG 088 35 40W)													
NOV 2003													
11...	<.006	<.1	<.005	<.006	<.004	<.004	<.006	<.006	<.005	91.2	<.007	<.03	<.050
FEB 2004													
10...	<.006	<.1	<.005	E.012	<.004	<.004	<.006	<.006	<.005	92.2	.013	<.02	<.050
APR													
13...	<.006	--	<.005	E.016	<.004	<.004	<.006	<.006	<.005	91.0	.026	<.02	<.050
MAY													
10...	<.006	--	<.005	E.092	<.004	.012	E.003	.034	E.004	92.0	1.24	<.02	<.050
19...	<.006	--	<.005	E.081	<.004	E.004	E.004	.015	.008	94.3	.653	<.02	<.050
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
28...	<.006	--	<.005	E.013	<.004	<.004	E.003	<.006	<.005	83.5	.065	<.07	<.050
04084429 MUD CREEK AT SPENCER ROAD AT APPLETON, WI (LAT 44 15 31N LONG 088 27 42W)													
NOV 2003													
12...	<.006	<.1	<.005	<.006	<.004	<.004	<.006	<.006	.025	81.2	.009	<.03	<.050
FEB 2004													
18...	<.006	<.1	<.005	E.004	<.004	<.004	<.006	<.006	.007	85.1	.009	<.02	<.050
APR													
07...	<.006	--	<.005	E.005	<.004	.015	<.006	<.006	.022	89.7	.021	<.02	<.050
MAY													
19...	<.006	--	<.005	E.034	<.004	<.004	<.006	.023	.019	89.1	.079	<.02	<.050
JUN													
16...	<.006	--	<.005	E.076	<.004	<.004	E.007	.491	.015	90.6	.991	<.02	<.050
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
28...	<.006	--	<.005	<.006	<.004	<.008	E.004	<.006	.006	82.4	.017	<.07	<.050
040853145 BLACK CREEK AT CURRAN ROAD NEAR DENMARK, WI (LAT 44 20 14N LONG 087 44 43W)													
NOV 2003													
12...	<.006	<.1	<.005	E.005	<.004	<.004	<.006	<.006	<.005	78.3	.018	<.03	<.050
FEB 2004													
18...	<.006	<.1	<.005	E.006	<.004	<.004	<.006	<.006	<.005	85.9	.009	<.02	<.050
APR													
07...	<.006	--	<.005	E.015	<.004	E.003	<.006	<.006	<.005	90.9	.023	<.02	<.050
MAY													
18...	<.006	--	<.005	E.026	<.004	<.004	<.006	<.006	<.005	96.9	.078	<.02	<.050
JUN													
16...	<.006	--	<.005	E.044	<.004	<.004	<.006	.011	<.005	88.5	.244	<.02	<.050
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	<.006	--	<.005	E.024	<.004	<.004	<.006	<.006	<.005	94.4	.059	<.07	<.050

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)	Car-baryl, water, fltrd 0.7u GF ug/L (82680)	Chlor-pyrifos oxon, water, fltrd, ug/L (61636)	Chlor-pyrifos water, fltrd, ug/L (38933)	cis-Per-methrin water fltrd 0.7u GF ug/L (82687)	Cyflu-thrin, water, fltrd, ug/L (61585)	Cyper-methrin water, fltrd, ug/L (61586)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulf-inyl fipro-nil, water, fltrd, ug/L (62170)	Diaz-inon oxon, water, fltrd, ug/L (61638)	Diazi-non, water, fltrd, ug/L (39572)	Diazi-non-d10 surrog, Sch2003 wat flt percent recovry (99994)	Dicro-tophos, water fltrd, ug/L (38454)
04087118 HONEY CREEK NEAR PORTLAND AVENUE AT WAUWATOSA, WI (LAT 43 02 32N LONG 088 00 38W)													
AUG 2004													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.010	E.010	<.06	<.005	<.006	<.008	<.009	E.003	E.006	<.01	.011	103	<.08
04081897 SAWYER CREEK AT WESTHAVEN ROAD AT OSHKOSH, WI (LAT 44 00 55N LONG 088 35 40W)													
NOV 2003													
11...	<.010	<.041	<.06	E.005	<.006	<.008	<.009	<.003	<.012	<.01	.010	105	--
FEB 2004													
10...	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005	103	<.08
APR													
13...	<.010	<.041	<.01	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005	91.9	<.08
MAY													
10...	<.010	<.041	<.01	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005	101	<.08
19...	<.010	E.013	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005	117	<.08
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
28...	<.010	E.010	<.06	<.005	<.006	<.008	<.009	E.001	<.012	<.01	<.005	91.9	<.08
04084429 MUD CREEK AT SPENCER ROAD AT APPLETON, WI (LAT 44 15 31N LONG 088 27 42W)													
NOV 2003													
12...	<.010	E.006	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.006	108	<.08
FEB 2004													
18...	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005	104	<.08
APR													
07...	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005	104	<.08
MAY													
19...	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	.008	122	<.08
JUN													
16...	E.006	E.011	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	.017	E123	<.08
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
28...	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005	102	<.08
040853145 BLACK CREEK AT CURRAN ROAD NEAR DENMARK, WI (LAT 44 20 14N LONG 087 44 43W)													
NOV 2003													
12...	<.010	<.041	<.06	.017	<.006	<.008	<.009	<.003	<.012	<.01	<.005	95.4	<.08
FEB 2004													
18...	<.010	<.041	<.06	.019	<.006	<.008	<.009	<.003	<.012	<.01	.028	100	<.08
APR													
07...	<.010	<.041	<.06	.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005	100	<.08
MAY													
18...	<.010	<.041	<.06	.008	<.006	<.008	<.009	<.003	<.012	<.01	<.005	93.1	<.08
JUN													
16...	<.010	<.041	<.06	.009	<.006	<.008	<.009	<.003	<.012	<.01	<.005	107	<.08
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	<.010	<.041	<.06	.096	<.006	<.008	<.009	<.003	<.012	<.01	.052	110	<.08

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Dieldrin, water, fltrd, ug/L (39381)	Dimethoate, water, fltrd 0.7u GF ug/L (82662)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Fenamiphos sulfone water, fltrd, ug/L (61645)	Fenamiphos sulfoxide, water, fltrd, ug/L (61646)	Fenamiphos, water, fltrd, ug/L (61591)	Desulfinylfipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)
04087118 HONEY CREEK NEAR PORTLAND AVENUE AT WAUWATOSA, WI (LAT 43 02 32N LONG 088 00 38W)													
AUG 2004													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.009	<.006	<.0020	<.004	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.003
04081897 SAWYER CREEK AT WESTHAVEN ROAD AT OSHKOSH, WI (LAT 44 00 55N LONG 088 35 40W)													
NOV 2003													
11...	<.009	<.006	<.03	<.004	<.008	--	<.03	<.029	<.013	<.024	<.016	<.002	<.003
FEB 2004													
10...	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.002	<.003
APR													
13...	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.002	<.003
MAY													
10...	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.002	<.003
19...	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.002	<.003
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
28...	<.009	<.006	<.0020	<.004	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.003
04084429 MUD CREEK AT SPENCER ROAD AT APPLETON, WI (LAT 44 15 31N LONG 088 27 42W)													
NOV 2003													
12...	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.002	<.003
FEB 2004													
18...	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.002	<.003
APR													
07...	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.002	<.003
MAY													
19...	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.002	<.003
JUN													
16...	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.002	<.003
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
28...	<.009	<.006	<.0020	<.004	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.003
040853145 BLACK CREEK AT CURRAN ROAD NEAR DENMARK, WI (LAT 44 20 14N LONG 087 44 43W)													
NOV 2003													
12...	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.002	<.003
FEB 2004													
18...	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.002	<.003
APR													
07...	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.002	<.003
MAY													
18...	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.002	<.003
JUN													
16...	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.002	<.003
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	<.009	<.006	<.0020	<.004	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.003

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Hexazinone, water, fltrd, ug/L (04025)	Iprodione, water, fltrd, ug/L (61593)	Isofenphos, water, fltrd, ug/L (61594)	Malaoxon, water, fltrd, ug/L (61652)	Malathion, water, fltrd, ug/L (39532)	Metalaxyl, water, fltrd, ug/L (61596)	Methialthion water, fltrd, ug/L (61598)	Methyl paraoxon, water, fltrd, ug/L (61664)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Myclobutanil water, fltrd, ug/L (61599)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)
04087118 HONEY CREEK NEAR PORTLAND AVENUE AT WAUWATOSA, WI (LAT 43 02 32N LONG 088 00 38W)													
AUG 2004													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.013	<.387	<.003	<.030	<.027	<.005	<.006	<.03	<.015	E.009	<.006	<.008	<.022
04081897 SAWYER CREEK AT WESTHAVEN ROAD AT OSHKOSH, WI (LAT 44 00 55N LONG 088 35 40W)													
NOV 2003													
11...	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	E.012	<.006	<.008	<.022
FEB 2004													
10...	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	E.003	<.006	<.008	<.022
APR													
13...	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	.014	<.006	<.008	<.022
MAY													
10...	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	2.04	<.006	<.008	<.022
19...	<.013	<1	<.003	<.008	E.016	<.005	<.006	<.03	<.015	.877	<.006	<.008	<.022
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
28...	<.013	<.387	<.003	<.030	<.027	<.005	<.006	<.03	<.015	E.010	<.006	<.008	<.022
04084429 MUD CREEK AT SPENCER ROAD AT APPLETON, WI (LAT 44 15 31N LONG 088 27 42W)													
NOV 2003													
12...	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	E.007	<.006	<.008	<.022
FEB 2004													
18...	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	E.004	<.006	<.008	<.022
APR													
07...	<.013	<1	<.003	<.025	<.027	<.005	<.006	<.03	<.015	<.013	<.006	<.008	<.022
MAY													
19...	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	.032	<.006	<.008	<.022
JUN													
16...	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	.035	<.006	<.008	<.022
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
28...	<.013	<.387	<.003	<.030	<.027	<.005	<.006	<.03	<.015	E.007	<.006	<.008	<.022
040853145 BLACK CREEK AT CURRAN ROAD NEAR DENMARK, WI (LAT 44 20 14N LONG 087 44 43W)													
NOV 2003													
12...	<.013	<1	<.003	<.008	<.027	.075	<.006	<.03	<.015	E.005	<.006	<.008	<.022
FEB 2004													
18...	<.013	M	<.003	<.008	<.027	.036	<.006	<.03	<.015	E.004	<.006	E.007	<.022
APR													
07...	<.013	<1	<.003	<.015	<.027	.082	<.006	<.03	<.015	E.009	<.006	<.008	<.022
MAY													
18...	<.013	<1	<.003	<.008	<.027	.008	<.006	<.03	<.015	.051	<.006	<.008	<.022
JUN													
16...	<.013	<1	<.003	<.008	<.027	.015	<.006	<.03	<.015	.119	.010	<.008	<.022
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	<.013	M	<.003	<.030	.187	.467	<.006	<.03	<.015	.037	<.006	<.008	<.022

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbufos oxon sulfone water, fltrd, ug/L (61674)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Terbuthylazine, water, fltrd, ug/L (04022)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
04087118 HONEY CREEK NEAR PORTLAND AVENUE AT WAUWATOSA, WI (LAT 43 02 32N LONG 088 00 38W)													
AUG 2004													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.10	<.011	<.05	<.008	.06	<.005	<.004	<.005	.04	<.07	<.02	<.01	E.005
04081897 SAWYER CREEK AT WESTHAVEN ROAD AT OSHKOSH, WI (LAT 44 00 55N LONG 088 35 40W)													
NOV 2003													
11...	<.10	<.011	--	<.008	<.01	<.005	<.004	<.005	<.02	<.07	<.02	<.01	<.009
FEB 2004													
10...	<.10	<.011	<.06	<.008	.01	<.005	<.004	<.005	<.02	<.07	<.02	<.01	<.009
APR													
13...	<.10	<.011	<.06	<.008	<.01	<.005	<.004	<.005	<.02	<.07	<.02	<.01	<.009
MAY													
10...	<.10	<.011	<.06	<.008	<.01	<.005	<.004	.006	<.02	<.07	<.02	<.01	E.003
19...	<.10	<.011	--	<.008	E.02	<.005	<.004	.009	<.02	<.07	<.02	<.01	<.009
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
28...	<.10	<.011	<.05	<.008	<.01	<.005	<.004	<.005	<.02	<.07	<.02	<.01	<.009
04084429 MUD CREEK AT SPENCER ROAD AT APPLETON, WI (LAT 44 15 31N LONG 088 27 42W)													
NOV 2003													
12...	<.10	<.011	--	<.008	.04	<.005	<.004	<.005	<.02	<.07	<.02	<.01	<.009
FEB 2004													
18...	<.10	<.011	<.06	<.008	<.01	<.005	<.004	<.005	<.02	<.07	<.02	<.01	<.009
APR													
07...	<.10	<.011	<.06	<.008	<.03	<.005	<.004	<.005	<.02	<.07	<.02	<.01	<.009
MAY													
19...	<.10	<.011	--	<.008	.05	<.005	<.004	.008	<.02	<.07	<.02	<.01	E.002
JUN													
16...	<.10	<.011	<.06	<.008	E.02	<.005	<.004	.022	<.02	<.07	<.02	<.01	E.002
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
28...	<.10	<.011	<.05	<.008	.08	<.005	<.004	<.005	<.02	<.07	<.02	<.01	E.004
040853145 BLACK CREEK AT CURRAN ROAD NEAR DENMARK, WI (LAT 44 20 14N LONG 087 44 43W)													
NOV 2003													
12...	<.10	<.011	--	<.008	<.01	<.005	<.004	<.005	<.02	<.07	<.02	<.01	<.009
FEB 2004													
18...	<.10	<.011	<.06	<.008	<.01	<.005	<.004	E.003	<.02	<.07	<.02	<.01	<.009
APR													
07...	<.10	<.011	<.06	<.008	<.01	<.005	<.004	<.005	<.02	<.07	<.02	<.01	<.009
MAY													
18...	<.10	<.011	<.06	<.008	<.01	<.005	<.004	.019	<.02	<.07	<.02	<.01	<.009
JUN													
16...	<.10	<.011	<.06	<.008	<.01	<.005	<.004	.011	<.02	<.07	<.02	<.01	<.009
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	<.10	<.011	<.05	<.008	<.01	<.005	<.004	<.005	<.02	<.07	<.02	<.01	<.009

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Di-chlor-vos, water fltrd, ug/L (38775)	Sus-pended sedi-ment concen-tration mg/L (80154)
04087118 HONEY CREEK NEAR PORTLAND AVENUE AT WAUWATOSA, WI (LAT 43 02 32N LONG 088 00 38W)		
AUG 2004		
18...	--	--
25...	<.01	68
04081897 SAWYER CREEK AT WESTHAVEN ROAD AT OSHKOSH, WI (LAT 44 00 55N LONG 088 35 40W)		
NOV 2003		
11...	<.01	101
FEB 2004		
10...	<.01	107
APR		
13...	<.01	204
MAY		
10...	<.01	83
19...	<.01	156
JUL		
14...	--	--
AUG		
28...	<.01	61
04084429 MUD CREEK AT SPENCER ROAD AT APPLETON, WI (LAT 44 15 31N LONG 088 27 42W)		
NOV 2003		
12...	<.01	170
FEB 2004		
18...	<.01	142
APR		
07...	<.01	137
MAY		
19...	<.01	146
JUN		
16...	<.01	89
JUL		
13...	--	--
AUG		
28...	<.01	101
040853145 BLACK CREEK AT CURRAN ROAD NEAR DENMARK, WI (LAT 44 20 14N LONG 087 44 43W)		
NOV 2003		
12...	<.01	127
FEB 2004		
18...	<.01	123
APR		
07...	<.01	37
MAY		
18...	<.01	68
JUN		
16...	<.01	69
JUL		
12...	--	--
AUG		
16...	--	--
31...	<.01	56

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Dis-charge, cfs (00060)	Instan-taneous dis-charge, cfs (00061)	Sam-pling method, code (82398)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (00417)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicar-bonate, wat flt incrm. titr., field, mg/L (00453)
04085188 RIO CREEK AT PHEASANT ROAD NEAR RIO CREEK, WI (LAT 44 36 12N LONG 087 31 37W)													
NOV 2003													
13...	0845	--	3.0	40	746	10.8	79	8.1	772	1.5	--	256	313
FEB 2004													
17...	1300	--	1.2	40	753	8.8	61	6.8	827	-.2	--	335	408
APR													
08...	0830	--	16	10	735	8.3	73	7.6	602	8.0	--	226	276
MAY													
19...	0815	--	14	10	750	7.1	69	7.5	634	13.0	--	290	350
JUN													
17...	0800	--	21	10	744	5.5	58	7.4	649	17.0	--	297	360
JUL													
12...	1759	--	--	--	--	11.2	--	8.1	756	22.3	--	--	--
AUG													
31...	1300	--	2.0	70	749	6.7	68	7.8	793	14.9	--	320	386
04085068 ASHWAUBENON CREEK NEAR LITTLE RAPIDS, WI (LAT 44 24 51N LONG 088 07 37W)													
MAY 2004													
17...	1010	--	8.0	10	745	7.4	74	7.6	949	14.0	--	260	314
040851325 BAIRD CREEK AT SUPERIOR ROAD AT GREEN BAY, WI (LAT 44 30 04N LONG 087 56 10W)													
NOV 2003													
13...	1215	--	2.1	40	746	12.6	95	8.0	677	2.6	--	206	251
FEB 2004													
19...	0920	--	.74	70	741	12.6	89	7.6	949	-.1	--	341	415
25...	0850	1.0	--	70	--	--	--	--	--	--	--	--	--
MAR													
01...	1550	77	--	70	--	--	--	--	--	--	73	--	--
17...	1250	--	30	70	--	--	--	--	--	--	149	--	--
APR													
08...	1140	--	10	10	740	11.0	97	7.9	704	8.5	--	192	234
20...	0915	--	1.6	70	--	--	--	--	--	--	248	--	--
MAY													
17...	1300	--	13	10	745	11.6	121	8.2	882	16.0	--	261	313
JUN													
17...	1045	--	98	10	744	7.8	85	7.6	414	18.5	--	153	185
JUL													
13...	0925	--	1.4	--	--	8.0	--	7.9	850	19.1	--	--	--
AUG													
27...	1445	--	1.4	70	751	9.0	102	7.9	797	20.7	--	311	369
04087070 LITTLE MENOMONEE RIVER AT MILWAUKEE, WI (LAT 43 07 25N LONG 088 02 37W)													
JUL 2004													
15...	0807	--	11	--	--	5.3	--	7.6	1,000	21.2	--	--	--
AUG													
18...	1320	--	2.0	--	--	4.1	--	7.6	688	20.0	--	--	--
23...	1400	--	1.1	10	745	5.7	64	7.9	872	19.8	--	210	254
04084468 GARNERS CREEK AT PARK STREET AT KAUKAUNA, WI (LAT 44 15 53N LONG 088 18 19W)													
FEB 2004													
10...	1200	--	--	70	--	--	--	--	--	--	--	--	--
MAR													
15...	1245	--	--	70	--	--	--	--	--	--	244	--	--
17...	1440	--	--	70	--	--	--	--	--	--	286	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, wat unf by analysis, mg/L (62855)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)
04085188 RIO CREEK AT PHEASANT ROAD NEAR RIO CREEK, WI (LAT 44 36 12N LONG 087 31 37W)													
NOV 2003													
13...	--	51.4	87.6	<.04	2.47	.013	.04	.067	.102	3.39	.3	<.1	.3
FEB 2004													
17...	--	39.9	977	E.02	4.54	.022	<.02	.036	.057	5.31	.2	<.1	.2
APR													
08...	--	24.3	32.0	E.02	2.17	.009	.03	.024	.054	3.08	.2	<.1	.2
MAY													
19...	--	19.7	17.6	<.04	.23	.067	.03	.112	.179	2.46	.2	<.1	.2
JUN													
17...	--	18.2	10.6	<.04	.84	.061	.04	.160	.22	2.87	.3	<.1	.3
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
31...	--	37.0	28.5	<.04	4.14	.031	<.02	.115	.160	5.20	.2	<.1	.2
04085068 ASHWAUBENON CREEK NEAR LITTLE RAPIDS, WI (LAT 44 24 51N LONG 088 07 37W)													
MAY 2004													
17...	--	83.7	72.4	.17	7.86	.175	.17	.328	.46	9.80	1.0	<.1	1.0
040851325 BAIRD CREEK AT SUPERIOR ROAD AT GREEN BAY, WI (LAT 44 30 04N LONG 087 56 10W)													
NOV 2003													
13...	--	48.1	79.8	<.04	.24	.025	.09	.132	.23	1.53	.7	<.1	.7
FEB 2004													
19...	--	43.2	133	<.04	.18	E.007	<.02	.015	.043	.52	.2	<.1	.2
25...	--	161	--	--	--	--	--	--	--	--	--	--	--
MAR													
01...	--	22.2	--	--	--	--	--	--	--	--	--	--	--
17...	--	54.1	--	--	--	--	--	--	--	--	--	--	--
APR													
08...	--	53.7	82.0	.04	.31	.009	.06	.088	.166	1.89	.5	<.1	.5
20...	--	60.7	--	--	--	--	--	--	--	--	--	--	--
MAY													
17...	--	76.5	83.6	E.03	<.06	E.006	.11	.189	.29	2.58	.8	<.1	.8
JUN													
17...	--	20.4	22.2	<.04	<.06	E.006	.42	.376	.71	1.69	3.5	<.1	3.4
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
27...	5	23.6	92.4	<.04	<.06	<.008	.09	.050	.128	.47	.9	<.1	.9
04087070 LITTLE MENOMONEE RIVER AT MILWAUKEE, WI (LAT 43 07 25N LONG 088 02 37W)													
JUL 2004													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	111	61.4	E.03	.12	E.005	.06	.079	.147	.65	.5	<.1	.5
04084468 GARNERS CREEK AT PARK STREET AT KAUKAUNA, WI (LAT 44 15 53N LONG 088 18 19W)													
FEB 2004													
10...	--	214	--	--	--	--	--	--	--	--	--	--	--
MAR													
15...	--	227	--	--	--	--	--	--	--	--	--	--	--
17...	--	223	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Organic carbon, water, fltrd, mg/L (00681)	1-Naphthol, water, fltrd 0.7u GF ug/L (49295)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	2-[(2-Et-6-Me-Ph)--amino]propan-1-ol, ug/L (61615)	2Chloro-2,6'-diethyl acetanilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl-6-methylaniline water, fltrd, ug/L (61620)	3,4-Dichloroaniline water fltrd, ug/L (61625)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH-d6, surrog, Sch2003 wat flt percent recovry (99995)	Atrazine, water, fltrd, ug/L (39632)
04085188 RIO CREEK AT PHEASANT ROAD NEAR RIO CREEK, WI (LAT 44 36 12N LONG 087 31 37W)													
NOV 2003													
13...	12.6	<.09	<.006	<.1	<.005	E.008	<.004	<.004	<.006	<.006	<.005	79.6	.025
FEB 2004													
17...	9.9	<.09	<.006	<.1	<.005	E.026	<.004	<.004	<.006	<.006	<.005	87.0	.026
APR													
08...	15.1	<.09	<.006	--	<.005	E.019	<.004	<.004	<.006	<.006	<.005	87.6	.029
MAY													
19...	20.3	<.09	<.006	--	<.005	E.026	<.004	<.004	<.006	<.006	<.005	89.0	.060
JUN													
17...	19.8	<.09	<.006	--	<.005	E.035	<.004	<.004	<.006	.014	<.005	89.0	.309
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
31...	10.0	<.09	<.006	--	<.005	E.057	<.004	<.004	<.006	<.006	<.005	97.5	.143
04085068 ASHWAUBENON CREEK NEAR LITTLE RAPIDS, WI (LAT 44 24 51N LONG 088 07 37W)													
MAY 2004													
17...	15.0	<.09	<.006	--	<.005	E.190	<.004	<.004	<.006	1.71	<.005	97.6	E7.09
040851325 BAIRD CREEK AT SUPERIOR ROAD AT GREEN BAY, WI (LAT 44 30 04N LONG 087 56 10W)													
NOV 2003													
13...	9.3	E.10	<.006	<.1	<.005	E.008	<.004	<.004	<.006	<.006	<.005	79.3	.046
FEB 2004													
19...	4.8	M	<.006	<.1	<.005	E.003	<.004	<.004	<.006	<.006	<.005	84.5	.018
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
08...	21.8	<.09	<.006	--	<.005	E.020	<.004	<.004	<.006	.007	<.005	92.0	.040
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
17...	30.9	<.09	<.006	--	<.005	E.082	<.004	<.004	<.006	<.006	<.005	100	1.86
JUN													
17...	19.9	<.09	<.006	--	<.005	E.093	<.004	<.004	<.006	.010	<.005	90.1	.932
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
27...	5.2	<.09	<.006	--	<.005	E.007	<.004	<.004	<.006	<.006	<.005	87.4	.126
04087070 LITTLE MENOMONEE RIVER AT MILWAUKEE, WI (LAT 43 07 25N LONG 088 02 37W)													
JUL 2004													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	5.3	<.09	<.006	--	<.005	E.024	<.004	.029	<.006	<.006	<.005	105	.038
04084468 GARNERS CREEK AT PARK STREET AT KAUKAUNA, WI (LAT 44 15 53N LONG 088 18 19W)													
FEB 2004													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Azinphosmethyl oxon, water, fltrd, ug/L (61635)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Chlorpyrifos oxon, water, fltrd, ug/L (61636)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Cyfluthrin, water, fltrd, ug/L (61585)	Cypermethrin water, fltrd, ug/L (61586)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon oxon, water, fltrd, ug/L (61638)	Diazinon, water, fltrd, ug/L (39572)
04085188 RIO CREEK AT PHEASANT ROAD NEAR RIO CREEK, WI (LAT 44 36 12N LONG 087 31 37W)													
NOV 2003													
13...	<.03	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
FEB 2004													
17...	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
APR													
08...	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
MAY													
19...	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
JUN													
17...	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.004	<.012	<.01	<.005
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
31...	<.07	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
04085068 ASHWAUBENON CREEK NEAR LITTLE RAPIDS, WI (LAT 44 24 51N LONG 088 07 37W)													
MAY													
2004													
17...	<.02	<.050	E.005	<.041	<.06	.006	<.006	<.008	<.009	E.003	E.007	<.01	<.005
040851325 BAIRD CREEK AT SUPERIOR ROAD AT GREEN BAY, WI (LAT 44 30 04N LONG 087 56 10W)													
NOV 2003													
13...	<.03	<.050	<.010	E.216	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
FEB 2004													
19...	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
08...	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
17...	<.02	<.050	<.010	E.024	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
JUN													
17...	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
27...	<.07	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
04087070 LITTLE MENOMONEE RIVER AT MILWAUKEE, WI (LAT 43 07 25N LONG 088 02 37W)													
JUL 2004													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	<.07	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005
04084468 GARNERS CREEK AT PARK STREET AT KAUKAUNA, WI (LAT 44 15 53N LONG 088 18 19W)													
FEB 2004													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Diazinon-d10 surrog, Sch2003 wat flt percent recovry (99994)	Dicrotophos, water fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)	Dimethoate, water, fltrd 0.7u GF ug/L (82662)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Fenamiphos sulfone water, fltrd, ug/L (61645)	Fenamiphos sulfoxide, water, fltrd, ug/L (61646)	Fenamiphos, water, fltrd, ug/L (61591)	Desulfinylfipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)
04085188 RIO CREEK AT PHEASANT ROAD NEAR RIO CREEK, WI (LAT 44 36 12N LONG 087 31 37W)													
NOV 2003													
13...	97.2	<.08	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016
FEB 2004													
17...	104	<.08	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016
APR													
08...	100	<.08	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016
MAY													
19...	93.0	<.08	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016
JUN													
17...	96.4	<.08	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
31...	112	<.08	<.009	<.006	<.0020	<.004	<.049	<.04	<.03	<.029	<.013	<.024	<.016
04085068 ASHWAUBENON CREEK NEAR LITTLE RAPIDS, WI (LAT 44 24 51N LONG 088 07 37W)													
MAY 2004													
17...	99.4	<.08	<.009	<.006	<.03	<.004	<.008	<.03	<.03	E.001	E.006	E.013	.063
040851325 BAIRD CREEK AT SUPERIOR ROAD AT GREEN BAY, WI (LAT 44 30 04N LONG 087 56 10W)													
NOV 2003													
13...	100	<.08	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016
FEB 2004													
19...	94.7	<.08	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
08...	98.1	<.08	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
17...	99.1	<.08	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	E.007
JUN													
17...	96.5	<.08	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
27...	92.1	<.08	<.009	<.006	<.0020	<.004	<.049	<.04	<.03	<.029	<.013	<.024	E.005
04087070 LITTLE MENOMONEE RIVER AT MILWAUKEE, WI (LAT 43 07 25N LONG 088 02 37W)													
JUL 2004													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	127	<.08	<.009	<.006	<.0020	<.004	<.049	<.04	<.03	<.029	<.013	<.024	<.016
04084468 GARNERS CREEK AT PARK STREET AT KAUKAUNA, WI (LAT 44 15 53N LONG 088 18 19W)													
FEB 2004													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	Hexazinone, water, fltrd, ug/L (04025)	Iprodione, water, fltrd, ug/L (61593)	Isofenphos, water, fltrd, ug/L (61594)	Malaoxon, water, fltrd, ug/L (61652)	Malathion, water, fltrd, ug/L (39532)	Metalaxyl, water, fltrd, ug/L (61596)	Methialthion water, fltrd, ug/L (61598)	Methyl paraoxon, water, fltrd, ug/L (61664)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)
04085188 RIO CREEK AT PHEASANT ROAD NEAR RIO CREEK, WI (LAT 44 36 12N LONG 087 31 37W)													
NOV 2003													
13...	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	.030	<.03	<.015	.033	<.006
FEB 2004													
17...	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	.051	<.006
APR													
08...	<.002	<.003	<.013	<1	<.003	<.015	<.027	<.005	<.006	<.03	<.015	.021	<.006
MAY													
19...	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	.024	<.006
JUN													
17...	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	.190	<.006
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
31...	<.003	<.003	<.013	<.387	<.003	<.030	<.027	<.005	<.006	<.03	<.015	.076	<.006
04085068 ASHWAUBENON CREEK NEAR LITTLE RAPIDS, WI (LAT 44 24 51N LONG 088 07 37W)													
MAY													
2004													
17...	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.020	<.006	<.03	<.015	E4.40	<.006
040851325 BAIRD CREEK AT SUPERIOR ROAD AT GREEN BAY, WI (LAT 44 30 04N LONG 087 56 10W)													
NOV 2003													
13...	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	.102	<.006
FEB 2004													
19...	<.002	<.003	<.013	<1	<.003	<.015	<.027	<.005	<.006	<.03	<.015	E.010	<.006
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
08...	<.002	<.003	<.013	<1	<.003	<.015	<.027	<.005	<.006	<.03	<.015	.046	<.006
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
17...	<.002	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	.394	<.006
JUN													
17...	<.006	<.003	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	1.03	.007
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
27...	<.003	<.003	<.013	<.387	<.003	<.030	<.027	<.005	<.006	<.03	<.015	.050	<.006
04087070 LITTLE MENOMONEE RIVER AT MILWAUKEE, WI (LAT 43 07 25N LONG 088 02 37W)													
JUL 2004													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	<.003	<.003	<.013	<.387	<.003	<.030	<.027	<.005	<.006	<.03	<.015	<.013	<.006
04084468 GARNERS CREEK AT PARK STREET AT KAUKAUNA, WI (LAT 44 15 53N LONG 088 18 19W)													
FEB 2004													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Myclobutanil water, fltrd, ug/L (61599)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbufos oxon sulfone water, fltrd, ug/L (61674)	Terbufos, water, fltrd 0.7u GF ug/L (82675)
04085188 RIO CREEK AT PHEASANT ROAD NEAR RIO CREEK, WI (LAT 44 36 12N LONG 087 31 37W)													
NOV 2003													
13...	<.008	<.022	<.10	<.011	--	<.008	.01	<.005	<.004	E.004	<.02	<.07	<.02
FEB 2004													
17...	<.008	<.022	<.10	<.011	<.06	<.008	.01	<.005	<.004	E.004	<.02	<.07	<.02
APR													
08...	<.008	<.022	<.10	<.011	--	--	<.01	<.005	<.004	.025	<.02	<.07	<.02
MAY													
19...	<.008	<.022	<.10	<.011	<.06	<.008	E.01	<.005	<.004	.018	<.02	<.07	<.02
JUN													
17...	<.008	<.022	<.10	<.011	<.06	<.008	.05	<.005	<.004	.017	<.02	<.07	<.02
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
31...	<.008	<.022	<.10	<.011	<.05	<.008	.01	<.005	<.004	.008	<.02	<.07	<.02
04085068 ASHWAUBENON CREEK NEAR LITTLE RAPIDS, WI (LAT 44 24 51N LONG 088 07 37W)													
MAY 2004													
17...	<.008	<.022	<.10	<.011	<.06	<.008	<.01	<.005	<.004	.028	<.02	<.07	<.02
040851325 BAIRD CREEK AT SUPERIOR ROAD AT GREEN BAY, WI (LAT 44 30 04N LONG 087 56 10W)													
NOV 2003													
13...	<.008	<.022	<.10	<.011	--	--	M	<.005	<.004	E.004	<.02	<.07	<.02
FEB 2004													
19...	<.008	<.022	<.10	<.011	<.06	<.008	M	<.005	<.004	E.002	<.02	<.07	<.02
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
08...	<.008	<.022	<.10	<.011	<.06	<.008	<.01	<.005	<.004	.005	<.02	<.07	<.02
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
17...	<.008	<.022	<.10	<.011	<.06	<.008	<.01	<.005	<.004	.622	<.02	<.07	<.02
JUN													
17...	<.008	<.022	<.10	<.011	<.06	<.008	<.01	<.005	<.004	.024	<.02	<.07	<.02
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
27...	<.008	<.022	<.10	<.011	<.05	<.008	<.01	<.005	<.004	<.005	<.02	<.07	<.02
04087070 LITTLE MENOMONEE RIVER AT MILWAUKEE, WI (LAT 43 07 25N LONG 088 02 37W)													
JUL 2004													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	<.008	<.022	<.10	<.011	<.05	<.008	.02	<.005	<.004	<.005	<.05	<.07	<.02
04084468 GARNERS CREEK AT PARK STREET AT KAUKAUNA, WI (LAT 44 15 53N LONG 088 18 19W)													
FEB 2004													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Ter-buthyl-azine, water, fltrd, ug/L (04022)	Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661)	Di-chlor-vos, water fltrd, ug/L (38775)	Sus-pended sedi-ment concen-tration mg/L (80154)
04085188 RIO CREEK AT PHEASANT ROAD NEAR RIO CREEK, WI (LAT 44 36 12N LONG 087 31 37W)				
NOV 2003				
13...	<.01	<.009	<.01	92
FEB 2004				
17...	<.01	<.009	<.01	73
APR				
08...	<.01	<.009	<.01	34
MAY				
19...	<.01	<.009	<.01	82
JUN				
17...	<.01	<.009	<.01	79
JUL				
12...	--	--	--	--
AUG				
31...	<.01	<.009	<.01	132
04085068 ASHWAUBENON CREEK NEAR LITTLE RAPIDS, WI (LAT 44 24 51N LONG 088 07 37W)				
MAY 2004				
17...	<.01	E.004	<.01	115
040851325 BAIRD CREEK AT SUPERIOR ROAD AT GREEN BAY, WI (LAT 44 30 04N LONG 087 56 10W)				
NOV 2003				
13...	<.01	<.009	<.01	73
FEB 2004				
19...	<.01	<.009	<.01	75
25...	--	--	--	--
MAR				
01...	--	--	--	--
17...	--	--	--	--
APR				
08...	<.01	<.009	<.01	69
20...	--	--	--	--
MAY				
17...	<.01	<.009	<.01	106
JUN				
17...	<.01	<.009	<.01	229
JUL				
13...	--	--	--	--
AUG				
27...	<.01	<.009	<.01	151
04087070 LITTLE MENOMONEE RIVER AT MILWAUKEE, WI (LAT 43 07 25N LONG 088 02 37W)				
JUL 2004				
15...	--	--	--	--
AUG				
18...	--	--	--	--
23...	<.01	<.009	<.01	109
04084468 GARNERS CREEK AT PARK STREET AT KAUKAUNA, WI (LAT 44 15 53N LONG 088 18 19W)				
FEB 2004				
10...	--	--	--	--
MAR				
15...	--	--	--	--
17...	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (00417)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)
04084468 GARNERS CREEK AT PARK STREET AT KAUKAUNA, WI (LAT 44 15 53N LONG 088 18 19W)													
APR 2004													
20...	1000	--	70	--	--	--	--	--	--	253	--	--	--
MAY													
19...	1530	4.0	40	753	10.1	105	7.8	1,170	16.5	--	318	373	7
JUN													
07...	1505	--	70	--	--	--	--	--	--	308	--	--	--
14...	1215	--	70	--	--	--	--	--	--	234	--	--	--
JUL													
07...	1010	--	70	--	--	--	--	--	--	170	--	--	--
13...	1825	--	--	--	7.9	--	8.0	1,050	21.7	--	--	--	--
26...	1500	--	70	--	--	--	--	--	--	284	--	--	--
AUG													
17...	1400	--	--	--	--	--	--	--	--	142	--	--	--
30...	1120	1.1	40	746	7.8	80	8.0	707	15.2	--	165	198	--
SEP													
16...	1415	--	--	--	--	--	--	--	--	211	--	--	--
04085270 JAMBO CREEK AT JAMBO CREEK ROAD NEAR MISHICOT, WI (LAT 44 15 43N LONG 087 40 52W)													
MAY 2004													
18...	1115	22	10	745	8.6	87	7.9	544	15.0	--	220	266	--
JUL													
12...	1303	--	--	--	8.5	--	7.9	644	18.3	--	--	--	--
AUG													
16...	1335	--	--	--	8.9	--	7.7	789	14.8	--	--	--	--
26...	0900	1.4	70	742	6.8	72	7.8	700	16.5	--	275	333	--
04085123 BOWER CREEK TRIBUTARY @ DALEY DRIVE NR BELLEVUE,WI (LAT 44 27 15N LONG 087 58 46W)													
MAY 2004													
18...	1345	6.0	10	751	13.7	141	8.4	997	16.0	--	290	346	4
040851932 KEWAUNEE RIVER TRIB @ LOWELL ROAD NR LUXEMBURG, WI (LAT 44 35 33N LONG 087 42 48W)													
MAY 2004													
19...	1015	2.7	70	757	8.3	82	7.8	781	14.5	--	309	374	--
JUL													
12...	1911	--	--	--	16.2	--	8.2	713	22.0	--	--	--	--
AUG													
31...	0810	.12	70	751	7.9	80	7.9	586	15.6	--	230	278	--
04078085 BLACK OTTER CREEK NEAR HORTONVILLE, WI (LAT 44 20 09N LONG 088 38 39W)													
MAY 2004													
19...	1310	11	40	756	9.6	95	8.1	550	14.5	--	242	291	--
JUL													
13...	1706	--	--	--	8.4	--	8.5	630	22.6	--	--	--	--
AUG													
30...	1010	2.2	70	752	6.3	67	7.8	636	17.5	--	253	303	3
04072016 DUCK CREEK AT MURPHY CORNER, WI (LAT 44 23 11N LONG 088 19 29W)													
MAY 2004													
19...	1520	21	10	743	12.0	129	8.1	684	17.5	--	290	350	--
JUL													
13...	1500	--	--	--	8.6	--	8.1	815	23.6	--	--	--	--
AUG													
27...	0830	--	70	748	4.2	48	7.1	680	20.4	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Chloride, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, wat unf by analysis, mg/L (62855)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)
04084468 GARNERS CREEK AT PARK STREET AT KAUKAUNA, WI (LAT 44 15 53N LONG 088 18 19W)													
APR 2004													
20...	187	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
19...	116	119	<.04	1.54	.038	.14	.011	.082	2.22	1.5	<.1	1.5	6.3
JUN													
07...	108	--	--	--	--	--	--	--	--	--	--	--	--
14...	54.3	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	66.7	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	120	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
17...	84.4	--	--	--	--	--	--	--	--	--	--	--	--
30...	65.6	86.8	<.04	.34	<.008	.08	.047	.107	.76	.8	<.1	.8	5.3
SEP													
16...	92.4	--	--	--	--	--	--	--	--	--	--	--	--
04085270 JAMBO CREEK AT JAMBO CREEK ROAD NEAR MISHICOT, WI (LAT 44 15 43N LONG 087 40 52W)													
MAY 2004													
18...	28.8	17.0	<.04	<.06	E.006	.08	.014	.100	1.77	.9	<.1	.9	26.0
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	24.6	40.9	<.04	4.40	.035	.04	.013	.033	4.86	.3	<.1	.3	5.0
04085123 BOWER CREEK TRIBUTARY @ DALEY DRIVE NR BELLEVUE,WI (LAT 44 27 15N LONG 087 58 46W)													
MAY 2004													
18...	99.0	74.9	<.04	1.61	.087	.08	.059	.119	3.18	.5	<.1	.4	12.7
040851932 KEWAUNEE RIVER TRIB @ LOWELL ROAD NR LUXEMBURG, WI (LAT 44 35 33N LONG 087 42 48W)													
MAY 2004													
19...	56.2	28.8	E.03	.94	.029	.06	.113	.185	2.11	.3	<.1	.3	13.5
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
31...	39.8	22.5	<.04	<.06	<.008	.05	.047	.085	.60	.3	<.1	.3	6.2
04078085 BLACK OTTER CREEK NEAR HORTONVILLE, WI (LAT 44 20 09N LONG 088 38 39W)													
MAY 2004													
19...	26.9	16.2	<.04	.67	.040	.16	.008	.064	2.17	.9	<.1	.9	18.6
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
30...	43.6	11.5	.06	.78	.024	.06	.044	.084	1.76	.4	<.1	.4	10.4
04072016 DUCK CREEK AT MURPHY CORNER, WI (LAT 44 23 11N LONG 088 19 29W)													
MAY 2004													
19...	43.3	52.6	<.04	2.80	.030	.03	.050	.094	4.38	.3	<.1	.3	29.3
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
27...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	1-Naph-thol, water, fltrd 0.7u GF ug/L (49295)	2,6-Di-ethyl-aniline water fltrd 0.7u GF ug/L (82660)	2Chloro -2,6'-' diethyl acet-anilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl -6-methyl-aniline water, fltrd, ug/L (61620)	3,4-Di-chloro-aniline water fltrd, ug/L (61625)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-HCH-d6, surrog, Sch2003 wat flt percent recovry (99995)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl oxon, water, fltrd, ug/L (61635)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)
04084468 GARNERS CREEK AT PARK STREET AT KAUKAUNA, WI (LAT 44 15 53N LONG 088 18 19W)													
APR 2004													
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
19...	<.09	<.006	<.005	E.035	<.004	<.004	E.013	.413	.013	95.8	.071	<.02	<.050
JUN													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	<.09	<.006	<.005	E.012	<.004	.012	E.004	<.006	<.005	96.6	.126	<.07	<.050
SEP													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
04085270 JAMBO CREEK AT JAMBO CREEK ROAD NEAR MISHICOT, WI (LAT 44 15 43N LONG 087 40 52W)													
MAY													
2004													
18...	<.09	<.006	<.005	E.014	<.004	<.004	<.006	E.005	<.005	79.9	.062	--	<.050
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.09	<.006	<.005	E.004	<.004	<.004	<.006	<.006	<.005	82.9	E.005	<.07	<.050
04085123 BOWER CREEK TRIBUTARY @ DALEY DRIVE NR BELLEVUE,WI (LAT 44 27 15N LONG 087 58 46W)													
MAY													
2004													
18...	<.09	<.006	<.005	E.163	<.004	<.004	<.006	.013	<.005	104	E4.98	<.02	<.050
040851932 KEWAUNEE RIVER TRIB @ LOWELL ROAD NR LUXEMBURG, WI (LAT 44 35 33N LONG 087 42 48W)													
MAY													
2004													
19...	<.09	<.006	<.005	E.036	<.004	<.004	<.006	.022	<.020	86.8	.179	<.02	<.050
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
31...	<.09	<.006	<.005	E.041	<.004	<.004	<.006	<.006	<.005	100	.382	<.07	<.050
04078085 BLACK OTTER CREEK NEAR HORTONVILLE, WI (LAT 44 20 09N LONG 088 38 39W)													
MAY													
2004													
19...	<.09	<.006	<.005	E.052	<.004	<.004	<.006	.013	.011	84.4	.602	<.02	<.050
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
30...	<.09	<.006	<.005	E.059	<.004	<.004	<.006	<.006	<.005	84.1	.135	<.07	<.050
04072016 DUCK CREEK AT MURPHY CORNER, WI (LAT 44 23 11N LONG 088 19 29W)													
MAY													
2004													
19...	<.09	<.006	<.005	E.052	<.004	.004	<.006	.332	<.005	96.9	.496	<.02	<.050
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
27...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)	Car-baryl, water, fltrd 0.7u GF ug/L (82680)	Chlor-pyrifos oxon, water, fltrd, ug/L (61636)	Chlor-pyrifos water, fltrd, ug/L (38933)	cis-Per-methrin water fltrd 0.7u GF ug/L (82687)	Cyflu-thrin, water, fltrd, ug/L (61585)	Cyper-methrin water, fltrd, ug/L (61586)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulf-inyl fipro-nil, water, fltrd, ug/L (62170)	Diaz-inon oxon, water, fltrd, ug/L (61638)	Diazi-non, water, fltrd, ug/L (39572)	Diazi-non-d10 surrog, Sch2003 wat flt percent recovry (99994)	Dicro-tophos, water fltrd, ug/L (38454)
04084468 GARNERS CREEK AT PARK STREET AT KAUKAUNA, WI (LAT 44 15 53N LONG 088 18 19W)													
APR 2004													
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
19...	<.010	E.020	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	.012	E130	<.08
JUN													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005	122	<.08
SEP													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
04085270 JAMBO CREEK AT JAMBO CREEK ROAD NEAR MISHICOT, WI (LAT 44 15 43N LONG 087 40 52W)													
MAY 2004													
18...	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005	89.2	<.08
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005	96.8	<.08
04085123 BOWER CREEK TRIBUTARY @ DALEY DRIVE NR BELLEVUE,WI (LAT 44 27 15N LONG 087 58 46W)													
MAY 2004													
18...	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005	98.9	<.08
040851932 KEWAUNEE RIVER TRIB @ LOWELL ROAD NR LUXEMBURG, WI (LAT 44 35 33N LONG 087 42 48W)													
MAY 2004													
19...	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005	97.3	<.08
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
31...	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005	116	<.08
04078085 BLACK OTTER CREEK NEAR HORTONVILLE, WI (LAT 44 20 09N LONG 088 38 39W)													
MAY 2004													
19...	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	E.003	95.5	<.08
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
30...	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005	93.4	<.08
04072016 DUCK CREEK AT MURPHY CORNER, WI (LAT 44 23 11N LONG 088 19 29W)													
MAY 2004													
19...	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005	118	<.08
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
27...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Dieldrin, water, fltrd, ug/L (39381)	Dimethoate, water, fltrd 0.7u GF ug/L (82662)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Fenamiphos sulfone water, fltrd, ug/L (61645)	Fenamiphos sulfoxide, water, fltrd, ug/L (61646)	Fenamiphos, water, fltrd, ug/L (61591)	Desulfinylfipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)
04084468 GARNERS CREEK AT PARK STREET AT KAUKAUNA, WI (LAT 44 15 53N LONG 088 18 19W)													
APR 2004													
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
19...	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.002	<.003
JUN													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	<.009	<.006	<.0020	<.004	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.003
SEP													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
04085270 JAMBO CREEK AT JAMBO CREEK ROAD NEAR MISHICOT, WI (LAT 44 15 43N LONG 087 40 52W)													
MAY 2004													
18...	<.009	<.006	<.03	<.004	<.030	--	<.03	<.029	<.013	<.024	<.016	<.010	<.003
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.009	<.006	<.0020	<.004	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.003
04085123 BOWER CREEK TRIBUTARY @ DALEY DRIVE NR BELLEVUE,WI (LAT 44 27 15N LONG 087 58 46W)													
MAY 2004													
18...	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.002	<.003
040851932 KEWAUNEE RIVER TRIB @ LOWELL ROAD NR LUXEMBURG, WI (LAT 44 35 33N LONG 087 42 48W)													
MAY 2004													
19...	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.002	<.003
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
31...	<.009	<.006	<.0020	<.004	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.003
04078085 BLACK OTTER CREEK NEAR HORTONVILLE, WI (LAT 44 20 09N LONG 088 38 39W)													
MAY 2004													
19...	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	E.007	<.002	<.003
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
30...	<.009	<.006	<.0020	<.015	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.003
04072016 DUCK CREEK AT MURPHY CORNER, WI (LAT 44 23 11N LONG 088 19 29W)													
MAY 2004													
19...	<.009	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.002	<.003
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
27...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Hexazinone, water, fltrd, ug/L (04025)	Iprodione, water, fltrd, ug/L (61593)	Isofenphos, water, fltrd, ug/L (61594)	Malaoxon, water, fltrd, ug/L (61652)	Malathion, water, fltrd, ug/L (39532)	Metalaxyl, water, fltrd, ug/L (61596)	Methialthion water, fltrd, ug/L (61598)	Methyl paraoxon, water, fltrd, ug/L (61664)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Myclobutanil water, fltrd, ug/L (61599)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)
04084468 GARNERS CREEK AT PARK STREET AT KAUKAUNA, WI (LAT 44 15 53N LONG 088 18 19W)													
APR 2004													
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
19...	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	.066	<.006	<.008	E.021
JUN													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	<.013	<.387	<.003	<.030	<.027	<.005	<.006	<.03	<.015	<.013	<.006	.018	<.022
SEP													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
04085270 JAMBO CREEK AT JAMBO CREEK ROAD NEAR MISHICOT, WI (LAT 44 15 43N LONG 087 40 52W)													
MAY 2004													
18...	<.013	<1	<.003	<.010	<.027	<.005	<.006	<.03	<.015	.102	<.006	<.008	<.022
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.013	<.387	<.003	<.030	<.027	<.005	<.006	<.03	<.015	<.013	<.006	<.008	<.022
04085123 BOWER CREEK TRIBUTARY @ DALEY DRIVE NR BELLEVUE,WI (LAT 44 27 15N LONG 087 58 46W)													
MAY 2004													
18...	<.013	<1	<.003	<.008	<.027	.017	<.006	<.03	<.015	2.55	<.006	<.008	<.022
040851932 KEWAUNEE RIVER TRIB @ LOWELL ROAD NR LUXEMBURG, WI (LAT 44 35 33N LONG 087 42 48W)													
MAY 2004													
19...	<.013	<1	<.003	<.009	<.027	<.005	<.006	<.03	<.015	.090	<.006	<.008	<.022
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
31...	<.013	<.387	<.003	<.030	<.027	<.005	<.006	<.03	<.015	.024	<.006	<.008	<.022
04078085 BLACK OTTER CREEK NEAR HORTONVILLE, WI (LAT 44 20 09N LONG 088 38 39W)													
MAY 2004													
19...	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	.880	<.006	<.008	<.022
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
30...	<.013	<.387	<.003	<.030	<.027	<.005	<.006	<.03	<.015	E.010	<.006	<.008	<.022
04072016 DUCK CREEK AT MURPHY CORNER, WI (LAT 44 23 11N LONG 088 19 29W)													
MAY 2004													
19...	<.013	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	.042	<.006	<.008	<.022
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
27...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbufos oxon sulfone water, fltrd, ug/L (61674)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Terbuthylazine, water, fltrd, ug/L (04022)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
04084468 GARNERS CREEK AT PARK STREET AT KAUKAUNA, WI (LAT 44 15 53N LONG 088 18 19W)													
APR 2004													
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
19...	<.10	<.011	--	<.008	.03	<.005	<.004	<.008	E.01	<.07	<.02	<.01	E.001
JUN													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	<.10	<.011	<.05	<.008	<.03	<.005	<.004	<.005	<.02	<.07	<.02	<.01	<.009
SEP													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
04085270 JAMBO CREEK AT JAMBO CREEK ROAD NEAR MISHICOT, WI (LAT 44 15 43N LONG 087 40 52W)													
MAY 2004													
18...	<.10	<.011	--	<.008	.01	<.005	<.004	.206	<.02	<.07	<.02	<.01	<.009
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.10	<.011	<.05	<.008	<.01	<.005	<.004	<.005	<.02	<.07	<.02	<.01	<.009
04085123 BOWER CREEK TRIBUTARY @ DALEY DRIVE NR BELLEVUE,WI (LAT 44 27 15N LONG 087 58 46W)													
MAY 2004													
18...	<.10	<.011	<.06	<.008	<.01	<.005	<.004	.074	<.02	<.07	<.02	<.01	<.009
040851932 KEWAUNEE RIVER TRIB @ LOWELL ROAD NR LUXEMBURG, WI (LAT 44 35 33N LONG 087 42 48W)													
MAY 2004													
19...	<.10	<.011	<.06	<.008	<.01	<.005	<.004	.030	<.02	<.07	<.02	<.01	<.009
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
31...	<.10	<.011	<.05	<.008	<.01	<.005	<.004	.009	<.02	<.07	<.02	<.01	<.009
04078085 BLACK OTTER CREEK NEAR HORTONVILLE, WI (LAT 44 20 09N LONG 088 38 39W)													
MAY 2004													
19...	<.10	<.011	<.06	<.008	M	<.005	<.004	.009	<.02	<.07	<.02	<.01	<.009
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
30...	<.10	<.011	<.05	<.008	.01	<.005	<.004	E.003	<.02	<.07	<.02	<.01	<.009
04072016 DUCK CREEK AT MURPHY CORNER, WI (LAT 44 23 11N LONG 088 19 29W)													
MAY 2004													
19...	<.10	<.011	--	<.008	<.01	<.005	<.004	.158	<.02	<.07	<.02	<.01	<.009
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
27...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Di-chlor-vos, water fltrd, ug/L (38775)	Sus-pended sedi-ment concen-tration mg/L (80154)
04084468 GARNERS CREEK AT PARK STREET AT KAUKAUNA, WI (LAT 44 15 53N LONG 088 18 19W)		
APR 2004		
20...	--	--
MAY		
19...	<.01	207
JUN		
07...	--	--
14...	--	--
JUL		
07...	--	--
13...	--	--
26...	--	--
AUG		
17...	--	--
30...	<.01	80
SEP		
16...	--	--
04085270 JAMBO CREEK AT JAMBO CREEK ROAD NEAR MISHICOT, WI (LAT 44 15 43N LONG 087 40 52W)		
MAY 2004		
18...	<.01	95
JUL		
12...	--	--
AUG		
16...	--	--
26...	<.01	113
04085123 BOWER CREEK TRIBUTARY @ DALEY DRIVE NR BELLEVUE,WI (LAT 44 27 15N LONG 087 58 46W)		
MAY 2004		
18...	<.01	219
040851932 KEWAUNEE RIVER TRIB @ LOWELL ROAD NR LUXEMBURG, WI (LAT 44 35 33N LONG 087 42 48W)		
MAY 2004		
19...	<.01	113
JUL		
12...	--	--
AUG		
31...	<.01	49
04078085 BLACK OTTER CREEK NEAR HORTONVILLE, WI (LAT 44 20 09N LONG 088 38 39W)		
MAY 2004		
19...	<.01	60
JUL		
13...	--	--
AUG		
30...	<.01	60
04072016 DUCK CREEK AT MURPHY CORNER, WI (LAT 44 23 11N LONG 088 19 29W)		
MAY 2004		
19...	<.01	131
JUL		
13...	--	--
AUG		
27...	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)
04085322 DEVILS RIVER AT ROSENCRANS ROAD NEAR MARIBEL, WI (LAT 44 18 33N LONG 087 49 36W)													
JUN 2004													
03...	1200	77	10	756	9.3	94	7.3	414	15.3	186	224	1	13.9
JUL													
12...	1625	--	--	--	9.3	--	8.1	706	18.2	--	--	--	--
AUG													
16...	1540	--	--	--	11.0	--	8.1	699	15.8	--	--	--	--
26...	1320	2.8	70	737	8.9	96	8.0	652	17.5	303	363	--	17.4
04085455 MEEME RIVER AT WASHINGTON ROAD NEAR CLEVELAND, WI (LAT 43 54 49N LONG 087 48 31W)													
JUN 2004													
03...	1540	33	40	757	10.4	109	7.6	617	17.3	267	320	3	20.7
JUL													
12...	1542	--	--	--	10.0	--	8.4	625	23.0	--	--	--	--
AUG													
16...	1138	--	--	--	10.2	--	8.0	620	16.9	--	--	--	--
26...	0850	5.5	70	748	7.5	83	7.6	566	19.4	269	321	4	15.7
04086699 PIGEON CREEK AT WILLIAMSBURG DR AT THEINSVILLE, WI (LAT 43 14 01N LONG 087 59 08W)													
JUN 2004													
04...	0830	11	10	759	10.8	103	7.6	712	12.9	268	319	3	52.7
JUL													
14...	1100	--	--	--	7.7	--	8.0	786	20.3	--	--	--	--
AUG													
23...	0920	.59	70	755	8.7	93	7.7	797	18.1	303	360	5	60.6
0408703164 LILY CREEK AT GOOD HOPE ROAD NR MENOMONEE FALLS,WI (LAT 43 08 54N LONG 088 04 53W)													
JUN 2004													
04...	1015	4.9	40	755	16.4	162	7.7	918	14.4	265	318	3	102
JUL													
14...	1307	--	--	--	10.8	--	8.1	904	--	--	--	--	--
AUG													
18...	0836	--	--	--	4.6	--	7.4	860	17.7	--	--	--	--
24...	0730	.20	70	742	6.4	70	7.9	937	18.8	236	285	--	126
055437901 FOX RIVER AT RIVER ROAD NEAR SUSSEX, WI (LAT 43 06 27N LONG 088 10 19W)													
JUN 2004													
10...	1045	27	40	748	7.0	73	7.4	889	16.7	254	307	--	92.4
JUL													
14...	1407	--	--	--	7.0	--	7.7	945	22.5	--	--	--	--
AUG													
18...	0945	--	--	--	8.4	--	7.8	1,020	17.0	--	--	--	--
25...	0750	1.5	70	740	5.5	61	7.8	1,030	18.9	258	312	--	106
04087213 ROOT RIVER AT LAYTON AVENUE AT GREENFIELD, WI (LAT 42 57 32N LONG 088 02 24W)													
JUN 2004													
16...	1030	15	40	751	8.4	86	7.5	1,180	15.8	316	381	2	149
JUL													
15...	1805	--	--	--	6.6	--	7.8	1,450	19.7	--	--	--	--
AUG													
18...	1315	--	--	--	5.8	--	7.5	1,430	16.9	--	--	--	--
SEP													
01...	1520	1.5	70	756	8.1	86	7.3	1,300	17.8	286	343	3	187

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, wat unf by analysis, mg/L (62855)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	1-Naphthol, water, fltrd 0.7u GF ug/L (49295)
04085322 DEVILS RIVER AT ROSENCRANS ROAD NEAR MARIBEL, WI (LAT 44 18 33N LONG 087 49 36W)													
JUN 2004													
03...	11.0	<.04	.19	.021	.14	.146	.22	1.55	1.2	<.1	1.2	17.9	--
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	29.9	<.04	.86	.035	.04	.034	.064	1.51	.3	<.1	.3	5.8	<.09
04085455 MEEME RIVER AT WASHINGTON ROAD NEAR CLEVELAND, WI (LAT 43 54 49N LONG 087 48 31W)													
JUN 2004													
03...	18.2	.05	3.39	.058	.15	.166	.23	4.79	1.2	<.1	1.1	11.6	--
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	20.2	<.04	.78	.017	.06	.067	.119	1.28	.7	<.1	.7	4.9	<.09
04086699 PIGEON CREEK AT WILLIAMSBURG DR AT THEINSVILLE, WI (LAT 43 14 01N LONG 087 59 08W)													
JUN 2004													
04...	22.4	<.04	.51	.009	.10	.016	.048	1.13	1.0	<.1	1.0	5.5	--
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
23...	36.6	<.04	.27	<.008	.10	.013	.065	.65	.9	<.1	.8	3.8	<.09
0408703164 LILY CREEK AT GOOD HOPE ROAD NR MENOMONEE FALLS,WI (LAT 43 08 54N LONG 088 04 53W)													
JUN 2004													
04...	40.5	<.04	1.21	.015	.05	.011	.040	1.73	.6	<.1	.5	4.3	--
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	53.7	<.04	.08	<.008	.10	.013	.071	.58	1.6	<.1	1.6	3.4	<.09
055437901 FOX RIVER AT RIVER ROAD NEAR SUSSEX, WI (LAT 43 06 27N LONG 088 10 19W)													
JUN 2004													
10...	53.5	.07	.87	.020	.35	.013	.110	1.44	3.9	<.1	3.8	7.8	<.09
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	110	<.04	.84	.015	.06	E.004	.035	1.18	.4	<.1	.4	2.8	<.09
04087213 ROOT RIVER AT LAYTON AVENUE AT GREENFIELD, WI (LAT 42 57 32N LONG 088 02 24W)													
JUN 2004													
16...	49.6	<.04	1.51	.049	.06	.024	.076	2.12	.6	<.1	.6	5.7	<.09
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
01...	62.9	.06	.58	.015	.04	.019	.067	1.06	.7	<.1	.7	4.8	<.09

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	2,6-Di-ethyl-aniline water fltrd 0.7u GF ug/L (82660)	2Chloro-2,6'-' diethyl acet-anilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl-6-methyl-aniline water, fltrd, ug/L (61620)	3,4-Di-chloro-aniline water fltrd, ug/L (61625)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-HCH-d6, surrog, Sch2003 wat flt percent recovry (99995)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl oxon, water, fltrd, ug/L (61635)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)
04085322 DEVILS RIVER AT ROSENCRANS ROAD NEAR MARIBEL, WI (LAT 44 18 33N LONG 087 49 36W)													
JUN 2004													
03...	<.006	<.005	E.050	<.004	<.004	--	<.006	<.005	95.5	.310	--	<.050	<.010
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.006	<.005	E.006	<.004	<.004	<.006	<.006	<.005	104	.009	<.07	<.050	<.010
04085455 MEEME RIVER AT WASHINGTON ROAD NEAR CLEVELAND, WI (LAT 43 54 49N LONG 087 48 31W)													
JUN 2004													
03...	<.006	<.005	E.028	<.004	<.004	--	E.005	<.005	93.3	.074	--	<.050	<.010
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.006	<.005	E.016	<.004	<.004	<.006	<.006	<.005	87.9	.024	<.01	<.050	<.010
04086699 PIGEON CREEK AT WILLIAMSBURG DR AT THEINSVILLE, WI (LAT 43 14 01N LONG 087 59 08W)													
JUN 2004													
04...	<.006	<.005	E.016	<.004	<.004	--	.011	<.005	93.2	.031	--	<.050	<.010
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
23...	<.006	<.005	E.007	<.004	.010	<.006	<.006	<.005	84.7	.012	<.07	<.050	<.010
0408703164 LILY CREEK AT GOOD HOPE ROAD NR MENOMONEE FALLS,WI (LAT 43 08 54N LONG 088 04 53W)													
JUN 2004													
04...	<.006	<.005	E.022	<.004	<.004	--	.010	.030	90.3	.086	--	<.050	<.010
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	<.006	<.005	E.014	<.004	<.004	<.006	<.006	<.005	97.2	.027	<.07	<.050	<.010
055437901 FOX RIVER AT RIVER ROAD NEAR SUSSEX, WI (LAT 43 06 27N LONG 088 10 19W)													
JUN 2004													
10...	<.006	<.005	E.038	<.004	<.004	<.006	.033	<.005	83.1	.220	<.02	<.050	<.010
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.006	E.003	E.009	<.004	<.004	<.006	<.006	<.005	76.9	.012	<.07	<.050	<.010
04087213 ROOT RIVER AT LAYTON AVENUE AT GREENFIELD, WI (LAT 42 57 32N LONG 088 02 24W)													
JUN 2004													
16...	<.006	<.005	E.023	<.004	<.004	E.007	.016	<.005	89.8	.045	<.02	<.050	<.010
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
01...	<.006	<.005	<.006	<.004	<.004	<.006	<.006	<.005	99.5	E.006	<.07	<.050	<.010

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Chlorpyrifos oxon, water, fltrd, ug/L (61636)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Cyfluthrin, water, fltrd, ug/L (61585)	Cypermethrin water, fltrd, ug/L (61586)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon oxon, water, fltrd, ug/L (61638)	Diazinon, water, fltrd, ug/L (39572)	Diazinon-d10 surrog, Sch2003 wat flt percent recovry (99994)	Dicrotophos, water fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)
04085322 DEVILS RIVER AT ROSENCRANS ROAD NEAR MARIBEL, WI (LAT 44 18 33N LONG 087 49 36W)													
JUN 2004													
03...	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005	91.9	<.12	<.009
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005	105	<.08	<.009
04085455 MEEME RIVER AT WASHINGTON ROAD NEAR CLEVELAND, WI (LAT 43 54 49N LONG 087 48 31W)													
JUN 2004													
03...	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005	94.7	<.12	<.009
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005	87.5	<.08	<.009
04086699 PIGEON CREEK AT WILLIAMSBURG DR AT THEINSVILLE, WI (LAT 43 14 01N LONG 087 59 08W)													
JUN 2004													
04...	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	.015	96.2	<.12	<.009
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
23...	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005	89.5	<.08	<.009
0408703164 LILY CREEK AT GOOD HOPE ROAD NR MENOMONEE FALLS,WI (LAT 43 08 54N LONG 088 04 53W)													
JUN 2004													
04...	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	E.004	96.4	<.12	<.009
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005	110	<.08	<.009
055437901 FOX RIVER AT RIVER ROAD NEAR SUSSEX, WI (LAT 43 06 27N LONG 088 10 19W)													
JUN 2004													
10...	E.008	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.007	109	<.08	<.009
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005	87.2	<.08	<.009
04087213 ROOT RIVER AT LAYTON AVENUE AT GREENFIELD, WI (LAT 42 57 32N LONG 088 02 24W)													
JUN 2004													
16...	E.011	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	.015	117	<.08	<.009
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
01...	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	<.005	112	<.08	<.009

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Dimeth-oate, water, fltrd 0.7u GF ug/L (82662)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Fenami-phos sulfone water, fltrd, ug/L (61645)	Fenami-phos sulf-oxide, water, fltrd, ug/L (61646)	Fenami-phos, water, fltrd, ug/L (61591)	Desulf-inyl-fipro-nil amide, wat flt ug/L (62169)	Fipro-nil sulfide water, fltrd, ug/L (62167)	Fipro-nil sulfone water, fltrd, ug/L (62168)	Fipro-nil, water, fltrd, ug/L (62166)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	Hexa-zinone, water, fltrd, ug/L (04025)
04085322 DEVILS RIVER AT ROSENCRANS ROAD NEAR MARIBEL, WI (LAT 44 18 33N LONG 087 49 36W)													
JUN 2004													
03...	<.031	<.03	<.004	<.008	--	<.03	<.029	<.013	<.024	<.016	<.002	<.003	<.013
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.006	<.0020	<.004	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.003	<.013
04085455 MEEME RIVER AT WASHINGTON ROAD NEAR CLEVELAND, WI (LAT 43 54 49N LONG 087 48 31W)													
JUN 2004													
03...	<.031	<.03	<.004	<.008	--	<.03	<.029	<.013	<.024	<.016	<.002	<.003	<.013
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.006	<.0020	<.004	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.003	<.013
04086699 PIGEON CREEK AT WILLIAMSBURG DR AT THEINSVILLE, WI (LAT 43 14 01N LONG 087 59 08W)													
JUN 2004													
04...	<.031	<.03	<.004	<.008	--	<.03	<.029	<.013	<.024	<.016	<.002	<.003	<.013
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
23...	<.006	<.0020	<.004	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.003	<.013
0408703164 LILY CREEK AT GOOD HOPE ROAD NR MENOMONEE FALLS,WI (LAT 43 08 54N LONG 088 04 53W)													
JUN 2004													
04...	<.031	<.03	<.004	<.008	--	<.03	<.029	<.013	<.024	<.016	<.002	<.003	<.013
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	<.006	<.0020	<.004	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.003	<.013
055437901 FOX RIVER AT RIVER ROAD NEAR SUSSEX, WI (LAT 43 06 27N LONG 088 10 19W)													
JUN 2004													
10...	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.002	<.003	<.013
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.006	<.0020	<.004	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.003	<.013
04087213 ROOT RIVER AT LAYTON AVENUE AT GREENFIELD, WI (LAT 42 57 32N LONG 088 02 24W)													
JUN 2004													
16...	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013	<.024	E.002	<.002	<.003	<.013
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
01...	<.006	<.0020	<.004	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.003	<.013

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Iprodione, water, fltrd, ug/L (61593)	Isofenphos, water, fltrd, ug/L (61594)	Malaoxon, water, fltrd, ug/L (61652)	Malathion, water, fltrd, ug/L (39532)	Metalaxyl, water, fltrd, ug/L (61596)	Methialthion water, fltrd, ug/L (61598)	Methyl paraoxon, water, fltrd, ug/L (61664)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Myclobutanil water, fltrd, ug/L (61599)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate oxon, water, fltrd, ug/L (61666)
04085322 DEVILS RIVER AT ROSENCRANS ROAD NEAR MARIBEL, WI (LAT 44 18 33N LONG 087 49 36W)													
JUN 2004													
03...	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	.569	<.006	<.008	<.022	<.10
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.387	<.003	<.030	<.027	<.005	<.006	<.03	<.015	E.006	<.006	<.008	<.022	<.10
04085455 MEEME RIVER AT WASHINGTON ROAD NEAR CLEVELAND, WI (LAT 43 54 49N LONG 087 48 31W)													
JUN 2004													
03...	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	.153	<.006	<.008	<.022	<.10
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.387	<.003	<.030	<.027	<.005	<.006	<.03	<.015	E.009	<.006	<.008	<.022	<.10
04086699 PIGEON CREEK AT WILLIAMSBURG DR AT THEINSVILLE, WI (LAT 43 14 01N LONG 087 59 08W)													
JUN 2004													
04...	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	E.009	<.006	.012	<.022	<.10
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
23...	<.387	<.003	<.030	<.027	<.005	<.006	<.03	<.015	E.004	<.006	E.005	<.022	<.10
0408703164 LILY CREEK AT GOOD HOPE ROAD NR MENOMONEE FALLS,WI (LAT 43 08 54N LONG 088 04 53W)													
JUN 2004													
04...	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	E.012	<.009	<.008	<.022	<.10
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	<.387	<.003	<.030	<.027	<.005	<.006	<.03	<.015	<.013	<.006	<.008	<.022	<.10
055437901 FOX RIVER AT RIVER ROAD NEAR SUSSEX, WI (LAT 43 06 27N LONG 088 10 19W)													
JUN 2004													
10...	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	.097	.013	<.008	<.022	<.10
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.387	<.003	<.030	<.027	<.005	<.006	<.03	<.015	<.013	<.006	<.008	<.022	<.10
04087213 ROOT RIVER AT LAYTON AVENUE AT GREENFIELD, WI (LAT 42 57 32N LONG 088 02 24W)													
JUN 2004													
16...	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	.015	<.006	<.008	<.022	<.10
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
01...	<.387	<.003	<.030	<.027	<.005	<.006	<.03	<.015	<.013	<.006	<.008	<.022	<.10

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbufos oxon sulfone water, fltrd, ug/L (61674)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Terbuthylazine, water, fltrd, ug/L (04022)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)	Dichlorvos, water fltrd, ug/L (38775)
04085322 DEVILS RIVER AT ROSENCRANS ROAD NEAR MARIBEL, WI (LAT 44 18 33N LONG 087 49 36W)													
JUN 2004													
03...	<.011	<.12	<.008	<.01	<.005	<.004	.012	--	<.07	<.02	<.01	<.009	<.01
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.011	<.05	<.008	<.01	<.005	<.004	<.005	<.02	<.07	<.02	<.01	<.009	<.01
04085455 MEEME RIVER AT WASHINGTON ROAD NEAR CLEVELAND, WI (LAT 43 54 49N LONG 087 48 31W)													
JUN 2004													
03...	<.011	<.12	<.008	<.01	<.005	<.004	<.005	--	<.07	<.02	<.01	<.009	<.01
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.011	<.05	<.008	E.01	<.005	<.004	<.005	<.02	<.07	<.02	<.01	<.009	<.01
04086699 PIGEON CREEK AT WILLIAMSBURG DR AT THEINSVILLE, WI (LAT 43 14 01N LONG 087 59 08W)													
JUN 2004													
04...	<.011	<.12	<.008	<.01	<.005	<.004	.012	--	<.07	<.02	<.01	<.009	<.01
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
23...	<.011	<.05	<.008	E.01	<.005	<.004	<.005	<.02	<.07	<.02	<.01	<.009	<.01
0408703164 LILY CREEK AT GOOD HOPE ROAD NR MENOMONEE FALLS,WI (LAT 43 08 54N LONG 088 04 53W)													
JUN 2004													
04...	<.011	<.12	<.008	.01	<.005	<.004	<.005	--	<.07	<.02	<.01	<.009	<.01
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	<.011	<.05	<.008	<.01	<.005	<.004	<.005	<.02	<.07	<.02	<.01	<.009	<.01
055437901 FOX RIVER AT RIVER ROAD NEAR SUSSEX, WI (LAT 43 06 27N LONG 088 10 19W)													
JUN 2004													
10...	<.011	<.06	<.008	.02	<.005	<.004	.007	<.02	<.07	<.02	<.01	<.009	<.01
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.011	<.05	<.008	.02	<.005	<.004	<.005	<.02	<.07	<.02	<.01	<.009	<.01
04087213 ROOT RIVER AT LAYTON AVENUE AT GREENFIELD, WI (LAT 42 57 32N LONG 088 02 24W)													
JUN 2004													
16...	<.011	<.06	<.008	.02	<.005	<.004	<.005	E.01	<.07	<.02	<.01	E.001	<.01
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
01...	<.011	<.05	<.008	.04	<.005	<.004	<.005	<.02	<.07	<.02	<.01	<.009	<.01

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Suspended sediment concentration mg/L (80154)
04085322 DEVILS RIVER AT ROSENCRANS ROAD NEAR MARIBEL, WI (LAT 44 18 33N LONG 087 49 36W)	
JUN 2004	
03...	62
JUL	
12...	--
AUG	
16...	--
26...	137
04085455 MEEME RIVER AT WASHINGTON ROAD NEAR CLEVELAND, WI (LAT 43 54 49N LONG 087 48 31W)	
JUN 2004	
03...	68
JUL	
12...	--
AUG	
16...	--
26...	57
04086699 PIGEON CREEK AT WILLIAMSBURG DR AT THEINSVILLE, WI (LAT 43 14 01N LONG 087 59 08W)	
JUN 2004	
04...	116
JUL	
14...	--
AUG	
23...	177
0408703164 LILY CREEK AT GOOD HOPE ROAD NR MENOMONEE FALLS,WI (LAT 43 08 54N LONG 088 04 53W)	
JUN 2004	
04...	100
JUL	
14...	--
AUG	
18...	--
24...	165
055437901 FOX RIVER AT RIVER ROAD NEAR SUSSEX, WI (LAT 43 06 27N LONG 088 10 19W)	
JUN 2004	
10...	130
JUL	
14...	--
AUG	
18...	--
25...	98
04087213 ROOT RIVER AT LAYTON AVENUE AT GREENFIELD, WI (LAT 42 57 32N LONG 088 02 24W)	
JUN 2004	
16...	150
JUL	
15...	--
AUG	
18...	--
SEP	
01...	158

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)
040870856 UNDERWOOD CRK @ WATERTOWN PLANK RD @ ELM GROVE, WI (LAT 43 02 34N LONG 088 04 46W)													
JUN 2004													
15...	1055	12	10	750	8.8	95	7.4	1,060	18.1	--	--	--	--
JUL													
15...	0953	--	--	--	7.0	--	8.0	1,560	19.5	--	--	--	--
AUG													
18...	1422	--	--	--	11.8	--	8.4	1,240	23.1	--	--	--	--
25...	1145	.57	70	740	5.7	66	7.6	1,120	20.6	--	--	--	--
040872393 HOODS CREEK AT BROOK ROAD NEAR FRANKSVILLE, WI (LAT 42 46 22N LONG 087 51 58W)													
JUN 2004													
16...	1515	17	40	752	8.5	93	7.6	784	19.1	--	--	--	--
JUL													
15...	1625	--	--	--	7.7	--	8.0	790	21.6	--	--	--	--
AUG													
19...	1050	--	--	--	6.4	--	7.9	892	17.9	--	--	--	--
25...	0800	1.8	70	752	6.9	76	7.6	1,140	18.9	--	--	--	--
05543796 POPLAR CREEK NEAR WAUKESHA, WI (LAT 43 02 39N LONG 088 09 59W)													
JUN 2004													
21...	0950	19	40	743	5.7	62	7.2	1,080	17.9	--	--	--	--
05527729 KILBOURN DITCH AT 6OTH STREET NEAR KENOSHA, WI (LAT 42 34 56N LONG 087 57 00W)													
JUN 2004													
28...	1030	20	10	755	7.3	77	7.5	718	17.3	--	--	--	--
JUL													
15...	1305	--	--	--	6.7	--	7.9	802	21.0	--	--	--	--
AUG													
19...	0703	--	--	--	--	--	--	--	--	--	--	--	--
23...	1325	.38	70	753	13.2	154	7.9	922	22.1	--	--	--	--
04087270 PIKE CREEK AT 43RD STREET AT KENOSHA, WI (LAT 42 35 49N LONG 087 49 42W)													
JUN 2004													
28...	1130	3.0	40	757	9.7	103	7.9	1,190	17.8	--	--	--	--
JUL													
15...	1427	--	--	--	9.5	--	7.9	1,390	23.0	--	--	--	--
AUG													
19...	0910	1.1	--	--	4.1	--	7.6	918	18.1	--	--	--	--
24...	0745	.43	70	755	6.2	68	7.5	1,380	18.7	--	--	--	--
04080791 TOMORROW RIVER @ HEMP FISHERY AREA NR GARFIELD, WI (LAT 44 33 16N LONG 089 21 14W)													
JUL 2004													
20...	0900	12	10	--	8.6	--	7.6	380	16.9	45.4	24.0	.86	3.58
04085068 ASHWAUBENON CREEK NEAR LITTLE RAPIDS, WI (LAT 44 24 51N LONG 088 07 37W)													
MAY 2004													
17...	1010	8.0	10	745	7.4	74	7.6	949	14.0	--	--	--	--
040850683 ASHWAUBENON CREEK AT SOUTH BRIDGE RD NR DEPERE, WI (LAT 44 24 59N LONG 088 07 25W)													
AUG 2004													
30...	1540	.23	70	745	6.3	64	7.9	1,210	15.2	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Bromide water, fltrd, mg/L (71870)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)
040870856 UNDERWOOD CRK @ WATERTOWN PLANK RD @ ELM GROVE, WI (LAT 43 02 34N LONG 088 04 46W)													
JUN 2004													
15...	226	271	2	--	137	--	--	73.6	--	.06	1.25	.038	.16
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	234	281	--	--	156	--	--	93.5	--	<.04	.22	E.007	.07
040872393 HOODS CREEK AT BROOK ROAD NEAR FRANKSVILLE, WI (LAT 42 46 22N LONG 087 51 58W)													
JUN 2004													
16...	221	265	2	--	74.7	--	--	34.7	--	<.04	8.79	.098	.20
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	266	318	3	--	144	--	--	78.2	--	<.04	2.33	E.005	.24
05543796 POPLAR CREEK NEAR WAUKESHA, WI (LAT 43 02 39N LONG 088 09 59W)													
JUN 2004													
21...	287	347	2	--	129	--	--	77.7	--	--	--	--	.51
05527729 KILBOURN DITCH AT 6OTH STREET NEAR KENOSHA, WI (LAT 42 34 56N LONG 087 57 00W)													
JUN 2004													
28...	237	282	3	--	52.3	--	--	31.3	--	<.04	10.7	.050	.30
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	236	278	5	--	118	--	--	43.7	--	<.04	E.04	E.006	.19
04087270 PIKE CREEK AT 43RD STREET AT KENOSHA, WI (LAT 42 35 49N LONG 087 49 42W)													
JUN 2004													
28...	339	405	4	--	139	--	--	79.5	--	.04	2.32	.043	.05
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	291	349	3	--	208	--	--	96.9	--	E.03	.68	.028	.07
04080791 TOMORROW RIVER @ HEMP FISHERY AREA NR GARFIELD, WI (LAT 44 33 16N LONG 089 21 14W)													
JUL 2004													
20...	168	--	--	<.08	8.83	.2	10.5	8.2	242	<.04	1.98	.012	--
04085068 ASHWAUBENON CREEK NEAR LITTLE RAPIDS, WI (LAT 44 24 51N LONG 088 07 37W)													
MAY 2004													
17...	260	314	--	--	83.7	--	--	72.4	--	.17	7.86	.175	.17
040850683 ASHWAUBENON CREEK AT SOUTH BRIDGE RD NR DEPERE, WI (LAT 44 24 59N LONG 088 07 25W)													
AUG 2004													
30...	264	318	--	--	167	--	--	83.4	--	<.04	1.18	.018	.04

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, unfltrd mg/L (00665)	Total nitro-gen, wat flt by anal ysis, mg/L (62854)	Total nitro-gen, wat unf by anal ysis, mg/L (62855)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inor-ganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Hydro-gen sulfide water unfltrd mg/L (71875)	Iron, water, fltrd, ug/L (01046)	Mangan-ese, water, fltrd, ug/L (01056)	1-Naph-thol, water, fltrd 0.7u GF ug/L (49295)	2,6-Di-ethyl-aniline water fltrd 0.7u GF ug/L (82660)
040870856 UNDERWOOD CRK @ WATERTOWN PLANK RD @ ELM GROVE, WI (LAT 43 02 34N LONG 088 04 46W)													
JUN 2004													
15...	.030	.093	--	2.58	1.6	<.1	1.6	20.4	--	--	--	<.09	<.006
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	.010	.044	--	.75	.5	<.1	.5	8.3	--	--	--	<.09	<.006
040872393 HOODS CREEK AT BROOK ROAD NEAR FRANKSVILLE, WI (LAT 42 46 22N LONG 087 51 58W)													
JUN 2004													
16...	.157	.28	--	10.0	2.1	<.1	2.0	9.1	--	--	--	<.09	<.006
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	.165	.24	--	3.12	1.8	<.1	1.8	7.4	--	--	--	<.09	<.006
05543796 POPLAR CREEK NEAR WAUKESHA, WI (LAT 43 02 39N LONG 088 09 59W)													
JUN 2004													
21...	--	--	--	--	5.2	<.1	5.2	15.4	--	--	--	<.09	<.006
05527729 KILBOURN DITCH AT 6OTH STREET NEAR KENOSHA, WI (LAT 42 34 56N LONG 087 57 00W)													
JUN 2004													
28...	.114	.22	--	11.7	1.6	.2	1.4	7.1	--	--	--	<.09	<.006
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	.039	.102	--	.85	1.5	<.1	1.5	10.8	--	--	--	<.09	<.006
04087270 PIKE CREEK AT 43RD STREET AT KENOSHA, WI (LAT 42 35 49N LONG 087 49 42W)													
JUN 2004													
28...	.009	.030	--	2.66	.5	<.1	.5	4.6	--	--	--	<.09	<.006
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	.006	.032	--	1.12	.5	<.1	.5	4.3	--	--	--	<.09	<.006
04080791 TOMORROW RIVER @ HEMP FISHERY AREA NR GARFIELD, WI (LAT 44 33 16N LONG 089 21 14W)													
JUL 2004													
20...	.007	--	2.33	--	--	--	--	8.9	ND	165	15.2	<.09	<.006
04085068 ASHWAUBENON CREEK NEAR LITTLE RAPIDS, WI (LAT 44 24 51N LONG 088 07 37W)													
MAY 2004													
17...	.328	.46	--	9.80	1.0	<.1	1.0	15.0	--	--	--	<.09	<.006
040850683 ASHWAUBENON CREEK AT SOUTH BRIDGE RD NR DEPERE, WI (LAT 44 24 59N LONG 088 07 25W)													
AUG 2004													
30...	.386	.42	--	2.07	.3	<.1	.3	7.8	--	--	--	<.09	<.006

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	2-[(2-Ethyl-6methylphenyl)amino]2oxoESA ug/L (62850)	2Chloro-2,6'-'diethyl acetanilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl-6-methylaniline water, fltrd, ug/L (61620)	3,4-Dichloroaniline water fltrd, ug/L (61625)	4Chloro 2methylphenol, water, fltrd, ug/L (61633)	Acetochlor ESA, water, fltrd 0.7u GF ug/L (61029)	Acetochlor OA, water, fltrd 0.7u GF ug/L (61030)	Acetochlor SAA, water, fltrd, ug/L (62847)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor ESA SA, water, fltrd, ug/L (62849)	Alachlor ESA, water, fltrd 0.7u GF ug/L (50009)	Alachlor OA, water, fltrd 0.7u GF ug/L (61031)
040870856 UNDERWOOD CRK @ WATERTOWN PLANK RD @ ELM GROVE, WI (LAT 43 02 34N LONG 088 04 46W)													
JUN 2004													
15...	--	<.005	E.015	<.004	<.004	E.005	--	--	--	.015	--	--	--
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	<.005	<.006	<.004	<.004	<.006	--	--	--	<.006	--	--	--
040872393 HOODS CREEK AT BROOK ROAD NEAR FRANKSVILLE, WI (LAT 42 46 22N LONG 087 51 58W)													
JUN 2004													
16...	--	<.005	E.082	<.004	.016	<.006	--	--	--	.015	--	--	--
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	<.005	E.038	<.004	.049	<.006	--	--	--	<.006	--	--	--
05543796 POPLAR CREEK NEAR WAUKESHA, WI (LAT 43 02 39N LONG 088 09 59W)													
JUN 2004													
21...	--	<.005	E.037	<.004	.006	E.004	--	--	--	.026	--	--	--
05527729 KILBOURN DITCH AT 6OTH STREET NEAR KENOSHA, WI (LAT 42 34 56N LONG 087 57 00W)													
JUN 2004													
28...	--	<.005	E.155	<.004	<.004	<.006	--	--	--	.016	--	--	--
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	<.005	E.044	<.004	.005	<.006	--	--	--	<.006	--	--	--
04087270 PIKE CREEK AT 43RD STREET AT KENOSHA, WI (LAT 42 35 49N LONG 087 49 42W)													
JUN 2004													
28...	--	<.005	E.018	<.004	<.004	<.006	--	--	--	<.008	--	--	--
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	<.005	<.008	<.004	<.004	<.008	--	--	--	<.006	--	--	--
04080791 TOMORROW RIVER @ HEMP FISHERY AREA NR GARFIELD, WI (LAT 44 33 16N LONG 089 21 14W)													
JUL 2004													
20...	<.02	<.005	E.031	<.004	<.004	<.006	<.02	<.02	<.02	<.006	<.02	.11	<.02
04085068 ASHWAUBENON CREEK NEAR LITTLE RAPIDS, WI (LAT 44 24 51N LONG 088 07 37W)													
MAY 2004													
17...	--	<.005	E.190	<.004	<.004	<.006	--	--	--	1.71	--	--	--
040850683 ASHWAUBENON CREEK AT SOUTH BRIDGE RD NR DEPERE, WI (LAT 44 24 59N LONG 088 07 25W)													
AUG 2004													
30...	--	<.005	E.019	<.004	<.004	<.006	--	--	--	<.006	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Ala-chlor SAA, water, fltrd, ug/L (62848)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-HCH-d6, surrog, Sch2003 wat flt percent recovry (99995)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl oxon, water, fltrd, ug/L (61635)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)	Car-baryl, water, fltrd 0.7u GF ug/L (82680)	Chlor-pyrifos oxon, water, fltrd, ug/L (61636)	Chlor-pyrifos water, fltrd, ug/L (38933)	cis-Per-methrin water fltrd 0.7u GF ug/L (82687)	Cyflu-thrin, water, fltrd, ug/L (61585)	Cyper-methrin water, fltrd, ug/L (61586)
040870856 UNDERWOOD CRK @ WATERTOWN PLANK RD @ ELM GROVE, WI (LAT 43 02 34N LONG 088 04 46W)													
JUN 2004													
15...	--	<.005	92.0	.037	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	<.005	80.2	<.007	<.07	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009
040872393 HOODS CREEK AT BROOK ROAD NEAR FRANKSVILLE, WI (LAT 42 46 22N LONG 087 51 58W)													
JUN 2004													
16...	--	<.005	90.6	1.99	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	<.005	88.3	.235	<.07	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.040
05543796 POPLAR CREEK NEAR WAUKESHA, WI (LAT 43 02 39N LONG 088 09 59W)													
JUN 2004													
21...	--	<.005	91.1	.361	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009
05527729 KILBOURN DITCH AT 6OTH STREET NEAR KENOSHA, WI (LAT 42 34 56N LONG 087 57 00W)													
JUN 2004													
28...	--	<.005	85.9	3.59	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.030	<.030
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	E.005	81.7	.615	<.07	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009
04087270 PIKE CREEK AT 43RD STREET AT KENOSHA, WI (LAT 42 35 49N LONG 087 49 42W)													
JUN 2004													
28...	--	<.005	79.7	.104	<.02	<.050	<.010	E.020	<.06	<.005	<.006	<.030	<.030
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	<.005	82.5	.018	<.07	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009
04080791 TOMORROW RIVER @ HEMP FISHERY AREA NR GARFIELD, WI (LAT 44 33 16N LONG 089 21 14W)													
JUL 2004													
20...	<.02	<.005	75.7	.018	<.07	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009
04085068 ASHWAUBENON CREEK NEAR LITTLE RAPIDS, WI (LAT 44 24 51N LONG 088 07 37W)													
MAY 2004													
17...	--	<.005	97.6	E7.09	<.02	<.050	E.005	<.041	<.06	.006	<.006	<.008	<.009
040850683 ASHWAUBENON CREEK AT SOUTH BRIDGE RD NR DEPERE, WI (LAT 44 24 59N LONG 088 07 25W)													
AUG 2004													
30...	--	<.005	94.9	.074	<.07	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon oxon, water, fltrd, ug/L (61638)	Diazinon, water, fltrd, ug/L (39572)	Diazinon-d10 surrog, Sch2003 wat flt percent recovry (99994)	Dicrotophos, water fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)	Dimethenamid ESA, water, fltrd, ug/L (61951)	Dimethenamid OA, water, fltrd, ug/L (62482)	Dimethenamid water, fltrd, ug/L (61588)	Dimethoate, water, fltrd 0.7u GF ug/L (82662)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)
040870856 UNDERWOOD CRK @ WATERTOWN PLANK RD @ ELM GROVE, WI (LAT 43 02 34N LONG 088 04 46W)													
JUN 2004													
15...	<.003	<.012	<.01	<.005	93.0	<.08	<.009	--	--	--	<.006	<.03	<.004
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.003	<.012	<.01	<.005	99.1	<.08	<.009	--	--	--	<.006	<.0020	<.004
040872393 HOODS CREEK AT BROOK ROAD NEAR FRANKSVILLE, WI (LAT 42 46 22N LONG 087 51 58W)													
JUN 2004													
16...	.004	<.012	<.01	<.005	123	<.08	<.009	--	--	--	<.006	<.03	<.004
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	E.003	E.006	<.01	<.005	104	<.08	<.009	--	--	--	<.006	<.0020	<.004
05543796 POPLAR CREEK NEAR WAUKESHA, WI (LAT 43 02 39N LONG 088 09 59W)													
JUN 2004													
21...	<.003	<.012	<.01	<.008	116	<.08	<.009	--	--	--	<.006	<.03	<.004
05527729 KILBOURN DITCH AT 6OTH STREET NEAR KENOSHA, WI (LAT 42 34 56N LONG 087 57 00W)													
JUN 2004													
28...	<.003	<.012	<.01	<.005	98.5	<.08	<.009	--	--	--	<.006	<.03	<.004
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	<.003	<.012	<.01	<.005	91.6	<.08	<.009	--	--	--	<.006	<.0020	<.004
04087270 PIKE CREEK AT 43RD STREET AT KENOSHA, WI (LAT 42 35 49N LONG 087 49 42W)													
JUN 2004													
28...	<.003	<.012	<.01	<.007	101	<.08	<.009	--	--	--	<.006	<.03	<.004
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	<.003	<.012	<.01	.005	93.6	<.08	<.009	--	--	--	<.006	<.0020	<.004
04080791 TOMORROW RIVER @ HEMP FISHERY AREA NR GARFIELD, WI (LAT 44 33 16N LONG 089 21 14W)													
JUL 2004													
20...	<.003	<.012	<.01	<.005	69.8	<.08	<.009	<.02	<.02	<.02	<.006	<.0020	<.004
04085068 ASHWAUBENON CREEK NEAR LITTLE RAPIDS, WI (LAT 44 24 51N LONG 088 07 37W)													
MAY 2004													
17...	E.003	E.007	<.01	<.005	99.4	<.08	<.009	--	--	--	<.006	<.03	<.004
040850683 ASHWAUBENON CREEK AT SOUTH BRIDGE RD NR DEPERE, WI (LAT 44 24 59N LONG 088 07 25W)													
AUG 2004													
30...	<.003	<.012	<.01	<.005	113	<.08	<.009	--	--	--	<.006	<.0020	<.004

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Fenamiphos sulfone water, fltrd, ug/L (61645)	Fenamiphos sulfoxide, water, fltrd, ug/L (61646)	Fenamiphos, water, fltrd, ug/L (61591)	Desulfinylfipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Flufenacet ESA, water, fltrd, ug/L (61952)	Flufenacet OA, water, fltrd, ug/L (62483)	Flufenacet, water, fltrd, ug/L (62481)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	Hexazinone, water, fltrd, ug/L (04025)
040870856 UNDERWOOD CRK @ WATERTOWN PLANK RD @ ELM GROVE, WI (LAT 43 02 34N LONG 088 04 46W)													
JUN 2004													
15...	<.008	<.03	<.03	<.029	<.013	<.024	<.016	--	--	--	<.002	<.003	<.013
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.049	<.04	<.03	<.029	<.013	<.024	<.016	--	--	--	<.003	<.003	<.013
040872393 HOODS CREEK AT BROOK ROAD NEAR FRANKSVILLE, WI (LAT 42 46 22N LONG 087 51 58W)													
JUN 2004													
16...	<.008	<.03	<.03	<.029	<.013	<.024	<.016	--	--	--	<.002	<.003	<.013
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.049	<.04	<.03	<.029	<.013	<.024	<.016	--	--	--	<.003	<.003	<.013
05543796 POPLAR CREEK NEAR WAUKESHA, WI (LAT 43 02 39N LONG 088 09 59W)													
JUN 2004													
21...	<.008	<.03	<.03	<.029	<.013	<.024	<.016	--	--	--	<.002	<.003	<.013
05527729 KILBOURN DITCH AT 6OTH STREET NEAR KENOSHA, WI (LAT 42 34 56N LONG 087 57 00W)													
JUN 2004													
28...	<.008	<.03	<.03	<.029	<.013	<.024	<.016	--	--	--	<.002	<.003	<.013
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	<.049	<.04	<.03	<.029	<.013	<.024	<.016	--	--	--	<.003	<.003	<.013
04087270 PIKE CREEK AT 43RD STREET AT KENOSHA, WI (LAT 42 35 49N LONG 087 49 42W)													
JUN 2004													
28...	<.008	<.03	<.03	<.029	<.013	<.024	<.016	--	--	--	<.002	<.003	<.013
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	<.049	<.04	<.03	<.029	<.013	<.024	<.016	--	--	--	<.003	<.003	<.013
04080791 TOMORROW RIVER @ HEMP FISHERY AREA NR GARFIELD, WI (LAT 44 33 16N LONG 089 21 14W)													
JUL 2004													
20...	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.003	<.003	<.013
04085068 ASHWAUBENON CREEK NEAR LITTLE RAPIDS, WI (LAT 44 24 51N LONG 088 07 37W)													
MAY 2004													
17...	<.008	<.03	<.03	E.001	E.006	E.013	.063	--	--	--	<.002	<.003	<.013
040850683 ASHWAUBENON CREEK AT SOUTH BRIDGE RD NR DEPERE, WI (LAT 44 24 59N LONG 088 07 25W)													
AUG 2004													
30...	<.049	<.04	<.03	<.029	<.013	<.024	<.016	--	--	--	<.003	<.003	<.013

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Iprodione, water, fltrd, ug/L (61593)	Isofenphos, water, fltrd, ug/L (61594)	Malaoxon, water, fltrd, ug/L (61652)	Malathion, water, fltrd, ug/L (39532)	Metalaxyl, water, fltrd, ug/L (61596)	Methialthion water, fltrd, ug/L (61598)	Methyl paraoxon, water, fltrd, ug/L (61664)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Metolachlor ESA, water, fltrd 0.7u GF ug/L (61043)	Metolachlor OA, water, fltrd 0.7u GF ug/L (61044)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Myclobutanil water, fltrd, ug/L (61599)
040870856 UNDERWOOD CRK @ WATERTOWN PLANK RD @ ELM GROVE, WI (LAT 43 02 34N LONG 088 04 46W)													
JUN 2004													
15...	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	--	--	.013	<.006	<.008
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.387	<.003	<.030	<.027	<.005	<.006	<.03	<.015	--	--	<.013	<.006	<.008
040872393 HOODS CREEK AT BROOK ROAD NEAR FRANKSVILLE, WI (LAT 42 46 22N LONG 087 51 58W)													
JUN 2004													
16...	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	--	--	.810	<.006	<.008
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.387	<.003	<.030	<.027	<.020	<.006	<.03	<.015	--	--	.342	<.006	<.008
05543796 POPLAR CREEK NEAR WAUKESHA, WI (LAT 43 02 39N LONG 088 09 59W)													
JUN 2004													
21...	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	--	--	.325	<.006	<.008
05527729 KILBOURN DITCH AT 6OTH STREET NEAR KENOSHA, WI (LAT 42 34 56N LONG 087 57 00W)													
JUN 2004													
28...	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	--	--	.600	<.006	.054
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	<.387	<.003	<.030	<.027	<.005	<.006	<.03	<.015	--	--	.094	<.006	.011
04087270 PIKE CREEK AT 43RD STREET AT KENOSHA, WI (LAT 42 35 49N LONG 087 49 42W)													
JUN 2004													
28...	<1	<.003	<.008	<.027	<.005	<.006	<.03	<.015	--	--	.017	<.006	<.008
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	<.387	<.003	<.030	<.027	.087	<.006	<.03	<.015	--	--	E.005	<.006	<.008
04080791 TOMORROW RIVER @ HEMP FISHERY AREA NR GARFIELD, WI (LAT 44 33 16N LONG 089 21 14W)													
JUL 2004													
20...	<.387	<.003	<.030	<.027	<.005	<.006	<.03	<.015	.09	<.02	E.008	<.006	<.008
04085068 ASHWAUBENON CREEK NEAR LITTLE RAPIDS, WI (LAT 44 24 51N LONG 088 07 37W)													
MAY 2004													
17...	<1	<.003	<.008	<.027	<.020	<.006	<.03	<.015	--	--	E4.40	<.006	<.008
040850683 ASHWAUBENON CREEK AT SOUTH BRIDGE RD NR DEPERE, WI (LAT 44 24 59N LONG 088 07 25W)													
AUG 2004													
30...	<.387	<.003	<.030	<.027	<.005	<.006	<.03	<.015	--	--	.050	<.006	<.008

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Propachlor ESA, water, fltrd 0.7u GF ug/L (62766)	Propachlor OA, water, fltrd 0.7u GF ug/L (62767)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbufos oxon sulfone water, fltrd, ug/L (61674)
040870856 UNDERWOOD CRK @ WATERTOWN PLANK RD @ ELM GROVE, WI (LAT 43 02 34N LONG 088 04 46W)													
JUN 2004													
15...	<.022	<.10	<.011	--	<.008	.01	<.005	<.004	--	--	.039	<.02	<.07
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.022	<.10	<.011	<.05	<.008	.02	<.005	<.004	--	--	<.005	<.02	<.07
040872393 HOODS CREEK AT BROOK ROAD NEAR FRANKSVILLE, WI (LAT 42 46 22N LONG 087 51 58W)													
JUN 2004													
16...	<.022	<.10	<.011	<.06	<.008	.02	<.005	<.004	--	--	1.36	E.01	<.07
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.022	<.10	<.011	<.05	<.008	.04	<.005	<.004	--	--	.120	.02	<.07
05543796 POPLAR CREEK NEAR WAUKESHA, WI (LAT 43 02 39N LONG 088 09 59W)													
JUN 2004													
21...	<.022	<.10	<.011	<.06	<.008	.01	<.005	<.004	--	--	.006	M	<.07
05527729 KILBOURN DITCH AT 6OTH STREET NEAR KENOSHA, WI (LAT 42 34 56N LONG 087 57 00W)													
JUN 2004													
28...	<.022	<.10	<.011	<.06	<.008	.01	<.005	<.004	--	--	.067	<.02	<.07
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	<.022	<.10	<.011	<.05	<.008	.01	<.005	<.004	--	--	<.009	<.02	<.07
04087270 PIKE CREEK AT 43RD STREET AT KENOSHA, WI (LAT 42 35 49N LONG 087 49 42W)													
JUN 2004													
28...	<.022	<.10	<.011	<.06	<.008	.02	<.005	<.004	--	--	<.005	<.02	<.07
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	<.022	<.10	<.011	<.05	<.008	.01	<.005	<.004	--	--	<.005	<.02	<.07
04080791 TOMORROW RIVER @ HEMP FISHERY AREA NR GARFIELD, WI (LAT 44 33 16N LONG 089 21 14W)													
JUL 2004													
20...	<.022	<.10	<.011	<.05	<.008	<.01	<.005	<.004	<.05	<.02	<.005	<.02	<.07
04085068 ASHWAUBENON CREEK NEAR LITTLE RAPIDS, WI (LAT 44 24 51N LONG 088 07 37W)													
MAY 2004													
17...	<.022	<.10	<.011	<.06	<.008	<.01	<.005	<.004	--	--	.028	<.02	<.07
040850683 ASHWAUBENON CREEK AT SOUTH BRIDGE RD NR DEPERE, WI (LAT 44 24 59N LONG 088 07 25W)													
AUG 2004													
30...	<.022	<.10	<.011	<.05	<.008	<.01	<.005	<.004	--	--	<.005	<.02	<.07

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Terbuthylazine, water, fltrd, ug/L (04022)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)	Dichlorvos, water fltrd, ug/L (38775)	Suspended sediment concentration mg/L (80154)
040870856 UNDERWOOD CRK @ WATERTOWN PLANK RD @ ELM GROVE, WI (LAT 43 02 34N LONG 088 04 46W)					
JUN 2004					
15...	<.02	<.01	<.009	<.01	127
JUL					
15...	--	--	--	--	--
AUG					
18...	--	--	--	--	--
25...	<.02	<.01	<.009	<.01	119
040872393 HOODS CREEK AT BROOK ROAD NEAR FRANKSVILLE, WI (LAT 42 46 22N LONG 087 51 58W)					
JUN 2004					
16...	<.02	E.01	E.003	<.01	37
JUL					
15...	--	--	--	--	--
AUG					
19...	--	--	--	--	--
25...	<.02	<.01	E.006	<.01	144
05543796 POPLAR CREEK NEAR WAUKESHA, WI (LAT 43 02 39N LONG 088 09 59W)					
JUN 2004					
21...	<.02	<.01	<.009	<.01	64
05527729 KILBOURN DITCH AT 6OTH STREET NEAR KENOSHA, WI (LAT 42 34 56N LONG 087 57 00W)					
JUN 2004					
28...	<.02	M	<.009	<.01	57
JUL					
15...	--	--	--	--	--
AUG					
19...	--	--	--	--	--
23...	<.02	<.01	<.009	<.01	83
04087270 PIKE CREEK AT 43RD STREET AT KENOSHA, WI (LAT 42 35 49N LONG 087 49 42W)					
JUN 2004					
28...	<.02	<.01	<.009	<.01	34
JUL					
15...	--	--	--	--	--
AUG					
19...	--	--	--	--	--
24...	<.02	<.01	<.009	<.01	150
04080791 TOMORROW RIVER @ HEMP FISHERY AREA NR GARFIELD, WI (LAT 44 33 16N LONG 089 21 14W)					
JUL 2004					
20...	<.02	<.01	<.009	<.01	--
04085068 ASHWAUBENON CREEK NEAR LITTLE RAPIDS, WI (LAT 44 24 51N LONG 088 07 37W)					
MAY 2004					
17...	<.02	<.01	E.004	<.01	115
040850683 ASHWAUBENON CREEK AT SOUTH BRIDGE RD NR DEPERE, WI (LAT 44 24 59N LONG 088 07 25W)					
AUG 2004					
30...	<.02	<.01	<.009	<.01	118

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (00417)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)
04085123 BOWER CREEK TRIBUTARY @ DALEY DRIVE NR BELLEVUE,WI (LAT 44 27 15N LONG 087 58 46W)													
MAY 2004													
18...	1345	6.0	10	751	13.7	141	8.4	997	16.0	--	290	346	4
040851235 BOWER CREEK TRIB AT LIME KILN ROAD NR BELLEVUE, WI (LAT 44 27 09N LONG 087 58 50W)													
JUL 2004													
13...	1126	--	--	--	5.0	--	7.8	1,120	21.5	--	--	--	--
AUG													
30...	1545	.11	70	756	8.9	97	7.3	587	18.7	--	162	195	1
040854395 POINT CREEK AT UCKER POINT ROAD NEAR NEWTON, WI (LAT 43 57 54N LONG 087 43 34W)													
JUN 2004													
03...	1405	23	10	759	11.1	111	7.8	632	15.2	--	262	313	3
JUL													
12...	1525	--	--	--	8.4	--	8.3	777	20.2	--	--	--	--
AUG													
16...	1210	--	--	--	9.0	--	7.9	689	16.5	--	--	--	--
26...	1350	1.4	70	750	9.0	100	7.8	638	19.4	--	232	279	2
04072233 LANCASTER BROOK AT SHAWANO AVENUE AT HOWARD, WI (LAT 44 33 29N LONG 088 06 10W)													
MAY 2004													
20...	0745	32	10	742	8.1	82	7.8	680	14.5	--	228	276	--
20...	1130	33	10	739	8.1	83	7.9	593	14.9	--	--	--	--
JUL													
13...	1230	--	--	--	8.3	--	8.0	831	19.7	--	--	--	--
SEP													
01...	0745	1.2	10	750	8.2	83	8.0	811	15.6	--	262	316	--
05428600 WEST BRANCH STARKWEATHER CREEK AT MADISON, WI (LAT 43 05 58N LONG 089 20 18W)													
JAN 2004													
15...	1300	--	10	--	--	--	--	--	--	--	--	--	--
FEB													
16...	1145	--	--	--	--	--	--	--	--	--	--	--	--
19...	1125	--	--	--	--	--	--	--	--	--	--	--	--
21...	1250	--	--	--	--	--	--	--	--	--	--	--	--
26...	1200	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
16...	1300	--	--	--	--	--	--	--	--	300	--	--	--
17...	0900	--	--	--	--	--	--	--	--	301	--	--	--
APR													
16...	1715	--	--	--	--	--	--	--	--	312	--	--	--
22...	1010	--	--	--	--	--	--	--	--	211	--	--	--
MAY													
28...	1000	--	--	--	--	--	--	--	--	240	--	--	--
JUN													
14...	0935	--	--	--	--	--	--	--	--	251	--	--	--
21...	0850	--	--	--	--	--	--	--	--	286	--	--	--
JUL													
30...	1300	--	--	--	--	--	--	--	--	44	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Chloride, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, wat unf by analysis, mg/L (62855)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)
04085123 BOWER CREEK TRIBUTARY @ DALEY DRIVE NR BELLEVUE,WI (LAT 44 27 15N LONG 087 58 46W)													
MAY 2004													
18...	99.0	74.9	<.04	1.61	.087	.08	.059	.119	3.18	.5	<.1	.4	12.7
040851235 BOWER CREEK TRIB AT LIME KILN ROAD NR BELLEVUE, WI (LAT 44 27 09N LONG 087 58 50W)													
JUL 2004													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
30...	60.2	43.7	<.04	.13	E.007	.10	.064	.144	.58	.9	<.1	.9	5.0
040854395 POINT CREEK AT UCKER POINT ROAD NEAR NEWTON, WI (LAT 43 57 54N LONG 087 43 34W)													
JUN 2004													
03...	23.0	23.1	E.02	3.79	.069	.14	.169	.23	5.28	1.2	<.1	1.1	15.1
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	8.21	99.2	<.04	.12	E.005	.07	.078	.117	.50	.6	<.1	.6	3.4
04072233 LANCASTER BROOK AT SHAWANO AVENUE AT HOWARD, WI (LAT 44 33 29N LONG 088 06 10W)													
MAY 2004													
20...	53.8	39.6	<.04	.59	.082	.80	.017	.24	2.01	9.2	.1	9.1	8.8
20...	--	--	E.03	.64	.014	--	.025	.28	2.36	--	--	--	--
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
01...	69.2	47.4	<.04	2.24	E.006	.03	.027	.044	2.66	.4	<.1	.4	4.1
05428600 WEST BRANCH STARKWEATHER CREEK AT MADISON, WI (LAT 43 05 58N LONG 089 20 18W)													
JAN 2004													
15...	63.4	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
16...	65.1	--	--	--	--	--	--	--	--	--	--	--	--
19...	217	--	--	--	--	--	--	--	--	--	--	--	--
21...	855	--	--	--	--	--	--	--	--	--	--	--	--
26...	148	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
16...	81.0	--	--	--	--	--	--	--	--	--	--	--	--
17...	95.8	--	--	--	--	--	--	--	--	--	--	--	--
APR													
16...	78.1	--	--	--	--	--	--	--	--	--	--	--	--
22...	86.8	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
28...	44.2	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
14...	43.9	--	--	--	--	--	--	--	--	--	--	--	--
21...	52.1	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
30...	13.8	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	1-Naph-thol, water, fltrd 0.7u GF ug/L (49295)	2,6-Di-ethyl-aniline water fltrd 0.7u GF ug/L (82660)	2Chloro -2,6'-' diethyl acet-anilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl -6-methyl-aniline water, fltrd, ug/L (61620)	3,4-Di-chloro-aniline water fltrd, ug/L (61625)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	alpha-HCH-d6, surrog, Sch2003 wat flt percent recovry (99995)	alpha-HCH-d6, surrog, wat flt 0.7u GF percent recovry (91065)	Atra-zine, water, fltrd, ug/L (39632)
04085123 BOWER CREEK TRIBUTARY @ DALEY DRIVE NR BELLEVUE,WI (LAT 44 27 15N LONG 087 58 46W)													
MAY 2004													
18...	<.09	<.006	<.005	E.163	<.004	<.004	<.006	.013	<.005	--	104	--	E4.98
040851235 BOWER CREEK TRIB AT LIME KILN ROAD NR BELLEVUE, WI (LAT 44 27 09N LONG 087 58 50W)													
JUL 2004													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
30...	<.09	<.006	<.005	E.005	<.004	<.004	E.006	<.006	<.005	--	89.5	--	.033
040854395 POINT CREEK AT UCKER POINT ROAD NEAR NEWTON, WI (LAT 43 57 54N LONG 087 43 34W)													
JUN 2004													
03...	--	<.006	<.005	E.032	<.004	<.004	--	<.006	<.005	--	90.1	--	.207
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.09	<.006	<.005	E.006	<.004	<.004	<.006	<.006	<.005	--	87.4	--	.009
04072233 LANCASTER BROOK AT SHAWANO AVENUE AT HOWARD, WI (LAT 44 33 29N LONG 088 06 10W)													
MAY 2004													
20...	<.09	<.006	<.005	E.017	<.004	<.004	<.006	.012	<.006	--	80.4	--	.043
20...	--	<.006	--	E.036	--	--	--	.017	<.007	<.005	--	95.7	17.5
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
01...	<.09	<.006	<.005	E.019	<.004	<.004	<.006	<.006	<.005	--	86.1	--	.052
05428600 WEST BRANCH STARKWEATHER CREEK AT MADISON, WI (LAT 43 05 58N LONG 089 20 18W)													
JAN 2004													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
30...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Azinphos-methyl oxon, water, fltrd, ug/L (61635)	Azinphos-methyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chlorpyrifos oxon, water, fltrd, ug/L (61636)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Cyanazine, water, fltrd, ug/L (04041)	Cyfluthrin, water, fltrd, ug/L (61585)	Cypermethrin water, fltrd, ug/L (61586)	DCPA, water fltrd 0.7u GF ug/L (82682)
04085123 BOWER CREEK TRIBUTARY @ DALEY DRIVE NR BELLEVUE,WI (LAT 44 27 15N LONG 087 58 46W)													
MAY 2004													
18...	<.02	<.050	<.010	--	<.041	--	<.06	<.005	<.006	--	<.008	<.009	<.003
040851235 BOWER CREEK TRIB AT LIME KILN ROAD NR BELLEVUE, WI (LAT 44 27 09N LONG 087 58 50W)													
JUL 2004													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
30...	<.07	<.050	<.010	--	E.010	--	<.06	<.005	<.006	--	<.008	<.009	<.003
040854395 POINT CREEK AT UCKER POINT ROAD NEAR NEWTON, WI (LAT 43 57 54N LONG 087 43 34W)													
JUN 2004													
03...	--	<.050	<.010	--	<.041	--	<.06	<.005	<.006	--	<.008	<.009	<.003
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.07	<.050	<.010	--	<.041	--	<.06	<.005	<.006	--	<.008	<.009	<.003
04072233 LANCASTER BROOK AT SHAWANO AVENUE AT HOWARD, WI (LAT 44 33 29N LONG 088 06 10W)													
MAY 2004													
20...	<.02	<.050	E.007	--	<.041	--	<.06	<.005	<.006	--	<.008	<.009	<.003
20...	--	<.050	<.010	<.004	E.008	<.020	--	--	<.006	.021	--	--	<.003
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
01...	<.07	<.050	<.010	--	<.041	--	<.06	<.005	<.006	--	<.008	<.009	<.003
05428600 WEST BRANCH STARKWEATHER CREEK AT MADISON, WI (LAT 43 05 58N LONG 089 20 18W)													
JAN 2004													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
30...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon oxon, water, fltrd, ug/L (61638)	Diazinon, water, fltrd, ug/L (39572)	Diazinon-d10 surrog, Sch2003 wat flt percent recovry (99994)	Diazinon-d10 surrog. wat flt 0.7u GF percent recovry (91063)	Dicrotophos, water fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)	Dimethoate, water, fltrd 0.7u GF ug/L (82662)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfluralin, water, fltrd 0.7u GF ug/L (82663)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)
04085123 BOWER CREEK TRIBUTARY @ DALEY DRIVE NR BELLEVUE,WI (LAT 44 27 15N LONG 087 58 46W)													
MAY 2004													
18...	<.012	<.01	<.005	98.9	--	<.08	<.009	<.006	--	--	--	<.03	<.004
040851235 BOWER CREEK TRIB AT LIME KILN ROAD NR BELLEVUE, WI (LAT 44 27 09N LONG 087 58 50W)													
JUL 2004													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
30...	<.012	<.01	.008	97.0	--	<.08	<.009	<.006	--	--	--	<.0020	<.004
040854395 POINT CREEK AT UCKER POINT ROAD NEAR NEWTON, WI (LAT 43 57 54N LONG 087 43 34W)													
JUN 2004													
03...	<.012	<.01	<.005	88.5	--	<.12	<.009	<.031	--	--	--	<.03	<.004
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.012	<.01	<.005	80.0	--	<.08	<.009	<.006	--	--	--	<.0020	<.004
04072233 LANCASTER BROOK AT SHAWANO AVENUE AT HOWARD, WI (LAT 44 33 29N LONG 088 06 10W)													
MAY 2004													
20...	<.012	<.01	.005	69.3	--	<.08	<.009	<.006	--	--	--	<.03	<.004
20...	<.012	--	.020	--	126	--	<.009	--	<.02	<.004	<.009	--	--
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
01...	<.012	<.01	.008	84.9	--	<.08	<.009	<.010	--	--	--	<.0020	<.004
05428600 WEST BRANCH STARKWEATHER CREEK AT MADISON, WI (LAT 43 05 58N LONG 089 20 18W)													
JAN 2004													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
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MAR													
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17...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
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MAY													
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
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MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Fenamiphos sulfone water, fltrd, ug/L (61645)	Fenamiphos sulfoxide, water, fltrd, ug/L (61646)	Fenamiphos, water, fltrd, ug/L (61591)	Desulfinylfipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	Hexazinone, water, fltrd, ug/L (04025)	Iprodione, water, fltrd, ug/L (61593)	Isofenphos, water, fltrd, ug/L (61594)
04085123 BOWER CREEK TRIBUTARY @ DALEY DRIVE NR BELLEVUE,WI (LAT 44 27 15N LONG 087 58 46W)													
MAY 2004													
18...	--	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.002	<.003	<.013	<1	<.003
040851235 BOWER CREEK TRIB AT LIME KILN ROAD NR BELLEVUE, WI (LAT 44 27 09N LONG 087 58 50W)													
JUL 2004													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
30...	--	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.003	<.013	<.387	<.003
040854395 POINT CREEK AT UCKER POINT ROAD NEAR NEWTON, WI (LAT 43 57 54N LONG 087 43 34W)													
JUN 2004													
03...	--	<.008	--	<.03	<.029	<.013	<.024	E.009	<.002	<.003	<.013	<1	<.003
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.003	<.013	<.387	<.003
04072233 LANCASTER BROOK AT SHAWANO AVENUE AT HOWARD, WI (LAT 44 33 29N LONG 088 06 10W)													
MAY 2004													
20...	--	<.030	--	<.03	<.029	<.013	<.024	<.016	<.010	<.003	<.013	<1	<.003
20...	<.005	--	--	--	<.029	<.013	<.024	<.016	--	<.003	--	--	--
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
01...	--	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.003	<.013	<.387	<.003
05428600 WEST BRANCH STARKWEATHER CREEK AT MADISON, WI (LAT 43 05 58N LONG 089 20 18W)													
JAN 2004													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
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MAY													
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
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JUL													
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MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Mala-oxon, water, fltrd, ug/L (61652)	Mala-thion, water, fltrd, ug/L (39532)	Meta-laxyl, water, fltrd, ug/L (61596)	Methi-althion water, fltrd, ug/L (61598)	Methyl para-oxon, water, fltrd, ug/L (61664)	Methyl para-thion, water, fltrd 0.7u GF ug/L (82667)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Moli-nate, water, fltrd 0.7u GF ug/L (82671)	Myclo-butanil water, fltrd, ug/L (61599)	Naprop-amide, water, fltrd 0.7u GF ug/L (82684)
04085123 BOWER CREEK TRIBUTARY @ DALEY DRIVE NR BELLEVUE,WI (LAT 44 27 15N LONG 087 58 46W)													
MAY 2004													
18...	--	--	<.008	<.027	.017	<.006	<.03	<.015	2.55	<.006	--	<.008	--
040851235 BOWER CREEK TRIB AT LIME KILN ROAD NR BELLEVUE, WI (LAT 44 27 09N LONG 087 58 50W)													
JUL 2004													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
30...	--	--	<.030	<.027	<.005	<.006	<.03	<.015	.018	<.006	--	<.008	--
040854395 POINT CREEK AT UCKER POINT ROAD NEAR NEWTON, WI (LAT 43 57 54N LONG 087 43 34W)													
JUN 2004													
03...	--	--	<.008	<.027	<.005	<.006	<.03	<.015	.368	<.006	--	<.008	--
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	<.030	<.027	<.005	<.006	<.03	<.015	E.010	<.006	--	<.008	--
04072233 LANCASTER BROOK AT SHAWANO AVENUE AT HOWARD, WI (LAT 44 33 29N LONG 088 06 10W)													
MAY 2004													
20...	--	--	<.010	<.027	.006	<.006	<.03	<.015	.059	<.006	--	<.008	--
20...	<.004	<.035	--	<.027	--	--	--	<.015	17.6	<.006	<.003	--	<.007
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
01...	--	--	<.030	<.027	<.010	<.006	<.03	<.015	.046	<.006	--	<.008	--
05428600 WEST BRANCH STARKWEATHER CREEK AT MADISON, WI (LAT 43 05 58N LONG 089 20 18W)													
JAN 2004													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
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MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	p,p-' DDE, water, fltrd, ug/L (34653)	Para-thion, water, fltrd, ug/L (39542)	Peb-ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi-meth-alin, water, fltrd 0.7u GF ug/L (82683)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)	Prome-ton, water, fltrd, ug/L (04037)	Prome-tryn, water, fltrd, ug/L (04036)	Propy-zamide, water, fltrd 0.7u GF ug/L (82676)	Propa-chlor, water, fltrd, ug/L (04024)	Pro-panil, water, fltrd 0.7u GF ug/L (82679)
04085123 BOWER CREEK TRIBUTARY @ DALEY DRIVE NR BELLEVUE,WI (LAT 44 27 15N LONG 087 58 46W)													
MAY 2004													
18...	--	--	--	<.022	<.10	<.011	<.06	<.008	<.01	<.005	<.004	--	--
040851235 BOWER CREEK TRIB AT LIME KILN ROAD NR BELLEVUE, WI (LAT 44 27 09N LONG 087 58 50W)													
JUL 2004													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
30...	--	--	--	<.022	<.10	<.011	<.05	<.008	.01	<.005	<.004	--	--
040854395 POINT CREEK AT UCKER POINT ROAD NEAR NEWTON, WI (LAT 43 57 54N LONG 087 43 34W)													
JUN 2004													
03...	--	--	--	<.022	<.10	<.011	<.12	<.008	<.01	<.005	<.004	--	--
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	<.022	<.10	<.011	<.05	<.008	<.01	<.005	<.004	--	--
04072233 LANCASTER BROOK AT SHAWANO AVENUE AT HOWARD, WI (LAT 44 33 29N LONG 088 06 10W)													
MAY 2004													
20...	--	--	--	<.022	<.10	<.011	<.06	<.008	.01	<.005	<.004	--	--
20...	<.003	<.010	<.004	<.022	--	<.011	--	--	.01	--	<.004	<.025	<.011
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
01...	--	--	--	<.022	<.10	<.011	<.05	<.008	<.01	<.005	<.004	--	--
05428600 WEST BRANCH STARKWEATHER CREEK AT MADISON, WI (LAT 43 05 58N LONG 089 20 18W)													
JAN 2004													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
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MAY													
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
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JUL													
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MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Propar-gite, water, fltrd 0.7u GF ug/L (82685)	Sima-zine, water, fltrd, ug/L (04035)	Tebu-thiuron water fltrd 0.7u GF ug/L (82670)	Terba-cil, water, fltrd 0.7u GF ug/L (82665)	Ter-bufos oxon sulfone water, fltrd, ug/L (61674)	Terbu-fos, water, fltrd 0.7u GF ug/L (82675)	Ter-buthyl-azine, water, fltrd, ug/L (04022)	Thio-bencarb water fltrd 0.7u GF ug/L (82681)	Tri-allate, water, fltrd 0.7u GF ug/L (82678)	Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661)	Di-chlor-vos, water fltrd, ug/L (38775)	Sus-pended sedi-ment concen-tration mg/L (80154)
04085123 BOWER CREEK TRIBUTARY @ DALEY DRIVE NR BELLEVUE,WI (LAT 44 27 15N LONG 087 58 46W)												
MAY 2004												
18...	--	.074	<.02	--	<.07	<.02	<.01	--	--	<.009	<.01	219
040851235 BOWER CREEK TRIB AT LIME KILN ROAD NR BELLEVUE, WI (LAT 44 27 09N LONG 087 58 50W)												
JUL 2004												
13...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
30...	--	<.005	<.02	--	<.07	<.02	<.01	--	--	<.009	<.01	64
040854395 POINT CREEK AT UCKER POINT ROAD NEAR NEWTON, WI (LAT 43 57 54N LONG 087 43 34W)												
JUN 2004												
03...	--	.021	--	--	<.07	<.02	<.01	--	--	<.009	<.01	76
JUL												
12...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
16...	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	<.005	<.02	--	<.07	<.02	<.01	--	--	<.009	<.01	59
04072233 LANCASTER BROOK AT SHAWANO AVENUE AT HOWARD, WI (LAT 44 33 29N LONG 088 06 10W)												
MAY 2004												
20...	--	.016	<.02	--	<.07	<.02	<.01	--	--	<.009	<.01	270
20...	<.02	.050	<.02	<.034	--	<.02	--	<.010	<.002	<.009	--	209
JUL												
13...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
01...	--	.010	<.02	--	<.07	<.02	<.01	--	--	<.009	<.01	--
05428600 WEST BRANCH STARKWEATHER CREEK AT MADISON, WI (LAT 43 05 58N LONG 089 20 18W)												
JAN 2004												
15...	--	--	--	--	--	--	--	--	--	--	--	--
FEB												
16...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
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MAR												
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APR												
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MAY												
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JUN												
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JUL												
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MISCELLANEOUS WATER-QUALITY DATA

MISCELLANEOUS STATION ANALYSES

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Biomass periphyton, ashfree drymass g/m2 (49954)	Periphyton biomass ash weight, g/m2 (00572)	Periphyton biomass dry weight, g/m2 (00573)	Pheophytin a, periphyton, mg/m2 (62359)	Chlorophyll a periphyton, chromofluoro, mg/m2 (70957)
04085046 APPLE CREEK AT SNIDERVILLE, WI (LAT 44 21 18N LONG 088 11 28W)								
AUG 2004								
31...	0900	1.9	280	21.7	490	511.5	20	54.0
04063700 POPPLE RIVER NEAR FENCE, WI (LAT 45 45 49N LONG 088 27 47W)								
MAY 2004								
20...	1000	128	--	32.3	840	872.5	17	50.2
SEP								
01...	1415	42	280	48.8	630	676.7	38	91.2
040869415 LINCOLN CREEK AT 47TH STREET AT MILWAUKEE, WI (LAT 43 05 49N LONG 087 58 20W)								
JUN 2004								
08...	1215	7.2	--	41.0	870	912.8	43	80.0
AUG								
25...	1545	3.5	280	56.6	700	760.2	61	126
04087204 OAK CREEK AT SOUTH MILWAUKEE, WI (LAT 42 55 30N LONG 087 52 12W)								
SEP 2004								
01...	1130	4.1	280	39.2	550	586.7	59	93.6
04087000 MILWAUKEE RIVER AT MILWAUKEE, WI (LAT 43 06 00N LONG 087 54 32W)								
SEP 2004								
07...	1015	214	280	40.6	630	674.7	37	113
04072050 DUCK CREEK AT SEMINARY ROAD NEAR ONEIDA, WI (LAT 44 27 57N LONG 088 13 08W)								
MAY 2004								
19...	1130	74	--	44.4	560	607.4	52	140
AUG								
27...	1100	1.4	280	24.3	470	499.1	41	59.5
04087030 MENOMONEE RIVER AT MENOMONEE FALLS, WI (LAT 43 10 22N LONG 088 06 14W)								
AUG 2004								
24...	1500	3.4	280	20.8	460	480.8	23	46.2
04087258 PIKE RIVER AT CTH A NEAR KENOSHA, WI (LAT 42 39 13N LONG 087 51 01W)								
AUG 2004								
24...	1425	15	280	30.0	1,000	1,034	63	68.0
04087118 HONEY CREEK NEAR PORTLAND AVENUE AT WAUWATOSA, WI (LAT 43 02 32N LONG 088 00 38W)								
AUG 2004								
25...	1540	6.0	280	16.3	690	709.1	6.0	8.3
04081897 SAWYER CREEK AT WESTHAVEN ROAD AT OSHKOSH, WI (LAT 44 00 55N LONG 088 35 40W)								
AUG 2004								
28...	1220	1.3	280	34.6	630	661.7	43	67.1
04084429 MUD CREEK AT SPENCER ROAD AT APPLETON, WI (LAT 44 15 31N LONG 088 27 42W)								
AUG 2004								
28...	0735	4.0	280	28.7	610	635.0	33	78.1
040853145 BLACK CREEK AT CURRAN ROAD NEAR DENMARK, WI (LAT 44 20 14N LONG 087 44 43W)								
AUG 2004								
31...	1500	.55	280	35.0	530	561.4	57	125

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Biomass periphyton, ashfree drymass g/m2 (49954)	Periphyton biomass ash weight, g/m2 (00572)	Periphyton biomass dry weight, g/m2 (00573)	Pheophytin a, periphyton, mg/m2 (62359)	Chlorophyll a periphyton, chromofluoro, mg/m2 (70957)
04085188 RIO CREEK AT PHEASANT ROAD NEAR RIO CREEK, WI (LAT 44 36 12N LONG 087 31 37W)								
AUG 2004 31...	1345	2.0	280	58.2	690	744.9	61	114
040851325 BAIRD CREEK AT SUPERIOR ROAD AT GREEN BAY, WI (LAT 44 30 04N LONG 087 56 10W)								
AUG 2004 27...	1530	1.4	280	23.1	580	607.0	31	49.5
04087070 LITTLE MENOMONEE RIVER AT MILWAUKEE, WI (LAT 43 07 25N LONG 088 02 37W)								
AUG 2004 23...	1520	1.1	280	29.4	520	553.9	15	44.3
04084468 GARNERS CREEK AT PARK STREET AT KAUKAUNA, WI (LAT 44 15 53N LONG 088 18 19W)								
AUG 2004 30...	1115	1.1	280	18.9	510	526.3	12	27.1
04085270 JAMBO CREEK AT JAMBO CREEK ROAD NEAR MISHICOT, WI (LAT 44 15 43N LONG 087 40 52W)								
AUG 2004 26...	0915	1.4	280	33.3	570	606.5	42	71.4
040851932 KEWAUNEE RIVER TRIB @ LOWELL ROAD NR LUXEMBURG, WI (LAT 44 35 33N LONG 087 42 48W)								
AUG 2004 31...	0845	.12	280	<15.4	660	666.9	44	79.9
04078085 BLACK OTTER CREEK NEAR HORTONVILLE, WI (LAT 44 20 09N LONG 088 38 39W)								
AUG 2004 30...	1110	2.2	280	47.0	980	1,028	47	96.2
04085322 DEVILS RIVER AT ROSENCRANS ROAD NEAR MARIBEL, WI (LAT 44 18 33N LONG 087 49 36W)								
AUG 2004 26...	1430	2.8	280	26.2	610	639.6	51	98.4
04085455 MEEME RIVER AT WASHINGTON ROAD NEAR CLEVELAND, WI (LAT 43 54 49N LONG 087 48 31W)								
AUG 2004 26...	1000	5.5	--	19.5	430	448.9	28	46.6
04086699 PIGEON CREEK AT WILLIAMSBURG DR AT THEINSVILLE, WI (LAT 43 14 01N LONG 087 59 08W)								
AUG 2004 23...	0940	.59	280	32.3	710	744.8	2.6	6.2
0408703164 LILY CREEK AT GOOD HOPE ROAD NR MENOMONEE FALLS,WI (LAT 43 08 54N LONG 088 04 53W)								
AUG 2004 24...	0745	.20	280	39.0	680	716.1	72	103
055437901 FOX RIVER AT RIVER ROAD NEAR SUSSEX, WI (LAT 43 06 27N LONG 088 10 19W)								
AUG 2004 25...	0730	1.5	280	32.8	640	675.1	48	83.9
04087213 ROOT RIVER AT LAYTON AVENUE AT GREENFIELD, WI (LAT 42 57 32N LONG 088 02 24W)								
SEP 2004 01...	1645	1.5	280	18.5	410	428.9	26	41.0
040870856 UNDERWOOD CRK @ WATERTOWN PLANK RD @ ELM GROVE, WI (LAT 43 02 34N LONG 088 04 46W)								
AUG 2004 25...	1215	.57	280	22.1	530	556.9	23	43.5

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Biomass periphyton, ashfree drymass g/m2 (49954)	Periphyton biomass ash weight, g/m2 (00572)	Periphyton biomass dry weight, g/m2 (00573)	Pheophytin a, periphyton, mg/m2 (62359)	Chlorophyll a periphyton, chromofluoro, mg/m2 (70957)
040872393 HOODS CREEK AT BROOK ROAD NEAR FRANKSVILLE, WI (LAT 42 46 22N LONG 087 51 58W)								
AUG 2004 25...	0950	1.8	280	25.3	910	936.5	32	52.7
05527729 KILBOURN DITCH AT 6OTH STREET NEAR KENOSHA, WI (LAT 42 34 56N LONG 087 57 00W)								
AUG 2004 23...	1400	.38	280	75.5	1,200	1,293	99	306
04087270 PIKE CREEK AT 43RD STREET AT KENOSHA, WI (LAT 42 35 49N LONG 087 49 42W)								
AUG 2004 24...	0845	.43	280	42.2	1,100	1,137	89	114
040850683 ASHWAUBENON CREEK AT SOUTH BRIDGE RD NR DEPERE, WI (LAT 44 24 59N LONG 088 07 25W)								
AUG 2004 30...	1600	.23	280	45.2	1,000	1,070	12	20.0
040851235 BOWER CREEK TRIB AT LIME KILN ROAD NR BELLEVUE, WI (LAT 44 27 09N LONG 087 58 50W)								
AUG 2004 30...	1600	.11	280	28.1	940	966.9	29	66.0
040854395 POINT CREEK AT UCKER POINT ROAD NEAR NEWTON, WI (LAT 43 57 54N LONG 087 43 34W)								
AUG 2004 26...	1445	1.4	--	30.1	880	911.9	47	64.7
04072233 LANCASTER BROOK AT SHAWANO AVENUE AT HOWARD, WI (LAT 44 33 29N LONG 088 06 10W)								
SEP 2004 01...	0815	--	280	29.5	600	626.7	44	92.1

MISCELLANEOUS WATER-QUALITY DATA

MISCELLANEOUS STATION ANALYSES

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)
04072185 TROUT CREEK NEAR HOWARD, WI (LAT 44 32 10N LONG 088 07 48W)													
OCT 2003													
23...	0950	2.0	70	--	10.4	7.8	634	7.8	--	--	<.04	<.06	<.008
NOV													
17...	1110	2.7	70	743	13.4	8.5	898	4.2	.69	.79	<.04	2.08	.014
DEC													
08...	1140	2.9	70	750	17.8	8.1	873	.0	--	--	.06	2.98	.009
JAN 2004													
15...	1045	E2.0	70	--	14.0	7.7	813	-.2	--	--	.11	3.07	.019
FEB													
26...	1045	2.8	70	791	14.5	7.7	940	-.2	--	--	.22	2.14	.023
MAR													
11...	1050	72	10	--	20.7	7.3	328	.0	--	--	.17	.95	.017
29...	1055	E165	10	753	11.6	7.3	438	6.7	--	--	E.03	1.49	.027
APR													
08...	1150	11	10	737	--	--	--	--	--	--	E.03	1.20	.009
MAY													
20...	1410	24	10	740	9.5	8.1	626	17.8	--	--	E.02	.50	.015
24...	1300	E240	40	740	10.5	7.6	393	9.9	--	--	.05	2.79	.027
JUN													
23...	1235	7.0	40	751	9.4	7.7	589	16.5	--	--	<.04	1.08	.018
JUL													
20...	1050	1.7	30	751	9.2	7.8	816	21.1	--	--	<.04	1.67	.010
AUG													
17...	1050	.84	30	764	9.8	8.0	806	17.0	--	--	<.04	2.10	E.004
SEP													
09...	1115	.92	40	761	8.9	7.7	784	15.8	--	--	<.04	1.35	E.005
04072233 LANCASTER BROOK AT SHAWANO AVENUE AT HOWARD, WI (LAT 44 33 29N LONG 088 06 10W)													
OCT 2003													
23...	0855	1.4	70	--	8.5	7.5	622	8.0	--	--	<.04	.56	E.006
NOV													
17...	1015	2.8	70	745	12.4	8.4	902	4.5	.40	.42	E.03	1.72	.008
DEC													
08...	1035	2.8	70	750	17.2	7.9	879	.3	--	--	.05	2.15	E.007
JAN 2004													
15...	1015	E1.0	70	--	13.2	7.2	812	-.2	--	--	.07	2.72	.012
FEB													
26...	1015	2.5	70	791	13.9	7.4	584	-.2	--	--	.21	1.76	.021
MAR													
11...	1220	37	10	--	19.5	7.5	476	.0	--	--	.08	.88	.010
29...	1200	40	10	753	13.0	7.5	521	5.7	--	--	<.04	.87	.037
APR													
08...	1125	5.0	10	--	--	--	--	--	--	--	E.02	1.38	.008
MAY													
20...	1130	33	10	739	8.1	7.9	593	14.9	--	--	E.03	.64	.014
24...	1400	60	30	740	12.0	7.7	443	10.1	--	--	E.03	.63	.009
JUN													
23...	1515	4.0	40	750	9.9	7.8	826	16.5	--	--	<.04	1.84	.023
JUL													
20...	1200	1.6	30	751	8.9	7.8	847	20.0	--	--	<.04	2.56	.008
AUG													
17...	1210	.73	30	754	10.7	7.9	889	16.4	--	--	<.04	2.65	E.004
SEP													
09...	1255	.62	40	761	9.1	7.8	837	16.1	--	--	<.04	2.01	E.006

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Total nitro-gen, wat unf by anal ysis, mg/L (62855)	2,6-Di-ethyl-aniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	alpha-HCH-d6, surrog, wat flt 0.7u GF percent recovry (91065)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)
04072185 TROUT CREEK NEAR HOWARD, WI (LAT 44 32 10N LONG 088 07 48W)													
OCT 2003													
23...	.039	--	.062	.54	<.006	E.010	<.006	<.004	<.005	93.6	.037	<.050	<.010
NOV													
17...	E.01	.025	.035	--	<.006	E.021	<.006	<.005	<.005	98.1	.031	<.050	<.010
DEC													
08...	.020	--	.049	3.70	<.006	E.005	<.006	<.005	<.005	92.9	.027	<.050	<.010
JAN 2004													
15...	.021	--	.046	3.61	<.006	E.026	<.006	<.005	<.005	127	.040	<.050	<.010
FEB													
26...	.019	--	.056	2.97	<.006	E.021	<.006	<.005	<.005	104	.041	<.050	<.010
MAR													
11...	.047	--	.39	2.93	<.006	E.019	<.006	<.005	<.005	107	.038	<.050	<.010
29...	.022	--	.60	3.59	<.006	E.056	<.006	<.005	<.005	102	.072	<.050	<.010
APR													
08...	.020	--	.064	2.05	<.006	E.021	.011	<.005	<.005	96.9	.042	<.050	<.010
MAY													
20...	.041	--	.131	1.56	<.006	E.024	.013	<.005	<.005	101	.095	<.050	<.010
24...	.036	--	.48	4.43	<.006	.082	1.07	<.005	<.005	80.7	2.26	<.050	<.010
JUN													
23...	.066	--	.136	2.19	<.006	E.043	.025	<.005	<.005	102	.286	<.050	<.010
JUL													
20...	.049	--	.075	2.17	<.006	E.034	<.006	<.005	<.005	96.1	.127	<.050	<.010
AUG													
17...	.032	--	.063	2.57	<.006	E.035	<.006	<.005	<.005	103	.072	<.050	<.010
SEP													
09...	.023	--	.069	1.87	<.006	E.028	<.006	<.005	<.005	87.4	.061	<.050	<.010
04072233 LANCASTER BROOK AT SHAWANO AVENUE AT HOWARD, WI (LAT 44 33 29N LONG 088 06 10W)													
OCT 2003													
23...	.007	--	.026	.97	<.006	E.007	<.006	<.004	<.005	93.8	.015	<.050	<.010
NOV													
17...	E.01	.017	.025	--	<.006	E.014	<.006	<.005	<.005	99.1	.013	<.050	<.010
DEC													
08...	.011	--	.029	2.44	<.006	E.004	<.006	<.005	<.005	82.1	.008	<.050	<.010
JAN 2004													
15...	.009	--	.023	3.04	<.006	E.014	<.006	<.005	<.005	99.1	.011	<.050	<.010
FEB													
26...	.010	--	.037	2.46	<.006	E.013	<.006	<.005	<.005	104	.013	<.050	<.010
MAR													
11...	.023	--	.18	2.06	<.006	E.009	<.006	<.005	<.005	105	.025	<.050	<.010
29...	<.006	--	.20	2.09	<.006	E.011	<.006	<.005	<.005	96.8	.029	<.050	<.010
APR													
08...	.007	--	.029	1.78	<.006	E.014	<.006	<.005	<.005	97.8	.016	<.050	<.010
MAY													
20...	.025	--	.28	2.36	<.006	E.036	.017	<.007	<.005	95.7	17.5	<.050	<.010
24...	.020	--	.171	1.74	<.006	E.023	.006	<.005	<.005	96.0	1.00	<.050	<.010
JUN													
23...	.025	--	.060	2.37	<.006	E.028	E.005	<.005	<.005	90.1	.261	<.050	<.010
JUL													
20...	.027	--	.051	2.83	<.006	E.020	<.006	<.005	<.005	94.3	.044	<.050	<.010
AUG													
17...	.016	--	.040	3.02	<.006	E.021	<.006	<.005	<.005	99.0	.025	<.050	<.010
SEP													
09...	.022	--	.045	2.55	<.006	E.020	<.006	<.005	<.005	82.0	.057	<.050	<.010

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Cyanazine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Diazinon-d10 surrog. wat flt 0.7u GF percent recovry (91063)	Dieldrin, water, fltrd, ug/L (39381)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)
04072185 TROUT CREEK NEAR HOWARD, WI (LAT 44 32 10N LONG 088 07 48W)													
OCT 2003													
23...	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.004	<.005	104	<.005	<.02	<.002
NOV													
17...	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	105	<.009	<.02	<.004
DEC													
08...	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	106	<.009	<.02	<.004
JAN 2004													
15...	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	140	<.009	<.02	<.004
FEB													
26...	<.004	<.041	<.020	<.005	<.006	E.009	<.003	<.012	<.005	116	<.009	<.02	.005
MAR													
11...	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	118	<.009	<.02	<.004
29...	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	120	<.009	<.02	<.004
APR													
08...	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	119	<.009	<.02	<.004
MAY													
20...	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	122	<.009	<.02	<.004
24...	<.004	<.041	<.020	<.007	<.006	E.009	<.003	<.012	<.005	98.8	<.009	<.02	<.004
JUN													
23...	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	113	<.009	<.02	E.002
JUL													
20...	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	110	<.009	<.02	E.002
AUG													
17...	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	103	<.009	<.02	<.004
SEP													
09...	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	101	<.009	<.02	<.004
04072233 LANCASTER BROOK AT SHAWANO AVENUE AT HOWARD, WI (LAT 44 33 29N LONG 088 06 10W)													
OCT 2003													
23...	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.004	<.005	105	<.005	<.02	<.002
NOV													
17...	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	108	<.009	<.02	<.004
DEC													
08...	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	93.6	<.009	<.02	<.004
JAN 2004													
15...	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	105	<.009	<.02	<.004
FEB													
26...	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	119	<.009	<.02	<.004
MAR													
11...	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	118	<.009	<.02	<.004
29...	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	111	<.009	<.02	<.004
APR													
08...	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	118	<.009	<.02	<.004
MAY													
20...	<.004	E.008	<.020	--	<.006	.021	<.003	<.012	.020	126	<.009	<.02	<.004
24...	<.004	<.041	<.020	<.010	<.006	<.018	<.003	<.012	.006	116	<.009	<.02	<.004
JUN													
23...	<.004	E.006	<.020	<.005	<.006	<.018	<.003	<.012	E.004	107	<.009	<.02	.008
JUL													
20...	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	E.003	109	<.009	<.02	E.001
AUG													
17...	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	110	<.009	<.02	<.004
SEP													
09...	<.004	E.258	<.020	<.005	<.006	<.018	<.003	<.012	<.005	84.8	<.009	<.02	<.004

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Ethalfluralin, water, fltrd 0.7u GF ug/L (82663)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Desulfinylfipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)
04072185 TROUT CREEK NEAR HOWARD, WI (LAT 44 32 10N LONG 088 07 48W)													
OCT 2003													
23...	<.009	<.005	<.009	<.005	<.005	<.007	<.003	<.004	<.035	<.027	<.006	.014	<.006
NOV													
17...	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.018	<.006
DEC													
08...	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	E.012	<.006
JAN 2004													
15...	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.016	<.006
FEB													
26...	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	E.011	<.006
MAR													
11...	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.142	<.006
29...	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.210	<.006
APR													
08...	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.047	<.006
MAY													
20...	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.080	<.006
24...	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	1.07	<.006
JUN													
23...	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.252	<.006
JUL													
20...	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.058	<.006
AUG													
17...	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.017	<.006
SEP													
09...	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.016	<.006
04072233 LANCASTER BROOK AT SHAWANO AVENUE AT HOWARD, WI (LAT 44 33 29N LONG 088 06 10W)													
OCT 2003													
23...	<.009	<.005	<.009	<.005	<.005	<.007	<.003	<.004	<.035	<.027	<.006	E.007	<.006
NOV													
17...	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	E.008	<.006
DEC													
08...	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	E.003	<.006
JAN 2004													
15...	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	E.007	<.006
FEB													
26...	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	E.006	<.006
MAR													
11...	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.058	<.006
29...	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.065	<.006
APR													
08...	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.014	<.006
MAY													
20...	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	17.6	<.006
24...	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	2.89	<.006
JUN													
23...	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.368	<.006
JUL													
20...	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.100	<.006
AUG													
17...	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.023	<.006
SEP													
09...	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.040	<.006

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Molinate, water, fltrd 0.7u GF ug/L (82671)	Napropamide, water, fltrd 0.7u GF ug/L (82684)	p,p-' DDE, water, fltrd, ug/L (34653)	Parathion, water, fltrd, ug/L (39542)	Pebulate, water, fltrd 0.7u GF ug/L (82669)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prometon, water, fltrd, ug/L (04037)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Simazine, water, fltrd, ug/L (04035)
04072185 TROUT CREEK NEAR HOWARD, WI (LAT 44 32 10N LONG 088 07 48W)													
OCT 2003													
23...	<.002	<.007	<.003	<.010	<.004	<.022	<.011	E.01	<.004	<.010	<.011	<.02	.007
NOV													
17...	<.003	<.007	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.008
DEC													
08...	<.003	<.007	<.003	<.010	<.004	<.022	<.011	M	<.004	<.025	<.011	<.02	E.003
JAN 2004													
15...	<.003	<.007	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.007
FEB													
26...	<.003	<.007	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.009
MAR													
11...	<.003	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005
29...	<.003	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005
APR													
08...	<.003	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	.006
MAY													
20...	<.003	<.007	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	<.007
24...	<.003	<.007	<.005	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	.009
JUN													
23...	<.003	<.007	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	E.005
JUL													
20...	<.003	<.007	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.007
AUG													
17...	<.003	<.007	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.010
SEP													
09...	<.003	<.007	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	<.020
04072233 LANCASTER BROOK AT SHAWANO AVENUE AT HOWARD, WI (LAT 44 33 29N LONG 088 06 10W)													
OCT 2003													
23...	<.002	<.007	<.003	<.010	<.004	<.022	<.011	E.01	<.004	<.010	<.011	<.02	.010
NOV													
17...	<.003	<.007	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.011
DEC													
08...	<.003	<.007	<.003	<.010	<.004	<.022	<.011	M	<.004	<.025	<.011	<.02	.006
JAN 2004													
15...	<.003	<.007	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.008
FEB													
26...	<.003	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	.011
MAR													
11...	<.003	<.007	<.003	<.010	<.004	<.022	<.011	M	<.004	<.025	<.011	<.02	.007
29...	<.003	<.007	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.007
APR													
08...	<.003	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	.010
MAY													
20...	<.003	<.007	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.050
24...	<.003	<.007	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.102
JUN													
23...	<.003	<.007	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.011
JUL													
20...	<.003	<.007	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.011
AUG													
17...	<.003	<.007	<.005	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.013
SEP													
09...	<.003	<.007	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	<.020

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Thiobencarb water fltrd 0.7u GF ug/L (82681)	Triallate, water, fltrd 0.7u GF ug/L (82678)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)	Suspended sediment concentration mg/L (80154)
04072185 TROUT CREEK NEAR HOWARD, WI (LAT 44 32 10N LONG 088 07 48W)							
OCT 2003							
23...	<.02	<.034	<.02	<.005	<.002	<.009	104
NOV							
17...	<.02	<.034	<.02	<.010	<.002	<.009	110
DEC							
08...	<.02	<.034	<.02	<.010	<.002	<.009	87
JAN 2004							
15...	<.02	<.034	<.02	<.010	.003	<.009	84
FEB							
26...	<.02	<.034	<.02	<.010	<.002	<.009	167
MAR							
11...	<.02	<.034	<.02	<.010	<.002	<.009	273
29...	<.02	<.034	<.02	<.010	<.002	<.009	546
APR							
08...	<.02	<.034	<.02	<.010	<.002	<.009	112
MAY							
20...	<.02	<.034	<.02	<.010	<.002	<.009	81
24...	<.02	<.034	<.02	<.010	<.002	<.009	--
JUN							
23...	<.02	<.034	<.02	<.010	<.002	<.009	67
JUL							
20...	<.02	<.034	<.02	<.010	<.002	<.009	159
AUG							
17...	<.02	<.034	<.02	<.010	<.002	<.009	115
SEP							
09...	<.02	<.034	<.02	<.010	<.002	<.009	137
04072233 LANCASTER BROOK AT SHAWANO AVENUE AT HOWARD, WI (LAT 44 33 29N LONG 088 06 10W)							
OCT 2003							
23...	<.02	<.034	<.02	<.005	<.002	<.009	121
NOV							
17...	<.02	<.034	<.02	<.010	<.002	<.009	87
DEC							
08...	<.02	<.034	<.02	<.010	<.002	<.009	68
JAN 2004							
15...	<.02	<.034	<.02	<.010	<.002	<.009	51
FEB							
26...	<.02	<.034	<.02	<.010	<.002	<.009	159
MAR							
11...	<.02	E.020	<.02	<.010	<.002	<.009	142
29...	<.02	<.034	<.02	<.010	<.002	<.009	193
APR							
08...	<.02	<.034	<.02	<.010	<.002	<.009	128
MAY							
20...	<.02	<.034	<.02	<.010	<.002	<.009	209
24...	<.02	<.034	<.02	<.010	<.002	<.009	--
JUN							
23...	E.01	<.034	<.02	<.010	<.002	<.009	140
JUL							
20...	M	<.034	<.02	<.010	<.002	<.009	104
AUG							
17...	<.02	<.034	<.02	<.010	<.002	<.009	91
SEP							
09...	<.02	<.034	<.02	<.010	<.002	<.009	158

MISCELLANEOUS WATER-QUALITY DATA

MISCELLANEOUS STATION ANALYSES

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)
04070621 SOUTH BRANCH OCONTO RIVER NEAR MARKTON, WI (LAT 45 08 46N LONG 088 35 51W)													
OCT 2004 13...	0950	20	40	741	12.7	104	8.0	3	6.0	--	--	--	--
04074730 HUNTING RIVER ON CTH HWY T NEAR SUMMIT LAKE, WI (LAT 45 22 26N LONG 089 05 12W)													
OCT 2004 12...	1440	12	40	741	12.6	113	8.1	200	9.4	--	--	--	--
04078005 TRIBUTARY TO WOLF RIVER NEAR SHAWANO, WI (LAT 44 43 45N LONG 088 33 20W)													
OCT 2004 13...	0750	1.1	40	741	9.0	77	7.8	649	7.6	--	--	--	--
040863315 STONEY CREEK AT BOLTONVILLE, WI (LAT 43 31 04N LONG 088 05 17W)													
SEP 2004 15...	0950	4.0	40	750	8.6	95	8.3	717	20.4	82.0	45.6	2.12	14.4
05341865 PARKER CREEK NEAR RIVER FALLS, WI (LAT 44 55 13N LONG 092 31 47W)													
OCT 2004 06...	0925	9.6	40	751	10.7	92	7.9	424	8.8	--	--	--	--
05365962 BLACK CREEK NEAR FAIRCHILD, WI (LAT 44 37 23N LONG 090 55 17W)													
OCT 2004 05...	1015	2.3	40	753	10.5	85	5.8	31	5.8	--	--	--	--
05367064 CRANBERRY CREEK AT MERIDEAN, WI (LAT 44 44 03N LONG 091 47 57W)													
OCT 2004 05...	1430	11	40	753	11.3	95	7.7	267	7.6	--	--	--	--
05367803 SILVER CREEK NEAR ARLAND, WI (LAT 45 17 16N LONG 092 02 38W)													
OCT 2004 04...	1605	2.8	40	749	13.9	122	7.4	319	8.6	--	--	--	--
05381441 SOPER CREEK AT CATARACT, WI (LAT 44 04 53N LONG 090 50 26W)													
SEP 2004 14...	0740	13	40	750	8.8	86	8.0	137	14.3	14.8	6.08	2.06	2.03
05382415 LITTLE LACROSSE RIVER NEAR MELVINA, WI (LAT 43 49 37N LONG 090 45 40W)													
SEP 2004 14...	0910	12	40	750	9.0	90	8.1	502	15.6	59.4	34.1	1.71	4.13
054041139 WEST BRANCH BARABOO RIVER AT HILLSBORO, WI (LAT 43 39 05N LONG 090 21 26W)													
SEP 2004 13...	1020	7.4	40	752	9.8	97	8.2	503	15.0	60.9	34.1	1.31	4.14
054067125 HAWKINS CREEK AT ROCKBRIDGE, WI (LAT 43 27 41N LONG 090 21 18W)													
SEP 2004 13...	0855	9.3	40	752	9.6	92	7.9	458	13.1	56.2	31.9	1.17	2.22
05407049 TRIBUTARY TO FENNIMORE CREEK NR HICKORY GROVE, WI (LAT 43 07 00N LONG 090 32 02W)													
SEP 2004 07...	0945	3.4	40	756	10.9	105	7.4	536	13.6	60.2	34.1	1.42	4.57
05407217 CROOKED CREEK AT BOSCOBEL, WI (LAT 43 07 21N LONG 090 42 59W)													
SEP 2004 07...	1300	9.2	40	756	10.8	103	8.0	561	13.2	71.7	33.1	1.34	5.43

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicar-bonate, wat flt incrm. titr., field, mg/L (00453)	Carbon-ate, wat flt incrm. titr., field, mg/L (00452)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)
04070621 SOUTH BRANCH OCONTO RIVER NEAR MARKTON, WI (LAT 45 08 46N LONG 088 35 51W)													
OCT 2004 13...	138	166	--	--	--	--	--	--	E.09	.19	<.04	.27	<.008
04074730 HUNTING RIVER ON CTH HWY T NEAR SUMMIT LAKE, WI (LAT 45 22 26N LONG 089 05 12W)													
OCT 2004 12...	97	115	--	--	--	--	--	--	.14	.17	<.04	<.06	<.008
04078005 TRIBUTARY TO WOLF RIVER NEAR SHAWANO, WI (LAT 44 43 45N LONG 088 33 20W)													
OCT 2004 13...	285	340	--	--	--	--	--	--	.29	.30	<.04	.71	E.004
040863315 STONEY CREEK AT BOLTONVILLE, WI (LAT 43 31 04N LONG 088 05 17W)													
SEP 2004 15...	308	370	2	32.2	<.2	15.1	20.9	423	.54	.71	<.04	1.85	E.007
05341865 PARKER CREEK NEAR RIVER FALLS, WI (LAT 44 55 13N LONG 092 31 47W)													
OCT 2004 06...	164	196	--	--	--	--	--	--	.12	.18	<.04	5.16	.008
05365962 BLACK CREEK NEAR FAIRCHILD, WI (LAT 44 37 23N LONG 090 55 17W)													
OCT 2004 05...	8	9	--	--	--	--	--	--	.42	.49	<.04	.30	<.008
05367064 CRANBERRY CREEK AT MERIDEAN, WI (LAT 44 44 03N LONG 091 47 57W)													
OCT 2004 05...	63	77	--	--	--	--	--	--	.27	.43	<.04	8.76	.014
05367803 SILVER CREEK NEAR ARLAND, WI (LAT 45 17 16N LONG 092 02 38W)													
OCT 2004 04...	158	192	--	--	--	--	--	--	<.10	.10	<.04	1.30	E.005
05381441 SOPER CREEK AT CATARACT, WI (LAT 44 04 53N LONG 090 50 26W)													
SEP 2004 14...	42	51	--	4.10	<.2	12.6	8.1	95	.16	.22	<.04	1.62	E.004
05382415 LITTLE LACROSSE RIVER NEAR MELVINA, WI (LAT 43 49 37N LONG 090 45 40W)													
SEP 2004 14...	244	292	--	7.95	<.2	12.6	12.2	271	.15	.28	<.04	1.22	.008
054041139 WEST BRANCH BARABOO RIVER AT HILLSBORO, WI (LAT 43 39 05N LONG 090 21 26W)													
SEP 2004 13...	244	291	--	8.18	<.2	11.9	9.7	280	.18	.23	<.04	1.38	.008
054067125 HAWKINS CREEK AT ROCKBRIDGE, WI (LAT 43 27 41N LONG 090 21 18W)													
SEP 2004 13...	238	286	--	3.32	<.2	11.8	9.2	264	.10	.20	<.04	.94	E.004
05407049 TRIBUTARY TO FENNIMORE CREEK NR HICKORY GROVE, WI (LAT 43 07 00N LONG 090 32 02W)													
SEP 2004 07...	260	310	--	9.14	<.2	10.9	10.9	301	.16	.16	<.04	1.61	.021
05407217 CROOKED CREEK AT BOSCOBEL, WI (LAT 43 07 21N LONG 090 42 59W)													
SEP 2004 07...	271	322	--	10.4	<.2	13.6	13.7	292	.21	.11	<.04	1.97	E.005

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Iron, water, fltrd, ug/L (01046)	Mangan-ese, water, fltrd, ug/L (01056)	1,4-Di-chloro-benzene water, fltrd, ug/L (34572)	1-Methyl-naphth-alene, water, fltrd, ug/L (62054)	2,6-Di-ethyl-aniline water fltrd 0.7u GF ug/L (82660)	2,6-Di-methyl-naphth-alene, water, fltrd, ug/L (62055)	2-[(2-Ethyl-6methyl phenyl) amino]2 oxoESA ug/L (62850)	CIAT, water, fltrd, ug/L (04040)	2-Methyl-naphth-alene, water, fltrd, ug/L (62056)	3-beta-Copros-tanol, water, fltrd, ug/L (62057)
04070621 SOUTH BRANCH OCONTO RIVER NEAR MARKTON, WI (LAT 45 08 46N LONG 088 35 51W)													
OCT 2004 13...	<.02	E.002	.011	--	--	--	--	<.006	--	<.02	<.006	--	--
04074730 HUNTING RIVER ON CTH HWY T NEAR SUMMIT LAKE, WI (LAT 45 22 26N LONG 089 05 12W)													
OCT 2004 12...	.03	.040	.044	--	--	--	--	<.006	--	<.02	<.006	--	--
04078005 TRIBUTARY TO WOLF RIVER NEAR SHAWANO, WI (LAT 44 43 45N LONG 088 33 20W)													
OCT 2004 13...	E.02	.032	.048	--	--	--	--	<.006	--	<.02	E.017	--	--
040863315 STONEY CREEK AT BOLTONVILLE, WI (LAT 43 31 04N LONG 088 05 17W)													
SEP 2004 15...	E.02	.034	.049	24	12.0	<.5	<.5	<.006	<.5	<.02	E.028	<.5	M
05341865 PARKER CREEK NEAR RIVER FALLS, WI (LAT 44 55 13N LONG 092 31 47W)													
OCT 2004 06...	.02	.028	.036	--	--	<.5	<.5	<.006	<.5	<.02	E.085	<.5	<2
05365962 BLACK CREEK NEAR FAIRCHILD, WI (LAT 44 37 23N LONG 090 55 17W)													
OCT 2004 05...	<.02	.015	.032	--	--	<.5	<.5	<.006	<.5	<.02	<.006	<.5	<2
05367064 CRANBERRY CREEK AT MERIDEAN, WI (LAT 44 44 03N LONG 091 47 57W)													
OCT 2004 05...	.07	.071	.23	--	--	<.5	<.5	<.006	<.5	<.02	E.048	<.5	<2
05367803 SILVER CREEK NEAR ARLAND, WI (LAT 45 17 16N LONG 092 02 38W)													
OCT 2004 04...	E.02	.021	.037	--	--	<.5	<.5	<.006	<.5	<.02	E.014	<.5	<2
05381441 SOPER CREEK AT CATARACT, WI (LAT 44 04 53N LONG 090 50 26W)													
SEP 2004 14...	.06	.071	.117	54	29.8	<.5	<.5	<.006	<.5	<.02	E.015	<.5	<2
05382415 LITTLE LACROSSE RIVER NEAR MELVINA, WI (LAT 43 49 37N LONG 090 45 40W)													
SEP 2004 14...	.04	.050	.083	7	43.5	<.5	<.5	<.006	<.5	<.02	E.025	<.5	<2
054041139 WEST BRANCH BARABOO RIVER AT HILLSBORO, WI (LAT 43 39 05N LONG 090 21 26W)													
SEP 2004 13...	.04	.058	.071	E6	18.7	<.5	<.5	<.006	<.5	<.02	E.036	<.5	<2
054067125 HAWKINS CREEK AT ROCKBRIDGE, WI (LAT 43 27 41N LONG 090 21 18W)													
SEP 2004 13...	.03	.039	.063	10	44.9	<.5	<.5	<.006	<.5	<.02	E.018	<.5	<2
05407049 TRIBUTARY TO FENNIMORE CREEK NR HICKORY GROVE, WI (LAT 43 07 00N LONG 090 32 02W)													
SEP 2004 07...	.03	.042	.068	E4	37.4	--	--	<.006	--	<.02	E.029	--	--
05407217 CROOKED CREEK AT BOSCOBEL, WI (LAT 43 07 21N LONG 090 42 59W)													
SEP 2004 07...	E.01	.024	.036	E4	20.3	<.5	<.5	<.006	<.5	<.02	E.029	<.5	<2

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	3-Methyl-1H-indole, water, fltrd, ug/L (62058)	3-tert-Butyl-4-hydroxyanisole wat flt ug/L (62059)	4-Cumylphenol, water, fltrd, ug/L (62060)	4-Octylphenol, water, fltrd, ug/L (62061)	4-Nonylphenol, water, fltrd, ug/L (62085)	4-tert-Octylphenol, water, fltrd, ug/L (62062)	5-Methyl-1H-benzotriazole, wat flt ug/L (62063)	9,10-Anthraquinone water, fltrd, ug/L (62066)	Acetochlor ESA, water, fltrd 0.7u GF ug/L (61029)	Acetochlor OA, water, fltrd 0.7u GF ug/L (61030)	Acetochlor SAA, water, fltrd, ug/L (62847)	Acetochlor, water, fltrd, ug/L (49260)	Acetophenone water, fltrd, ug/L (62064)
04070621 SOUTH BRANCH OCONTO RIVER NEAR MARKTON, WI (LAT 45 08 46N LONG 088 35 51W)													
OCT 2004 13...	--	--	--	--	--	--	--	--	<.02	<.02	<.02	<.006	--
04074730 HUNTING RIVER ON CTH HWY T NEAR SUMMIT LAKE, WI (LAT 45 22 26N LONG 089 05 12W)													
OCT 2004 12...	--	--	--	--	--	--	--	--	<.02	<.02	<.02	<.006	--
04078005 TRIBUTARY TO WOLF RIVER NEAR SHAWANO, WI (LAT 44 43 45N LONG 088 33 20W)													
OCT 2004 13...	--	--	--	--	--	--	--	--	<.02	<.02	<.02	<.006	--
040863315 STONEY CREEK AT BOLTONVILLE, WI (LAT 43 31 04N LONG 088 05 17W)													
SEP 2004 15...	<1	<5	<1	<1	<5	<1	<2	<.5	<.02	<.02	<.02	<.006	<.5
05341865 PARKER CREEK NEAR RIVER FALLS, WI (LAT 44 55 13N LONG 092 31 47W)													
OCT 2004 06...	<1	<5	<1	<1	<5	<1	<2	<.5	<.02	<.02	<.02	<.006	<.5
05365962 BLACK CREEK NEAR FAIRCHILD, WI (LAT 44 37 23N LONG 090 55 17W)													
OCT 2004 05...	<1	<5	<1	<1	<5	<1	<2	<.5	<.02	<.02	<.02	<.006	<.5
05367064 CRANBERRY CREEK AT MERIDEAN, WI (LAT 44 44 03N LONG 091 47 57W)													
OCT 2004 05...	<1	<5	<1	<1	<5	<1	<2	<.5	<.02	<.02	<.02	<.006	<.5
05367803 SILVER CREEK NEAR ARLAND, WI (LAT 45 17 16N LONG 092 02 38W)													
OCT 2004 04...	<1	<5	<1	<1	<5	<1	<2	<.5	<.02	<.02	<.02	<.006	<.5
05381441 SOPER CREEK AT CATARACT, WI (LAT 44 04 53N LONG 090 50 26W)													
SEP 2004 14...	M	<5	<1	<1	<5	<1	<2	<.5	<.02	<.02	<.02	<.006	<.5
05382415 LITTLE LACROSSE RIVER NEAR MELVINA, WI (LAT 43 49 37N LONG 090 45 40W)													
SEP 2004 14...	M	<5	<1	<1	<5	<1	<2	<.5	<.02	<.02	<.02	<.006	<.5
054041139 WEST BRANCH BARABOO RIVER AT HILLSBORO, WI (LAT 43 39 05N LONG 090 21 26W)													
SEP 2004 13...	<1	<5	<1	<1	<5	<1	<2	<.5	<.02	<.02	<.02	<.006	<.5
054067125 HAWKINS CREEK AT ROCKBRIDGE, WI (LAT 43 27 41N LONG 090 21 18W)													
SEP 2004 13...	<1	<5	<1	<1	<5	<1	<2	<.5	<.02	<.02	<.02	<.006	<.5
05407049 TRIBUTARY TO FENNIMORE CREEK NR HICKORY GROVE, WI (LAT 43 07 00N LONG 090 32 02W)													
SEP 2004 07...	--	--	--	--	--	--	--	--	<.02	<.02	<.02	<.006	--
05407217 CROOKED CREEK AT BOSCOBEL, WI (LAT 43 07 21N LONG 090 42 59W)													
SEP 2004 07...	<1	<5	<1	<1	<5	<1	<2	<.5	<.02	<.02	<.02	<.006	<.5

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	AHTN, water, fltrd, ug/L (62065)	Ala-chlor ESA SA, water, fltrd, ug/L (62849)	Ala-chlor ESA, water, fltrd 0.7u GF ug/L (50009)	Ala-chlor OA, water, fltrd 0.7u GF ug/L (61031)	Ala-chlor SAA, water, fltrd, ug/L (62848)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	alpha-HCH-d6, surrog, wat flt 0.7u GF percent recovry (91065)	Anthra-cene, water, fltrd, ug/L (34221)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)	Benzo-[a]-pyrene, water, fltrd, ug/L (34248)
04070621 SOUTH BRANCH OCONTO RIVER NEAR MARKTON, WI (LAT 45 08 46N LONG 088 35 51W)													
OCT 2004 13...	--	<.02	<.02	<.02	<.02	<.005	<.005	94.3	--	<.010	<.050	<.010	--
04074730 HUNTING RIVER ON CTH HWY T NEAR SUMMIT LAKE, WI (LAT 45 22 26N LONG 089 05 12W)													
OCT 2004 12...	--	<.02	<.02	<.02	<.02	<.005	<.005	97.5	--	<.007	<.050	<.010	--
04078005 TRIBUTARY TO WOLF RIVER NEAR SHAWANO, WI (LAT 44 43 45N LONG 088 33 20W)													
OCT 2004 13...	--	<.02	.08	<.02	<.02	<.005	<.005	92.7	--	.026	<.050	<.010	--
040863315 STONEY CREEK AT BOLTONVILLE, WI (LAT 43 31 04N LONG 088 05 17W)													
SEP 2004 15...	<.5	<.02	<.02	<.02	<.02	<.005	<.005	91.3	<.5	.026	<.050	<.010	<.5
05341865 PARKER CREEK NEAR RIVER FALLS, WI (LAT 44 55 13N LONG 092 31 47W)													
OCT 2004 06...	<.5	<.02	.38	<.02	<.02	<.005	<.005	84.3	<.5	.145	<.050	<.010	<.5
05365962 BLACK CREEK NEAR FAIRCHILD, WI (LAT 44 37 23N LONG 090 55 17W)													
OCT 2004 05...	<.5	<.02	.07	<.02	<.02	<.005	<.005	96.4	<.5	<.007	<.050	<.010	<.5
05367064 CRANBERRY CREEK AT MERIDEAN, WI (LAT 44 44 03N LONG 091 47 57W)													
OCT 2004 05...	<.5	.04	.83	.03	<.02	<.005	<.005	98.2	<.5	.021	<.050	<.010	<.5
05367803 SILVER CREEK NEAR ARLAND, WI (LAT 45 17 16N LONG 092 02 38W)													
OCT 2004 04...	<.5	<.02	.03	<.02	<.02	<.005	<.005	86.8	<.5	.017	<.050	<.010	<.5
05381441 SOPER CREEK AT CATARACT, WI (LAT 44 04 53N LONG 090 50 26W)													
SEP 2004 14...	<.5	.02	.53	.02	<.02	<.005	<.005	89.9	<.5	.017	<.050	<.010	<.5
05382415 LITTLE LACROSSE RIVER NEAR MELVINA, WI (LAT 43 49 37N LONG 090 45 40W)													
SEP 2004 14...	<.5	<.02	.03	<.02	<.02	<.005	<.005	90.2	<.5	.030	<.050	<.010	<.5
054041139 WEST BRANCH BARABOO RIVER AT HILLSBORO, WI (LAT 43 39 05N LONG 090 21 26W)													
SEP 2004 13...	<.5	<.02	.05	<.02	<.02	<.005	<.005	94.2	<.5	.031	<.050	<.010	<.5
054067125 HAWKINS CREEK AT ROCKBRIDGE, WI (LAT 43 27 41N LONG 090 21 18W)													
SEP 2004 13...	<.5	<.02	<.02	<.02	<.02	<.005	<.005	88.9	<.5	.021	<.050	<.010	<.5
05407049 TRIBUTARY TO FENNIMORE CREEK NR HICKORY GROVE, WI (LAT 43 07 00N LONG 090 32 02W)													
SEP 2004 07...	--	<.02	.03	<.02	<.02	<.005	<.005	86.9	--	.049	<.050	<.010	--
05407217 CROOKED CREEK AT BOSCOBEL, WI (LAT 43 07 21N LONG 090 42 59W)													
SEP 2004 07...	<.5	<.02	.04	<.02	<.02	<.005	<.005	91.1	<.5	.033	<.050	<.010	<.5

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Benzophenone water, fltrd, ug/L (62067)	beta-Sitosterol, water, fltrd, ug/L (62068)	beta-Stigmastanol, water, fltrd, ug/L (62086)	Bisphenol A, water, fltrd, ug/L (62069)	Bisphenol A-d3 sur Sch 2033 & 8033, wat flt pct rcv (99583)	Bromacil, water, fltrd, ug/L (04029)	Butylate, water, fltrd, ug/L (04028)	Caffeine, water, fltrd, ug/L (50305)	Caffeine-13C sur Sch 2033 & 8033, wat flt pct rcv (99584)	Camphor water, fltrd, ug/L (62070)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbazole, water, fltrd, ug/L (62071)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)
04070621 SOUTH BRANCH OCONTO RIVER NEAR MARKTON, WI (LAT 45 08 46N LONG 088 35 51W)													
OCT 2004 13...	--	--	--	--	--	--	<.004	--	--	--	<.041	--	<.020
04074730 HUNTING RIVER ON CTH HWY T NEAR SUMMIT LAKE, WI (LAT 45 22 26N LONG 089 05 12W)													
OCT 2004 12...	--	--	--	--	--	--	<.004	--	--	--	<.041	--	<.020
04078005 TRIBUTARY TO WOLF RIVER NEAR SHAWANO, WI (LAT 44 43 45N LONG 088 33 20W)													
OCT 2004 13...	--	--	--	--	--	--	<.004	--	--	--	<.041	--	<.020
040863315 STONEY CREEK AT BOLTONVILLE, WI (LAT 43 31 04N LONG 088 05 17W)													
SEP 2004 15...	<.5	M	<2	M	108	<.5	<.004	<.5	106	<.5	<.041	<.5	<.020
05341865 PARKER CREEK NEAR RIVER FALLS, WI (LAT 44 55 13N LONG 092 31 47W)													
OCT 2004 06...	<.5	<2	<2	<1	73.9	<.5	<.004	<.5	92.5	<.5	<.041	<.5	<.020
05365962 BLACK CREEK NEAR FAIRCHILD, WI (LAT 44 37 23N LONG 090 55 17W)													
OCT 2004 05...	<.5	<2	<2	<1	129	<.5	<.004	<.5	95.6	<.5	<.041	<.5	<.020
05367064 CRANBERRY CREEK AT MERIDEAN, WI (LAT 44 44 03N LONG 091 47 57W)													
OCT 2004 05...	<.5	<2	<2	<1	92.2	<.5	<.004	<.5	89.8	<.5	<.041	<.5	<.020
05367803 SILVER CREEK NEAR ARLAND, WI (LAT 45 17 16N LONG 092 02 38W)													
OCT 2004 04...	<.5	<2	<2	<1	76.3	<.5	<.004	<.5	87.2	<.5	<.041	<.5	<.020
05381441 SOPER CREEK AT CATARACT, WI (LAT 44 04 53N LONG 090 50 26W)													
SEP 2004 14...	<.5	<2	<2	<1	92.9	<.5	<.004	<.5	108	M	<.041	<.5	<.020
05382415 LITTLE LACROSSE RIVER NEAR MELVINA, WI (LAT 43 49 37N LONG 090 45 40W)													
SEP 2004 14...	<.5	<2	<2	<1	56.4	<.5	<.004	<.5	102	M	<.041	<.5	<.020
054041139 WEST BRANCH BARABOO RIVER AT HILLSBORO, WI (LAT 43 39 05N LONG 090 21 26W)													
SEP 2004 13...	<.5	<2	<2	<1	38.6	<.5	<.004	<.5	103	M	<.041	<.5	<.020
054067125 HAWKINS CREEK AT ROCKBRIDGE, WI (LAT 43 27 41N LONG 090 21 18W)													
SEP 2004 13...	<.5	<2	<2	<1	76.2	<.5	<.004	M	98.4	M	<.041	<.5	<.020
05407049 TRIBUTARY TO FENNIMORE CREEK NR HICKORY GROVE, WI (LAT 43 07 00N LONG 090 32 02W)													
SEP 2004 07...	--	--	--	--	--	--	<.004	--	--	--	<.041	--	<.020
05407217 CROOKED CREEK AT BOSCOBEL, WI (LAT 43 07 21N LONG 090 42 59W)													
SEP 2004 07...	<.5	<2	<2	<1	28.7	<.5	<.004	<.5	68.2	M	<.041	<.5	<.020

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Chlor-pyrifos water, fltrd, ug/L (38933)	Choles-terol, water, fltrd, ug/L (62072)	cis-Per-methrin water fltrd 0.7u GF ug/L (82687)	Cot-inine, water, fltrd, ug/L (62005)	Cyana-zine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	DecaF-biphenl sur Sch 2033 & 8033, wat flt pct rcv (99585)	DEET, water, fltrd, ug/L (62082)	Desulf-inyl fipro-nil, water, fltrd, ug/L (62170)	Diazi-non, water, fltrd, ug/L (39572)	Diazi-non-d10 surrog. wat flt 0.7u GF percent recovry (91063)	Diel-drin, water, fltrd, ug/L (39381)	Di-ethoxy-nonyl-phenol, water, fltrd, ug/L (62083)
04070621 SOUTH BRANCH OCONTO RIVER NEAR MARKTON, WI (LAT 45 08 46N LONG 088 35 51W)													
OCT 2004 13...	<.005	--	<.006	--	<.018	<.003	--	--	<.012	<.005	91.5	<.009	--
04074730 HUNTING RIVER ON CTH HWY T NEAR SUMMIT LAKE, WI (LAT 45 22 26N LONG 089 05 12W)													
OCT 2004 12...	<.005	--	<.006	--	<.018	<.003	--	--	<.012	<.005	101	<.009	--
04078005 TRIBUTARY TO WOLF RIVER NEAR SHAWANO, WI (LAT 44 43 45N LONG 088 33 20W)													
OCT 2004 13...	<.005	--	<.006	--	<.018	<.003	--	--	<.012	<.005	95.2	<.009	--
040863315 STONEY CREEK AT BOLTONVILLE, WI (LAT 43 31 04N LONG 088 05 17W)													
SEP 2004 15...	<.005	M	<.006	<1.00	<.018	<.003	54.8	M	<.012	<.005	96.8	<.009	<5
05341865 PARKER CREEK NEAR RIVER FALLS, WI (LAT 44 55 13N LONG 092 31 47W)													
OCT 2004 06...	<.005	<2	<.006	<1.00	<.018	<.003	48.4	<.5	<.012	<.005	91.6	<.009	<5
05365962 BLACK CREEK NEAR FAIRCHILD, WI (LAT 44 37 23N LONG 090 55 17W)													
OCT 2004 05...	<.005	<2	<.006	<1.00	<.018	<.003	44.0	<.5	<.012	<.005	94.0	<.009	<5
05367064 CRANBERRY CREEK AT MERIDEAN, WI (LAT 44 44 03N LONG 091 47 57W)													
OCT 2004 05...	<.005	<2	<.006	<1.00	<.018	<.003	48.0	<.5	<.012	<.005	108	<.009	<5
05367803 SILVER CREEK NEAR ARLAND, WI (LAT 45 17 16N LONG 092 02 38W)													
OCT 2004 04...	<.005	<2	<.006	<1.00	<.018	<.003	47.9	<.5	<.012	<.005	95.2	<.009	<5
05381441 SOPER CREEK AT CATARACT, WI (LAT 44 04 53N LONG 090 50 26W)													
SEP 2004 14...	<.005	<2	<.006	<1.00	<.018	<.003	55.1	<.5	<.012	<.005	91.1	<.009	<5
05382415 LITTLE LACROSSE RIVER NEAR MELVINA, WI (LAT 43 49 37N LONG 090 45 40W)													
SEP 2004 14...	<.005	<2	<.006	<1.00	<.018	<.003	49.4	<.5	<.012	<.005	104	<.009	<5
054041139 WEST BRANCH BARABOO RIVER AT HILLSBORO, WI (LAT 43 39 05N LONG 090 21 26W)													
SEP 2004 13...	<.005	<2	<.006	<1.00	<.018	<.003	44.2	M	<.012	<.005	96.4	<.009	<5
054067125 HAWKINS CREEK AT ROCKBRIDGE, WI (LAT 43 27 41N LONG 090 21 18W)													
SEP 2004 13...	<.005	<2	<.006	<1.00	<.018	<.003	50.8	M	<.012	<.005	91.2	<.009	<5
05407049 TRIBUTARY TO FENNIMORE CREEK NR HICKORY GROVE, WI (LAT 43 07 00N LONG 090 32 02W)													
SEP 2004 07...	<.005	--	<.006	--	<.018	<.003	--	--	<.012	<.005	88.5	<.009	--
05407217 CROOKED CREEK AT BOSCOBEL, WI (LAT 43 07 21N LONG 090 42 59W)													
SEP 2004 07...	<.005	<2	<.006	<1.00	<.018	<.003	32.9	M	<.012	<.005	85.3	<.009	<5

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Di-ethoxy-octyl-phenol, water, fltrd ug/L (61705)	Dimeth-enamid ESA, water, fltrd, ug/L (61951)	Dimeth-enamid OA, water, fltrd, ug/L (62482)	Dimeth-enamid water, fltrd, ug/L (61588)	Disul-foton, water, fltrd 0.7u GF ug/L (82677)	D-Limo-nene, water, fltrd, ug/L (62073)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal-flur-alin, water, fltrd 0.7u GF ug/L (82663)	Etho-prop, water, fltrd 0.7u GF ug/L (82672)	Ethoxy-octyl-phenol, water, fltrd ug/L (61706)	Desulf-inyl-fipro-nil amide, wat flt ug/L (62169)	Fipro-nil sulfide water, fltrd, ug/L (62167)	Fipro-nil sulfone water, fltrd, ug/L (62168)
04070621 SOUTH BRANCH OCONTO RIVER NEAR MARKTON, WI (LAT 45 08 46N LONG 088 35 51W)													
OCT 2004 13...	--	<.02	<.02	<.02	<.02	--	<.004	<.009	<.005	--	<.029	<.013	<.024
04074730 HUNTING RIVER ON CTH HWY T NEAR SUMMIT LAKE, WI (LAT 45 22 26N LONG 089 05 12W)													
OCT 2004 12...	--	<.02	<.02	<.02	<.02	--	<.004	<.009	<.005	--	<.029	<.013	<.024
04078005 TRIBUTARY TO WOLF RIVER NEAR SHAWANO, WI (LAT 44 43 45N LONG 088 33 20W)													
OCT 2004 13...	--	<.02	<.02	<.02	<.02	--	<.004	<.009	<.005	--	<.029	<.013	<.024
040863315 STONEY CREEK AT BOLTONVILLE, WI (LAT 43 31 04N LONG 088 05 17W)													
SEP 2004 15...	<1	<.02	<.02	<.02	<.02	<.5	<.004	<.009	<.005	<1	<.029	<.013	<.024
05341865 PARKER CREEK NEAR RIVER FALLS, WI (LAT 44 55 13N LONG 092 31 47W)													
OCT 2004 06...	<1	<.02	<.02	<.02	<.02	<.5	<.004	<.009	<.005	<1	<.029	<.013	<.024
05365962 BLACK CREEK NEAR FAIRCHILD, WI (LAT 44 37 23N LONG 090 55 17W)													
OCT 2004 05...	<1	<.02	<.02	<.02	<.02	<.5	<.004	<.009	<.005	<1	<.029	<.013	<.024
05367064 CRANBERRY CREEK AT MERIDEAN, WI (LAT 44 44 03N LONG 091 47 57W)													
OCT 2004 05...	<1	.05	<.02	<.02	<.02	<.5	<.004	<.009	<.005	<1	<.029	<.013	<.024
05367803 SILVER CREEK NEAR ARLAND, WI (LAT 45 17 16N LONG 092 02 38W)													
OCT 2004 04...	<1	<.02	<.02	<.02	<.02	<.5	<.004	<.009	<.005	<1	<.029	<.013	<.024
05381441 SOPER CREEK AT CATARACT, WI (LAT 44 04 53N LONG 090 50 26W)													
SEP 2004 14...	<1	.03	<.02	<.02	<.02	<.5	<.004	<.009	<.005	<1	<.029	<.013	<.024
05382415 LITTLE LACROSSE RIVER NEAR MELVINA, WI (LAT 43 49 37N LONG 090 45 40W)													
SEP 2004 14...	<1	<.02	<.02	<.02	<.02	<.5	<.004	<.009	<.005	<1	<.029	<.013	<.024
054041139 WEST BRANCH BARABOO RIVER AT HILLSBORO, WI (LAT 43 39 05N LONG 090 21 26W)													
SEP 2004 13...	<1	<.02	<.02	<.02	<.02	<.5	<.004	<.009	<.005	<1	<.029	<.013	<.024
054067125 HAWKINS CREEK AT ROCKBRIDGE, WI (LAT 43 27 41N LONG 090 21 18W)													
SEP 2004 13...	<1	<.02	<.02	<.02	<.02	<.5	<.004	<.009	<.005	<1	<.029	<.013	<.024
05407049 TRIBUTARY TO FENNIMORE CREEK NR HICKORY GROVE, WI (LAT 43 07 00N LONG 090 32 02W)													
SEP 2004 07...	--	<.02	<.02	<.02	<.02	--	<.004	<.009	<.005	--	<.029	<.013	<.024
05407217 CROOKED CREEK AT BOSCOBEL, WI (LAT 43 07 21N LONG 090 42 59W)													
SEP 2004 07...	<1	<.02	<.02	<.02	<.02	<.5	<.004	<.009	<.005	<1	<.029	<.013	<.024

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Fipronil, water, fltrd, ug/L (62166)	Flufenacet ESA, water, fltrd, ug/L (61952)	Flufenacet OA, water, fltrd, ug/L (62483)	Flufenacet, water, fltrd, ug/L (62481)	Fluoranthene water, fltrd, ug/L (34377)	Fluoranthene-d10, sur Sch 20/8033 wat flt pct rcv (99586)	Fonofos water, fltrd, ug/L (04095)	HHCB, water, fltrd, ug/L (62075)	Indole, water, fltrd, ug/L (62076)	Isoborneol, water, fltrd, ug/L (62077)	Isophorone water, fltrd, ug/L (34409)	Isopropylbenzene water, fltrd, ug/L (62078)	Isoquinoline, water, fltrd, ug/L (62079)
04070621 SOUTH BRANCH OCONTO RIVER NEAR MARKTON, WI (LAT 45 08 46N LONG 088 35 51W)													
OCT 2004 13...	<.016	<.02	<.02	<.02	--	--	<.003	--	--	--	--	--	--
04074730 HUNTING RIVER ON CTH HWY T NEAR SUMMIT LAKE, WI (LAT 45 22 26N LONG 089 05 12W)													
OCT 2004 12...	<.016	<.02	<.02	<.02	--	--	<.003	--	--	--	--	--	--
04078005 TRIBUTARY TO WOLF RIVER NEAR SHAWANO, WI (LAT 44 43 45N LONG 088 33 20W)													
OCT 2004 13...	<.016	<.02	<.02	<.02	--	--	<.003	--	--	--	--	--	--
040863315 STONEY CREEK AT BOLTONVILLE, WI (LAT 43 31 04N LONG 088 05 17W)													
SEP 2004 15...	<.016	<.02	<.02	<.02	<.5	106	<.003	<.5	<.5	<.5	M	<.5	<.5
05341865 PARKER CREEK NEAR RIVER FALLS, WI (LAT 44 55 13N LONG 092 31 47W)													
OCT 2004 06...	<.016	<.02	<.02	<.02	<.5	107	<.003	<.5	<.5	<.5	<.5	<.5	<.5
05365962 BLACK CREEK NEAR FAIRCHILD, WI (LAT 44 37 23N LONG 090 55 17W)													
OCT 2004 05...	<.016	<.02	<.02	<.02	<.5	105	<.003	<.5	<.5	<.5	<.5	<.5	<.5
05367064 CRANBERRY CREEK AT MERIDEAN, WI (LAT 44 44 03N LONG 091 47 57W)													
OCT 2004 05...	<.016	<.02	<.02	<.02	<.5	102	<.003	<.5	<.5	<.5	<.5	<.5	<.5
05367803 SILVER CREEK NEAR ARLAND, WI (LAT 45 17 16N LONG 092 02 38W)													
OCT 2004 04...	<.016	<.02	<.02	<.02	<.5	99.2	<.003	<.5	<.5	<.5	<.5	<.5	<.5
05381441 SOPER CREEK AT CATARACT, WI (LAT 44 04 53N LONG 090 50 26W)													
SEP 2004 14...	<.016	<.02	<.02	<.02	<.5	111	<.003	<.5	M	<.5	<.5	<.5	<.5
05382415 LITTLE LACROSSE RIVER NEAR MELVINA, WI (LAT 43 49 37N LONG 090 45 40W)													
SEP 2004 14...	<.016	<.02	<.02	<.02	<.5	105	<.003	<.5	M	<.5	<.5	<.5	<.5
054041139 WEST BRANCH BARABOO RIVER AT HILLSBORO, WI (LAT 43 39 05N LONG 090 21 26W)													
SEP 2004 13...	<.016	<.02	<.02	<.02	<.5	103	<.003	<.5	M	<.5	M	<.5	<.5
054067125 HAWKINS CREEK AT ROCKBRIDGE, WI (LAT 43 27 41N LONG 090 21 18W)													
SEP 2004 13...	<.016	<.02	<.02	<.02	<.5	101	<.003	<.5	<.5	<.5	<.5	<.5	<.5
05407049 TRIBUTARY TO FENNIMORE CREEK NR HICKORY GROVE, WI (LAT 43 07 00N LONG 090 32 02W)													
SEP 2004 07...	<.016	<.02	<.02	<.02	--	--	<.003	--	--	--	--	--	--
05407217 CROOKED CREEK AT BOSCOBEL, WI (LAT 43 07 21N LONG 090 42 59W)													
SEP 2004 07...	<.016	<.02	<.02	<.02	<.5	78.1	<.003	<.5	<.5	<.5	<.5	<.5	<.5

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Mala-thion, water, fltrd, ug/L (39532)	Menthol water, fltrd, ug/L (62080)	Meta-laxyl, water, fltrd, ug/L (50359)	Methyl para-thion, water, fltrd 0.7u GF ug/L (82667)	Methyl salicy-late, water, fltrd, ug/L (62081)	Metola-chlor ESA, water, fltrd 0.7u GF ug/L (61043)	Metola-chlor OA, water, fltrd 0.7u GF ug/L (61044)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Moli-nate, water, fltrd 0.7u GF ug/L (82671)	Naphth-alene, water, fltrd, ug/L (34443)
04070621 SOUTH BRANCH OCONTO RIVER NEAR MARKTON, WI (LAT 45 08 46N LONG 088 35 51W)													
OCT 2004 13...	<.004	<.035	<.027	--	--	<.015	--	.03	<.02	<.006	<.006	<.003	--
04074730 HUNTING RIVER ON CTH HWY T NEAR SUMMIT LAKE, WI (LAT 45 22 26N LONG 089 05 12W)													
OCT 2004 12...	<.004	<.035	<.027	--	--	<.015	--	<.02	<.02	<.006	<.006	<.003	--
04078005 TRIBUTARY TO WOLF RIVER NEAR SHAWANO, WI (LAT 44 43 45N LONG 088 33 20W)													
OCT 2004 13...	<.004	<.035	<.027	--	--	<.015	--	.40	.06	E.006	<.006	<.003	--
040863315 STONEY CREEK AT BOLTONVILLE, WI (LAT 43 31 04N LONG 088 05 17W)													
SEP 2004 15...	<.004	<.035	<.027	<.5	<.5	<.015	M	.06	<.02	<.013	<.006	<.003	<.5
05341865 PARKER CREEK NEAR RIVER FALLS, WI (LAT 44 55 13N LONG 092 31 47W)													
OCT 2004 06...	<.004	<.035	<.027	<.5	<.5	<.015	<.5	.38	.02	<.006	<.006	<.003	<.5
05365962 BLACK CREEK NEAR FAIRCHILD, WI (LAT 44 37 23N LONG 090 55 17W)													
OCT 2004 05...	<.004	<.035	<.027	<.5	<.5	<.015	<.5	<.02	<.02	<.013	<.006	<.003	<.5
05367064 CRANBERRY CREEK AT MERIDEAN, WI (LAT 44 44 03N LONG 091 47 57W)													
OCT 2004 05...	<.004	<.035	<.027	<.5	<.5	<.015	<.5	.60	.09	<.013	<.006	<.003	<.5
05367803 SILVER CREEK NEAR ARLAND, WI (LAT 45 17 16N LONG 092 02 38W)													
OCT 2004 04...	<.004	<.035	<.027	<.5	<.5	<.015	<.5	.03	<.02	<.013	<.006	<.003	<.5
05381441 SOPER CREEK AT CATARACT, WI (LAT 44 04 53N LONG 090 50 26W)													
SEP 2004 14...	<.004	<.035	<.027	<.5	<.5	<.015	<.5	.11	.03	<.013	<.006	<.003	<.5
05382415 LITTLE LACROSSE RIVER NEAR MELVINA, WI (LAT 43 49 37N LONG 090 45 40W)													
SEP 2004 14...	<.004	<.035	<.027	<.5	<.5	<.015	M	.05	<.02	<.013	<.006	<.003	<.5
054041139 WEST BRANCH BARABOO RIVER AT HILLSBORO, WI (LAT 43 39 05N LONG 090 21 26W)													
SEP 2004 13...	<.004	<.035	<.027	<.5	<.5	<.015	<.5	.08	<.02	<.013	<.006	<.003	<.5
054067125 HAWKINS CREEK AT ROCKBRIDGE, WI (LAT 43 27 41N LONG 090 21 18W)													
SEP 2004 13...	<.004	<.035	<.027	<.5	<.5	<.015	<.5	.02	<.02	<.013	<.006	<.003	<.5
05407049 TRIBUTARY TO FENNIMORE CREEK NR HICKORY GROVE, WI (LAT 43 07 00N LONG 090 32 02W)													
SEP 2004 07...	<.004	<.035	<.027	--	--	<.015	--	.04	<.02	.013	<.006	<.003	--
05407217 CROOKED CREEK AT BOSCOBEL, WI (LAT 43 07 21N LONG 090 42 59W)													
SEP 2004 07...	<.004	<.035	<.027	<.5	<.5	<.015	<.5	.05	<.02	<.013	<.006	<.003	<.5

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Napropamide, water, fltrd 0.7u GF ug/L (82684)	p,p-' DDE, water, fltrd, ug/L (34653)	Parathion, water, fltrd, ug/L (39542)	p-Cresol, water, fltrd, ug/L (62084)	Pebulate, water, fltrd 0.7u GF ug/L (82669)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Pentachlorophenol, water, fltrd, ug/L (34459)	Phenanthrene, water, fltrd, ug/L (34462)	Phenol, water, fltrd, ug/L (34466)	Phorate water fltrd 0.7u GF ug/L (82664)	Prometon, water, fltrd, ug/L (04037)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Propachlor ESA, water, fltrd 0.7u GF ug/L (62766)
04070621 SOUTH BRANCH OCONTO RIVER NEAR MARKTON, WI (LAT 45 08 46N LONG 088 35 51W)													
OCT 2004 13...	<.007	<.003	<.010	--	<.004	<.022	--	--	--	<.011	<.01	<.004	<.05
04074730 HUNTING RIVER ON CTH HWY T NEAR SUMMIT LAKE, WI (LAT 45 22 26N LONG 089 05 12W)													
OCT 2004 12...	<.007	<.003	<.010	--	<.004	<.022	--	--	--	<.011	<.01	<.004	<.05
04078005 TRIBUTARY TO WOLF RIVER NEAR SHAWANO, WI (LAT 44 43 45N LONG 088 33 20W)													
OCT 2004 13...	<.007	<.003	<.010	--	<.004	<.022	--	--	--	<.011	<.01	<.004	<.05
040863315 STONEY CREEK AT BOLTONVILLE, WI (LAT 43 31 04N LONG 088 05 17W)													
SEP 2004 15...	<.007	<.003	<.010	M	<.004	<.022	<2	<.5	E.1	<.011	<.01	<.004	<.05
05341865 PARKER CREEK NEAR RIVER FALLS, WI (LAT 44 55 13N LONG 092 31 47W)													
OCT 2004 06...	<.007	<.003	<.010	<1	<.004	<.022	<2	<.5	1.7	<.011	<.01	<.004	<.05
05365962 BLACK CREEK NEAR FAIRCHILD, WI (LAT 44 37 23N LONG 090 55 17W)													
OCT 2004 05...	<.007	<.003	<.010	<1	<.004	<.022	<2	<.5	<.5	<.011	<.01	<.004	<.05
05367064 CRANBERRY CREEK AT MERIDEAN, WI (LAT 44 44 03N LONG 091 47 57W)													
OCT 2004 05...	<.007	<.003	<.010	<1	<.004	<.022	<2	<.5	<.5	<.011	<.01	<.004	<.05
05367803 SILVER CREEK NEAR ARLAND, WI (LAT 45 17 16N LONG 092 02 38W)													
OCT 2004 04...	<.007	<.003	<.010	<1	<.004	<.022	<2	<.5	<.5	<.011	<.01	<.004	<.05
05381441 SOPER CREEK AT CATARACT, WI (LAT 44 04 53N LONG 090 50 26W)													
SEP 2004 14...	<.007	<.003	<.010	M	<.004	<.022	<2	M	E.2	<.011	<.01	<.004	<.05
05382415 LITTLE LACROSSE RIVER NEAR MELVINA, WI (LAT 43 49 37N LONG 090 45 40W)													
SEP 2004 14...	<.007	<.003	<.010	M	<.004	<.022	<2	<.5	E.1	<.011	<.01	<.004	<.05
054041139 WEST BRANCH BARABOO RIVER AT HILLSBORO, WI (LAT 43 39 05N LONG 090 21 26W)													
SEP 2004 13...	<.007	<.003	<.010	<1	<.004	<.022	<2	<.5	.5	<.011	<.01	<.004	<.05
054067125 HAWKINS CREEK AT ROCKBRIDGE, WI (LAT 43 27 41N LONG 090 21 18W)													
SEP 2004 13...	<.007	<.003	<.010	M	<.004	<.022	<2	<.5	E.2	<.011	<.01	<.004	<.05
05407049 TRIBUTARY TO FENNIMORE CREEK NR HICKORY GROVE, WI (LAT 43 07 00N LONG 090 32 02W)													
SEP 2004 07...	<.007	<.003	<.010	--	<.004	<.022	--	--	--	<.011	<.01	<.004	<.05
05407217 CROOKED CREEK AT BOSCOBEL, WI (LAT 43 07 21N LONG 090 42 59W)													
SEP 2004 07...	<.007	<.003	<.010	M	<.004	<.022	<2	<.5	E.3	<.011	<.01	<.004	<.05

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Propachlor OA, water, fltrd 0.7u GF ug/L (62767)	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Pyrene, water, fltrd, ug/L (34470)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Tetrachloroethene, water, fltrd, ug/L (34476)	Thiobencarb water fltrd 0.7u GF ug/L (82681)	Triallate, water, fltrd 0.7u GF ug/L (82678)	Tribromomethane water, fltrd, ug/L (34288)
04070621 SOUTH BRANCH OCONTO RIVER NEAR MARKTON, WI (LAT 45 08 46N LONG 088 35 51W)													
OCT 2004 13...	<.02	<.025	<.011	<.02	--	<.005	<.02	<.034	<.02	--	<.010	<.006	--
04074730 HUNTING RIVER ON CTH HWY T NEAR SUMMIT LAKE, WI (LAT 45 22 26N LONG 089 05 12W)													
OCT 2004 12...	<.02	<.025	<.011	<.02	--	<.005	<.02	<.034	<.02	--	<.010	<.006	--
04078005 TRIBUTARY TO WOLF RIVER NEAR SHAWANO, WI (LAT 44 43 45N LONG 088 33 20W)													
OCT 2004 13...	<.02	<.025	<.011	<.02	--	<.005	<.02	<.034	<.02	--	<.010	<.006	--
040863315 STONEY CREEK AT BOLTONVILLE, WI (LAT 43 31 04N LONG 088 05 17W)													
SEP 2004 15...	<.02	<.025	<.011	<.02	<.5	.016	<.02	<.034	<.02	<.5	<.010	<.002	<.5
05341865 PARKER CREEK NEAR RIVER FALLS, WI (LAT 44 55 13N LONG 092 31 47W)													
OCT 2004 06...	<.02	<.025	<.011	<.02	<.5	.011	<.02	<.034	<.02	<.5	<.010	<.006	<.5
05365962 BLACK CREEK NEAR FAIRCHILD, WI (LAT 44 37 23N LONG 090 55 17W)													
OCT 2004 05...	<.02	<.025	<.011	<.02	<.5	<.005	<.02	<.034	<.02	<.5	<.010	<.002	<.5
05367064 CRANBERRY CREEK AT MERIDEAN, WI (LAT 44 44 03N LONG 091 47 57W)													
OCT 2004 05...	<.02	<.025	<.011	<.02	<.5	<.005	<.02	<.034	<.02	<.5	<.010	<.002	<.5
05367803 SILVER CREEK NEAR ARLAND, WI (LAT 45 17 16N LONG 092 02 38W)													
OCT 2004 04...	<.02	<.025	<.011	<.02	<.5	<.005	<.02	<.034	<.02	<.5	<.010	<.002	<.5
05381441 SOPER CREEK AT CATARACT, WI (LAT 44 04 53N LONG 090 50 26W)													
SEP 2004 14...	<.02	<.025	<.011	<.02	<.5	<.005	<.02	<.034	<.02	M	<.010	<.002	<.5
05382415 LITTLE LACROSSE RIVER NEAR MELVINA, WI (LAT 43 49 37N LONG 090 45 40W)													
SEP 2004 14...	<.02	<.025	<.011	<.02	<.5	<.005	<.02	<.034	<.02	<.5	<.010	<.002	<.5
054041139 WEST BRANCH BARABOO RIVER AT HILLSBORO, WI (LAT 43 39 05N LONG 090 21 26W)													
SEP 2004 13...	<.02	<.025	<.011	<.02	<.5	<.005	<.02	<.034	<.02	M	<.010	<.002	<.5
054067125 HAWKINS CREEK AT ROCKBRIDGE, WI (LAT 43 27 41N LONG 090 21 18W)													
SEP 2004 13...	<.02	<.025	<.011	<.02	<.5	<.005	<.02	<.034	<.02	<.5	<.010	<.002	<.5
05407049 TRIBUTARY TO FENNIMORE CREEK NR HICKORY GROVE, WI (LAT 43 07 00N LONG 090 32 02W)													
SEP 2004 07...	<.02	<.025	<.011	<.02	--	<.005	<.02	<.034	<.02	--	<.010	<.002	--
05407217 CROOKED CREEK AT BOSCOBEL, WI (LAT 43 07 21N LONG 090 42 59W)													
SEP 2004 07...	<.02	<.025	<.011	<.02	<.5	<.005	<.02	<.034	<.02	M	<.010	<.002	<.5

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Tri-butyl phos-phate, water, fltrd, ug/L (62089)	Triclo-san, water, fltrd, ug/L (62090)	Tri-ethyl citrate water, fltrd, ug/L (62091)	Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661)	Tri-phenyl phos-phate, water, fltrd, ug/L (62092)	Tris(2-butoxy-ethyl) phos-phate, wat flt ug/L (62093)	Tris(2-chloro-ethyl) phos-phate, wat flt ug/L (62087)	Tris(di chloro-i-Pr) phos-phate, wat flt ug/L (62088)
04070621 SOUTH BRANCH OCONTO RIVER NEAR MARKTON, WI (LAT 45 08 46N LONG 088 35 51W)								
OCT 2004 13...	--	--	--	<.009	--	--	--	--
04074730 HUNTING RIVER ON CTH HWY T NEAR SUMMIT LAKE, WI (LAT 45 22 26N LONG 089 05 12W)								
OCT 2004 12...	--	--	--	<.009	--	--	--	--
04078005 TRIBUTARY TO WOLF RIVER NEAR SHAWANO, WI (LAT 44 43 45N LONG 088 33 20W)								
OCT 2004 13...	--	--	--	<.009	--	--	--	--
040863315 STONEY CREEK AT BOLTONVILLE, WI (LAT 43 31 04N LONG 088 05 17W)								
SEP 2004 15...	<.5	<1	<.5	<.009	<.5	<.5	<.5	<.5
05341865 PARKER CREEK NEAR RIVER FALLS, WI (LAT 44 55 13N LONG 092 31 47W)								
OCT 2004 06...	<.5	<1	<.5	<.009	<.5	<.5	<.5	<.5
05365962 BLACK CREEK NEAR FAIRCHILD, WI (LAT 44 37 23N LONG 090 55 17W)								
OCT 2004 05...	<.5	<1	<.5	<.009	<.5	<.5	<.5	<.5
05367064 CRANBERRY CREEK AT MERIDEAN, WI (LAT 44 44 03N LONG 091 47 57W)								
OCT 2004 05...	<.5	<1	<.5	<.009	<.5	<.5	<.5	<.5
05367803 SILVER CREEK NEAR ARLAND, WI (LAT 45 17 16N LONG 092 02 38W)								
OCT 2004 04...	<.5	<1	<.5	<.009	<.5	<.5	<.5	<.5
05381441 SOPER CREEK AT CATARACT, WI (LAT 44 04 53N LONG 090 50 26W)								
SEP 2004 14...	<.5	<1	<.5	<.009	<.5	<.5	<.5	<.5
05382415 LITTLE LACROSSE RIVER NEAR MELVINA, WI (LAT 43 49 37N LONG 090 45 40W)								
SEP 2004 14...	<.5	<1	<.5	<.009	<.5	<.5	<.5	<.5
054041139 WEST BRANCH BARABOO RIVER AT HILLSBORO, WI (LAT 43 39 05N LONG 090 21 26W)								
SEP 2004 13...	<.5	<1	<.5	<.009	<.5	<.5	<.5	<.5
054067125 HAWKINS CREEK AT ROCKBRIDGE, WI (LAT 43 27 41N LONG 090 21 18W)								
SEP 2004 13...	<.5	<1	<.5	<.009	<.5	<.5	<.5	<.5
05407049 TRIBUTARY TO FENNIMORE CREEK NR HICKORY GROVE, WI (LAT 43 07 00N LONG 090 32 02W)								
SEP 2004 07...	--	--	--	<.009	--	--	--	--
05407217 CROOKED CREEK AT BOSCOBEL, WI (LAT 43 07 21N LONG 090 42 59W)								
SEP 2004 07...	<.5	<1	<.5	<.009	<.5	<.5	<.5	<.5

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)
05412880 ROGERS BRANCH NEAR LANCASTER, WI (LAT 42 53 21N LONG 090 42 51W)													
SEP 2004 08...	1250	14	40	757	12.8	127	8.1	678	15.1	79.1	31.0	2.91	13.3
05414133 LITTLE PLATTE RIVER NEAR ARTHUR, WI (LAT 42 46 54N LONG 090 28 45W)													
SEP 2004 08...	0710	19	40	757	9.3	89	7.8	734	13.4	88.0	46.1	2.14	8.13
05414924 GALENA RIVER AT JENKINSVILLE, WI (LAT 42 37 51N LONG 090 21 32W)													
SEP 2004 09...	0920	18	40	755	9.5	92	7.9	801	14.0	86.3	48.2	1.57	7.62
05436361 LITTLE SUGAR RIVER WEST BRANCH AT MONTICELLO, WI (LAT 42 44 47N LONG 089 35 07W)													
SEP 2004 10...	0815	19	40	757	9.8	92	7.7	653	12.4	72.0	43.3	1.75	5.79

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)
05412880 ROGERS BRANCH NEAR LANCASTER, WI (LAT 42 53 21N LONG 090 42 51W)													
SEP 2004 08...	277	325	32.0	<.2	11.3	24.1	392	.27	.33	E.03	5.43	.029	.06
05414133 LITTLE PLATTE RIVER NEAR ARTHUR, WI (LAT 42 46 54N LONG 090 28 45W)													
SEP 2004 08...	300	357	22.9	<.2	11.8	30.3	423	.32	.46	<.04	9.72	.053	.06
05414924 GALENA RIVER AT JENKINSVILLE, WI (LAT 42 37 51N LONG 090 21 32W)													
SEP 2004 09...	284	342	23.0	<.2	14.3	64.6	494	.27	.35	<.04	10.5	.037	.05
05436361 LITTLE SUGAR RIVER WEST BRANCH AT MONTICELLO, WI (LAT 42 44 47N LONG 089 35 07W)													
SEP 2004 10...	292	350	15.0	<.2	10.5	17.9	363	.17	.31	<.04	5.06	.014	.05

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	1,4-Dichlorobenzene water, fltrd, ug/L (34572)	1-Methylnaphthalene, water, fltrd, ug/L (62054)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	2,6-Dimethylnaphthalene, water, fltrd, ug/L (62055)	2-[(2-Ethyl-6methylphenyl)amino]2 oxoESA ug/L (62850)	CIAT, water, fltrd, ug/L (04040)	2-Methylnaphthalene, water, fltrd, ug/L (62056)	3-beta-Coprostanol, water, fltrd, ug/L (62057)	3-Methyl-1H-indole, water, fltrd, ug/L (62058)
05412880 ROGERS BRANCH NEAR LANCASTER, WI (LAT 42 53 21N LONG 090 42 51W)													
SEP 2004 08...	.080	.090	7	17.9	<.5	<.5	<.006	<.5	<.02	E.064	<.5	<2	<1
05414133 LITTLE PLATTE RIVER NEAR ARTHUR, WI (LAT 42 46 54N LONG 090 28 45W)													
SEP 2004 08...	.086	.137	10	63.5	<.5	<.5	<.006	<.5	.03	E.080	<.5	<2	<1
05414924 GALENA RIVER AT JENKINSVILLE, WI (LAT 42 37 51N LONG 090 21 32W)													
SEP 2004 09...	.064	.083	<6	54.5	<.5	<.5	<.006	<.5	.04	E.079	<.5	<2	<1
05436361 LITTLE SUGAR RIVER WEST BRANCH AT MONTICELLO, WI (LAT 42 44 47N LONG 089 35 07W)													
SEP 2004 10...	.066	.090	9	31.4	<.5	<.5	<.006	<.5	<.02	E.049	<.5	<2	<1

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	3-tert-Butyl-4-hydroxyanisole wat flt ug/L (62059)	4-Cumylphenol, water, fltrd, ug/L (62060)	4-Octylphenol, water, fltrd, ug/L (62061)	4-Nonylphenol, water, fltrd, ug/L (62085)	4-tert-Octylphenol, water, fltrd, ug/L (62062)	5-Methyl-1H-benzotriazole, wat flt ug/L (62063)	9,10-Anthraquinone water, fltrd, ug/L (62066)	Acetochlor ESA, water, fltrd 0.7u GF ug/L (61029)	Acetochlor OA, water, fltrd 0.7u GF ug/L (61030)	Acetochlor SAA, water, fltrd, ug/L (62847)	Acetochlor, water, fltrd, ug/L (49260)	Acetophenone water, fltrd, ug/L (62064)	AHTN, water, fltrd, ug/L (62065)
05412880 ROGERS BRANCH NEAR LANCASTER, WI (LAT 42 53 21N LONG 090 42 51W)													
SEP 2004 08...	<5	<1	<1	<5	<1	<2	<.5	<.02	<.02	<.02	<.006	<.5	M
05414133 LITTLE PLATTE RIVER NEAR ARTHUR, WI (LAT 42 46 54N LONG 090 28 45W)													
SEP 2004 08...	<5	<1	<1	<5	<1	<2	<.5	.07	<.02	<.02	<.006	<.5	<.5
05414924 GALENA RIVER AT JENKINSVILLE, WI (LAT 42 37 51N LONG 090 21 32W)													
SEP 2004 09...	<5	<1	<1	<5	<1	<2	<.5	<.02	<.02	<.02	<.006	<.5	<.5
05436361 LITTLE SUGAR RIVER WEST BRANCH AT MONTICELLO, WI (LAT 42 44 47N LONG 089 35 07W)													
SEP 2004 10...	<5	<1	<1	<5	<1	<2	<.5	.04	<.02	<.02	E.003	<.5	<.5

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Alachlor ESA SA, water, fltrd, ug/L (62849)	Alachlor ESA, water, fltrd 0.7u GF ug/L (50009)	Alachlor OA, water, fltrd 0.7u GF ug/L (61031)	Alachlor SAA, water, fltrd, ug/L (62848)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	alpha-HCH-d6, surrog, wat flt 0.7u GF percent recovry (91065)	Anthracene, water, fltrd, ug/L (34221)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Benzo[a]pyrene, water, fltrd, ug/L (34248)	Benzophenone water, fltrd, ug/L (62067)
05412880 ROGERS BRANCH NEAR LANCASTER, WI (LAT 42 53 21N LONG 090 42 51W)													
SEP 2004 08...	<.02	.32	<.02	<.02	<.005	<.005	81.7	<.5	.073	<.050	<.010	<.5	<.5
05414133 LITTLE PLATTE RIVER NEAR ARTHUR, WI (LAT 42 46 54N LONG 090 28 45W)													
SEP 2004 08...	<.02	.27	<.02	<.02	<.005	<.005	89.9	<.5	.106	<.050	<.010	<.5	<.5
05414924 GALENA RIVER AT JENKINSVILLE, WI (LAT 42 37 51N LONG 090 21 32W)													
SEP 2004 09...	<.02	.71	<.02	<.02	<.005	<.005	86.5	<.5	.082	<.050	<.010	<.5	<.5
05436361 LITTLE SUGAR RIVER WEST BRANCH AT MONTICELLO, WI (LAT 42 44 47N LONG 089 35 07W)													
SEP 2004 10...	<.02	.06	<.02	<.02	<.005	<.005	89.7	<.5	.051	<.050	<.010	<.5	<.5

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	beta-Sitosterol, water, fltrd, ug/L (62068)	beta-Stigmastanol, water, fltrd, ug/L (62086)	Bisphenol A, water, fltrd, ug/L (62069)	Bisphenol A-d3 sur Sch 2033 & 8033, wat flt pct rcv (99583)	Bromacil, water, fltrd, ug/L (04029)	Butylate, water, fltrd, ug/L (04028)	Caffeine, water, fltrd, ug/L (50305)	Caffeine-13C sur Sch 2033 & 8033, wat flt pct rcv (99584)	Camphor water, fltrd, ug/L (62070)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbazole, water, fltrd, ug/L (62071)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chlorpyrifos water, fltrd, ug/L (38933)
05412880 ROGERS BRANCH NEAR LANCASTER, WI (LAT 42 53 21N LONG 090 42 51W)													
SEP 2004 08...	<2	<2	<1	68.8	<.5	<.004	<.5	83.5	<.5	<.041	<.5	<.020	<.005
05414133 LITTLE PLATTE RIVER NEAR ARTHUR, WI (LAT 42 46 54N LONG 090 28 45W)													
SEP 2004 08...	<2	<2	<1	39.6	<.5	<.004	<.5	72.3	<.5	<.041	<.5	<.020	<.005
05414924 GALENA RIVER AT JENKINSVILLE, WI (LAT 42 37 51N LONG 090 21 32W)													
SEP 2004 09...	<2	<2	<1	50.4	<.5	<.004	<.5	86.9	<.5	<.041	<.5	<.020	<.005
05436361 LITTLE SUGAR RIVER WEST BRANCH AT MONTICELLO, WI (LAT 42 44 47N LONG 089 35 07W)													
SEP 2004 10...	<2	<2	<1	57.6	<.5	<.004	M	79.0	<.5	<.041	<.5	<.020	<.005

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Cholesterol, water, fltrd, ug/L (62072)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Cotinine, water, fltrd, ug/L (62005)	Cyanazine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	DecaFbiphenl sur Sch 2033 & 8033, wat flt pct rcv (99585)	DEET, water, fltrd, ug/L (62082)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Diazinon-d10 surrog. wat flt 0.7u GF percent recovry (91063)	Dieldrin, water, fltrd, ug/L (39381)	Diethoxynonylphenol, water, fltrd, ug/L (62083)	Diethoxyoctylphenol, water, fltrd ug/L (61705)
05412880 ROGERS BRANCH NEAR LANCASTER, WI (LAT 42 53 21N LONG 090 42 51W)													
SEP 2004 08...	<2	<.006	<1.00	<.018	<.003	31.5	M	<.012	<.005	87.0	<.009	<5	<1
05414133 LITTLE PLATTE RIVER NEAR ARTHUR, WI (LAT 42 46 54N LONG 090 28 45W)													
SEP 2004 08...	<2	<.006	<1.00	<.018	<.003	32.6	M	<.012	<.005	91.1	<.009	<5	<1
05414924 GALENA RIVER AT JENKINSVILLE, WI (LAT 42 37 51N LONG 090 21 32W)													
SEP 2004 09...	<2	<.006	<1.00	<.018	<.003	36.2	M	<.012	<.005	88.5	<.009	<5	<1
05436361 LITTLE SUGAR RIVER WEST BRANCH AT MONTICELLO, WI (LAT 42 44 47N LONG 089 35 07W)													
SEP 2004 10...	<2	<.006	<1.00	<.018	<.003	26.6	M	<.012	<.005	92.4	<.009	<5	<1

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Dimethenamid ESA, water, fltrd, ug/L (61951)	Dimethenamid OA, water, fltrd, ug/L (62482)	Dimethenamid water, fltrd, ug/L (61588)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	D-Limonene, water, fltrd, ug/L (62073)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfluralin, water, fltrd 0.7u GF ug/L (82663)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Ethoxyoctylphenol, water, fltrd ug/L (61706)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)
05412880 ROGERS BRANCH NEAR LANCASTER, WI (LAT 42 53 21N LONG 090 42 51W)													
SEP 2004 08...	<.02	<.02	<.02	<.02	<.5	<.004	<.009	<.005	<1	<.029	<.013	<.024	<.016
05414133 LITTLE PLATTE RIVER NEAR ARTHUR, WI (LAT 42 46 54N LONG 090 28 45W)													
SEP 2004 08...	<.02	<.02	<.02	<.02	<.5	<.004	<.009	<.005	<1	<.029	<.013	<.024	<.016
05414924 GALENA RIVER AT JENKINSVILLE, WI (LAT 42 37 51N LONG 090 21 32W)													
SEP 2004 09...	<.02	<.02	<.02	<.02	<.5	<.004	<.009	<.005	<1	<.029	<.013	<.024	<.016
05436361 LITTLE SUGAR RIVER WEST BRANCH AT MONTICELLO, WI (LAT 42 44 47N LONG 089 35 07W)													
SEP 2004 10...	<.02	<.02	<.02	<.02	<.5	<.004	<.009	<.005	<1	<.029	<.013	<.024	<.016

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Flufenacet ESA, water, fltrd, ug/L (61952)	Flufenacet OA, water, fltrd, ug/L (62483)	Flufenacet, water, fltrd, ug/L (62481)	Fluoranthene water, fltrd, ug/L (34377)	Fluoranthene-d10, sur Sch 20/8033 wat flt pct rcv (99586)	Fonofos water, fltrd, ug/L (04095)	HHCB, water, fltrd, ug/L (62075)	Indole, water, fltrd, ug/L (62076)	Isoborneol, water, fltrd, ug/L (62077)	Isophorone water, fltrd, ug/L (34409)	Isopropylbenzene water, fltrd, ug/L (62078)	Isoquinoline, water, fltrd, ug/L (62079)	Lindane water, fltrd, ug/L (39341)
05412880 ROGERS BRANCH NEAR LANCASTER, WI (LAT 42 53 21N LONG 090 42 51W)													
SEP 2004 08...	<.02	<.02	<.02	<.5	87.4	<.003	<.5	<.5	<.5	M	<.5	<.5	<.004
05414133 LITTLE PLATTE RIVER NEAR ARTHUR, WI (LAT 42 46 54N LONG 090 28 45W)													
SEP 2004 08...	<.02	<.02	<.02	<.5	75.9	<.003	<.5	<.5	<.5	M	<.5	<.5	<.004
05414924 GALENA RIVER AT JENKINSVILLE, WI (LAT 42 37 51N LONG 090 21 32W)													
SEP 2004 09...	<.02	<.02	<.02	<.5	91.5	<.003	<.5	<.5	<.5	M	<.5	<.5	<.004
05436361 LITTLE SUGAR RIVER WEST BRANCH AT MONTICELLO, WI (LAT 42 44 47N LONG 089 35 07W)													
SEP 2004 10...	<.02	<.02	<.02	<.5	81.3	<.003	<.5	<.5	<.5	<.5	<.5	<.5	<.004

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Linuron water fltrd 0.7u GF ug/L (82666)	Mala-thion, water, fltrd, ug/L (39532)	Menthol water, fltrd, ug/L (62080)	Meta-laxyl, water, fltrd, ug/L (50359)	Methyl para-thion, water, fltrd 0.7u GF ug/L (82667)	Methyl salicy-late, water, fltrd, ug/L (62081)	Metola-chlor ESA, water, fltrd 0.7u GF ug/L (61043)	Metola-chlor OA, water, fltrd 0.7u GF ug/L (61044)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Moli-nate, water, fltrd 0.7u GF ug/L (82671)	Naphth-alene, water, fltrd, ug/L (34443)	Naprop-amide, water, fltrd 0.7u GF ug/L (82684)
05412880 ROGERS BRANCH NEAR LANCASTER, WI (LAT 42 53 21N LONG 090 42 51W)													
SEP 2004 08...	<.035	<.027	<.5	<.5	<.015	<.5	.32	<.02	.027	<.006	<.003	<.5	<.007
05414133 LITTLE PLATTE RIVER NEAR ARTHUR, WI (LAT 42 46 54N LONG 090 28 45W)													
SEP 2004 08...	<.035	<.027	<.5	<.5	<.015	<.5	2.42	.10	.020	<.006	<.003	<.5	<.007
05414924 GALENA RIVER AT JENKINSVILLE, WI (LAT 42 37 51N LONG 090 21 32W)													
SEP 2004 09...	<.035	<.027	<.5	<.5	<.015	<.5	3.91	.14	.018	<.006	<.003	<.5	<.007
05436361 LITTLE SUGAR RIVER WEST BRANCH AT MONTICELLO, WI (LAT 42 44 47N LONG 089 35 07W)													
SEP 2004 10...	<.035	<.027	<.5	<.5	<.015	<.5	.27	.03	E.004	<.006	<.003	<.5	<.007

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	p,p'-DDE, water, fltrd, ug/L (34653)	Para-thion, water, fltrd, ug/L (39542)	p-Cresol, water, fltrd, ug/L (62084)	Peb-ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi-meth-alin, water, fltrd 0.7u GF ug/L (82683)	Penta-chloro-phenol, water, fltrd, ug/L (34459)	Phenan-threne, water, fltrd, ug/L (34462)	Phenol, water, fltrd, ug/L (34466)	Phorate water fltrd 0.7u GF ug/L (82664)	Prome-ton, water, fltrd, ug/L (04037)	Propy-zamide, water, fltrd 0.7u GF ug/L (82676)	Propa-chlor ESA, water, fltrd 0.7u GF ug/L (62766)	Propa-chlor OA, water, fltrd 0.7u GF ug/L (62767)
05412880 ROGERS BRANCH NEAR LANCASTER, WI (LAT 42 53 21N LONG 090 42 51W)													
SEP 2004 08...	<.003	<.010	<1	<.004	<.022	<2	<.5	.6	<.011	.01	<.004	<.05	<.02
05414133 LITTLE PLATTE RIVER NEAR ARTHUR, WI (LAT 42 46 54N LONG 090 28 45W)													
SEP 2004 08...	<.003	<.010	M	<.004	<.022	<2	<.5	E.2	<.011	<.01	<.004	<.05	<.02
05414924 GALENA RIVER AT JENKINSVILLE, WI (LAT 42 37 51N LONG 090 21 32W)													
SEP 2004 09...	<.003	<.010	<1	<.004	<.022	<2	<.5	E.3	<.011	<.01	<.004	<.05	<.02
05436361 LITTLE SUGAR RIVER WEST BRANCH AT MONTICELLO, WI (LAT 42 44 47N LONG 089 35 07W)													
SEP 2004 10...	<.003	<.010	M	<.004	<.022	<2	<.5	1.0	<.011	<.01	<.004	<.05	<.02

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Propa-chlor, water, fltrd, ug/L (04024)	Pro-panil, water, fltrd 0.7u GF ug/L (82679)	Propar-gite, water, fltrd 0.7u GF ug/L (82685)	Pyrene, water, fltrd, ug/L (34470)	Sima-zine, water, fltrd, ug/L (04035)	Tebu-thiuron water fltrd 0.7u GF ug/L (82670)	Terba-cil, water, fltrd 0.7u GF ug/L (82665)	Terbu-fos, water, fltrd 0.7u GF ug/L (82675)	Tetra-chloro-ethene, water, fltrd, ug/L (34476)	Thio-bencarb water fltrd 0.7u GF ug/L (82681)	Tri-allate, water, fltrd 0.7u GF ug/L (82678)	Tri-bromo-methane water, fltrd, ug/L (34288)	Tri-butyl phos-phate, water, fltrd, ug/L (62089)
05412880 ROGERS BRANCH NEAR LANCASTER, WI (LAT 42 53 21N LONG 090 42 51W)													
SEP 2004 08...	<.025	<.011	<.02	<.5	<.010	<.02	<.034	<.02	<.5	<.010	<.002	<.5	<.5
05414133 LITTLE PLATTE RIVER NEAR ARTHUR, WI (LAT 42 46 54N LONG 090 28 45W)													
SEP 2004 08...	<.025	<.011	<.02	<.5	E.004	E.01	<.034	<.02	<.5	<.010	<.002	<.5	<.5
05414924 GALENA RIVER AT JENKINSVILLE, WI (LAT 42 37 51N LONG 090 21 32W)													
SEP 2004 09...	<.025	<.011	<.02	<.5	<.005	<.02	<.034	<.02	<.5	<.010	<.002	<.5	<.5
05436361 LITTLE SUGAR RIVER WEST BRANCH AT MONTICELLO, WI (LAT 42 44 47N LONG 089 35 07W)													
SEP 2004 10...	<.025	<.011	<.02	<.5	E.003	E.01	<.034	<.02	M	<.010	<.002	<.5	<.5

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Triclosan, water, fltrd, ug/L (62090)	Triethyl citrate water, fltrd, ug/L (62091)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)	Triphenyl phosphate, water, fltrd, ug/L (62092)	Tris(2-butoxyethyl) phosphate, wat flt ug/L (62093)	Tris(2-chloroethyl) phosphate, wat flt ug/L (62087)	Tris(dichloro-i-Pr) phosphate, wat flt ug/L (62088)
05412880 ROGERS BRANCH NEAR LANCASTER, WI (LAT 42 53 21N LONG 090 42 51W)							
SEP 2004 08...	<1	<.5	<.009	<.5	<.5	<.5	<.5
05414133 LITTLE PLATTE RIVER NEAR ARTHUR, WI (LAT 42 46 54N LONG 090 28 45W)							
SEP 2004 08...	<1	<.5	<.009	<.5	<.5	<.5	<.5
05414924 GALENA RIVER AT JENKINSVILLE, WI (LAT 42 37 51N LONG 090 21 32W)							
SEP 2004 09...	<1	<.5	<.009	<.5	<.5	<.5	<.5
05436361 LITTLE SUGAR RIVER WEST BRANCH AT MONTICELLO, WI (LAT 42 44 47N LONG 089 35 07W)							
SEP 2004 10...	<1	<.5	<.009	<.5	<.5	<.5	<.5

MISCELLANEOUS WATER-QUALITY DATA

MISCELLANEOUS STATION ANALYSES

Date	Time	Sampling method, code (82398)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	alpha-HCH-d6, surrog, wat flt 0.7u GF percent recovry (91065)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)
040780922 MID BR EMBARRASS R @ TOWNLINE RD NR WITTENBERG, WI (LAT 44 51 21N LONG 089 09 51W)													
MAY 2004													
30...	1700	30	<.006	E.014	.010	<.005	<.005	87.7	.043	<.050	<.010	<.004	<.041
31...	1200	30	<.006	E.009	.030	.007	<.005	102	.122	<.050	<.010	<.004	<.041
JUN													
01...	1420	70	<.006	E.018	.021	.006	<.005	83.1	.088	<.050	<.010	<.004	<.041
JUL													
04...	2200	30	<.006	E.022	.008	<.005	<.005	86.7	.028	<.050	<.010	<.004	<.041
05...	0930	30	<.006	E.022	.009	<.005	<.005	85.9	.040	<.050	<.010	<.004	<.041
06...	1310	70	<.006	E.018	.008	<.005	<.005	88.4	.028	<.050	<.010	<.004	<.041
05381265 MORRISON CREEK AT MOUTH NEAR BLACK RIVER FALLS, WI (LAT 44 21 23N LONG 090 45 58W)													
JUN 2004													
10...	0915	70	<.006	E.017	.011	<.005	<.005	101	.042	E.028	<.010	<.004	E.029
10...	1415	70	<.006	E.016	.010	<.005	<.005	99.3	.038	E.022	<.010	<.004	<.041
15...	1600	70	<.006	E.013	.007	<.005	<.005	97.7	.028	<.050	<.010	<.004	<.041
JUL													
06...	1030	70	<.006	E.007	.009	<.005	<.005	88.2	.019	E.028	<.010	<.004	E.010
07...	1230	70	<.006	E.007	.008	<.005	<.005	90.3	.017	E.044	<.010	<.004	E.014
05403279 MILL CREEK AT CTH N NEAR TOMAH, WI (LAT 44 02 25N LONG 090 24 47W)													
JUN 2004													
10...	1005	70	<.006	E.018	.009	<.005	<.005	101	.044	<.050	<.010	<.004	<.041
10...	1520	70	<.006	E.019	.009	<.005	<.005	98.9	.045	<.050	<.010	<.004	<.041
16...	0730	70	<.006	E.017	.010	<.005	<.005	86.1	.037	E.020	<.010	<.004	<.041
JUL													
06...	1120	70	<.006	E.005	<.010	<.005	<.005	86.0	.018	<.050	<.010	<.004	<.041
07...	1330	70	<.006	E.005	<.010	<.005	<.005	85.3	.015	<.050	<.010	<.004	<.041

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Cyanazine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Diazinon-d10 surrog. wat flt 0.7u GF percent recovry (91063)	Dieldrin, water, fltrd, ug/L (39381)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfluralin, water, fltrd 0.7u GF ug/L (82663)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)
040780922 MID BR EMBARRASS R @ TOWNLINE RD NR WITTENBERG, WI (LAT 44 51 21N LONG 089 09 51W)													
MAY 2004													
30...	<.020	<.005	<.006	<.018	<.003	<.012	<.005	98.7	<.009	<.02	<.004	<.009	<.005
31...	<.020	<.005	<.006	<.018	<.003	<.012	<.005	102	<.009	<.02	<.004	<.009	<.005
JUN													
01...	<.020	<.005	<.006	<.018	<.003	<.012	<.005	96.4	<.009	<.02	<.004	<.009	<.005
JUL													
04...	<.020	<.005	<.006	<.018	<.003	<.012	<.005	108	<.009	<.02	<.004	<.009	<.005
05...	<.020	<.005	<.006	<.018	<.003	<.012	<.005	106	<.009	<.02	<.004	<.009	<.005
06...	<.020	<.005	<.006	<.018	<.003	<.012	<.005	104	<.009	<.02	<.004	<.009	<.005
05381265 MORRISON CREEK AT MOUTH NEAR BLACK RIVER FALLS, WI (LAT 44 21 23N LONG 090 45 58W)													
JUN 2004													
10...	<.020	.008	<.006	<.018	<.003	<.012	.090	118	<.009	<.02	<.004	<.009	<.005
10...	<.020	.007	<.006	<.018	<.003	<.012	.050	104	<.009	<.02	<.004	<.009	<.005
15...	<.020	.009	<.006	<.018	<.003	<.012	.022	112	<.009	<.02	<.004	<.009	<.005
JUL													
06...	<.020	<.005	<.006	<.018	<.003	<.012	E.005	99.5	<.009	<.02	<.004	<.009	<.005
07...	<.020	<.005	<.006	<.018	<.003	<.012	.006	102	<.009	<.02	<.004	<.009	<.005
05403279 MILL CREEK AT CTH N NEAR TOMAH, WI (LAT 44 02 25N LONG 090 24 47W)													
JUN 2004													
10...	<.020	.048	<.006	<.018	<.003	<.012	<.005	115	<.009	<.02	<.004	<.009	<.005
10...	<.020	.043	<.006	<.018	<.003	<.012	<.005	116	<.009	<.02	<.004	<.009	<.005
16...	<.020	.074	<.006	<.018	<.003	<.012	<.005	118	<.009	<.02	<.004	<.009	<.005
JUL													
06...	<.020	.031	<.006	<.018	<.003	<.012	<.005	102	<.009	<.02	<.004	<.009	<.005
07...	<.020	.025	<.006	<.018	<.003	<.012	<.005	102	<.009	<.02	<.004	<.009	<.005

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Molinate, water, fltrd 0.7u GF ug/L (82671)	Napropamide, water, fltrd 0.7u GF ug/L (82684)
040780922 MID BR EMBARRASS R @ TOWNLINE RD NR WITTENBERG, WI (LAT 44 51 21N LONG 089 09 51W)													
MAY 2004													
30...	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	E.010	<.006	<.003	<.007
31...	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.022	<.006	<.003	<.007
JUN													
01...	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.019	<.006	<.003	<.007
JUL													
04...	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	E.008	<.006	<.003	<.007
05...	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.014	<.006	<.003	<.007
06...	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	E.008	<.006	<.003	<.007
05381265 MORRISON CREEK AT MOUTH NEAR BLACK RIVER FALLS, WI (LAT 44 21 23N LONG 090 45 58W)													
JUN 2004													
10...	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.014	<.006	<.003	<.007
10...	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.013	<.006	<.003	<.007
15...	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	E.012	<.006	<.003	E.006
JUL													
06...	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	E.009	<.006	<.003	<.007
07...	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	E.008	<.006	<.003	E.006
05403279 MILL CREEK AT CTH N NEAR TOMAH, WI (LAT 44 02 25N LONG 090 24 47W)													
JUN 2004													
10...	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.016	<.006	<.003	.009
10...	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.017	<.006	<.003	E.007
16...	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.014	<.006	<.003	.015
JUL													
06...	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	E.011	<.006	<.003	.019
07...	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	E.007	<.006	<.003	.014

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	p,p-' DDE, water, fltrd, ug/L (34653)	Parathion, water, fltrd, ug/L (39542)	Pebulate, water, fltrd 0.7u GF ug/L (82669)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prometon, water, fltrd, ug/L (04037)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)
040780922 MID BR EMBARRASS R @ TOWNLINE RD NR WITTENBERG, WI (LAT 44 51 21N LONG 089 09 51W)													
MAY 2004													
30...	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034
31...	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034
JUN													
01...	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	E.003	<.02	<.034
JUL													
04...	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034
05...	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034
06...	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034
05381265 MORRISON CREEK AT MOUTH NEAR BLACK RIVER FALLS, WI (LAT 44 21 23N LONG 090 45 58W)													
JUN 2004													
10...	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034
10...	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034
15...	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034
JUL													
06...	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034
07...	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034
05403279 MILL CREEK AT CTH N NEAR TOMAH, WI (LAT 44 02 25N LONG 090 24 47W)													
JUN 2004													
10...	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034
10...	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034
16...	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034
JUL													
06...	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034
07...	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Thiobencarb water fltrd 0.7u GF ug/L (82681)	Triallate, water, fltrd 0.7u GF ug/L (82678)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
040780922 MID BR EMBARRASS R @ TOWNLINE RD NR WITTENBERG, WI (LAT 44 51 21N LONG 089 09 51W)				
MAY 2004				
30...	<.02	<.010	<.002	<.009
31...	<.02	<.010	<.002	<.009
JUN				
01...	<.02	<.010	<.002	<.009
JUL				
04...	<.02	<.010	<.002	<.009
05...	<.02	<.010	<.002	<.009
06...	<.02	<.010	<.002	<.009
05381265 MORRISON CREEK AT MOUTH NEAR BLACK RIVER FALLS, WI (LAT 44 21 23N LONG 090 45 58W)				
JUN 2004				
10...	<.02	<.010	<.002	<.009
10...	<.02	<.010	<.002	<.009
15...	<.02	<.010	<.002	<.009
JUL				
06...	<.02	<.010	<.002	<.009
07...	<.02	<.010	<.002	<.009
05403279 MILL CREEK AT CTH N NEAR TOMAH, WI (LAT 44 02 25N LONG 090 24 47W)				
JUN 2004				
10...	<.02	<.010	<.002	<.009
10...	<.02	<.010	<.002	<.009
16...	<.02	<.010	<.002	<.009
JUL				
06...	<.02	<.010	<.002	<.009
07...	<.02	<.010	<.002	<.009

MISCELLANEOUS WATER-QUALITY DATA

MISCELLANEOUS STATION ANALYSES

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)
04073470 PUCHYAN RIVER AT GREEN LAKE, WI (LAT 43 50 48N LONG 088 57 36W)					
MAR 2004					
22...	1230	203	10	.051	--
MAY					
26...	1647	768	30	.056	7
JUL					
02...	1237	350	10	.050	13
SEP					
10...	1220	47	10	.032	--

MISCELLANEOUS WATER-QUALITY DATA

MISCELLANEOUS STATION ANALYSES

Date	Time	Discharge, cfs (00060)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
04087030 MENOMONEE RIVER AT MENOMONEE FALLS, WI (LAT 43 10 22N LONG 088 06 14W)													
NOV 2003													
12...	0955	--	15	10	738	12.7	106	8.0	1,110	6.2	--	--	--
JAN 2004													
21...	1500	9.0	--	10	--	--	--	--	--	--	--	--	--
FEB													
11...	1005	38	--	70	749	16.6	115	8.0	1,140	-.3	--	--	--
19...	0715	8.8	--	70	747	13.5	94	8.0	1,230	-.2	107	49.9	2.59
MAR													
05...	1215	--	190	10	740	17.6	134	7.9	726	2.7	51.0	21.5	3.43
17...	1035	--	35	70	--	--	--	--	--	--	--	--	--
APR													
14...	0800	--	21	10	750	12.6	105	8.0	1,030	7.0	--	--	--
20...	1310	--	29	70	--	--	--	--	--	--	--	--	--
MAY													
11...	1045	--	190	40	740	9.3	94	7.9	639	14.3	51.5	21.8	2.54
JUN													
07...	1725	--	37	70	--	--	--	--	--	--	--	--	--
10...	1210	--	47	10	750	9.3	93	7.9	850	14.4	--	--	--
29...	1420	--	31	70	--	--	--	--	--	--	--	--	--
JUL													
14...	1213	--	17	--	--	8.5	--	8.2	896	22.5	--	--	--
26...	1030	--	6.9	40	--	9.0	--	8.3	888	18.4	72.3	40.4	2.05
AUG													
04...	1130	--	10	10	--	8.9	--	8.3	671	22.2	49.4	28.2	2.30
18...	0725	--	5.2	70	--	--	--	--	--	--	--	--	--
18...	0750	--	--	--	747	7.9	86	7.5	847	18.5	--	--	--
24...	1140	--	3.4	40	742	8.4	95	8.3	1,350	19.9	--	--	--
04087159 KINNICKINNIC RIVER @ S. 11TH STREET @ MILWAUKEE,WI (LAT 42 59 51N LONG 087 55 35W)													
FEB 2004													
18...	1420	6.0	--	40	752	23.7	165	7.8	3,000	-.3	85.8	31.8	6.19
MAR													
05...	0920	--	287	40	734	15.4	125	7.5	1,150	4.6	39.7	13.6	6.44
MAY													
11...	0945	--	16	70	760	14.5	142	8.4	1,110	14.2	56.1	20.7	6.03
30...	1035	--	13	50	--	--	--	--	--	--	--	--	--
30...	1235	--	187	50	--	--	--	--	--	--	--	--	--
30...	1310	--	824	50	--	--	--	--	--	--	--	--	--
30...	1335	--	1,090	50	--	--	--	--	--	--	--	--	--
30...	1435	--	679	50	--	--	--	--	--	--	--	--	--
30...	2015	--	76	50	--	--	--	--	--	--	--	--	--
31...	0215	--	48	50	--	--	--	--	--	--	--	--	--
31...	0415	--	64	50	--	--	--	--	--	--	--	--	--
31...	1415	--	28	50	--	--	--	--	--	--	--	--	--
31...	1815	--	68	50	--	--	--	--	--	--	--	--	--
JUN													
09...	1135	--	74	50	--	--	--	--	--	--	--	--	--
10...	1255	--	147	50	--	--	--	--	--	--	--	--	--
10...	1410	--	624	50	--	--	--	--	--	--	--	--	--
10...	1920	--	299	50	--	--	--	--	--	--	--	--	--
10...	2320	--	115	50	--	--	--	--	--	--	--	--	--
11...	0920	--	59	50	--	--	--	--	--	--	--	--	--
11...	1135	--	342	50	--	--	--	--	--	--	--	--	--
11...	1935	--	60	50	--	--	--	--	--	--	--	--	--
12...	1245	--	50	50	--	--	--	--	--	--	--	--	--
14...	0240	--	223	50	--	--	--	--	--	--	--	--	--
14...	0330	--	591	50	--	--	--	--	--	--	--	--	--
14...	0715	--	60	50	--	--	--	--	--	--	--	--	--
14...	1140	--	257	50	--	--	--	--	--	--	--	--	--
14...	1220	--	1,260	50	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (00417)	Alka-linity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicar-bonate, wat flt incrm. titr., field, mg/L (00453)	Carbon-ate, wat flt incrm. titr., field, mg/L (00452)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
04087030 MENOMONEE RIVER AT MENOMONEE FALLS, WI (LAT 43 10 22N LONG 088 06 14W)													
NOV 2003													
12...	--	--	--	229	273	3	133	--	--	139	--	.06	3.05
JAN 2004													
21...	--	--	--	--	--	--	149	--	--	--	--	--	--
FEB													
11...	--	--	--	288	345	4	93.6	--	--	94.0	--	<.04	.28
19...	82.6	--	--	300	--	--	159	<.2	9.34	88.7	702	E.04	1.15
MAR													
05...	58.5	--	142	139	168	1	120	<.2	6.13	40.3	425	<.04	2.02
17...	--	--	--	--	--	--	400	--	--	--	--	--	--
APR													
14...	--	--	--	263	310	5	134	--	--	65.9	--	<.04	1.07
20...	--	253	--	--	--	--	144	--	--	--	--	--	--
MAY													
11...	42.0	--	166	146	--	--	78.6	<.2	6.05	33.5	399	E.03	.72
JUN													
07...	--	264	--	--	--	--	89.0	--	--	--	--	--	--
10...	--	--	--	260	312	2	91.5	--	--	31.9	--	E.03	1.10
29...	--	264	--	--	--	--	92.2	--	--	--	--	--	--
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	50.4	--	278	263	--	--	111	<.2	3.90	46.8	509	<.04	.28
AUG													
04...	46.2	--	177	168	--	--	87.6	<.2	3.85	30.1	390	<.04	.36
18...	--	225	--	--	--	--	110	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	234	280	--	224	--	--	55.0	--	<.04	.39
04087159 KINNICKINNIC RIVER @ S. 11TH STREET @ MILWAUKEE,WI (LAT 42 59 51N LONG 087 55 35W)													
FEB 2004													
18...	459	--	--	188	--	--	789	.8	5.80	88.1	1,600	.16	.43
MAR													
05...	140	--	102	98	118	<1	228	<.2	5.25	29.7	556	<.04	1.92
MAY													
11...	125	--	168	--	--	--	217	.3	4.28	51.0	634	<.04	.49
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
09...	--	--	--	--	--	--	239	--	--	--	--	--	--
10...	--	--	--	--	--	--	78.9	--	--	--	--	--	--
10...	--	--	--	--	--	--	66.2	--	--	--	--	--	--
10...	--	--	--	--	--	--	38.1	--	--	--	--	--	--
10...	--	--	--	--	--	--	62.7	--	--	--	--	--	--
11...	--	--	--	--	--	--	119	--	--	--	--	--	--
11...	--	--	--	--	--	--	71.4	--	--	--	--	--	--
11...	--	--	--	--	--	--	107	--	--	--	--	--	--
12...	--	--	--	--	--	--	115	--	--	--	--	--	--
14...	--	--	--	--	--	--	62.7	--	--	--	--	--	--
14...	--	--	--	--	--	--	29.1	--	--	--	--	--	--
14...	--	--	--	--	--	--	69.3	--	--	--	--	--	--
14...	--	--	--	--	--	--	45.4	--	--	--	--	--	--
14...	--	--	--	--	--	--	14.3	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, wat unf by analysis, mg/L (62855)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	COD, low level, water, unfltrd mg/L (00335)	Chlorophyll a wat unf trichr. method, uncorr, ug/L (32210)	Iron, water, fltrd, ug/L (01046)
04087030 MENOMONEE RIVER AT MENOMONEE FALLS, WI (LAT 43 10 22N LONG 088 06 14W)													
NOV 2003													
12...	.053	.08	.017	.058	4.03	.7	<.1	.7	11.5	--	--	--	--
JAN 2004													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
11...	.029	.20	.011	.079	.75	1.3	<.1	1.3	142	--	--	--	--
19...	E.007	.11	.016	.037	1.55	.4	<.1	.4	5.1	<2.0	20	1.80	28
MAR													
05...	.071	.44	.066	.196	3.32	5.3	<.1	5.3	9.7	>11.6	47	9.21	39
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
14...	.008	.07	<.006	.021	1.61	.5	<.1	.5	9.0	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
11...	.029	.29	.026	.141	1.98	2.5	<.1	2.5	13.4	4.8	52	13.8	86
JUN													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	.040	.13	.027	.090	1.83	1.3	<.1	1.3	11.3	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.008	.08	.039	.070	.84	.8	<.1	.8	6.5	4.4	41	2.36	30
AUG													
04...	E.007	.07	.056	.099	.82	.8	<.1	.8	5.8	6.1	28	2.57	28
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	.009	.04	.137	.177	.90	.4	<.1	.4	4.3	--	--	--	--
04087159 KINNICKINNIC RIVER @ S. 11TH STREET @ MILWAUKEE,WI (LAT 42 59 51N LONG 087 55 35W)													
FEB 2004													
18...	.027	.27	.114	.24	1.16	1.5	<.1	1.5	4.2	3.7	28	2.13	61
MAR													
05...	.020	.39	.054	.20	2.75	9.6	.2	9.4	8.0	8.1	43	3.91	32
MAY													
11...	.025	.20	.022	.088	1.13	1.1	<.1	1.1	5.6	2.9	52	10.2	32
30...	--	--	--	.057	--	--	--	--	--	--	--	--	--
30...	--	--	--	.389	--	--	--	--	--	--	--	--	--
30...	--	--	--	.299	--	--	--	--	--	--	--	--	--
30...	--	--	--	.310	--	--	--	--	--	--	--	--	--
30...	--	--	--	.240	--	--	--	--	--	--	--	--	--
30...	--	--	--	.084	--	--	--	--	--	--	--	--	--
31...	--	--	--	.062	--	--	--	--	--	--	--	--	--
31...	--	--	--	.098	--	--	--	--	--	--	--	--	--
31...	--	--	--	.062	--	--	--	--	--	--	--	--	--
31...	--	--	--	.098	--	--	--	--	--	--	--	--	--
JUN													
09...	--	--	--	.443	--	--	--	--	--	--	--	--	--
10...	--	--	--	.970	--	--	--	--	--	--	--	--	--
10...	--	--	--	.507	--	--	--	--	--	--	--	--	--
10...	--	--	--	.201	--	--	--	--	--	--	--	--	--
10...	--	--	--	.119	--	--	--	--	--	--	--	--	--
11...	--	--	--	.143	--	--	--	--	--	--	--	--	--
11...	--	--	--	.211	--	--	--	--	--	--	--	--	--
11...	--	--	--	.124	--	--	--	--	--	--	--	--	--
12...	--	--	--	.072	--	--	--	--	--	--	--	--	--
14...	--	--	--	.400	--	--	--	--	--	--	--	--	--
14...	--	--	--	.406	--	--	--	--	--	--	--	--	--
14...	--	--	--	.221	--	--	--	--	--	--	--	--	--
14...	--	--	--	.431	--	--	--	--	--	--	--	--	--
14...	--	--	--	.382	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Manganese, water, fltrd, ug/L (01056)	Mercury water fltrd, ng/L (50287)	1,4-Dichlorobenzene water, fltrd, ug/L (34572)	1-Methylnaphthalene, water, fltrd, ug/L (62054)	1-Naphthol, water, fltrd 0.7u GF ug/L (49295)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	2,6-Dimethylnaphthalene, water, fltrd, ug/L (62055)	2-[(2-Et-6-Me-Ph)--amino]propan-1-ol, ug/L (61615)	2Chloro-2,6'-'diethyl acetanilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl-6-methylaniline water, fltrd, ug/L (61620)	2-Methylnaphthalene, water, fltrd, ug/L (62056)	3,4-Dichloroaniline water fltrd, ug/L (61625)
04087030 MENOMONEE RIVER AT MENOMONEE FALLS, WI (LAT 43 10 22N LONG 088 06 14W)													
NOV 2003													
12...	--	--	--	--	<.09	<.006	--	<.1	<.005	E.012	<.004	--	<.004
JAN 2004													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
11...	--	--	--	--	<.09	<.006	--	<.1	<.005	E.007	<.004	--	<.004
19...	24.4	--	<.5	<.5	--	--	<.5	--	--	--	--	<.5	--
MAR													
05...	25.4	--	<.5	M	--	--	M	--	--	--	--	M	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
14...	--	--	--	--	<.09	<.006	--	--	<.005	E.012	<.004	--	<.004
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
11...	11.0	--	<.5	<.5	E.01	<.006	<.5	--	<.005	E.050	<.004	<.5	.010
JUN													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	<.09	<.006	--	--	<.005	E.049	<.004	--	.007
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	10.0	1.07	<.5	<.5	--	--	<.5	--	--	--	--	<.5	--
AUG													
04...	9.5	1.61	--	--	<.09	<.006	--	--	<.005	E.015	<.004	--	<.004
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	<.09	<.006	--	--	<.005	E.016	<.004	--	<.004
04087159 KINNICKINNIC RIVER @ S. 11TH STREET @ MILWAUKEE,WI (LAT 42 59 51N LONG 087 55 35W)													
FEB 2004													
18...	72.3	--	<.5	<.5	--	--	M	--	--	--	--	<.5	--
MAR													
05...	21.5	--	<.5	E.1	--	--	M	--	--	--	--	E.1	--
MAY													
11...	12.1	--	E.2	<.5	<.09	<.006	<.5	--	<.005	E.053	<.004	<.5	<.008
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	3-beta-Coprostanol, water, fltrd, ug/L (62057)	3-Methyl-1H-indole, water, fltrd, ug/L (62058)	3-tert-Butyl-4-hydroxyanisole wat flt ug/L (62059)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	4-Cumylphenol, water, fltrd, ug/L (62060)	4-Octylphenol, water, fltrd, ug/L (62061)	4-Nonylphenol, water, fltrd, ug/L (62085)	4-tert-Octylphenol, water, fltrd, ug/L (62062)	5-Methyl-1H-benzotriazole, wat flt ug/L (62063)	9,10-Anthraquinone water, fltrd, ug/L (62066)	Acetochlor, water, fltrd, ug/L (49260)	Acetophenone water, fltrd, ug/L (62064)	AHTN, water, fltrd, ug/L (62065)
04087030 MENOMONEE RIVER AT MENOMONEE FALLS, WI (LAT 43 10 22N LONG 088 06 14W)													
NOV 2003													
12...	--	--	--	<.006	--	--	--	--	--	--	<.006	--	--
JAN 2004													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
11...	--	--	--	<.006	--	--	--	--	--	--	<.006	--	--
19...	<2	<1	<5	--	<1	<1	<5	<1	<2	<.5	--	<.5	<.5
MAR													
05...	M	M	<5	--	<1	<1	M	<1	<2	E.1	--	<.5	M
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
14...	--	--	--	<.006	--	--	--	--	--	--	<.006	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
11...	<2	<1	<5	<.006	<1	<1	E2	<1	<2	E.1	.031	<.5	<.5
JUN													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	<.006	--	--	--	--	--	--	.028	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<2	<1	<5	--	<1	<1	<5	<1	<2	<.5	--	<.5	<.5
AUG													
04...	--	--	--	<.006	--	--	--	--	--	--	<.006	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	<.006	--	--	--	--	--	--	<.006	--	--
04087159 KINNICKINNIC RIVER @ S. 11TH STREET @ MILWAUKEE,WI (LAT 42 59 51N LONG 087 55 35W)													
FEB 2004													
18...	M	M	<5	--	M	<1	E1	M	6	E.2	--	E.2	M
MAR													
05...	<2	<1	<5	--	<1	<1	<5	M	2	E.3	--	E.1	<.5
MAY													
11...	M	<1	<5	<.006	M	<1	E2	M	E2	E.2	.059	<.5	<.5
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
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12...	--	--	--	--	--	--	--	--	--	--	--	--	--
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14...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Ala-chlor, water, fltrd, ug/L (46342)	alpha-HCH-d6, surrog, Sch2003 wat flt percent recovry (99995)	Anthra-cene, water, fltrd, ug/L (34221)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl oxon, water, fltrd, ug/L (61635)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)	Benzo-[a]-pyrene, water, fltrd, ug/L (34248)	Benzo-phenone water, fltrd, ug/L (62067)	beta-Sitos-terol, water, fltrd, ug/L (62068)	beta-Stigma-stanol, water, fltrd, ug/L (62086)	Bisphe-nol A, water, fltrd, ug/L (62069)	Bisphenol A-d3 sur Sch 2033 & 8033, wat flt pct rcv (99583)
04087030 MENOMONEE RIVER AT MENOMONEE FALLS, WI (LAT 43 10 22N LONG 088 06 14W)													
NOV 2003													
12...	<.005	91.2	--	.016	<.03	<.050	<.010	--	--	--	--	--	--
JAN 2004													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
11...	<.005	96.2	--	.015	<.02	<.050	<.010	--	--	--	--	--	--
19...	--	--	<.5	--	--	--	--	<.5	<.5	<2	<2	<1	63.6
MAR													
05...	--	--	<.5	--	--	--	--	<.5	<.5	M	M	M	100
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
14...	<.005	82.5	--	.012	<.02	<.050	<.010	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
11...	E.003	95.4	<.5	.207	<.02	<.050	E.004	<.5	<.5	<2	<2	<1	86.4
JUN													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	.007	86.1	--	.122	<.02	<.050	<.010	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	<.5	--	--	--	--	<.5	<.5	<20	<20	<1	152
AUG													
04...	<.005	76.6	--	.023	<.07	<.050	<.010	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	<.005	109	--	.016	<.07	<.050	<.010	--	--	--	--	--	--
04087159 KINNICKINNIC RIVER @ S. 11TH STREET @ MILWAUKEE,WI (LAT 42 59 51N LONG 087 55 35W)													
FEB 2004													
18...	--	--	M	--	--	--	--	<.5	<.5	M	M	M	100
MAR													
05...	--	--	<.5	--	--	--	--	<.5	E.1	<2	<2	<1	100
MAY													
11...	<.005	95.9	E.1	.185	<.02	<.050	E.004	<.5	<.5	<2	<2	<1	113
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
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31...	--	--	--	--	--	--	--	--	--	--	--	--	--
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JUN													
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MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Broma-cil, water, fltrd, ug/L (04029)	Caf-feine, water, fltrd, ug/L (50305)	Caffe-ine-13C sur Sch 2033 & 8033, wat flt pct rcv (99584)	Camphor water, fltrd, ug/L (62070)	Car-baryl, water, fltrd 0.7u GF ug/L (82680)	Carba-zole, water, fltrd, ug/L (62071)	Chlor-pyrifos oxon, water, fltrd, ug/L (61636)	Chlor-pyrifos water, fltrd, ug/L (38933)	Choles-terol, water, fltrd, ug/L (62072)	cis-Per-methrin water fltrd 0.7u GF ug/L (82687)	Cot-inine, water, fltrd, ug/L (62005)	Cyflu-thrin, water, fltrd, ug/L (61585)	Cyper-methrin water, fltrd, ug/L (61586)
04087030 MENOMONEE RIVER AT MENOMONEE FALLS, WI (LAT 43 10 22N LONG 088 06 14W)													
NOV 2003													
12...	--	--	--	--	<.041	--	<.06	<.005	--	<.006	--	<.008	<.009
JAN 2004													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
11...	--	--	--	--	<.041	--	<.06	<.005	--	<.006	--	<.008	<.009
19...	<.5	M	114	<.5	<1	<.5	--	<.5	<2	--	<1.00	--	--
MAR													
05...	<.5	E.1	86.4	M	<1	M	--	<.5	M	--	<1.00	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
14...	--	--	--	--	<.041	--	<.06	<.005	--	<.006	--	<.008	<.009
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
11...	.7	E.1	114	E.1	E.080	E.1	<.06	<.005	<2	<.006	<1.00	<.008	<.009
JUN													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	E.007	--	<.06	<.005	--	<.006	--	<.008	<.009
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.5	<.5	108	M	<1	<.5	--	<.5	<20	--	<1.00	--	--
AUG													
04...	--	--	--	--	E.020	--	<.06	<.005	--	<.006	--	<.008	<.009
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	<.041	--	<.06	<.005	--	<.006	--	<.008	<.009
04087159 KINNICKINNIC RIVER @ S. 11TH STREET @ MILWAUKEE,WI (LAT 42 59 51N LONG 087 55 35W)													
FEB 2004													
18...	<.5	.7	106	E.2	<1	E.1	--	<.5	M	--	E.4100	--	--
MAR													
05...	.8	E.3	114	<.5	<1	E.1	--	<.5	<2	--	<1.00	--	--
MAY													
11...	1.0	E.4	117	E.1	<.041	E.1	<.06	<.005	E1	<.006	<1.00	<.008	<.009
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
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31...	--	--	--	--	--	--	--	--	--	--	--	--	--
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31...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
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10...	--	--	--	--	--	--	--	--	--	--	--	--	--
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11...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
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14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	DCPA, water fltrd 0.7u GF ug/L (82682)	DecaF-biphenl sur Sch 2033 & 8033, wat flt pct rcv (99585)	DEET, water, fltrd, ug/L (62082)	Desulf-inyl fipro-nil, water, fltrd, ug/L (62170)	Diaz-inon oxon, water, fltrd, ug/L (61638)	Diazi-non, water, fltrd, ug/L (39572)	Diazi-non-d10 surrog, Sch2003 wat flt percent recovry (99994)	Dicro-tophos, water fltrd, ug/L (38454)	Diel-drin, water, fltrd, ug/L (39381)	Di-ethoxy-nonyl-phenol, water, fltrd, ug/L (62083)	Di-ethoxy-octyl-phenol, water, fltrd ug/L (61705)	Dimeth-oate, water, fltrd 0.7u GF ug/L (82662)	D-Limo-nene, water, fltrd, ug/L (62073)
04087030 MENOMONEE RIVER AT MENOMONEE FALLS, WI (LAT 43 10 22N LONG 088 06 14W)													
NOV 2003													
12...	<.003	--	--	<.012	<.01	<.005	102	--	<.009	--	--	<.006	--
JAN 2004													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
11...	<.003	--	--	<.012	<.01	E.002	106	<.08	<.009	--	--	<.006	--
19...	--	59.1	E.1	--	--	<.5	--	--	--	<5	<1	--	<.5
MAR													
05...	--	63.6	M	--	--	<.5	--	--	--	M	<1	--	<.5
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
14...	<.003	--	--	<.012	<.01	<.005	85.3	<.08	<.009	--	--	<.006	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
11...	<.003	81.8	<.5	<.012	<.01	.012	104	<.08	<.009	<5	<1	<.006	<.5
JUN													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	<.003	--	--	<.012	<.01	<.009	120	<.08	<.009	--	--	<.006	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	50.8	E.1	--	--	<.5	--	--	--	<5	<1	--	<.5
AUG													
04...	E.002	--	--	<.012	<.01	<.010	93.3	<.08	<.009	--	--	<.006	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	<.003	--	--	<.012	<.01	<.005	128	<.08	<.009	--	--	<.006	--
04087159 KINNICKINNIC RIVER @ S. 11TH STREET @ MILWAUKEE,WI (LAT 42 59 51N LONG 087 55 35W)													
FEB 2004													
18...	--	77.8	E.1	--	--	<.5	--	--	--	E2	M	--	<.5
MAR													
05...	--	72.7	E.1	--	--	<.5	--	--	--	E2	<1	--	<.5
MAY													
11...	<.003	78.3	E.2	<.012	<.01	.032	102	<.08	<.009	E4	M	<.006	E.1
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
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31...	--	--	--	--	--	--	--	--	--	--	--	--	--
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31...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
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MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Ethoxy-octyl-phenol, water, fltrd ug/L (61706)	Fenami-phos sulfone water, fltrd, ug/L (61645)	Fenami-phos sulf-oxide, water, fltrd, ug/L (61646)	Fenami-phos, water, fltrd, ug/L (61591)	Desulf-inyl-fipro-nil amide, wat flt ug/L (62169)	Fipro-nil sulfide water, fltrd, ug/L (62167)	Fipro-nil sulfone water, fltrd, ug/L (62168)	Fipro-nil, water, fltrd, ug/L (62166)	Fluor-anthene water, fltrd, ug/L (34377)	Fluor-anthene -d10, sur Sch 20/8033 wat flt pct rcv (99586)	Fonofos oxon, water, fltrd, ug/L (61649)
04087030 MENOMONEE RIVER AT MENOMONEE FALLS, WI (LAT 43 10 22N LONG 088 06 14W)													
NOV 2003													
12...	<.03	<.004	--	<.008	<.03	<.03	<.029	<.013	<.024	<.016	--	--	<.002
JAN 2004													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
11...	<.03	<.004	--	<.008	<.03	<.03	<.029	<.013	<.024	<.016	--	--	<.002
19...	--	--	<1	--	--	--	--	--	--	--	M	100	--
MAR													
05...	--	--	<1	--	--	--	--	--	--	--	E.1	100	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
14...	<.03	<.004	--	<.008	<.03	<.03	<.029	<.013	<.024	<.016	--	--	<.002
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
11...	<.03	<.004	<1	<.008	<.03	<.03	<.029	<.013	<.024	<.016	E.1	114	<.002
JUN													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	<.03	<.004	--	<.008	<.03	<.03	<.029	<.013	<.024	<.016	--	--	<.002
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	<1	--	--	--	--	--	--	--	M	93.1	--
AUG													
04...	<.0020	<.004	--	<.049	<.04	<.03	<.029	<.013	<.024	<.016	--	--	<.003
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	<.0020	<.004	--	<.049	<.04	<.03	<.029	<.013	<.024	<.016	--	--	<.003
04087159 KINNICKINNIC RIVER @ S. 11TH STREET @ MILWAUKEE,WI (LAT 42 59 51N LONG 087 55 35W)													
FEB 2004													
18...	--	--	M	--	--	--	--	--	--	--	E.1	100	--
MAR													
05...	--	--	<1	--	--	--	--	--	--	--	E.2	95.5	--
MAY													
11...	<.03	<.004	E1	<.008	<.03	<.03	<.029	<.013	<.024	<.016	E.2	117	<.002
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
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31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
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MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Fonofos water, fltrd, ug/L (04095)	HHCB, water, fltrd, ug/L (62075)	Hexazinone, water, fltrd, ug/L (04025)	Indole, water, fltrd, ug/L (62076)	Iprodione, water, fltrd, ug/L (61593)	Isoborneol, water, fltrd, ug/L (62077)	Isofenphos, water, fltrd, ug/L (61594)	Isophorone water, fltrd, ug/L (34409)	Isopropylbenzene water, fltrd, ug/L (62078)	Isoquinoline, water, fltrd, ug/L (62079)	Malaoxon, water, fltrd, ug/L (61652)	Malathion, water, fltrd, ug/L (39532)	Menthol water, fltrd, ug/L (62080)
04087030 MENOMONEE RIVER AT MENOMONEE FALLS, WI (LAT 43 10 22N LONG 088 06 14W)													
NOV 2003													
12...	<.003	--	<.013	--	<1	--	<.003	--	--	--	<.008	<.027	--
JAN 2004													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
11...	<.003	--	<.013	--	<1	--	<.003	--	--	--	<.008	<.027	--
19...	--	<.5	--	<.5	--	<.5	--	<.5	<.5	<.5	--	--	<.5
MAR													
05...	--	<.5	--	M	--	<.5	--	M	<.5	<.5	--	--	M
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
14...	<.003	--	<.013	--	<1	--	<.003	--	--	--	<.008	<.027	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
11...	<.003	<.5	<.013	<.5	<1	<.5	<.003	E.1	<.5	<.5	<.008	<.027	<.5
JUN													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	<.003	--	<.013	--	<1	--	<.003	--	--	--	<.008	<.027	--
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JUL													
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26...	--	<.5	--	<.5	--	<.5	--	<.5	<.5	<.5	--	--	<.5
AUG													
04...	<.003	--	<.013	--	<.387	--	<.003	--	--	--	<.030	<.027	--
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18...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	<.003	--	<.013	--	<.387	--	<.003	--	--	--	<.030	<.027	--
04087159 KINNICKINNIC RIVER @ S. 11TH STREET @ MILWAUKEE,WI (LAT 42 59 51N LONG 087 55 35W)													
FEB 2004													
18...	--	E.1	--	M	--	<.5	--	M	<.5	<.5	--	--	E.3
MAR													
05...	--	<.5	--	M	--	<.5	--	<.5	<.5	<.5	--	--	E.1
MAY													
11...	<.003	<.5	<.013	<.5	<1	<.5	<.003	E.1	<.5	<.5	<.008	<.027	<.5
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MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Metalaxyl, water, fltrd, ug/L (50359)	Metalaxyl, water, fltrd, ug/L (61596)	Methidathion water, fltrd, ug/L (61598)	Methyl paraoxon, water, fltrd, ug/L (61664)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Methyl salicylate, water, fltrd, ug/L (62081)	Methylmercury water fltrd, ng/L (50285)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Myclobutanil water, fltrd, ug/L (61599)	Naphthalene, water, fltrd, ug/L (34443)	p-Cresol, water, fltrd, ug/L (62084)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)
04087030 MENOMONEE RIVER AT MENOMONEE FALLS, WI (LAT 43 10 22N LONG 088 06 14W)													
NOV 2003													
12...	--	<.005	<.006	<.03	<.015	--	--	E.006	<.006	<.008	--	--	<.022
JAN 2004													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
11...	--	<.005	<.006	<.03	<.015	--	--	E.005	E.005	<.008	--	--	<.022
19...	<.5	--	--	--	--	<.5	--	<.5	--	--	M	<1	--
MAR													
05...	<.5	--	--	--	--	<.5	--	E.1	--	--	M	M	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
14...	--	<.005	<.006	<.03	<.015	--	--	E.005	<.006	<.008	--	--	<.022
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MAY													
11...	<.5	<.005	<.006	<.03	<.015	E.1	--	.198	<.006	<.008	<.5	<1	<.022
JUN													
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10...	--	<.005	<.006	<.03	<.015	--	--	.049	<.006	<.008	--	--	<.022
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26...	<.5	--	--	--	--	M	.10	<.5	--	--	<.5	<1	--
AUG													
04...	--	<.005	<.006	<.03	<.015	--	.15	E.010	<.006	<.008	--	--	<.022
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24...	--	<.005	<.006	<.03	<.015	--	--	<.013	<.006	<.008	--	--	<.022
04087159 KINNICKINNIC RIVER @ S. 11TH STREET @ MILWAUKEE,WI (LAT 42 59 51N LONG 087 55 35W)													
FEB 2004													
18...	<.5	--	--	--	--	<.5	--	<.5	--	--	<.5	M	--
MAR													
05...	<.5	--	--	--	--	M	--	<.5	--	--	E.1	M	--
MAY													
11...	<.5	<.005	<.006	<.03	<.015	<.5	--	.037	<.006	<.008	<.5	<1	E.030
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JUN													
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MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Penta-chloro-phenol, water, fltrd, ug/L (34459)	Phenan-threne, water, fltrd, ug/L (34462)	Phenol, water, fltrd, ug/L (34466)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)	Prome-ton, water, fltrd, ug/L (04037)	Prome-tryn, water, fltrd, ug/L (04036)	Propy-zamide, water, fltrd 0.7u GF ug/L (82676)	Pyrene, water, fltrd, ug/L (34470)	Sima-zine, water, fltrd, ug/L (04035)	Tebu-thiuron water fltrd 0.7u GF ug/L (82670)
04087030 MENOMONEE RIVER AT MENOMONEE FALLS, WI (LAT 43 10 22N LONG 088 06 14W)													
NOV 2003													
12...	--	--	--	<.10	<.011	--	<.008	E.01	<.005	<.004	--	<.005	<.02
JAN 2004													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
11...	--	--	--	<.10	<.011	<.06	<.008	<.01	<.005	<.004	--	<.005	<.02
19...	<2	<.5	<.5	--	--	--	--	<.5	--	--	M	--	--
MAR													
05...	M	E.1	E.3	--	--	--	--	<.5	--	--	M	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
14...	--	--	--	<.10	<.011	<.06	<.008	.01	<.005	<.004	--	E.004	<.02
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MAY													
11...	<2	M	<.5	<.10	<.011	<.06	<.008	.01	<.005	<.004	E.1	.135	<.02
JUN													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	<.10	<.011	<.06	<.008	.01	<.005	<.004	--	.012	<.02
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JUL													
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26...	<2	M	E.3	--	--	--	--	<.5	--	--	M	--	--
AUG													
04...	--	--	--	<.10	<.011	--	--	.02	<.005	<.004	--	<.005	<.02
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24...	--	--	--	<.10	<.011	<.05	<.008	.02	<.005	<.004	--	<.005	<.02
04087159 KINNICKINNIC RIVER @ S. 11TH STREET @ MILWAUKEE,WI (LAT 42 59 51N LONG 087 55 35W)													
FEB 2004													
18...	M	E.1	E.2	--	--	--	--	<.5	--	--	E.1	--	--
MAR													
05...	E2	E.3	.6	--	--	--	--	<.5	--	--	E.1	--	--
MAY													
11...	E1	E.1	1.1	<.10	<.011	--	<.008	.02	<.005	<.004	E.1	<.007	.05
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MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Terbufos oxon sulfone water, fltrd, ug/L (61674)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Terbuthylazine, water, fltrd, ug/L (04022)	Tetrachloroethene, water, fltrd, ug/L (34476)	Tribromomethane water, fltrd, ug/L (34288)	Tributyl phosphate, water, fltrd, ug/L (62089)	Triclosan, water, fltrd, ug/L (62090)	Triethyl citrate water, fltrd, ug/L (62091)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)	Triphenyl phosphate, water, fltrd, ug/L (62092)	Tris(2-butoxyethyl) phosphate, wat flt ug/L (62093)	Tris(2-chloroethyl) phosphate, wat flt ug/L (62087)	Tris(dichloro-i-Pr) phosphate, wat flt ug/L (62088)
04087030 MENOMONEE RIVER AT MENOMONEE FALLS, WI (LAT 43 10 22N LONG 088 06 14W)													
NOV 2003													
12...	<.07	<.02	<.01	--	--	--	--	--	<.009	--	--	--	--
JAN 2004													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
11...	<.07	<.02	<.01	--	--	--	--	--	<.009	--	--	--	--
19...	--	--	--	M	<.5	<.5	<1	<.5	--	<.5	<.5	<.5	<.5
MAR													
05...	--	--	--	M	<.5	<.5	M	<.5	--	M	E.2	E.1	<.5
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
14...	<.07	<.02	<.01	--	--	--	--	--	<.009	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
11...	<.07	<.02	<.01	<.5	<.5	<.5	<1	<.5	E.004	E.1	E.2	E.1	<.5
JUN													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	<.07	<.02	<.01	--	--	--	--	--	<.009	--	--	--	--
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JUL													
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AUG													
04...	<.07	<.02	<.01	--	--	--	--	--	<.009	--	--	--	--
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24...	<.07	<.02	<.01	--	--	--	--	--	<.009	--	--	--	--
04087159 KINNICKINNIC RIVER @ S. 11TH STREET @ MILWAUKEE,WI (LAT 42 59 51N LONG 087 55 35W)													
FEB 2004													
18...	--	--	--	<.5	M	E.3	M	E.1	--	E.1	.5	E.1	E.1
MAR													
05...	--	--	--	M	<.5	1.9	<1	<.5	--	E.1	E.3	E.1	E.1
MAY													
11...	<.07	<.02	<.01	<.5	<.5	.6	<1	<.5	<.009	E.5	E.5	E.1	E.1
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
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12...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Di-chlor-vos, water fltrd, ug/L (38775)	Methyl-mercury suspnd sedimnt total, ng/L (62977)	Sus-pended sedi-ment concen-tration mg/L (80154)
04087030 MENOMONEE RIVER AT MENOMONEE FALLS, WI (LAT 43 10 22N LONG 088 06 14W)			
NOV 2003			
12...	<.01	--	155
JAN 2004			
21...	--	--	5
FEB			
11...	<.01	--	205
19...	<1.00	--	5
MAR			
05...	<1.00	--	51
17...	--	--	--
APR			
14...	<.01	--	117
20...	--	--	--
MAY			
11...	<.01	--	28
JUN			
07...	--	--	--
10...	<.01	--	76
29...	--	--	--
JUL			
14...	--	--	--
26...	--	--	--
AUG			
04...	<.01	.027	--
18...	--	--	--
18...	--	--	--
24...	<.01	--	103
04087159 KINNICKINNIC RIVER @ S. 11TH STREET @ MILWAUKEE,WI (LAT 42 59 51N LONG 087 55 35W)			
FEB 2004			
18...	<1.00	--	6
MAR			
05...	<1.00	--	135
MAY			
11...	<.01	--	1
30...	--	--	3
30...	--	--	130
30...	--	--	173
30...	--	--	242
30...	--	--	230
30...	--	--	21
31...	--	--	11
31...	--	--	25
31...	--	--	5
31...	--	--	18
JUN			
09...	--	--	163
10...	--	--	354
10...	--	--	278
10...	--	--	51
10...	--	--	17
11...	--	--	11
11...	--	--	84
11...	--	--	12
12...	--	--	7
14...	--	--	215
14...	--	--	333
14...	--	--	171
14...	--	--	345
14...	--	--	390

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)
04087159 KINNICKINNIC RIVER @ S. 11TH STREET @ MILWAUKEE,WI (LAT 42 59 51N LONG 087 55 35W)													
JUN 2004													
14...	1240	1,990	50	--	--	--	--	--	--	--	--	--	--
14...	1715	154	50	--	--	--	--	--	--	--	--	--	--
14...	2315	55	50	--	--	--	--	--	--	--	--	--	--
16...	2000	68	50	--	--	--	--	--	--	--	--	--	--
16...	2055	299	50	--	--	--	--	--	--	--	--	--	--
17...	0800	85	50	--	--	--	--	--	--	--	--	--	--
17...	0845	156	50	--	--	--	--	--	--	--	--	--	--
17...	1245	67	50	--	--	--	--	--	--	--	--	--	--
21...	1145	60	50	--	--	--	--	--	--	--	--	--	--
21...	1330	395	50	--	--	--	--	--	--	--	--	--	--
21...	1730	249	50	--	--	--	--	--	--	--	--	--	--
22...	0530	67	50	--	--	--	--	--	--	--	--	--	--
23...	1005	13	50	--	--	--	--	--	--	--	--	--	--
JUL													
03...	1735	112	50	--	--	--	--	--	--	--	--	--	--
03...	1925	519	50	--	--	--	--	--	--	--	--	--	--
03...	2225	313	50	--	--	--	--	--	--	--	--	--	--
04...	0005	4,460	50	--	--	--	--	--	--	--	--	--	--
04...	0140	1,740	50	--	--	--	--	--	--	--	--	--	--
04...	0630	135	50	--	--	--	--	--	--	--	--	--	--
06...	1100	14	10	--	--	--	--	--	--	--	--	--	--
11...	2140	101	50	--	--	--	--	--	--	--	--	--	--
11...	2235	605	50	--	--	--	--	--	--	--	--	--	--
12...	0025	257	50	--	--	--	--	--	--	--	--	--	--
12...	0415	77	50	--	--	--	--	--	--	--	--	--	--
13...	1155	10	50	--	--	--	--	--	--	--	--	--	--
27...	0935	162	40	--	14.6	--	8.6	1,280	19.1	87.0	36.5	4.56	119
AUG													
03...	2045	303	50	--	--	--	--	--	--	--	--	--	--
03...	2115	2,330	50	--	--	--	--	--	--	--	--	--	--
03...	2145	3,830	50	--	--	--	--	--	--	--	--	--	--
03...	2200	3,900	50	--	--	--	--	--	--	--	--	--	--
03...	2245	3,010	50	--	--	--	--	--	--	--	--	--	--
04...	0045	859	50	--	--	--	--	--	--	--	--	--	--
04...	0430	130	50	--	--	--	--	--	--	--	--	--	--
04...	1225	34	10	741	9.3	112	7.8	707	22.8	48.8	17.4	5.44	65.7
17...	1108	7.5	50	--	--	--	--	--	--	--	--	--	--
24...	0930	16	50	--	--	--	--	--	--	--	--	--	--
24...	0945	38	50	--	--	--	--	--	--	--	--	--	--
24...	2030	7.8	50	--	--	--	--	--	--	--	--	--	--
25...	0000	1,050	50	--	--	--	--	--	--	--	--	--	--
25...	0100	674	50	--	--	--	--	--	--	--	--	--	--
25...	0730	28	50	--	--	--	--	--	--	--	--	--	--
27...	0230	77	50	--	--	--	--	--	--	--	--	--	--
27...	0400	246	50	--	--	--	--	--	--	--	--	--	--
28...	0415	303	50	--	--	--	--	--	--	--	--	--	--
SEP													
16...	1105	9.4	50	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)
04087159 KINNICKINNIC RIVER @ S. 11TH STREET @ MILWAUKEE,WI (LAT 42 59 51N LONG 087 55 35W)													
JUN 2004													
14...	--	--	23.6	--	--	--	--	--	--	--	--	--	.582
14...	--	--	55.0	--	--	--	--	--	--	--	--	--	.166
14...	--	--	121	--	--	--	--	--	--	--	--	--	.103
16...	--	--	168	--	--	--	--	--	--	--	--	--	.175
16...	--	--	53.2	--	--	--	--	--	--	--	--	--	.310
17...	--	--	72.4	--	--	--	--	--	--	--	--	--	.150
17...	--	--	97.2	--	--	--	--	--	--	--	--	--	.218
17...	--	--	72.3	--	--	--	--	--	--	--	--	--	.078
21...	--	--	101	--	--	--	--	--	--	--	--	--	.206
21...	--	--	133	--	--	--	--	--	--	--	--	--	.422
21...	--	--	34.8	--	--	--	--	--	--	--	--	--	.166
22...	--	--	66.5	--	--	--	--	--	--	--	--	--	.212
23...	--	--	239	--	--	--	--	--	--	--	--	--	.146
JUL													
03...	--	--	150	--	--	--	--	--	--	--	--	--	.343
03...	--	--	58.1	--	--	--	--	--	--	--	--	--	.464
03...	--	--	35.5	--	--	--	--	--	--	--	--	--	.143
04...	--	--	12.5	--	--	--	--	--	--	--	--	--	.609
04...	--	--	20.0	--	--	--	--	--	--	--	--	--	.447
04...	--	--	67.8	--	--	--	--	--	--	--	--	--	.131
06...	--	--	241	--	--	--	--	--	--	--	--	--	.088
11...	--	--	147	--	--	--	--	--	--	--	--	--	.722
11...	--	--	94.3	--	--	--	--	--	--	--	--	--	.692
12...	--	--	20.2	--	--	--	--	--	--	--	--	--	.184
12...	--	--	44.6	--	--	--	--	--	--	--	--	--	.111
13...	--	--	208	--	--	--	--	--	--	--	--	--	.081
27...	221	211	217	.7	4.76	99.9	700	<.04	.10	.015	.06	.089	.132
AUG													
03...	--	--	13.2	--	--	--	--	--	--	--	--	--	2.35
03...	--	--	7.0	--	--	--	--	--	--	--	--	--	.535
03...	--	--	17.8	--	--	--	--	--	--	--	--	--	.783
03...	--	--	13.3	--	--	--	--	--	--	--	--	--	.514
03...	--	--	14.6	--	--	--	--	--	--	--	--	--	.365
04...	--	--	35.5	--	--	--	--	--	--	--	--	--	.223
04...	--	--	77.4	--	--	--	--	--	--	--	--	--	.146
04...	139	133	106	.3	6.71	44.6	408	<.04	.95	.032	.29	.047	.133
17...	--	--	228	--	--	--	--	--	--	--	--	--	.095
24...	--	--	224	--	--	--	--	--	--	--	--	--	.169
24...	--	--	223	--	--	--	--	--	--	--	--	--	2.40
24...	--	--	124	--	--	--	--	--	--	--	--	--	.145
25...	--	--	21.8	--	--	--	--	--	--	--	--	--	.579
25...	--	--	9.8	--	--	--	--	--	--	--	--	--	.359
25...	--	--	68.6	--	--	--	--	--	--	--	--	--	.113
27...	--	--	70.0	--	--	--	--	--	--	--	--	--	.333
27...	--	--	60.5	--	--	--	--	--	--	--	--	--	.362
28...	--	--	28.4	--	--	--	--	--	--	--	--	--	.179
SEP													
16...	--	--	104	--	--	--	--	--	--	--	--	--	.127

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Total nitro-gen, wat unf by anal ysis, mg/L (62855)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inor-ganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	COD, low level, water, unfltrd mg/L (00335)	Chloro-phyll a wat unf trichr. method, uncorr, ug/L (32210)	Iron, water, fltrd, ug/L (01046)	Mangan-ese, water, fltrd, ug/L (01056)	Mercury water fltrd, ng/L (50287)	1,4-Di-chloro-benzene water, fltrd, ug/L (34572)	1-Methyl-naphth-alene, water, fltrd, ug/L (62054)
04087159 KINNICKINNIC RIVER @ S. 11TH STREET @ MILWAUKEE,WI (LAT 42 59 51N LONG 087 55 35W)													
JUN 2004													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	.42	.4	<.1	.4	3.2	<2.0	30	4.64	24	4.1	.71	<.5	<.5
AUG													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	1.64	2.1	<.1	2.1	6.3	3.4	17	4.34	24	16.5	2.86	<.5	<.5
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	1-Naphthol, water, fltrd 0.7u GF ug/L (49295)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	2,6-Dimethylnaphthalene, water, fltrd, ug/L (62055)	2Chloro-2,6'-diethyl acetanilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl-6-methylaniline water, fltrd, ug/L (61620)	2-Methylnaphthalene, water, fltrd, ug/L (62056)	3,4-Dichloroaniline water fltrd, ug/L (61625)	3-beta-Coprostanol, water, fltrd, ug/L (62057)	3-Methyl-1H-indole, water, fltrd, ug/L (62058)	3-tert-Butyl-4-hydroxyanisole wat flt ug/L (62059)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	4-Cumylphenol, water, fltrd, ug/L (62060)
04087159 KINNICKINNIC RIVER @ S. 11TH STREET @ MILWAUKEE,WI (LAT 42 59 51N LONG 087 55 35W)													
JUN 2004													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	<.5	--	--	--	<.5	--	<2	<1	<5	--	<1
AUG													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	<.09	<.006	<.5	<.005	E.016	<.004	<.5	.036	<2	<1	<5	E.009	<1
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	4-Octyl-phenol, water, fltrd, ug/L (62061)	4-Nonyl-phenol, water, fltrd, ug/L (62085)	4-tert-Octyl-phenol, water, fltrd, ug/L (62062)	5-Meth-yl-1H-benzo-tri-azole, wat flt ug/L (62063)	9,10-Anthra-quinone water, fltrd, ug/L (62066)	Aceto-chlor, water, fltrd, ug/L (49260)	Aceto-phenone water, fltrd, ug/L (62064)	AHTN, water, fltrd, ug/L (62065)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-HCH-d6, surrog, Sch2003 wat flt percent recovry (99995)	Anthra-cene, water, fltrd, ug/L (34221)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl oxon, water, fltrd, ug/L (61635)
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MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Azinphos-methyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Benzo[a]pyrene, water, fltrd, ug/L (34248)	Benzophenone water, fltrd, ug/L (62067)	beta-Sitosterol, water, fltrd, ug/L (62068)	beta-Stigmastanol, water, fltrd, ug/L (62086)	Bisphenol A, water, fltrd, ug/L (62069)	Bisphenol A-d3 sur Sch 2033 & 8033, wat flt pct rcv (99583)	Bromacil, water, fltrd, ug/L (04029)	Caffeine, water, fltrd, ug/L (50305)	Caffeine-13C sur Sch 2033 & 8033, wat flt pct rcv (99584)	Camphor water, fltrd, ug/L (62070)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)
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MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Carbazole, water, fltrd, ug/L (62071)	Chlorpyrifos oxon, water, fltrd, ug/L (61636)	Chlorpyrifos water, fltrd, ug/L (38933)	Cholesterol, water, fltrd, ug/L (62072)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Cotinine, water, fltrd, ug/L (62005)	Cyfluthrin, water, fltrd, ug/L (61585)	Cypermethrin water, fltrd, ug/L (61586)	DCPA, water fltrd 0.7u GF ug/L (82682)	DecaFbiphenl sur Sch 2033 & 8033, wat flt pct rcv (99585)	DEET, water, fltrd, ug/L (62082)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon oxon, water, fltrd, ug/L (61638)
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MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Diazinon, water, fltrd, ug/L (39572)	Diazinon-d10 surrog, Sch2003 wat flt percent recovry (99994)	Dicrotophos, water fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)	Diethoxynonylphenol, water, fltrd, ug/L (62083)	Diethoxyoctylphenol, water, fltrd ug/L (61705)	Dimethoate, water, fltrd 0.7u GF ug/L (82662)	D-Limonene, water, fltrd, ug/L (62073)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Ethoxyoctylphenol, water, fltrd ug/L (61706)	Fenamiphos sulfone water, fltrd, ug/L (61645)	Fenamiphos sulfoxide, water, fltrd, ug/L (61646)
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MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Fenamiphos, water, fltrd, ug/L (61591)	Desulfinylfipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Fluoranthene water, fltrd, ug/L (34377)	Fluoranthene-d10, sur Sch 20/8033 wat flt pct rcv (99586)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	HHCB, water, fltrd, ug/L (62075)	Hexazinone, water, fltrd, ug/L (04025)	Indole, water, fltrd, ug/L (62076)	Iprodione, water, fltrd, ug/L (61593)
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MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Isobor-neol, water, fltrd, ug/L (62077)	Isofen-phos, water, fltrd, ug/L (61594)	Iso-phorone water, fltrd, ug/L (34409)	Iso-propyl-benzene water, fltrd, ug/L (62078)	Iso-quin-oline, water, fltrd, ug/L (62079)	Mala-oxon, water, fltrd, ug/L (61652)	Mala-thion, water, fltrd, ug/L (39532)	Menthol water, fltrd, ug/L (62080)	Meta-laxyl, water, fltrd, ug/L (50359)	Meta-laxyl, water, fltrd, ug/L (61596)	Methi-althion water, fltrd, ug/L (61598)	Methyl para-oxon, water, fltrd, ug/L (61664)	Methyl para-thion, water, fltrd 0.7u GF ug/L (82667)
04087159 KINNICKINNIC RIVER @ S. 11TH STREET @ MILWAUKEE,WI (LAT 42 59 51N LONG 087 55 35W)													
JUN 2004													
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MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Methyl salicylate, water, fltrd, ug/L (62081)	Methylmercury water fltrd, ng/L (50285)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Myclobutanil water, fltrd, ug/L (61599)	Naphthalene, water, fltrd, ug/L (34443)	p-Cresol, water, fltrd, ug/L (62084)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Pentachlorophenol, water, fltrd, ug/L (34459)	Phenanthrene, water, fltrd, ug/L (34462)	Phenol, water, fltrd, ug/L (34466)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)
04087159 KINNICKINNIC RIVER @ S. 11TH STREET @ MILWAUKEE,WI (LAT 42 59 51N LONG 087 55 35W)													
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MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Pyrene, water, fltrd, ug/L (34470)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbufos oxon sulfone water, fltrd, ug/L (61674)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Terbuthylazine, water, fltrd, ug/L (04022)	Tetrachloroethene, water, fltrd, ug/L (34476)	Tribromomethane water, fltrd, ug/L (34288)	Tributyl phosphate, water, fltrd, ug/L (62089)	Triclosan, water, fltrd, ug/L (62090)
04087159 KINNICKINNIC RIVER @ S. 11TH STREET @ MILWAUKEE,WI (LAT 42 59 51N LONG 087 55 35W)													
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04...	.11	<.005	<.004	<.5	<.005	E.16	<.07	<.02	<.01	E.2	<.5	E.3	<1
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MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Tri-ethyl citrate water, fltrd, ug/L (62091)	Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661)	Tri-phenyl phos-phate, water, fltrd, ug/L (62092)	Tris(2-butoxy-ethyl) phos-phate, wat flt ug/L (62093)	Tris(2-chloro-ethyl) phos-phate, wat flt ug/L (62087)	Tris(di chloro-i-Pr) phos-phate, wat flt ug/L (62088)	Di-chlor-vos, water fltrd, ug/L (38775)	Methyl-mercury suspnd sedimnt total, ng/L (62977)	Sus-pended sedi-ment concen-tration mg/L (80154)
04087159 KINNICKINNIC RIVER @ S. 11TH STREET @ MILWAUKEE,WI (LAT 42 59 51N LONG 087 55 35W)									
JUN 2004									
14...	--	--	--	--	--	--	--	--	723
14...	--	--	--	--	--	--	--	--	104
14...	--	--	--	--	--	--	--	--	14
16...	--	--	--	--	--	--	--	--	48
16...	--	--	--	--	--	--	--	--	186
17...	--	--	--	--	--	--	--	--	61
17...	--	--	--	--	--	--	--	--	124
17...	--	--	--	--	--	--	--	--	6
21...	--	--	--	--	--	--	--	--	32
21...	--	--	--	--	--	--	--	--	215
21...	--	--	--	--	--	--	--	--	47
22...	--	--	--	--	--	--	--	--	3
23...	--	--	--	--	--	--	--	--	15
JUL									
03...	--	--	--	--	--	--	--	--	116
03...	--	--	--	--	--	--	--	--	307
03...	--	--	--	--	--	--	--	--	54
04...	--	--	--	--	--	--	--	--	891
04...	--	--	--	--	--	--	--	--	583
04...	--	--	--	--	--	--	--	--	48
06...	--	--	--	--	--	--	--	--	3
11...	--	--	--	--	--	--	--	--	261
11...	--	--	--	--	--	--	--	--	511
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12...	--	--	--	--	--	--	--	--	49
13...	--	--	--	--	--	--	--	--	3
27...	<.5	--	E.1	E.3	E.1	E.1	--	--	2
AUG									
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03...	--	--	--	--	--	--	--	--	601
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03...	--	--	--	--	--	--	--	--	442
04...	--	--	--	--	--	--	--	--	137
04...	--	--	--	--	--	--	--	--	25
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17...	--	--	--	--	--	--	--	--	<2
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SEP									
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MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)
04087088 UNDERWOOD CREEK AT WAUWATOSA, WI (LAT 43 03 17N LONG 088 02 46W)													
FEB 2004													
19...	0910	3.3	70	746	13.1	92	7.6	3,340	-.2	135	47.5	6.42	469
MAR													
05...	0915	130	10	812	13.1	94	7.8	1,290	3.9	56.1	20.0	4.02	149
MAY													
10...	1045	11	70	753	13.5	149	8.3	1,630	19.4	103	42.4	3.61	178
JUL													
26...	1100	9.0	40	--	13.2	--	8.4	1,690	18.8	116	51.8	4.18	145
AUG													
04...	1005	2.8	40	--	9.4	--	8.8	715	26.6	57.4	22.5	3.91	87.0
04087220 ROOT RIVER NEAR FRANKLIN, WI (LAT 42 52 25N LONG 087 59 45W)													
FEB 2004													
17...	1455	4.3	30	759	17.9	123	7.8	2,520	-.2	115	57.6	4.16	327
MAR													
06...	1145	421	10	--	11.7	--	7.9	1,030	3.4	58.9	25.5	3.96	107
MAY													
11...	1315	90	10	--	--	--	--	--	--	39.6	19.0	2.25	64.0
JUL													
26...	1130	30	40	756	7.3	79	7.8	1,110	18.2	81.7	42.2	3.06	75.1
AUG													
05...	1030	97	40	742	5.7	64	7.4	635	19.5	49.0	22.5	3.20	47.9
05544371 JEWEL CREEK AT MUSKEGO, WI (LAT 42 55 37N LONG 088 08 45W)													
FEB 2004													
17...	0945	1.9	40	757	16.6	114	7.9	1,040	-.1	107	51.8	1.92	51.5
MAR													
06...	1000	23	10	828	12.6	86	7.9	1,010	2.9	63.1	26.0	3.41	101
MAY													
10...	0900	6.4	10	753	9.3	97	7.6	1,180	16.9	80.6	41.5	2.13	100
JUL													
26...	0945	2.7	40	--	7.8	--	7.9	1,010	20.0	85.7	43.9	2.15	58.8
AUG													
05...	1220	5.4	70	--	8.6	--	7.7	629	20.2	51.0	23.6	3.30	42.8
04087119 HONEY CREEK AT WAUWATOSA, WI (LAT 43 02 38N LONG 088 00 10W)													
FEB 2004													
18...	1730	4.7	40	740	23.7	167	8.3	2,730	-.3	78.9	32.5	4.94	401
MAR													
05...	1245	52	10	--	12.7	--	8.2	1,470	5.3	61.8	22.8	5.28	194
MAY													
10...	1200	4.7	10	--	11.8	--	8.2	1,450	15.9	72.1	32.8	4.28	172
JUL													
26...	1200	4.7	40	--	8.2	--	8.0	1,570	17.0	99.0	46.1	4.26	141
AUG													
04...	1115	2.5	40	--	7.9	--	8.2	753	22.6	43.0	17.3	4.25	66.8
04087120 MENOMONEE RIVER AT WAUWATOSA, WI (LAT 43 02 44N LONG 087 59 59W)													
FEB 2004													
19...	1100	23	10	742	13.1	93	7.6	3,340	-.2	112	43.9	5.04	299
MAR													
05...	1540	987	30	--	13.6	--	8.0	972	4.4	50.3	18.5	4.07	119
MAY													
10...	1315	115	10	--	11.9	--	8.2	1,100	16.5	80.8	34.1	2.77	99.1
JUN													
10...	1255	211	50	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)
04087088 UNDERWOOD CREEK AT WAUWATOSA, WI (LAT 43 03 17N LONG 088 02 46W)													
FEB 2004													
19...	--	266	--	--	794	.5	9.58	172	1,830	.16	.72	.037	.09
MAR													
05...	120	112	135	1	250	<.2	5.72	50.5	642	.09	2.49	.020	.63
MAY													
10...	265	--	--	--	332	.3	1.94	121	969	<.04	.39	.032	.15
JUL													
26...	236	252	--	--	302	.5	8.67	168	953	<.04	<.06	<.008	.04
AUG													
04...	142	136	--	--	153	.2	5.56	58.7	501	<.04	.56	.037	.14
04087220 ROOT RIVER NEAR FRANKLIN, WI (LAT 42 52 25N LONG 087 59 45W)													
FEB 2004													
17...	--	286	--	--	581	.5	9.70	151	1,440	.07	.48	.009	.03
MAR													
06...	153	145	175	1	192	<.2	7.24	47.8	577	<.04	2.50	.026	.18
MAY													
11...	131	--	--	--	115	.2	3.48	41.5	399	.08	.53	.032	.27
JUL													
26...	260	246	--	--	147	.4	5.10	92.6	631	<.04	.43	E.005	.09
AUG													
05...	155	148	--	--	83.9	.2	6.74	43.0	381	<.04	.56	.022	.18
05544371 JEWEL CREEK AT MUSKEGO, WI (LAT 42 55 37N LONG 088 08 45W)													
FEB 2004													
17...	--	429	--	--	110	.2	15.9	79.4	577	.04	.99	E.007	<.02
MAR													
06...	150	143	172	1	184	<.2	7.74	50.6	560	.07	2.72	.017	.18
MAY													
10...	257	--	--	--	193	.2	7.02	58.9	674	E.03	.64	.013	.20
JUL													
26...	285	287	--	--	123	.2	12.8	53.1	557	.07	1.30	.035	.11
AUG													
05...	158	151	--	--	79.6	<.2	7.99	41.4	381	E.03	.77	.017	.23
04087119 HONEY CREEK AT WAUWATOSA, WI (LAT 43 02 38N LONG 088 00 10W)													
FEB 2004													
18...	--	169	--	--	710	.8	4.48	91.1	1,440	<.04	.56	.038	.05
MAR													
05...	146	143	172	1	341	.2	6.87	42.3	787	.11	3.48	.031	.18
MAY													
10...	192	171	--	--	317	.3	3.06	65.7	878	E.02	.87	.038	.12
JUL													
26...	246	229	--	--	293	.7	9.27	117	901	<.04	.55	.011	.06
AUG													
04...	128	122	--	--	111	.2	5.89	34.6	381	<.04	1.36	.026	.15
04087120 MENOMONEE RIVER AT WAUWATOSA, WI (LAT 43 02 44N LONG 087 59 59W)													
FEB 2004													
19...	--	231	--	--	505	.4	6.45	141	1,300	<.04	.68	.027	.08
MAR													
05...	122	113	137	<1	213	<.2	5.68	41.3	562	.05	1.85	.018	.52
MAY													
10...	226	--	--	--	182	.2	2.49	72.1	702	E.02	.57	.024	.12
JUN													
10...	--	--	--	--	125	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, unfltrd mg/L (00665)	Total nitro-gen, wat unf by anal ysis, mg/L (62855)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inor-ganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	COD, low level, water, unfltrd mg/L (00335)	Chloro-phyll a wat unf trichr. method, uncorr, ug/L (32210)	Iron, water, fltrd, ug/L (01046)	Mangan-ese, water, fltrd, ug/L (01056)	Mercury water fltrd, ng/L (50287)
04087088 UNDERWOOD CREEK AT WAUWATOSA, WI (LAT 43 03 17N LONG 088 02 46W)													
FEB 2004													
19...	.023	.098	1.37	.7	<.1	.7	3.9	2.9	24	24.4	59	96.8	--
MAR													
05...	.036	.28	4.17	7.9	<.1	7.8	6.6	3.9	54	11.5	38	50.0	--
MAY													
10...	<.006	.039	1.15	.8	<.1	.8	9.5	3.4	38	12.1	54	16.0	--
JUL													
26...	E.003	.020	.35	.3	<.1	.3	4.2	19.3	58	1.35	18	1.8	.66
AUG													
04...	.016	.080	1.19	.9	<.1	.9	7.2	7.4	37	4.66	31	5.4	2.46
04087220 ROOT RIVER NEAR FRANKLIN, WI (LAT 42 52 25N LONG 087 59 45W)													
FEB 2004													
17...	E.005	.023	.84	.2	<.1	.2	3.5	<2.0	22	2.07	25	92.2	--
MAR													
06...	.036	.117	3.22	1.5	<.1	1.5	6.3	2.7	27	4.92	26	23.6	--
MAY													
11...	<.006	.092	1.29	2.6	<.1	2.6	6.2	2.5	32	13.7	25	22.7	--
JUL													
26...	.016	.053	.81	.9	<.1	.9	4.9	<2.0	32	2.06	19	26.0	.35
AUG													
05...	.051	.130	1.28	1.9	<.1	1.9	6.4	3.2	34	7.02	28	15.4	2.84
05544371 JEWEL CREEK AT MUSKEGO, WI (LAT 42 55 37N LONG 088 08 45W)													
FEB 2004													
17...	<.006	.009	1.16	.2	<.1	.2	2.0	<2.0	13	1.20	7	31.5	--
MAR													
06...	.045	.126	3.55	1.4	<.1	1.4	7.1	4.6	32	4.24	1,240	66.7	--
MAY													
10...	<.006	.045	1.24	1.3	<.1	1.3	5.1	<2.0	24	15.6	15	12.1	--
JUL													
26...	<.006	.031	1.69	.7	<.1	.7	3.0	<2.0	25	4.96	8	38.9	1.07
AUG													
05...	.033	.119	1.48	1.6	.2	1.3	6.2	2.2	29	9.68	21	3.3	1.81
04087119 HONEY CREEK AT WAUWATOSA, WI (LAT 43 02 38N LONG 088 00 10W)													
FEB 2004													
18...	.104	.158	.85	.5	<.1	.5	2.7	<2.0	<9	1.72	<19	26.5	--
MAR													
05...	.066	.175	4.44	2.5	<.1	2.4	6.2	2.3	29	2.87	31	27.7	--
MAY													
10...	.024	.080	1.34	.7	<.1	.7	5.5	<2.0	32	6.03	34	13.4	--
JUL													
26...	.064	.121	.78	.4	<.1	.4	3.0	<2.0	29	2.38	13	16.8	.73
AUG													
04...	.059	.137	1.91	1.1	<.1	1.1	5.5	2.5	25	5.42	24	5.3	2.70
04087120 MENOMONEE RIVER AT WAUWATOSA, WI (LAT 43 02 44N LONG 087 59 59W)													
FEB 2004													
19...	.022	.055	1.03	.7	<.1	.7	4.1	<2.0	25	3.15	E17	30.7	--
MAR													
05...	.050	--	--	7.9	<.1	7.9	6.4	3.2	36	16.3	30	28.4	--
MAY													
10...	E.005	.051	1.14	.9	<.1	.9	7.5	<2.0	31	12.1	43	18.6	--
JUN													
10...	--	.176	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	1,4-Dichlorobenzene water, fltrd, ug/L (34572)	1-Methylnaphthalene, water, fltrd, ug/L (62054)	1-Naphthol, water, fltrd 0.7u GF ug/L (49295)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	2,6-Dimethylnaphthalene, water, fltrd, ug/L (62055)	2Chloro-2,6'-diethyl acetanilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl-6-methylaniline water, fltrd, ug/L (61620)	2-Methylnaphthalene, water, fltrd, ug/L (62056)	3,4-Dichloroaniline water fltrd, ug/L (61625)	3-beta-Coprostanol, water, fltrd, ug/L (62057)	3-Methyl-1H-indole, water, fltrd, ug/L (62058)	3-tert-Butyl-4-hydroxyanisole wat flt ug/L (62059)
04087088 UNDERWOOD CREEK AT WAUWATOSA, WI (LAT 43 03 17N LONG 088 02 46W)													
FEB 2004													
19...	<.5	<.5	--	--	<.5	--	--	--	<.5	--	M	M	<5
MAR													
05...	<.5	<.5	--	--	<.5	--	--	--	<.5	--	<2	<1	<5
MAY													
10...	E.2	<.5	<.09	<.006	<.5	<.005	E.066	<.004	<.5	<.004	<2	<1	<5
JUL													
26...	<.5	M	--	--	<.5	--	--	--	<.5	--	<2	<1	<5
AUG													
04...	<.5	<.5	<.09	<.006	<.5	<.005	<.010	<.004	<.5	<.004	<2	<1	<5
04087220 ROOT RIVER NEAR FRANKLIN, WI (LAT 42 52 25N LONG 087 59 45W)													
FEB 2004													
17...	<.5	<.5	--	--	<.5	--	--	--	<.5	--	<2	<1	<5
MAR													
06...	<.5	<.5	--	--	<.5	--	--	--	<.5	--	<2	<1	<5
MAY													
11...	E.2	<.5	<.09	<.006	<.5	<.005	E.066	<.004	<.5	<.004	<2	<1	<5
JUL													
26...	<.5	<.5	--	--	<.5	--	--	--	<.5	--	<2	<1	<5
AUG													
05...	<.5	<.5	M	<.006	<.5	<.005	E.015	<.004	<.5	.022	<2	<1	<5
05544371 JEWEL CREEK AT MUSKEGO, WI (LAT 42 55 37N LONG 088 08 45W)													
FEB 2004													
17...	<.5	<.5	--	--	<.5	--	--	--	<.5	--	<2	<1	<5
MAR													
06...	<.5	<.5	--	--	<.5	--	--	--	<.5	--	<2	M	<5
MAY													
10...	E.2	<.5	<.09	<.006	<.5	<.005	E.039	<.004	<.5	<.004	<2	<1	<5
JUL													
26...	<.5	M	--	--	<.5	--	--	--	E.1	--	<2	<1	<5
AUG													
05...	<.5	<.5	<.09	<.006	<.5	<.005	E.015	<.004	<.5	<.004	<2	<1	<5
04087119 HONEY CREEK AT WAUWATOSA, WI (LAT 43 02 38N LONG 088 00 10W)													
FEB 2004													
18...	<.5	<.5	--	--	<.5	--	--	--	<.5	--	<2	<1	<5
MAR													
05...	<.5	<.5	--	--	<.5	--	--	--	<.5	--	<2	<1	<5
MAY													
10...	E.2	<.5	<.09	<.006	<.5	<.005	E.109	<.004	<.5	<.004	<2	<1	<5
JUL													
26...	<.5	M	--	--	<.5	--	--	--	E.1	--	<2	<1	<5
AUG													
04...	<.5	<.5	<.09	<.006	<.5	<.005	<.006	<.004	<.5	.009	<2	<1	<5
04087120 MENOMONEE RIVER AT WAUWATOSA, WI (LAT 43 02 44N LONG 087 59 59W)													
FEB 2004													
19...	<.5	<.5	--	--	<.5	--	--	--	<.5	--	M	<1	<5
MAR													
05...	<.5	<.5	--	--	<.5	--	--	--	<.5	--	<2	<1	<5
MAY													
10...	E.2	<.5	<.09	<.006	<.5	<.005	E.059	<.004	<.5	<.004	<2	<1	<5
JUN													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	4-Cumyl-phenol, water, fltrd, ug/L (62060)	4-Octyl-phenol, water, fltrd, ug/L (62061)	4-Nonyl-phenol, water, fltrd, ug/L (62085)	4-tert-Octyl-phenol, water, fltrd, ug/L (62062)	5-Methyl-1H-benzo-triazole, wat flt ug/L (62063)	9,10-Anthra-quinone water, fltrd, ug/L (62066)	Aceto-chlor, water, fltrd, ug/L (49260)	Aceto-phenone water, fltrd, ug/L (62064)	AHTN, water, fltrd, ug/L (62065)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-HCH-d6, surrog, Sch2003 wat flt percent recovry (99995)	Anthra-cene, water, fltrd, ug/L (34221)
04087088 UNDERWOOD CREEK AT WAUWATOSA, WI (LAT 43 03 17N LONG 088 02 46W)													
FEB 2004													
19...	--	<1	<1	<5	<1	2	E.3	--	E.1	<.5	--	--	<.5
MAR													
05...	--	<1	<1	<5	<1	<2	E.4	--	<.5	<.5	--	--	<.5
MAY													
10...	E.005	M	<1	E2	<1	<2	E.2	.090	E.2	<.5	<.005	95.6	<.5
JUL													
26...	--	<1	<1	<5	<1	<2	E.1	--	<.5	<.5	--	--	<.5
AUG													
04...	<.006	<1	<1	<5	<1	<2	.5	<.006	<.5	<.5	<.005	78.3	E.2
04087220 ROOT RIVER NEAR FRANKLIN, WI (LAT 42 52 25N LONG 087 59 45W)													
FEB 2004													
17...	--	<1	<1	<5	<1	<2	E.1	--	<.5	<.5	--	--	<.5
MAR													
06...	--	<1	<1	<5	<1	<2	E.1	--	<.5	<.5	--	--	<.5
MAY													
11...	E.007	<1	<1	E2	<1	<2	E.3	.092	E.2	<.5	<.005	80.7	E.1
JUL													
26...	--	<1	<1	<5	<1	<2	<.5	--	<.5	<.5	--	--	<.5
AUG													
05...	E.009	<1	<1	<5	<1	<2	E.2	<.006	<.5	<.5	<.005	87.8	<.5
05544371 JEWEL CREEK AT MUSKEGO, WI (LAT 42 55 37N LONG 088 08 45W)													
FEB 2004													
17...	--	<1	<1	<5	<1	<2	<.5	--	<.5	M	--	--	<.5
MAR													
06...	--	<1	<1	<5	<1	<2	<.5	--	<.5	<.5	--	--	<.5
MAY													
10...	<.006	<1	<1	E2	<1	<2	<.5	.050	<.5	<.5	<.005	94.4	<.5
JUL													
26...	--	<1	<1	<5	<1	<2	<.5	--	<.5	<.5	--	--	<.5
AUG													
05...	E.006	<1	<1	<5	<1	<2	E.1	<.006	<.5	<.5	<.005	72.8	<.5
04087119 HONEY CREEK AT WAUWATOSA, WI (LAT 43 02 38N LONG 088 00 10W)													
FEB 2004													
18...	--	M	<1	<5	<1	<2	E.1	--	<.5	M	--	--	<.5
MAR													
05...	--	<1	<1	<5	<1	<2	E.2	--	<.5	<.5	--	--	<.5
MAY													
10...	E.007	<1	<1	E2	M	<2	E.2	.099	E.2	<.5	<.005	93.5	<.5
JUL													
26...	--	<1	<1	<5	<1	<2	E.1	--	<.5	<.5	--	--	E.1
AUG													
04...	<.006	<1	<1	<5	<1	<2	E.2	<.006	<.5	<.5	<.005	84.2	<.5
04087120 MENOMONEE RIVER AT WAUWATOSA, WI (LAT 43 02 44N LONG 087 59 59W)													
FEB 2004													
19...	--	<1	<1	<5	<1	<2	E.2	--	<.5	<.5	--	--	<.5
MAR													
05...	--	<1	<1	<5	<1	<2	E.2	--	<.5	<.5	--	--	<.5
MAY													
10...	<.006	<1	<1	E2	<1	<2	E.2	.056	<.5	<.5	<.005	97.0	<.5
JUN													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Atrazine, water, fltrd, ug/L (39632)	Azinphos-methyl oxon, water, fltrd, ug/L (61635)	Azinphos-methyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Benzo[a]pyrene, water, fltrd, ug/L (34248)	Benzophenone water, fltrd, ug/L (62067)	beta-Sitosterol, water, fltrd, ug/L (62068)	beta-Stigmastanol, water, fltrd, ug/L (62086)	Bisphenol A, water, fltrd, ug/L (62069)	Bisphenol A-d3 sur Sch 2033 & 8033, wat flt pct rcv (99583)	Bromacil, water, fltrd, ug/L (04029)	Caffeine, water, fltrd, ug/L (50305)	Caffeine-13C sur Sch 2033 & 8033, wat flt pct rcv (99584)
04087088 UNDERWOOD CREEK AT WAUWATOSA, WI (LAT 43 03 17N LONG 088 02 46W)													
FEB 2004													
19...	--	--	--	--	<.5	E.1	<2	<2	M	109	<.5	E.5	113
MAR													
05...	--	--	--	--	<.5	<.5	<2	<2	<1	76.2	<.5	E.1	85.7
MAY													
10...	.236	<.02	<.050	<.010	<.5	<.5	<2	<2	<1	118	<.5	E.3	118
JUL													
26...	--	--	--	--	<.5	<.5	<2	<2	M	146	<.5	E.1	126
AUG													
04...	.023	<.07	<.050	<.010	<.5	<.5	<2	<2	<1	132	<.5	E.2	76.8
04087220 ROOT RIVER NEAR FRANKLIN, WI (LAT 42 52 25N LONG 087 59 45W)													
FEB 2004													
17...	--	--	--	--	<.5	E.1	<2	<2	<1	72.2	<.5	E.1	100
MAR													
06...	--	--	--	--	<.5	<.5	<2	<2	<1	81.0	<.5	E.1	95.2
MAY													
11...	.233	<.02	<.050	E.004	<.5	<.5	<2	<2	<1	118	<.5	E.4	118
JUL													
26...	--	--	--	--	<.5	<.5	<20	<20	<1	.0	<.5	<.5	.0
AUG													
05...	.021	<.07	<.050	<.010	<.5	<.5	<2	<2	<1	112	<.5	<.5	84.3
05544371 JEWEL CREEK AT MUSKEGO, WI (LAT 42 55 37N LONG 088 08 45W)													
FEB 2004													
17...	--	--	--	--	<.5	E.1	<2	<2	<1	55.6	<.5	<.5	100
MAR													
06...	--	--	--	--	<.5	<.5	<2	<2	<1	85.7	<.5	<.5	100
MAY													
10...	.133	<.02	<.050	<.010	<.5	<.5	<2	<2	<1	95.5	<.5	E.1	114
JUL													
26...	--	--	--	--	<.5	M	<20	<20	<1	169	<.5	<.5	109
AUG													
05...	.018	<.07	<.050	<.010	<.5	<.5	<2	<2	<1	137	<.5	<.5	85.0
04087119 HONEY CREEK AT WAUWATOSA, WI (LAT 43 02 38N LONG 088 00 10W)													
FEB 2004													
18...	--	--	--	--	<.5	<.5	<2	<2	M	88.9	<.5	E.2	106
MAR													
05...	--	--	--	--	<.5	E.1	<2	<2	M	81.0	<.5	E.2	90.5
MAY													
10...	.354	<.02	<.050	E.004	<.5	<.5	<2	<2	<1	109	<.5	E.5	118
JUL													
26...	--	--	--	--	<.5	E.1	<2	<2	M	128	<.5	1.6	120
AUG													
04...	.014	<.07	<.050	E.006	<.5	<.5	<2	<2	<1	144	<.5	E.3	86.9
04087120 MENOMONEE RIVER AT WAUWATOSA, WI (LAT 43 02 44N LONG 087 59 59W)													
FEB 2004													
19...	--	--	--	--	<.5	<.5	<2	<2	M	100	<.5	E.3	109
MAR													
05...	--	--	--	--	<.5	<.5	<2	<2	<1	76.2	<.5	E.1	90.5
MAY													
10...	.225	<.02	<.050	E.004	<.5	<.5	<2	<2	<1	110	<.5	E.2	129
JUN													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Camphor water, fltrd, ug/L (62070)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbazole, water, fltrd, ug/L (62071)	Chlorpyrifos oxon, water, fltrd, ug/L (61636)	Chlorpyrifos water, fltrd, ug/L (38933)	Cholesterol, water, fltrd, ug/L (62072)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Cotinine, water, fltrd, ug/L (62005)	Cyfluthrin, water, fltrd, ug/L (61585)	Cypermethrin water, fltrd, ug/L (61586)	DCPA, water fltrd 0.7u GF ug/L (82682)	DecaFbiphenl sur Sch 2033 & 8033, wat flt pct rcv (99585)	DEET, water, fltrd, ug/L (62082)
04087088 UNDERWOOD CREEK AT WAUWATOSA, WI (LAT 43 03 17N LONG 088 02 46W)													
FEB 2004													
19...	<.5	<1	E.1	--	<.5	M	--	E.4000	--	--	--	41.7	E.1
MAR													
05...	M	<1	E.2	--	<.5	<2	--	<1.00	--	--	--	66.7	E.1
MAY													
10...	<.5	<.041	E.1	<.06	<.005	<2	<.006	<1.00	<.008	<.009	<.003	86.4	E.1
JUL													
26...	M	<1	E.2	--	<.5	E1	--	<1.00	--	--	--	54.9	E.3
AUG													
04...	<.5	E.015	E.1	<.06	<.005	<2	<.006	<1.00	<.008	<.009	E.002	48.6	E.2
04087220 ROOT RIVER NEAR FRANKLIN, WI (LAT 42 52 25N LONG 087 59 45W)													
FEB 2004													
17...	<.5	<1	<.5	--	<.5	<2	--	E.1600	--	--	--	66.7	E.1
MAR													
06...	<.5	<1	M	--	<.5	<2	--	<1.00	--	--	--	61.9	E.1
MAY													
11...	E.1	E.011	E.1	<.06	<.005	<2	<.006	E.3800	<.008	<.009	<.003	90.9	E.1
JUL													
26...	<.5	<1	<.5	--	<.5	<20	--	<1.00	--	--	--	.0	<.5
AUG													
05...	<.5	E.047	<.5	<.06	<.005	<2	<.006	<1.00	<.008	<.009	.004	49.6	E.3
05544371 JEWEL CREEK AT MUSKEGO, WI (LAT 42 55 37N LONG 088 08 45W)													
FEB 2004													
17...	<.5	<1	<.5	--	<.5	<2	--	<1.00	--	--	--	66.7	E.1
MAR													
06...	<.5	<1	<.5	--	<.5	<2	--	<1.00	--	--	--	61.9	E.1
MAY													
10...	<.5	<.041	<.5	<.06	<.005	<2	<.006	<1.00	<.008	<.009	<.003	77.3	E.1
JUL													
26...	M	<1	<.5	--	<.5	<20	--	<1.00	--	--	--	42.4	E.3
AUG													
05...	<.5	E.015	<.5	<.06	<.005	<2	<.006	<1.00	<.008	<.009	<.003	41.3	<.5
04087119 HONEY CREEK AT WAUWATOSA, WI (LAT 43 02 38N LONG 088 00 10W)													
FEB 2004													
18...	<.5	<1	M	--	<.5	<2	--	E.2200	--	--	--	66.7	E.1
MAR													
05...	M	<1	E.1	--	<.5	<2	--	<1.00	--	--	--	61.9	E.1
MAY													
10...	E.1	E.011	E.1	<.06	<.005	<2	<.006	E.3600	<.008	<.009	<.003	86.4	E.2
JUL													
26...	M	<1	<.5	--	<.5	<2	--	<1.00	--	--	--	50.5	E.2
AUG													
04...	<.5	E.021	<.5	<.06	<.005	<2	<.006	<1.00	<.008	<.009	E.002	64.3	E.2
04087120 MENOMONEE RIVER AT WAUWATOSA, WI (LAT 43 02 44N LONG 087 59 59W)													
FEB 2004													
19...	<.5	<1	M	--	<.5	M	--	E.3000	--	--	--	63.6	E.1
MAR													
05...	<.5	<1	E.1	--	<.5	<2	--	<1.00	--	--	--	57.1	E.1
MAY													
10...	E.1	<.041	E.1	<.06	<.005	<2	<.006	<1.00	<.008	<.009	<.003	85.7	E.1
JUN													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Desulf-inyl fipro-nil, water, fltrd, ug/L (62170)	Diaz-inon oxon, water, fltrd, ug/L (61638)	Diazi-non, water, fltrd, ug/L (39572)	Diazi-non-d10 surrog, Sch2003 wat flt percent recovry (99994)	Dicro-tophos, water fltrd, ug/L (38454)	Diel-drin, water, fltrd, ug/L (39381)	Di-ethoxy-nonyl-phenol, water, fltrd, ug/L (62083)	Di-ethoxy-octyl-phenol, water, fltrd ug/L (61705)	Dimeth-oate, water, fltrd 0.7u GF ug/L (82662)	D-Limo-nene, water, fltrd, ug/L (62073)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Ethoxy-octyl-phenol, water, fltrd ug/L (61706)
04087088 UNDERWOOD CREEK AT WAUWATOSA, WI (LAT 43 03 17N LONG 088 02 46W)													
FEB 2004													
19...	--	--	<.5	--	--	--	<5	<1	--	<.5	--	--	<1
MAR													
05...	--	--	<.5	--	--	--	<5	<1	--	<.5	--	--	<1
MAY													
10...	<.012	<.01	.008	102	<.08	<.009	<5	<1	<.006	<.5	<.03	<.004	M
JUL													
26...	--	--	<.5	--	--	--	<5	<1	--	<.5	--	--	<1
AUG													
04...	<.012	<.01	<.008	95.3	<.08	<.009	<5	<1	<.006	<.5	<.0020	<.004	<1
04087220 ROOT RIVER NEAR FRANKLIN, WI (LAT 42 52 25N LONG 087 59 45W)													
FEB 2004													
17...	--	--	<.5	--	--	--	<5	<1	--	<.5	--	--	<1
MAR													
06...	--	--	<.5	--	--	--	<5	<1	--	<.5	--	--	<1
MAY													
11...	<.012	<.01	.027	97.9	<.08	<.009	<5	<1	<.006	<.5	<.03	<.004	<1
JUL													
26...	--	--	<.5	--	--	--	<5	<1	--	<.5	--	--	<1
AUG													
05...	E.007	<.01	.018	110	<.08	<.009	<5	<1	<.006	<.5	<.0020	<.004	<1
05544371 JEWEL CREEK AT MUSKEGO, WI (LAT 42 55 37N LONG 088 08 45W)													
FEB 2004													
17...	--	--	<.5	--	--	--	<5	<1	--	<.5	--	--	<1
MAR													
06...	--	--	<.5	--	--	--	<5	<1	--	<.5	--	--	<1
MAY													
10...	<.012	<.01	<.005	97.6	<.08	<.009	<5	<1	<.006	<.5	<.03	<.004	<1
JUL													
26...	--	--	<.5	--	--	--	<5	<1	--	<.5	--	--	<1
AUG													
05...	<.012	<.01	<.005	68.8	<.08	<.009	<5	<1	<.006	<.5	<.0020	<.004	<1
04087119 HONEY CREEK AT WAUWATOSA, WI (LAT 43 02 38N LONG 088 00 10W)													
FEB 2004													
18...	--	--	<.5	--	--	--	<5	<1	--	<.5	--	--	<1
MAR													
05...	--	--	<.5	--	--	--	<5	<1	--	<.5	--	--	<1
MAY													
10...	<.012	<.01	.022	99.7	<.08	<.009	<5	M	<.006	E.1	<.03	<.004	E2
JUL													
26...	--	--	<.5	--	--	--	<5	<1	--	<.5	--	--	<1
AUG													
04...	<.012	<.01	.015	93.1	<.08	<.009	<5	M	<.006	<.5	<.0020	<.004	M
04087120 MENOMONEE RIVER AT WAUWATOSA, WI (LAT 43 02 44N LONG 087 59 59W)													
FEB 2004													
19...	--	--	<.5	--	--	--	<5	<1	--	<.5	--	--	<1
MAR													
05...	--	--	<.5	--	--	--	<5	<1	--	<.5	--	--	<1
MAY													
10...	<.012	<.01	.010	97.6	<.08	<.009	<5	<1	<.006	<.5	<.03	<.004	M
JUN													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Fenamiphos sulfone water, fltrd, ug/L (61645)	Fenamiphos sulfoxide, water, fltrd, ug/L (61646)	Fenamiphos, water, fltrd, ug/L (61591)	Desulfinylfipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Fluoranthene water, fltrd, ug/L (34377)	Fluoranthene-d10, sur Sch 20/8033 wat flt pct rcv (99586)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	HHCB, water, fltrd, ug/L (62075)	Hexazinone, water, fltrd, ug/L (04025)
04087088 UNDERWOOD CREEK AT WAUWATOSA, WI (LAT 43 03 17N LONG 088 02 46W)													
FEB 2004													
19...	--	--	--	--	--	--	--	E.2	95.7	--	--	<.5	--
MAR													
05...	--	--	--	--	--	--	--	E.2	90.5	--	--	<.5	--
MAY													
10...	<.008	<.03	<.03	<.029	<.013	<.024	<.016	E.2	118	<.002	<.003	<.5	<.013
JUL													
26...	--	--	--	--	--	--	--	E.1	121	--	--	<.5	--
AUG													
04...	<.049	<.04	<.03	<.029	<.013	<.024	<.016	E.3	72.6	<.003	<.003	<.5	<.013
04087220 ROOT RIVER NEAR FRANKLIN, WI (LAT 42 52 25N LONG 087 59 45W)													
FEB 2004													
17...	--	--	--	--	--	--	--	<.5	100	--	--	<.5	--
MAR													
06...	--	--	--	--	--	--	--	E.1	100	--	--	<.5	--
MAY													
11...	<.008	<.03	<.03	<.029	<.013	<.024	<.016	E.1	118	<.002	<.003	<.5	<.013
JUL													
26...	--	--	--	--	--	--	--	<.5	.0	--	--	<.5	--
AUG													
05...	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.5	83.6	<.003	<.003	<.5	<.013
05544371 JEWEL CREEK AT MUSKEGO, WI (LAT 42 55 37N LONG 088 08 45W)													
FEB 2004													
17...	--	--	--	--	--	--	--	<.5	100	--	--	<.5	--
MAR													
06...	--	--	--	--	--	--	--	<.5	105	--	--	<.5	--
MAY													
10...	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.5	114	<.002	<.003	<.5	<.013
JUL													
26...	--	--	--	--	--	--	--	<.5	90.9	--	--	<.5	--
AUG													
05...	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.5	89.2	<.003	<.003	<.5	<.013
04087119 HONEY CREEK AT WAUWATOSA, WI (LAT 43 02 38N LONG 088 00 10W)													
FEB 2004													
18...	--	--	--	--	--	--	--	E.1	100	--	--	<.5	--
MAR													
05...	--	--	--	--	--	--	--	E.2	95.2	--	--	<.5	--
MAY													
10...	<.008	<.03	<.03	<.029	<.013	<.024	<.016	E.1	118	<.002	<.003	<.5	<.013
JUL													
26...	--	--	--	--	--	--	--	E.1	121	--	--	<.5	--
AUG													
04...	<.049	<.04	<.03	<.029	<.013	<.024	E.007	E.1	98.9	<.003	<.003	<.5	<.013
04087120 MENOMONEE RIVER AT WAUWATOSA, WI (LAT 43 02 44N LONG 087 59 59W)													
FEB 2004													
19...	--	--	--	--	--	--	--	E.1	95.5	--	--	<.5	--
MAR													
05...	--	--	--	--	--	--	--	E.1	95.2	--	--	<.5	--
MAY													
10...	<.008	<.03	<.03	<.029	<.013	<.024	<.016	E.1	129	<.002	<.003	<.5	<.013
JUN													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Indole, water, fltrd, ug/L (62076)	Iprodione, water, fltrd, ug/L (61593)	Isoborneol, water, fltrd, ug/L (62077)	Isofenphos, water, fltrd, ug/L (61594)	Isophorone water, fltrd, ug/L (34409)	Isopropylbenzene water, fltrd, ug/L (62078)	Isoquinoline, water, fltrd, ug/L (62079)	Malaoxon, water, fltrd, ug/L (61652)	Malathion, water, fltrd, ug/L (39532)	Menthol water, fltrd, ug/L (62080)	Metalaxyl, water, fltrd, ug/L (50359)	Metalaxyl, water, fltrd, ug/L (61596)	Methialthion water, fltrd, ug/L (61598)
04087088 UNDERWOOD CREEK AT WAUWATOSA, WI (LAT 43 03 17N LONG 088 02 46W)													
FEB 2004													
19...	M	--	<.5	--	M	<.5	<.5	--	--	E.2	<.5	--	--
MAR													
05...	<.5	--	<.5	--	<.5	<.5	<.5	--	--	<.5	<.5	--	--
MAY													
10...	<.5	<1	<.5	<.003	E.1	<.5	<.5	<.008	<.027	<.5	<.5	<.005	<.006
JUL													
26...	<.5	--	<.5	--	<.5	<.5	E.1	--	--	<.5	<.5	--	--
AUG													
04...	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.030	<.027	<.5	<.5	<.005	<.006
04087220 ROOT RIVER NEAR FRANKLIN, WI (LAT 42 52 25N LONG 087 59 45W)													
FEB 2004													
17...	<.5	--	<.5	--	<.5	<.5	<.5	--	--	E.1	<.5	--	--
MAR													
06...	<.5	--	<.5	--	<.5	<.5	<.5	--	--	<.5	<.5	--	--
MAY													
11...	<.5	<1	<.5	<.003	E.1	<.5	<.5	<.008	<.027	E.1	<.5	<.005	<.006
JUL													
26...	<.5	--	<.5	--	<.5	<.5	<.5	--	--	<.5	<.5	--	--
AUG													
05...	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.030	<.027	<.5	<.5	<.005	<.006
05544371 JEWEL CREEK AT MUSKEGO, WI (LAT 42 55 37N LONG 088 08 45W)													
FEB 2004													
17...	<.5	--	<.5	--	<.5	<.5	<.5	--	--	<.5	<.5	--	--
MAR													
06...	<.5	--	<.5	--	<.5	<.5	<.5	--	--	<.5	<.5	--	--
MAY													
10...	<.5	<1	<.5	<.003	E.1	<.5	<.5	<.008	<.027	<.5	<.5	<.005	<.006
JUL													
26...	<.5	--	<.5	--	M	<.5	<.5	--	--	E.1	<.5	--	--
AUG													
05...	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.030	<.027	<.5	<.5	<.005	<.006
04087119 HONEY CREEK AT WAUWATOSA, WI (LAT 43 02 38N LONG 088 00 10W)													
FEB 2004													
18...	<.5	--	<.5	--	<.5	<.5	<.5	--	--	E.1	<.5	--	--
MAR													
05...	<.5	--	<.5	--	<.5	<.5	<.5	--	--	<.5	<.5	--	--
MAY													
10...	<.5	<1	<.5	<.003	E.1	<.5	<.5	<.008	<.027	E.2	<.5	<.005	<.006
JUL													
26...	<.5	--	<.5	--	<.5	<.5	<.5	--	--	E.1	<.5	--	--
AUG													
04...	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.030	<.027	<.5	<.5	.012	<.006
04087120 MENOMONEE RIVER AT WAUWATOSA, WI (LAT 43 02 44N LONG 087 59 59W)													
FEB 2004													
19...	<.5	--	<.5	--	<.5	<.5	<.5	--	--	E.1	<.5	--	--
MAR													
05...	<.5	--	<.5	--	<.5	<.5	<.5	--	--	<.5	<.5	--	--
MAY													
10...	<.5	<1	<.5	<.003	E.1	<.5	<.5	<.020	<.027	E.1	<.5	<.005	<.006
JUN													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Methyl para-oxon, water, fltrd, ug/L (61664)	Methyl para-thion, water, fltrd 0.7u GF ug/L (82667)	Methyl salicy-late, water, fltrd, ug/L (62081)	Methyl-mercury water fltrd, ng/L (50285)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Myclo-butanil water, fltrd, ug/L (61599)	Naphth-alene, water, fltrd, ug/L (34443)	p-Cresol, water, fltrd, ug/L (62084)	Pendi-meth-alin, water, fltrd 0.7u GF ug/L (82683)	Penta-chloro-phenol, water, fltrd, ug/L (34459)	Phenan-threne, water, fltrd, ug/L (34462)	Phenol, water, fltrd, ug/L (34466)
04087088 UNDERWOOD CREEK AT WAUWATOSA, WI (LAT 43 03 17N LONG 088 02 46W)													
FEB 2004													
19...	--	--	<.5	--	<.5	--	--	M	M	--	<2	E.1	E.2
MAR													
05...	--	--	<.5	--	<.5	--	--	M	M	--	<2	E.3	E.4
MAY													
10...	<.03	<.015	<.5	--	.051	<.006	<.008	<.5	<1	E.214	<2	E.1	<.5
JUL													
26...	--	--	M	<.04	<.5	--	--	M	<1	--	<2	E.1	.7
AUG													
04...	<.03	<.015	<.5	.10	.031	<.006	<.008	<.5	<1	<.022	<2	E.4	E.4
04087220 ROOT RIVER NEAR FRANKLIN, WI (LAT 42 52 25N LONG 087 59 45W)													
FEB 2004													
17...	--	--	<.5	--	<.5	--	--	<.5	M	--	<2	<.5	E.2
MAR													
06...	--	--	<.5	--	<.5	--	--	<.5	<1	--	<2	M	E.5
MAY													
11...	<.03	<.015	<.5	--	.046	<.006	<.008	<.5	<1	E.026	E1	E.1	<.5
JUL													
26...	--	--	<.5	.07	<.5	--	--	<.5	<1	--	<2	<.5	<.5
AUG													
05...	<.03	<.015	<.5	.10	E.011	<.006	<.009	<.5	<1	<.022	<2	<.5	E.3
05544371 JEWEL CREEK AT MUSKEGO, WI (LAT 42 55 37N LONG 088 08 45W)													
FEB 2004													
17...	--	--	<.5	--	<.5	--	--	<.5	<1	--	<2	<.5	<.5
MAR													
06...	--	--	<.5	--	<.5	--	--	<.5	<1	--	<2	<.5	E.4
MAY													
10...	<.03	<.015	<.5	--	.058	<.006	<.008	<.5	<1	<.022	<2	M	<.5
JUL													
26...	--	--	E.1	.04	M	--	--	M	<1	--	<2	<.5	.8
AUG													
05...	<.03	<.015	<.5	.10	.036	<.006	<.008	<.5	<1	<.022	<2	<.5	E.3
04087119 HONEY CREEK AT WAUWATOSA, WI (LAT 43 02 38N LONG 088 00 10W)													
FEB 2004													
18...	--	--	<.5	--	<.5	--	--	<.5	M	--	<2	E.1	E.2
MAR													
05...	--	--	<.5	--	<.5	--	--	M	M	--	E2	E.1	E.4
MAY													
10...	<.03	<.015	E.1	--	.055	<.006	<.008	<.5	<1	E.058	E1	E.1	<.5
JUL													
26...	--	--	E.1	<.04	<.5	--	--	M	<1	--	<2	E.1	.7
AUG													
04...	<.03	<.015	<.5	.06	E.007	<.006	<.008	<.5	<1	<.022	<2	M	<.5
04087120 MENOMONEE RIVER AT WAUWATOSA, WI (LAT 43 02 44N LONG 087 59 59W)													
FEB 2004													
19...	--	--	<.5	--	<.5	--	--	<.5	M	--	<2	E.1	E.2
MAR													
05...	--	--	<.5	--	<.5	--	--	<.5	M	--	<2	E.1	.7
MAY													
10...	<.03	<.015	<.5	--	.035	<.006	<.008	<.5	<1	E.037	<2	E.1	<.5
JUN													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Pyrene, water, fltrd, ug/L (34470)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbufos oxon sulfone water, fltrd, ug/L (61674)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Terbuthylazine, water, fltrd, ug/L (04022)
04087088 UNDERWOOD CREEK AT WAUWATOSA, WI (LAT 43 03 17N LONG 088 02 46W)													
FEB 2004													
19...	--	--	--	--	<.5	--	--	E.1	--	--	--	--	--
MAR													
05...	--	--	--	--	<.5	--	--	E.1	--	--	--	--	--
MAY													
10...	<.10	<.011	--	<.008	.01	<.005	<.004	E.1	<.008	<.02	<.07	<.02	E.01
JUL													
26...	--	--	--	--	<.5	--	--	E.1	--	--	--	--	--
AUG													
04...	<.10	<.011	--	--	.02	<.005	<.004	E.1	<.005	<.02	<.07	<.02	<.01
04087220 ROOT RIVER NEAR FRANKLIN, WI (LAT 42 52 25N LONG 087 59 45W)													
FEB 2004													
17...	--	--	--	--	<.5	--	--	<.5	--	--	--	--	--
MAR													
06...	--	--	--	--	<.5	--	--	M	--	--	--	--	--
MAY													
11...	<.10	<.011	<.06	<.008	<.01	<.005	<.004	E.1	<.005	<.02	<.07	<.02	<.01
JUL													
26...	--	--	--	--	<.5	--	--	<.5	--	--	--	--	--
AUG													
05...	<.10	<.011	--	--	.09	<.005	<.004	<.5	<.009	<.02	<.07	<.02	<.01
05544371 JEWEL CREEK AT MUSKEGO, WI (LAT 42 55 37N LONG 088 08 45W)													
FEB 2004													
17...	--	--	--	--	<.5	--	--	<.5	--	--	--	--	--
MAR													
06...	--	--	--	--	<.5	--	--	<.5	--	--	--	--	--
MAY													
10...	<.10	<.011	--	<.008	.02	<.005	<.004	<.5	E.004	<.02	<.07	<.02	<.01
JUL													
26...	--	--	--	--	<.5	--	--	<.5	--	--	--	--	--
AUG													
05...	<.10	<.011	--	--	.02	<.005	<.004	<.5	<.005	<.02	<.07	<.02	<.01
04087119 HONEY CREEK AT WAUWATOSA, WI (LAT 43 02 38N LONG 088 00 10W)													
FEB 2004													
18...	--	--	--	--	<.5	--	--	E.1	--	--	--	--	--
MAR													
05...	--	--	--	--	<.5	--	--	E.1	--	--	--	--	--
MAY													
10...	<.10	<.011	--	<.008	.02	<.005	<.004	E.1	.012	.02	<.07	<.02	<.01
JUL													
26...	--	--	--	--	<.5	--	--	E.1	--	--	--	--	--
AUG													
04...	<.10	<.011	--	--	.07	<.005	<.004	M	<.005	.02	<.07	<.02	<.01
04087120 MENOMONEE RIVER AT WAUWATOSA, WI (LAT 43 02 44N LONG 087 59 59W)													
FEB 2004													
19...	--	--	--	--	<.5	--	--	M	--	--	--	--	--
MAR													
05...	--	--	--	--	<.5	--	--	E.1	--	--	--	--	--
MAY													
10...	<.10	<.011	--	<.008	.02	<.005	<.004	E.1	.014	.02	<.07	<.02	<.01
JUN													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Tetra-chloro-ethene, water, fltrd, ug/L (34476)	Tri-bromo-methane water, fltrd, ug/L (34288)	Tri-butyl phos-phate, water, fltrd, ug/L (62089)	Triclo-san, water, fltrd, ug/L (62090)	Tri-ethyl citrate water, fltrd, ug/L (62091)	Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661)	Tri-phenyl phos-phate, water, fltrd, ug/L (62092)	Tris(2-butoxy-ethyl) phos-phate, wat flt ug/L (62093)	Tris(2-chloro-ethyl) phos-phate, wat flt ug/L (62087)	Tris(di chloro-i-Pr) phos-phate, wat flt ug/L (62088)	Di-chlor-vos, water fltrd, ug/L (38775)	Methyl-mercury suspnd sedimnt total, ng/L (62977)	Sus-pended sedi-ment concen-tration mg/L (80154)
04087088 UNDERWOOD CREEK AT WAUWATOSA, WI (LAT 43 03 17N LONG 088 02 46W)													
FEB 2004													
19...	<.5	<.5	E.1	<1	<.5	--	E.1	E.4	E.1	<.5	<1.00	--	6
MAR													
05...	<.5	<.5	<.5	<1	<.5	--	M	E.3	<.5	<.5	<1.00	--	174
MAY													
10...	<.5	<.5	<.5	<1	<.5	<.009	E.1	.7	E.1	<.5	<.01	--	4
JUL													
26...	<.5	M	<.5	<1	<.5	--	E.1	E.3	E.1	E.1	--	--	4
AUG													
04...	<.5	<.5	<.5	<1	<.5	<.009	<.5	<.5	<.5	<.5	<.01	.053	7
04087220 ROOT RIVER NEAR FRANKLIN, WI (LAT 42 52 25N LONG 087 59 45W)													
FEB 2004													
17...	<.5	<.5	E.1	<1	<.5	--	<.5	E.2	M	<.5	<1.00	--	20
MAR													
06...	<.5	<.5	<.5	<1	<.5	--	<.5	<.5	<.5	<.5	<1.00	--	40
MAY													
11...	<.5	<.5	E.2	<1	<.5	E.004	E.1	.7	E.1	E.1	<.01	--	30
JUL													
26...	<.5	<.5	<.5	<1	<.5	--	<.5	<.5	<.5	<.5	--	--	13
AUG													
05...	<.5	<.5	<.5	<1	<.5	E.003	<.5	<.5	<.5	<.5	<.01	.089	32
05544371 JEWEL CREEK AT MUSKEGO, WI (LAT 42 55 37N LONG 088 08 45W)													
FEB 2004													
17...	<.5	<.5	E.1	<1	<.5	--	<.5	E.1	<.5	<.5	<1.00	--	1
MAR													
06...	<.5	<.5	<.5	<1	<.5	--	<.5	<.5	<.5	<.5	<1.00	--	32
MAY													
10...	<.5	<.5	<.5	<1	<.5	<.009	<.5	<.5	<.5	<.5	<.01	--	20
JUL													
26...	<.5	<.5	<.5	<1	<.5	--	<.5	<.5	<.5	<.5	--	--	28
AUG													
05...	<.5	<.5	<.5	<1	<.5	<.009	<.5	<.5	<.5	<.5	<.01	.102	28
04087119 HONEY CREEK AT WAUWATOSA, WI (LAT 43 02 38N LONG 088 00 10W)													
FEB 2004													
18...	<.5	M	E.1	<1	<.5	--	E.1	E.4	E.1	E.1	<1.00	--	--
MAR													
05...	<.5	<.5	<.5	<1	<.5	--	M	E.3	E.1	<.5	<1.00	--	56
MAY													
10...	<.5	<.5	<.5	<1	<.5	E.005	E.2	.5	E.1	E.1	<.01	--	4
JUL													
26...	<.5	<.5	<.5	<1	<.5	--	E.1	E.6	E.1	E.1	--	--	5
AUG													
04...	<.5	<.5	<.5	<1	<.5	E.006	<.5	E1.7	<.5	<.5	E.01	--	15
04087120 MENOMONEE RIVER AT WAUWATOSA, WI (LAT 43 02 44N LONG 087 59 59W)													
FEB 2004													
19...	<.5	<.5	E.1	<1	<.5	--	E.1	.6	E.1	E.1	<1.00	--	2
MAR													
05...	<.5	<.5	<.5	<1	<.5	--	M	E.2	<.5	<.5	<1.00	--	128
MAY													
10...	<.5	<.5	<.5	<1	<.5	<.009	E.1	.8	E.1	E.1	<.01	--	8
JUN													
10...	--	--	--	--	--	--	--	--	--	--	--	--	53

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)
04087120 MENOMONEE RIVER AT WAUWATOSA, WI (LAT 43 02 44N LONG 087 59 59W)													
JUN 2004													
10...	1330	423	50	--	--	--	--	--	--	--	--	--	--
10...	1430	753	50	--	--	--	--	--	--	--	--	--	--
10...	2230	433	50	--	--	--	--	--	--	--	--	--	--
11...	0430	603	50	--	--	--	--	--	--	--	--	--	--
11...	1040	817	50	--	--	--	--	--	--	--	--	--	--
12...	0240	477	50	--	--	--	--	--	--	--	--	--	--
12...	1040	539	50	--	--	--	--	--	--	--	--	--	--
14...	0240	401	50	--	--	--	--	--	--	--	--	--	--
14...	0315	884	50	--	--	--	--	--	--	--	--	--	--
14...	0455	622	50	--	--	--	--	--	--	--	--	--	--
15...	1210	318	50	--	--	--	--	--	--	--	--	--	--
16...	1230	200	50	--	--	--	--	--	--	--	--	--	--
16...	2025	677	50	--	--	--	--	--	--	--	--	--	--
17...	0015	226	50	--	--	--	--	--	--	--	--	--	--
17...	0735	619	50	--	--	--	--	--	--	--	--	--	--
18...	0620	235	50	--	--	--	--	--	--	--	--	--	--
21...	1225	332	50	--	--	--	--	--	--	--	--	--	--
21...	1345	603	50	--	--	--	--	--	--	--	--	--	--
23...	1120	107	50	--	--	--	--	--	--	--	--	--	--
JUL													
03...	1106	41	50	--	--	--	--	--	--	--	--	--	--
03...	1845	433	50	--	--	--	--	--	--	--	--	--	--
03...	2245	517	50	--	--	--	--	--	--	--	--	--	--
04...	0030	4,950	50	--	--	--	--	--	--	--	--	--	--
04...	0155	3,010	50	--	--	--	--	--	--	--	--	--	--
04...	0450	1,150	50	--	--	--	--	--	--	--	--	--	--
04...	1250	1,070	50	--	--	--	--	--	--	--	--	--	--
06...	0950	269	50	--	--	--	--	--	--	--	--	--	--
11...	2115	352	50	--	--	--	--	--	--	--	--	--	--
11...	2150	813	50	--	--	--	--	--	--	--	--	--	--
11...	2205	1,130	50	--	--	--	--	--	--	--	--	--	--
11...	2335	653	50	--	--	--	--	--	--	--	--	--	--
12...	0030	420	50	--	--	--	--	--	--	--	--	--	--
13...	1055	86	50	--	--	--	--	--	--	--	--	--	--
26...	1400	24	10	12.1	8.3	1,270	19.3	97.3	43.3	3.39	91.8	258	241
AUG													
03...	2030	165	50	--	--	--	--	--	--	--	--	--	--
03...	2055	833	50	--	--	--	--	--	--	--	--	--	--
03...	2140	2,290	50	--	--	--	--	--	--	--	--	--	--
03...	2200	2,580	50	--	--	--	--	--	--	--	--	--	--
03...	2240	2,060	50	--	--	--	--	--	--	--	--	--	--
04...	0130	551	50	--	--	--	--	--	--	--	--	--	--
04...	1330	118	10	7.9	8.1	723	22.0	49.8	22.3	3.12	61.2	140	131
24...	0810	22	50	--	--	--	--	--	--	--	--	--	--
24...	0910	231	50	--	--	--	--	--	--	--	--	--	--
24...	1310	41	50	--	--	--	--	--	--	--	--	--	--
24...	1905	31	50	--	--	--	--	--	--	--	--	--	--
24...	2255	261	50	--	--	--	--	--	--	--	--	--	--
27...	1320	177	50	--	--	--	--	--	--	--	--	--	--
SEP													
16...	1140	27	50	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, wat unf by analysis, mg/L (62855)	Total carbon, suspnd sedimnt total, mg/L (00694)
04087120 MENOMONEE RIVER AT WAUWATOSA, WI (LAT 43 02 44N LONG 087 59 59W)													
JUN 2004													
10...	120	--	--	--	--	--	--	--	--	--	.297	--	--
10...	96.7	--	--	--	--	--	--	--	--	--	.313	--	--
10...	79.6	--	--	--	--	--	--	--	--	--	.169	--	--
11...	77.7	--	--	--	--	--	--	--	--	--	.153	--	--
11...	73.3	--	--	--	--	--	--	--	--	--	.171	--	--
12...	87.1	--	--	--	--	--	--	--	--	--	.148	--	--
12...	83.8	--	--	--	--	--	--	--	--	--	.127	--	--
14...	73.6	--	--	--	--	--	--	--	--	--	.127	--	--
14...	80.3	--	--	--	--	--	--	--	--	--	.234	--	--
14...	76.2	--	--	--	--	--	--	--	--	--	.147	--	--
15...	89.7	--	--	--	--	--	--	--	--	--	.131	--	--
16...	98.0	--	--	--	--	--	--	--	--	--	.133	--	--
16...	82.0	--	--	--	--	--	--	--	--	--	.256	--	--
17...	90.6	--	--	--	--	--	--	--	--	--	.159	--	--
17...	97.0	--	--	--	--	--	--	--	--	--	.190	--	--
18...	101	--	--	--	--	--	--	--	--	--	.130	--	--
21...	104	--	--	--	--	--	--	--	--	--	.202	--	--
21...	92.3	--	--	--	--	--	--	--	--	--	.217	--	--
23...	131	--	--	--	--	--	--	--	--	--	.097	--	--
JUL													
03...	39.0	--	--	--	--	--	--	--	--	--	.410	--	--
03...	147	--	--	--	--	--	--	--	--	--	.339	--	--
03...	75.6	--	--	--	--	--	--	--	--	--	.291	--	--
04...	17.5	--	--	--	--	--	--	--	--	--	.463	--	--
04...	25.7	--	--	--	--	--	--	--	--	--	.270	--	--
04...	45.1	--	--	--	--	--	--	--	--	--	.211	--	--
04...	44.8	--	--	--	--	--	--	--	--	--	.192	--	--
06...	85.4	--	--	--	--	--	--	--	--	--	.129	--	--
11...	91.4	--	--	--	--	--	--	--	--	--	.296	--	--
11...	96.9	--	--	--	--	--	--	--	--	--	.247	--	--
11...	96.4	--	--	--	--	--	--	--	--	--	.312	--	--
11...	46.6	--	--	--	--	--	--	--	--	--	.205	--	--
12...	60.3	--	--	--	--	--	--	--	--	--	.182	--	--
13...	137	--	--	--	--	--	--	--	--	--	.087	--	--
26...	182	.4	6.40	114	719	<.04	.16	E.006	.06	.026	.055	.57	.4
AUG													
03...	88.7	--	--	--	--	--	--	--	--	--	.475	--	--
03...	37.5	--	--	--	--	--	--	--	--	--	.803	--	--
03...	58.2	--	--	--	--	--	--	--	--	--	.526	--	--
03...	36.3	--	--	--	--	--	--	--	--	--	.508	--	--
03...	25.6	--	--	--	--	--	--	--	--	--	.368	--	--
04...	51.8	--	--	--	--	--	--	--	--	--	.187	--	--
04...	110	.2	4.67	49.9	433	<.04	.58	.020	.18	.039	.113	1.18	1.8
24...	167	--	--	--	--	--	--	--	--	--	.348	--	--
24...	73.3	--	--	--	--	--	--	--	--	--	.752	--	--
24...	136	--	--	--	--	--	--	--	--	--	.115	--	--
24...	147	--	--	--	--	--	--	--	--	--	.091	--	--
24...	58.7	--	--	--	--	--	--	--	--	--	.297	--	--
27...	73.2	--	--	--	--	--	--	--	--	--	.190	--	--
SEP													
16...	123	--	--	--	--	--	--	--	--	--	.126	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	COD, low level, water, unfltrd mg/L (00335)	Chlorophyll a wat unf trichr. method, uncorr, ug/L (32210)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	Mercury water fltrd, ng/L (50287)	1,4-Dichlorobenzene water, fltrd, ug/L (34572)	1-Methylnaphthalene, water, fltrd, ug/L (62054)	1-Naphthol, water, fltrd 0.7u GF ug/L (49295)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)
04087120 MENOMONEE RIVER AT WAUWATOSA, WI (LAT 43 02 44N LONG 087 59 59W)													
JUN 2004													
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26...	<.1	.4	4.3	<2.0	30	5.80	13	12.3	.78	<.5	<.5	--	--
AUG													
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04...	<.1	1.7	6.0	3.8	15	11.2	20	8.7	1.71	<.5	<.5	<.09	<.006
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MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	2,6-Dimethylnaphthalene, water, fltrd, ug/L (62055)	2Chloro-2,6'-diethyl acetanilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl-6-methylaniline water, fltrd, ug/L (61620)	2-Methylnaphthalene, water, fltrd, ug/L (62056)	3,4-Dichloroaniline water fltrd, ug/L (61625)	3-beta-Coprostanol, water, fltrd, ug/L (62057)	3-Methyl-1H-indole, water, fltrd, ug/L (62058)	3-tert-Butyl-4-hydroxyanisole wat flt ug/L (62059)	4Chloro2methyl phenol, water, fltrd, ug/L (61633)	4-Cumylphenol, water, fltrd, ug/L (62060)	4-Octylphenol, water, fltrd, ug/L (62061)	4-Nonylphenol, water, fltrd, ug/L (62085)
04087120 MENOMONEE RIVER AT WAUWATOSA, WI (LAT 43 02 44N LONG 087 59 59W)													
JUN 2004													
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04...	<.5	<.005	E.019	<.004	<.5	.062	<2	<1	<5	E.009	<1	<1	<5
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MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	4-tert-Octyl-phenol, water, fltrd, ug/L (62062)	5-Methyl-1H-benzo-tri-azole, wat flt ug/L (62063)	9,10-Anthra-quinone water, fltrd, ug/L (62066)	Aceto-chlor, water, fltrd, ug/L (49260)	Aceto-phenone water, fltrd, ug/L (62064)	AHTN, water, fltrd, ug/L (62065)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-HCH-d6, surrog, Sch2003 wat flt percent recovry (99995)	Anthra-cene, water, fltrd, ug/L (34221)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl oxon, water, fltrd, ug/L (61635)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)
04087120 MENOMONEE RIVER AT WAUWATOSA, WI (LAT 43 02 44N LONG 087 59 59W)													
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MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Benzo-[a]-pyrene, water, fltrd, ug/L (34248)	Benzo-phenone water, fltrd, ug/L (62067)	beta-Sitos-terol, water, fltrd, ug/L (62068)	beta-Stigma-stanol, water, fltrd, ug/L (62086)	Bisphe-nol A, water, fltrd, ug/L (62069)	Bisphenol A-d3 sur Sch 2033 & 8033, wat flt pct rcv (99583)	Broma-cil, water, fltrd, ug/L (04029)	Caf-feine, water, fltrd, ug/L (50305)	Caffe-ine-13C sur Sch 2033 & 8033, wat flt pct rcv (99584)	Camphor water, fltrd, ug/L (62070)	Car-baryl, water, fltrd 0.7u GF ug/L (82680)	Carba-zole, water, fltrd, ug/L (62071)	Chlor-pyrifos oxon, water, fltrd, ug/L (61636)
04087120 MENOMONEE RIVER AT WAUWATOSA, WI (LAT 43 02 44N LONG 087 59 59W)													
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04...	<.5	<.5	<2	<2	<1	128	<.5	E.2	87.6	<.5	E.041	E.1	<.06
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MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Chlor-pyrifos water, fltrd, ug/L (38933)	Choles-terol, water, fltrd, ug/L (62072)	cis-Per-methrin water fltrd 0.7u GF ug/L (82687)	Cot-inine, water, fltrd, ug/L (62005)	Cyflu-thrin, water, fltrd, ug/L (61585)	Cyper-methrin water, fltrd, ug/L (61586)	DCPA, water fltrd 0.7u GF ug/L (82682)	DecaF-biphenl sur Sch 2033 & 8033, wat flt pct rcv (99585)	DEET, water, fltrd, ug/L (62082)	Desulf-inyl fipro-nil, water, fltrd, ug/L (62170)	Diaz-inon oxon, water, fltrd, ug/L (61638)	Diazi-non, water, fltrd, ug/L (39572)	Diazi-non-d10 surrog, Sch2003 wat flt percent recovry (99994)
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MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Dicrotophos, water fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)	Diethoxynonylphenol, water, fltrd, ug/L (62083)	Diethoxyoctylphenol, water, fltrd ug/L (61705)	Dimethoate, water, fltrd 0.7u GF ug/L (82662)	D-Limonene, water, fltrd, ug/L (62073)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Ethoxyoctylphenol, water, fltrd ug/L (61706)	Fenamiphos sulfone water, fltrd, ug/L (61645)	Fenamiphos sulfoxide, water, fltrd, ug/L (61646)	Fenamiphos, water, fltrd, ug/L (61591)	Desulfinylfipronil amide, wat flt ug/L (62169)
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MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Fluoranthene water, fltrd, ug/L (34377)	Fluoranthene-d10, sur Sch 20/8033 wat flt pct rcv (99586)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	HHCB, water, fltrd, ug/L (62075)	Hexazinone, water, fltrd, ug/L (04025)	Indole, water, fltrd, ug/L (62076)	Iprodione, water, fltrd, ug/L (61593)	Isoborneol, water, fltrd, ug/L (62077)	Isofenphos, water, fltrd, ug/L (61594)
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MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Isophorone water, fltrd, ug/L (34409)	Isopropylbenzene water, fltrd, ug/L (62078)	Isoquinoline, water, fltrd, ug/L (62079)	Malaoxon, water, fltrd, ug/L (61652)	Malathion, water, fltrd, ug/L (39532)	Menthol water, fltrd, ug/L (62080)	Metalaxyl, water, fltrd, ug/L (50359)	Metolaxyl, water, fltrd, ug/L (61596)	Methidathion water, fltrd, ug/L (61598)	Methyl paraoxon, water, fltrd, ug/L (61664)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Methyl salicylate, water, fltrd, ug/L (62081)	Methylmercury water fltrd, ng/L (50285)
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MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Myclobutanil water, fltrd, ug/L (61599)	Naphthalene, water, fltrd, ug/L (34443)	p-Cresol, water, fltrd, ug/L (62084)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Pentachlorophenol, water, fltrd, ug/L (34459)	Phenanthrene, water, fltrd, ug/L (34462)	Phenol, water, fltrd, ug/L (34466)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)
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18...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	M	--	--	M	<1	--	<2	M	E.4	--	--	<.5	--
AUG													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	.016	<.006	<.008	<.5	<1	E.011	<2	E.2	E.2	<.10	<.011	.11	<.005
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Pyrene, water, fltrd, ug/L (34470)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbufos oxon sulfone water, fltrd, ug/L (61674)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Terbuthylazine, water, fltrd, ug/L (04022)	Tetrachloroethene, water, fltrd, ug/L (34476)	Tribromomethane water, fltrd, ug/L (34288)	Tributyl phosphate, water, fltrd, ug/L (62089)	Triclosan, water, fltrd, ug/L (62090)	Triethyl citrate water, fltrd, ug/L (62091)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
04087120 MENOMONEE RIVER AT WAUWATOSA, WI (LAT 43 02 44N LONG 087 59 59W)													
JUN 2004													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	M	--	--	--	--	--	M	<.5	<.5	<1	<.5	--
AUG													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	<.004	E.1	<.011	E.09	<.07	<.02	<.01	<.5	<.5	<.5	<1	<.5	E.003
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Tri-phenyl phos-phate, water, fltrd, ug/L (62092)	Tris(2-butoxy-ethyl) phos-phate, wat flt ug/L (62093)	Tris(2-chloro-ethyl) phos-phate, wat flt ug/L (62087)	Tris(di chloro-i-Pr) phos-phate, wat flt ug/L (62088)	Di-chlor-vos, water fltrd, ug/L (38775)	Methyl-mercury suspnd sedimnt total, ng/L (62977)	Sus-pended sedi-ment concen-tration mg/L (80154)
04087120 MENOMONEE RIVER AT WAUWATOSA, WI (LAT 43 02 44N LONG 087 59 59W)							
JUN 2004							
10...	--	--	--	--	--	--	127
10...	--	--	--	--	--	--	155
10...	--	--	--	--	--	--	62
11...	--	--	--	--	--	--	71
11...	--	--	--	--	--	--	83
12...	--	--	--	--	--	--	38
12...	--	--	--	--	--	--	38
14...	--	--	--	--	--	--	32
14...	--	--	--	--	--	--	134
14...	--	--	--	--	--	--	57
15...	--	--	--	--	--	--	30
16...	--	--	--	--	--	--	45
16...	--	--	--	--	--	--	172
17...	--	--	--	--	--	--	51
17...	--	--	--	--	--	--	86
18...	--	--	--	--	--	--	48
21...	--	--	--	--	--	--	106
21...	--	--	--	--	--	--	91
23...	--	--	--	--	--	--	18
JUL							
03...	--	--	--	--	--	--	375
03...	--	--	--	--	--	--	205
03...	--	--	--	--	--	--	208
04...	--	--	--	--	--	--	510
04...	--	--	--	--	--	--	259
04...	--	--	--	--	--	--	125
04...	--	--	--	--	--	--	68
06...	--	--	--	--	--	--	35
11...	--	--	--	--	--	--	237
11...	--	--	--	--	--	--	173
11...	--	--	--	--	--	--	259
11...	--	--	--	--	--	--	126
12...	--	--	--	--	--	--	98
13...	--	--	--	--	--	--	16
26...	<.5	E.3	<.5	<.5	--	--	8
AUG							
03...	--	--	--	--	--	--	199
03...	--	--	--	--	--	--	537
03...	--	--	--	--	--	--	436
03...	--	--	--	--	--	--	386
03...	--	--	--	--	--	--	258
04...	--	--	--	--	--	--	71
04...	E.1	E.9	<.5	<.5	<.01	.059	17
24...	--	--	--	--	--	--	64
24...	--	--	--	--	--	--	263
24...	--	--	--	--	--	--	27
24...	--	--	--	--	--	--	8
24...	--	--	--	--	--	--	150
27...	--	--	--	--	--	--	76
SEP							
16...	--	--	--	--	--	--	7

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Discharge, cfs (00060)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
04087170 MILWAUKEE RIVER AT MOUTH AT MILWAUKEE, WI (LAT 43 01 28N LONG 087 53 54W)													
FEB 2004													
17...	0915	--	--	70	765	12.8	87	7.8	394	.1	42.3	13.9	2.12
MAR													
08...	0944	--	--	40	--	13.0	--	7.9	629	2.6	50.1	23.2	4.10
MAY													
10...	0723	--	--	40	--	8.2	--	7.8	617	12.7	52.8	24.0	2.75
JUL													
26...	1132	--	--	40	--	6.0	--	7.9	167	21.3	49.3	20.1	3.23
AUG													
05...	0923	--	--	40	--	6.7	--	8.0	471	21.0	44.5	19.0	2.69
04086600 MILWAUKEE RIVER NEAR CEDARBURG, WI (LAT 43 16 49N LONG 087 56 34W)													
FEB 2004													
18...	0925	740	--	10	756	13.2	91	8.1	994	-.2	91.4	47.7	3.96
MAR													
06...	0925	--	2,690	10	740	15.7	113	7.4	467	.6	45.0	22.2	4.31
MAY													
10...	1000	--	830	40	739	10.9	113	8.3	710	15.5	64.6	33.9	2.89
30...	1330	--	2,170	50	--	--	--	--	--	--	--	--	--
30...	1915	--	2,400	50	--	--	--	--	--	--	--	--	--
31...	0300	--	2,650	50	--	--	--	--	--	--	--	--	--
31...	2100	--	2,850	50	--	--	--	--	--	--	--	--	--
JUN													
01...	1200	--	2,790	50	--	--	--	--	--	--	--	--	--
02...	0600	--	2,660	50	--	--	--	--	--	--	--	--	--
03...	1800	--	2,470	50	--	--	--	--	--	--	--	--	--
04...	1800	--	2,260	50	--	--	--	--	--	--	--	--	--
05...	2115	--	1,890	50	--	--	--	--	--	--	--	--	--
06...	2115	--	1,500	50	--	--	--	--	--	--	--	--	--
11...	0500	--	1,720	50	--	--	--	--	--	--	--	--	--
11...	1000	--	2,430	50	--	--	--	--	--	--	--	--	--
11...	1845	--	3,470	50	--	--	--	--	--	--	--	--	--
12...	1245	--	4,410	50	--	--	--	--	--	--	--	--	--
13...	1845	--	5,380	50	--	--	--	--	--	--	--	--	--
15...	1413	--	4,870	50	--	--	--	--	--	--	--	--	--
16...	0945	--	4,190	50	--	--	--	--	--	--	--	--	--
17...	0745	--	3,640	50	--	--	--	--	--	--	--	--	--
17...	0945	--	3,680	50	--	--	--	--	--	--	--	--	--
18...	0945	--	3,070	50	--	--	--	--	--	--	--	--	--
20...	0945	--	1,990	50	--	--	--	--	--	--	--	--	--
23...	1645	--	1,130	50	--	--	--	--	--	--	--	--	--
JUL													
04...	1145	--	1,130	50	--	--	--	--	--	--	--	--	--
05...	0145	--	1,130	50	--	--	--	--	--	--	--	--	--
06...	1315	--	995	10	--	--	--	--	--	--	--	--	--
13...	1455	--	608	50	--	--	--	--	--	--	--	--	--
27...	0900	--	265	40	743	9.9	114	8.2	775	20.5	76.8	40.2	2.40
AUG													
05...	0845	--	333	10	--	--	--	--	--	--	75.0	41.3	2.91
17...	1335	--	265	50	--	--	--	--	--	--	--	--	--
24...	1545	--	317	50	--	--	--	--	--	--	--	--	--
25...	0345	--	317	50	--	--	--	--	--	--	--	--	--
SEP													
16...	0920	--	150	50	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, field, mg/L as CaCO3 (00410)	Alka-linity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicar-bonate, wat flt incrm. titr., field, mg/L (00453)	Carbon-ate, wat flt incrm. titr., field, mg/L (00452)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
04087170 MILWAUKEE RIVER AT MOUTH AT MILWAUKEE, WI (LAT 43 01 28N LONG 087 53 54W)													
FEB 2004													
17...	20.9	--	--	118	--	--	33.3	<.2	2.25	27.1	222	.07	.53
MAR													
08...	43.5	--	155	150	181	1	82.2	<.2	7.94	39.5	373	.09	2.68
MAY													
10...	37.5	--	184	--	--	--	70.2	<.2	1.11	35.7	369	.09	.69
JUL													
26...	24.4	--	172	167	--	--	43.5	.2	4.43	29.2	293	.08	.64
AUG													
05...	26.1	144	150	144	174	.0	44.5	<.2	4.07	27.1	286	.12	.67
04086600 MILWAUKEE RIVER NEAR CEDARBURG, WI (LAT 43 16 49N LONG 087 56 34W)													
FEB 2004													
18...	57.7	--	--	313	--	--	104	.2	13.0	52.8	588	E.03	3.29
MAR													
06...	19.5	--	145	139	168	1	37.6	<.2	7.76	29.9	283	<.04	2.50
MAY													
10...	31.9	--	247	--	--	--	60.7	<.2	3.80	33.2	411	E.02	1.36
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	32.8	--	--	--	--	--	--
04...	--	--	--	--	--	--	33.6	--	--	--	--	--	--
05...	--	--	--	--	--	--	36.1	--	--	--	--	--	--
06...	--	--	--	--	--	--	38.8	--	--	--	--	--	--
11...	--	--	--	--	--	--	43.4	--	--	--	--	--	--
11...	--	--	--	--	--	--	39.9	--	--	--	--	--	--
11...	--	--	--	--	--	--	30.7	--	--	--	--	--	--
12...	--	--	--	--	--	--	23.9	--	--	--	--	--	--
13...	--	--	--	--	--	--	20.8	--	--	--	--	--	--
15...	--	--	--	--	--	--	19.0	--	--	--	--	--	--
16...	--	--	--	--	--	--	23.0	--	--	--	--	--	--
17...	--	--	--	--	--	--	32.1	--	--	--	--	--	--
17...	--	--	--	--	--	--	25.7	--	--	--	--	--	--
18...	--	--	--	--	--	--	30.0	--	--	--	--	--	--
20...	--	--	--	--	--	--	35.5	--	--	--	--	--	--
23...	--	--	--	--	--	--	39.8	--	--	--	--	--	--
JUL													
04...	--	--	--	--	--	--	49.3	--	--	--	--	--	--
05...	--	--	--	--	--	--	45.5	--	--	--	--	--	--
06...	--	--	--	--	--	--	45.1	--	--	--	--	--	--
13...	--	--	--	--	--	--	50.1	--	--	--	--	--	--
27...	33.8	--	314	297	--	--	67.8	<.2	12.3	23.1	469	<.04	1.44
AUG													
05...	32.7	--	296	--	--	--	61.6	<.2	13.4	24.7	464	<.04	1.48
17...	--	--	--	--	--	--	63.1	--	--	--	--	--	--
24...	--	--	--	--	--	--	82.9	--	--	--	--	--	--
25...	--	--	--	--	--	--	76.7	--	--	--	--	--	--
SEP													
16...	--	--	--	--	--	--	82.3	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, wat unf by analysis, mg/L (62855)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	COD, low level, water, unfltrd mg/L (00335)	Chlorophyll a wat unf trichr. method, uncorr, ug/L (32210)	Iron, water, fltrd, ug/L (01046)
04087170 MILWAUKEE RIVER AT MOUTH AT MILWAUKEE, WI (LAT 43 01 28N LONG 087 53 54W)													
FEB 2004													
17...	E.006	<.02	.007	.016	.78	.1	<.1	.1	2.4	<2.0	22	<.260	E4
MAR													
08...	.024	.20	.065	.148	3.70	2.0	<.1	2.0	9.2	2.1	38	4.64	42
MAY													
10...	.016	.17	.017	.071	1.42	1.0	<.1	1.0	8.2	2.0	34	9.47	30
JUL													
26...	.025	.08	.051	.076	1.28	.6	<.1	.6	7.0	<2.0	28	10.7	13
AUG													
05...	.020	.08	.042	.099	1.28	.7	<.1	.7	5.0	<2.0	15	7.27	13
04086600 MILWAUKEE RIVER NEAR CEDARBURG, WI (LAT 43 16 49N LONG 087 56 34W)													
FEB 2004													
18...	.057	.02	.057	.083	4.09	.2	<.1	.2	4.9	7.3	28	1.80	23
MAR													
06...	.049	.34	.058	.34	3.82	3.3	<.1	3.3	9.5	16.2	84	16.5	74
MAY													
10...	.021	.27	.012	.111	2.27	2.1	<.1	2.1	10.3	2.8	35	32.5	45
30...	--	--	--	.144	--	--	--	--	--	--	--	--	--
30...	--	--	--	.150	--	--	--	--	--	--	--	--	--
31...	--	--	--	.161	--	--	--	--	--	--	--	--	--
31...	--	--	--	.147	--	--	--	--	--	--	--	--	--
JUN													
01...	--	--	--	.133	--	--	--	--	--	--	--	--	--
02...	--	--	--	.125	--	--	--	--	--	--	--	--	--
03...	--	--	--	.123	--	--	--	--	--	--	--	--	--
04...	--	--	--	.116	--	--	--	--	--	--	--	--	--
05...	--	--	--	.129	--	--	--	--	--	--	--	--	--
06...	--	--	--	.148	--	--	--	--	--	--	--	--	--
11...	--	--	--	.209	--	--	--	--	--	--	--	--	--
11...	--	--	--	.222	--	--	--	--	--	--	--	--	--
11...	--	--	--	.264	--	--	--	--	--	--	--	--	--
12...	--	--	--	.217	--	--	--	--	--	--	--	--	--
13...	--	--	--	.177	--	--	--	--	--	--	--	--	--
15...	--	--	--	.143	--	--	--	--	--	--	--	--	--
16...	--	--	--	.168	--	--	--	--	--	--	--	--	--
17...	--	--	--	.211	--	--	--	--	--	--	--	--	--
17...	--	--	--	.177	--	--	--	--	--	--	--	--	--
18...	--	--	--	.194	--	--	--	--	--	--	--	--	--
20...	--	--	--	.194	--	--	--	--	--	--	--	--	--
23...	--	--	--	.184	--	--	--	--	--	--	--	--	--
JUL													
04...	--	--	--	.239	--	--	--	--	--	--	--	--	--
05...	--	--	--	.192	--	--	--	--	--	--	--	--	--
06...	--	--	--	.162	--	--	--	--	--	--	--	--	--
13...	--	--	--	.137	--	--	--	--	--	--	--	--	--
27...	E.005	--	.091	.128	2.18	--	--	--	9.7	3.4	52	5.38	23
AUG													
05...	.009	.17	.092	.146	2.10	2.0	<.1	2.0	8.4	<2.0	30	3.21	20
17...	--	--	--	.101	--	--	--	--	--	--	--	--	--
24...	--	--	--	.120	--	--	--	--	--	--	--	--	--
25...	--	--	--	.102	--	--	--	--	--	--	--	--	--
SEP													
16...	--	--	--	.050	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Manganese, water, fltrd, ug/L (01056)	Mercury water fltrd, ng/L (50287)	1,4-Dichlorobenzene water, fltrd, ug/L (34572)	1-Methylnaphthalene, water, fltrd, ug/L (62054)	1-Naphthol, water, fltrd 0.7u GF ug/L (49295)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	2,6-Dimethylnaphthalene, water, fltrd, ug/L (62055)	2Chloro-2,6'-'diethyl acetanilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl-6-methylaniline water, fltrd, ug/L (61620)	2-Methylnaphthalene, water, fltrd, ug/L (62056)	3,4-Dichloroaniline water fltrd, ug/L (61625)	3-beta-Coprostanol, water, fltrd, ug/L (62057)
04087170 MILWAUKEE RIVER AT MOUTH AT MILWAUKEE, WI (LAT 43 01 28N LONG 087 53 54W)													
FEB 2004													
17...	2.9	--	<.5	<.5	--	--	<.5	--	--	--	<.5	--	<2
MAR													
08...	7.7	--	<.5	M	--	--	M	--	--	--	M	--	<2
MAY													
10...	2.4	--	<.5	<.5	<.09	<.006	<.5	<.005	E.060	<.004	<.5	<.004	<2
JUL													
26...	3.5	.42	<.5	<.5	--	--	<.5	--	--	--	<.5	--	<2
AUG													
05...	3.4	.84	<.5	<.5	E.01	<.006	<.5	<.005	E.021	<.004	<.5	.020	<2
04086600 MILWAUKEE RIVER NEAR CEDARBURG, WI (LAT 43 16 49N LONG 087 56 34W)													
FEB 2004													
18...	6.1	--	<.5	<.5	--	--	<.5	--	--	--	<.5	--	M
MAR													
06...	16.3	--	<.5	<.5	--	--	<.5	--	--	--	<.5	--	<2
MAY													
10...	6.0	--	E.2	<.5	<.09	<.006	<.5	<.005	E.058	<.004	<.5	<.004	<2
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
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12...	--	--	--	--	--	--	--	--	--	--	--	--	--
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15...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	4.4	1.32	<.5	<.5	--	--	<.5	--	--	--	<.5	--	<2
AUG													
05...	5.1	1.02	<.5	<.5	<.09	<.006	<.5	<.005	E.017	<.004	<.5	.008	<2
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	3-Methyl-1H-indole, water, fltrd, ug/L (62058)	3-tert-Butyl-4-hydroxyanisole wat flt ug/L (62059)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	4-Cumylphenol, water, fltrd, ug/L (62060)	4-Octylphenol, water, fltrd, ug/L (62061)	4-Nonylphenol, water, fltrd, ug/L (62085)	4-tert-Octylphenol, water, fltrd, ug/L (62062)	5-Methyl-1H-benzotriazole, wat flt ug/L (62063)	9,10-Anthraquinone water, fltrd, ug/L (62066)	Acetochlor, water, fltrd, ug/L (49260)	Acetophenone water, fltrd, ug/L (62064)	AHTN, water, fltrd, ug/L (62065)	Alachlor, water, fltrd, ug/L (46342)
04087170 MILWAUKEE RIVER AT MOUTH AT MILWAUKEE, WI (LAT 43 01 28N LONG 087 53 54W)													
FEB 2004													
17...	<1	<5	--	<1	<1	<5	<1	<2	<.5	--	<.5	M	--
MAR													
08...	M	<5	--	<1	<1	E1	<1	<2	E.1	--	E.1	E.1	--
MAY													
10...	<1	<5	<.006	<1	<1	<5	<1	<2	E.2	.058	<.5	E.1	<.005
JUL													
26...	<1	<5	--	<1	<1	<5	<1	<2	<.5	--	<.5	E.1	--
AUG													
05...	<1	<5	<.006	<1	<1	<5	<1	<2	<.5	<.006	<.5	<.5	<.005
04086600 MILWAUKEE RIVER NEAR CEDARBURG, WI (LAT 43 16 49N LONG 087 56 34W)													
FEB 2004													
18...	<1	<5	--	<1	<1	<5	<1	<2	<.5	--	<.5	E.1	--
MAR													
06...	<1	<5	--	<1	<1	<5	<1	<2	<.5	--	<.5	<.5	--
MAY													
10...	<1	<5	<.006	<1	<1	E2	<1	<2	<.5	.110	<.5	E.1	E.003
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
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12...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	<1	<5	--	<1	<1	<5	<1	<2	<.5	--	<.5	M	--
AUG													
05...	<1	<5	<.006	<1	<1	<5	<1	<2	<.5	<.006	<.5	<.5	<.005
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	alpha-HCH-d6, surrog, Sch2003 wat flt percent recovry (99995)	Anthracene, water, fltrd, ug/L (34221)	Atrazine, water, fltrd, ug/L (39632)	Azinphos-methyl oxon, water, fltrd, ug/L (61635)	Azinphos-methyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Benzo-[a]-pyrene, water, fltrd, ug/L (34248)	Benzophenone water, fltrd, ug/L (62067)	beta-Sitosterol, water, fltrd, ug/L (62068)	beta-Stigmastanol, water, fltrd, ug/L (62086)	Bisphenol A, water, fltrd, ug/L (62069)	Bisphenol A-d3 sur Sch 2033 & 8033, wat flt pct rcv (99583)	Bromacil, water, fltrd, ug/L (04029)
04087170 MILWAUKEE RIVER AT MOUTH AT MILWAUKEE, WI (LAT 43 01 28N LONG 087 53 54W)													
FEB 2004													
17...	--	<.5	--	--	--	--	<.5	E.1	<2	<2	<1	54.5	<.5
MAR													
08...	--	<.5	--	--	--	--	<.5	E.1	<2	<2	<1	54.2	<.5
MAY													
10...	98.9	<.5	.195	<.02	<.050	<.010	<.5	<.5	<2	<2	<1	90.5	<.5
JUL													
26...	--	<.5	--	--	--	--	<.5	<.5	<20	<20	<1	132	<.5
AUG													
05...	77.5	<.5	.040	<.07	<.050	<.010	<.5	<.5	<2	<2	<1	129	<.5
04086600 MILWAUKEE RIVER NEAR CEDARBURG, WI (LAT 43 16 49N LONG 087 56 34W)													
FEB 2004													
18...	--	<.5	--	--	--	--	<.5	E.1	<2	<2	<1	68.2	<.5
MAR													
06...	--	<.5	--	--	--	--	<.5	<.5	<2	<2	<1	85.7	<.5
MAY													
10...	90.7	<.5	.236	<.02	<.050	<.010	<.5	<.5	<2	<2	<1	100	<.5
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
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13...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	<.5	--	--	--	--	<.5	<.5	<20	<20	<1	137	<.5
AUG													
05...	81.7	<.5	.042	<.07	<.050	<.010	<.5	<.5	<2	<2	<1	111	<.5
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Caffeine, water, fltrd, ug/L (50305)	Caffeine-13C sur Sch 2033 & 8033, wat flt pct rcv (99584)	Camphor water, fltrd, ug/L (62070)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbazole, water, fltrd, ug/L (62071)	Chlorpyrifos oxon, water, fltrd, ug/L (61636)	Chlorpyrifos water, fltrd, ug/L (38933)	Cholesterol, water, fltrd, ug/L (62072)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Cotinine, water, fltrd, ug/L (62005)	Cyfluthrin, water, fltrd, ug/L (61585)	Cypermethrin water, fltrd, ug/L (61586)	DCPA, water fltrd 0.7u GF ug/L (82682)
04087170 MILWAUKEE RIVER AT MOUTH AT MILWAUKEE, WI (LAT 43 01 28N LONG 087 53 54W)													
FEB 2004													
17...	M	109	<.5	<1	<.5	--	<.5	<2	--	<1.00	--	--	--
MAR													
08...	E.1	87.5	M	<1	M	--	<.5	<2	--	<1.00	--	--	--
MAY													
10...	E.2	119	E.1	E.011	E.1	<.06	<.005	<2	<.006	<1.00	<.008	<.009	<.003
JUL													
26...	E.1	104	<.5	<1	<.5	--	<.5	<20	--	<1.00	--	--	--
AUG													
05...	E.3	90.8	<.5	E.022	<.5	<.06	<.005	<2	<.006	<1.00	<.008	<.009	.004
04086600 MILWAUKEE RIVER NEAR CEDARBURG, WI (LAT 43 16 49N LONG 087 56 34W)													
FEB 2004													
18...	E.1	109	<.5	<1	<.5	--	<.5	M	--	<1.00	--	--	--
MAR													
06...	<.5	100	<.5	<1	<.5	--	<.5	<2	--	<1.00	--	--	--
MAY													
10...	E.1	119	E.1	E.003	<.5	<.06	<.005	<2	<.006	<1.00	<.008	<.009	<.003
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
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17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
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23...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	<.5	105	<.5	<1	<.5	--	<.5	<20	--	<1.00	--	--	--
AUG													
05...	<.5	92.5	<.5	<.041	<.5	<.06	<.005	<2	<.006	<1.00	<.008	<.009	<.003
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	DecaF-biphenl sur Sch 2033 & 8033, wat flt pct rcv (99585)	DEET, water, fltrd, ug/L (62082)	Desulf-inyl fipro-nil, water, fltrd, ug/L (62170)	Diaz-inon oxon, water, fltrd, ug/L (61638)	Diazi-non, water, fltrd, ug/L (39572)	Diazi-non-d10 surrog, Sch2003 wat flt percent recovry (99994)	Dicro-tophos, water fltrd, ug/L (38454)	Diel-drin, water, fltrd, ug/L (39381)	Di-ethoxy-nonyl-phenol, water, fltrd, ug/L (62083)	Di-ethoxy-octyl-phenol, water, fltrd ug/L (61705)	Dimeth-oate, water, fltrd 0.7u GF ug/L (82662)	D-Limo-nene, water, fltrd, ug/L (62073)	Ethion monoxon water, fltrd, ug/L (61644)
04087170 MILWAUKEE RIVER AT MOUTH AT MILWAUKEE, WI (LAT 43 01 28N LONG 087 53 54W)													
FEB 2004													
17...	59.1	E.1	--	--	<.5	--	--	--	<5	<1	--	<.5	--
MAR													
08...	62.5	M	--	--	<.5	--	--	--	<5	<1	--	M	--
MAY													
10...	85.7	E.1	<.012	<.01	.011	104	<.08	<.009	<5	<1	<.006	<.5	<.03
JUL													
26...	60.3	E.2	--	--	<.5	--	--	--	E3	<1	--	<.5	--
AUG													
05...	60.0	<.5	<.012	<.01	.009	97.4	<.08	<.009	<5	<1	<.006	<.5	<.0020
04086600 MILWAUKEE RIVER NEAR CEDARBURG, WI (LAT 43 16 49N LONG 087 56 34W)													
FEB 2004													
18...	72.7	E.2	--	--	<.5	--	--	--	E2	<1	--	<.5	--
MAR													
06...	71.4	E.1	--	--	<.5	--	--	--	<5	<1	--	<.5	--
MAY													
10...	85.7	E.1	<.012	<.01	E.004	102	<.08	<.009	<5	<1	<.006	<.5	<.03
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
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15...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
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23...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	56.9	E.1	--	--	<.5	--	--	--	<5	<1	--	<.5	--
AUG													
05...	62.6	<.5	<.012	<.01	<.005	88.8	<.08	<.009	<5	<1	<.006	<.5	<.0020
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Ethion, water, fltrd, ug/L (82346)	Ethoxy-octyl-phenol, water, fltrd ug/L (61706)	Fenami-phos sulfone water, fltrd, ug/L (61645)	Fenami-phos sulf-oxide, water, fltrd, ug/L (61646)	Fenami-phos, water, fltrd, ug/L (61591)	Desulf-inyl-fipro-nil amide, wat flt ug/L (62169)	Fipro-nil sulfide water, fltrd, ug/L (62167)	Fipro-nil sulfone water, fltrd, ug/L (62168)	Fipro-nil, water, fltrd, ug/L (62166)	Fluor-anthene water, fltrd, ug/L (34377)	Fluor-anthene -d10, sur Sch 20/8033 wat flt pct rcv (99586)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)
04087170 MILWAUKEE RIVER AT MOUTH AT MILWAUKEE, WI (LAT 43 01 28N LONG 087 53 54W)													
FEB 2004													
17...	--	<1	--	--	--	--	--	--	--	<.5	105	--	--
MAR													
08...	--	<1	--	--	--	--	--	--	--	E.1	100	--	--
MAY													
10...	<.004	<1	<.008	<.03	<.03	<.029	<.013	<.024	<.016	E.1	119	<.002	<.003
JUL													
26...	--	<1	--	--	--	--	--	--	--	E.1	157	--	--
AUG													
05...	<.004	<1	<.049	<.04	<.03	<.029	<.013	<.024	<.016	E.1	98.1	<.003	<.003
04086600 MILWAUKEE RIVER NEAR CEDARBURG, WI (LAT 43 16 49N LONG 087 56 34W)													
FEB 2004													
18...	--	<1	--	--	--	--	--	--	--	M	109	--	--
MAR													
06...	--	<1	--	--	--	--	--	--	--	<.5	100	--	--
MAY													
10...	<.004	<1	<.008	<.03	<.03	<.029	<.013	<.024	<.016	M	119	<.002	<.003
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
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JUN													
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02...	--	--	--	--	--	--	--	--	--	--	--	--	--
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05...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
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17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
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23...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
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13...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	<1	--	--	--	--	--	--	--	<.5	148	--	--
AUG													
05...	<.004	<1	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.5	97.7	<.003	<.003
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	HHCB, water, fltrd, ug/L (62075)	Hexazinone, water, fltrd, ug/L (04025)	Indole, water, fltrd, ug/L (62076)	Iprodione, water, fltrd, ug/L (61593)	Isoborneol, water, fltrd, ug/L (62077)	Isofenphos, water, fltrd, ug/L (61594)	Isophorone water, fltrd, ug/L (34409)	Isopropylbenzene water, fltrd, ug/L (62078)	Isoquinoline, water, fltrd, ug/L (62079)	Malaoxon, water, fltrd, ug/L (61652)	Malathion, water, fltrd, ug/L (39532)	Menthol water, fltrd, ug/L (62080)	Metalaxyl, water, fltrd, ug/L (50359)
04087170 MILWAUKEE RIVER AT MOUTH AT MILWAUKEE, WI (LAT 43 01 28N LONG 087 53 54W)													
FEB 2004													
17...	<.5	--	<.5	--	<.5	--	<.5	<.5	<.5	--	--	<.5	<.5
MAR													
08...	E.1	--	<.5	--	<.5	--	M	<.5	<.5	--	--	M	<.5
MAY													
10...	<.5	<.013	<.5	<1	<.5	<.003	E.1	<.5	<.5	<.008	<.027	<.5	<.5
JUL													
26...	<.5	--	<.5	--	<.5	--	M	<.5	<.5	--	--	<.5	<.5
AUG													
05...	<.5	<.013	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.030	E.009	<.5	<.5
04086600 MILWAUKEE RIVER NEAR CEDARBURG, WI (LAT 43 16 49N LONG 087 56 34W)													
FEB 2004													
18...	E.1	--	<.5	--	<.5	--	M	<.5	<.5	--	--	<.5	<.5
MAR													
06...	<.5	--	<.5	--	<.5	--	<.5	<.5	<.5	--	--	<.5	<.5
MAY													
10...	E.1	<.013	<.5	<1	<.5	<.003	E.1	<.5	<.5	<.008	<.027	<.5	<.5
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
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31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
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23...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	<.5	--	<.5	--	<.5	--	<.5	<.5	<.5	--	--	<.5	<.5
AUG													
05...	<.5	<.013	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.030	<.027	<.5	<.5
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Metalaxyl, water, fltrd, ug/L (61596)	Methidathion water, fltrd, ug/L (61598)	Methyl paraoxon, water, fltrd, ug/L (61664)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Methyl salicylate, water, fltrd, ug/L (62081)	Methylmercury water fltrd, ng/L (50285)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Myclobutanil water, fltrd, ug/L (61599)	Naphthalene, water, fltrd, ug/L (34443)	p-Cresol, water, fltrd, ug/L (62084)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Pentachlorophenol, water, fltrd, ug/L (34459)
04087170 MILWAUKEE RIVER AT MOUTH AT MILWAUKEE, WI (LAT 43 01 28N LONG 087 53 54W)													
FEB 2004													
17...	--	--	--	--	<.5	--	M	--	--	E.1	<1	--	<2
MAR													
08...	--	--	--	--	<.5	--	E.1	--	--	M	M	--	M
MAY													
10...	<.005	<.006	<.03	<.015	<.5	--	.030	<.006	<.008	<.5	<1	<.022	<2
JUL													
26...	--	--	--	--	<.5	<.04	M	--	--	<.5	<1	--	<2
AUG													
05...	<.005	<.006	<.03	<.015	<.5	.05	.014	<.006	<.008	<.5	<1	<.022	<2
04086600 MILWAUKEE RIVER NEAR CEDARBURG, WI (LAT 43 16 49N LONG 087 56 34W)													
FEB 2004													
18...	--	--	--	--	<.5	--	<.5	--	--	<.5	<1	--	<2
MAR													
06...	--	--	--	--	<.5	--	E.1	--	--	<.5	<1	--	<2
MAY													
10...	<.005	<.006	<.03	<.015	<.5	--	.071	<.006	<.008	<.5	<1	<.022	<2
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
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02...	--	--	--	--	--	--	--	--	--	--	--	--	--
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05...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
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18...	--	--	--	--	--	--	--	--	--	--	--	--	--
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23...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	<.5	.11	<.5	--	--	<.5	<1	--	<2
AUG													
05...	<.005	<.006	<.03	<.015	<.5	.09	.013	<.006	<.008	<.5	<1	<.022	<2
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Phenanthrene, water, fltrd, ug/L (34462)	Phenol, water, fltrd, ug/L (34466)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Pyrene, water, fltrd, ug/L (34470)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbufos oxon sulfone water, fltrd, ug/L (61674)
04087170 MILWAUKEE RIVER AT MOUTH AT MILWAUKEE, WI (LAT 43 01 28N LONG 087 53 54W)													
FEB 2004													
17...	<.5	<.5	--	--	--	--	<.5	--	--	<.5	--	--	--
MAR													
08...	M	E.3	--	--	--	--	<.5	--	--	M	--	--	--
MAY													
10...	E.1	<.5	<.10	<.011	--	<.008	.01	<.005	<.004	E.1	.012	<.02	<.07
JUL													
26...	<.5	1.9	--	--	--	--	<.5	--	--	E.1	--	--	--
AUG													
05...	<.5	E.4	<.10	<.011	--	--	.03	<.005	<.004	E.1	.013	<.02	<.07
04086600 MILWAUKEE RIVER NEAR CEDARBURG, WI (LAT 43 16 49N LONG 087 56 34W)													
FEB 2004													
18...	<.5	E.3	--	--	--	--	<.5	--	--	M	--	--	--
MAR													
06...	<.5	E.4	--	--	--	--	<.5	--	--	<.5	--	--	--
MAY													
10...	<.5	<.5	<.10	<.011	<.06	<.008	M	<.005	<.004	E.1	.077	<.02	<.07
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	<.5	1.7	--	--	--	--	<.5	--	--	<.5	--	--	--
AUG													
05...	<.5	<.5	<.10	<.011	--	--	<.01	<.005	<.004	<.5	.023	<.02	<.07
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Terbuthylazine, water, fltrd, ug/L (04022)	Tetrachloroethene, water, fltrd, ug/L (34476)	Tribromomethane water, fltrd, ug/L (34288)	Tributyl phosphate, water, fltrd, ug/L (62089)	Triclosan, water, fltrd, ug/L (62090)	Triethyl citrate water, fltrd, ug/L (62091)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)	Triphenyl phosphate, water, fltrd, ug/L (62092)	Tris(2-butoxyethyl) phosphate, wat flt ug/L (62093)	Tris(2-chloroethyl) phosphate, wat flt ug/L (62087)	Tris(dichloro-i-Pr) phosphate, wat flt ug/L (62088)	Dichlorvos, water fltrd, ug/L (38775)
04087170 MILWAUKEE RIVER AT MOUTH AT MILWAUKEE, WI (LAT 43 01 28N LONG 087 53 54W)													
FEB 2004													
17...	--	--	<.5	<.5	E.1	<1	E.1	--	M	E.1	E.1	<.5	<1.00
MAR													
08...	--	--	M	<.5	E.1	<1	<.5	--	E.1	E.1	<.5	<.5	<1.00
MAY													
10...	<.02	<.01	<.5	<.5	<.5	<1	<.5	<.009	E.1	E.4	E.1	E.1	<.01
JUL													
26...	--	--	<.5	<.5	<.5	<1	<.5	--	<.5	E1.4	M	<.5	--
AUG													
05...	<.02	<.01	<.5	<.5	<.5	<1	<.5	<.009	<.5	<.5	<.5	<.5	<.01
04086600 MILWAUKEE RIVER NEAR CEDARBURG, WI (LAT 43 16 49N LONG 087 56 34W)													
FEB 2004													
18...	--	--	<.5	<.5	E.1	<1	E.1	--	<.5	<.5	E.1	E.1	<1.00
MAR													
06...	--	--	<.5	<.5	<.5	<1	<.5	--	<.5	<.5	<.5	<.5	<1.00
MAY													
10...	<.02	<.01	<.5	<.5	<.5	<1	<.5	E.003	<.5	<.5	<.5	<.5	<.01
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	<.5	<.5	<.5	<1	<.5	--	<.5	<.5	<.5	<.5	--
AUG													
05...	<.02	<.01	<.5	<.5	<.5	<1	<.5	<.009	<.5	<.5	<.5	<.5	<.01
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Suspended sediment concentration mg/L (80154)
04087170 MILWAUKEE RIVER AT MOUTH AT MILWAUKEE, WI (LAT 43 01 28N LONG 087 53 54W)	
FEB 2004	
17...	2
MAR	
08...	23
MAY	
10...	<1
JUL	
26...	5
AUG	
05...	10
04086600 MILWAUKEE RIVER NEAR CEDARBURG, WI (LAT 43 16 49N LONG 087 56 34W)	
FEB 2004	
18...	4
MAR	
06...	158
MAY	
10...	21
30...	52
30...	68
31...	52
31...	31
JUN	
01...	26
02...	24
03...	25
04...	21
05...	37
06...	46
11...	83
11...	71
11...	77
12...	49
13...	46
15...	16
16...	36
17...	41
17...	37
18...	33
20...	39
23...	20
JUL	
04...	86
05...	56
06...	21
13...	22
27...	11
AUG	
05...	13
17...	5
24...	6
25...	18
SEP	
16...	3

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)
040870195 WILLOW CREEK AT MAPLE ROAD NR GERMANTOWN, WI (LAT 43 12 24N LONG 088 08 34W)													
FEB 2004													
18...	1225	E.50	70	756	11.9	82	8.0	1,040	-.2	101	48.3	1.66	53.1
MAR													
05...	1340	--	10	740	14.6	112	7.7	577	3.1	42.8	18.7	3.75	36.0
MAY													
10...	1200	6.2	10	736	10.2	104	8.0	1,000	14.8	86.2	42.1	1.71	63.7
JUL													
26...	0930	--	40	--	6.4	--	7.9	933	15.0	78.8	43.8	1.65	50.9
AUG													
04...	1015	--	40	--	8.3	--	8.0	782	20.3	63.0	39.4	2.94	43.8
04087214 ROOT RIVER AT GRANGE AVENUE AT GREENFIELD, WI (LAT 42 56 42N LONG 088 00 51W)													
FEB 2004													
18...	1025	1.6	40	754	20.3	141	7.4	3,760	-.4	132	62.7	4.24	550
MAR													
05...	1645	314	10	738	14.4	116	7.4	1,210	4.6	55.4	22.3	4.06	139
MAY													
11...	1430	12	10	757	8.9	89	7.9	1,120	14.7	62.5	29.0	2.70	110
JUL													
26...	1300	1.9	40	756	7.6	80	7.6	1,610	17.1	99.1	48.6	3.17	148
AUG													
05...	0900	12	40	742	6.5	70	7.2	1,090	17.0	83.0	36.4	3.45	92.8
430216087532400 NORTH MID-HARBOR MILWAUKEE OUTER HARBOR (LAT 43 02 16N LONG 087 53 24W)													
MAR 2004													
08...	0737	--	30	--	12.7	--	7.7	495	2.2	42.3	16.5	2.72	34.3
MAY													
10...	0840	--	30	--	10.6	--	8.0	366	9.9	40.6	15.5	2.46	16.6
JUL													
26...	1200	--	30	--	9.3	--	8.3	348	20.1	37.6	13.3	2.23	12.6
AUG													
05...	0825	--	30	--	8.9	--	8.3	321	18.6	36.6	13.3	1.88	10.7
430052087531400 SOUTH MID-HARBOR MILWAUKEE OUTER HARBOR (LAT 43 00 52N LONG 087 53 14W)													
MAR 2004													
08...	0900	--	30	--	13.4	--	8.0	289	1.6	46.3	19.5	3.86	50.8
MAY													
10...	0917	--	30	--	9.6	--	7.8	316	11.1	45.7	18.4	3.40	28.0
JUL													
26...	1027	--	30	--	9.7	--	8.4	418	20.5	40.6	15.0	2.71	17.4
AUG													
05...	1010	--	30	--	9.1	--	8.5	365	20.0	38.7	15.1	2.19	15.5
430031087511000 SOUTHERN OUTSIDE HARBOR BREAKWALL LAKE SITE (LAT 43 00 31N LONG 087 51 10W)													
MAR 2004													
09...	0840	--	30	--	13.3	--	7.9	252	1.7	36.8	12.2	1.58	11.1
MAY													
10...	0855	--	30	--	11.3	--	8.0	303	8.2	36.0	12.5	1.57	8.41
JUL													
26...	0950	--	30	--	8.9	--	8.5	279	19.4	34.4	11.3	1.38	6.42
AUG													
09...	0851	--	30	--	8.5	--	8.4	287	19.7	33.8	11.5	1.39	7.24

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	ANC, wat unf fixed end pt, field, mg/L as CaCO3 (00410)	Alka-linity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicar-bonate, wat flt incrm. titr., field, mg/L (00453)	Carbon-ate, wat flt incrm. titr., field, mg/L (00452)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)
040870195 WILLOW CREEK AT MAPLE ROAD NR GERMANTOWN, WI (LAT 43 12 24N LONG 088 08 34W)													
FEB 2004													
18...	--	--	318	--	--	110	<.2	12.1	65.0	591	<.04	.88	.012
MAR													
05...	--	134	128	155	1	76.1	<.2	5.90	29.7	336	<.04	1.97	.120
MAY													
10...	--	299	262	--	--	124	<.2	7.17	46.3	583	<.04	.84	.013
JUL													
26...	--	308	292	--	--	109	.2	11.7	42.6	539	<.04	.70	.008
AUG													
04...	--	251	236	--	--	90.1	<.2	12.0	31.1	449	<.04	.40	.011
04087214 ROOT RIVER AT GRANGE AVENUE AT GREENFIELD, WI (LAT 42 56 42N LONG 088 00 51W)													
FEB 2004													
18...	--	--	334	--	--	971	.5	14.0	123	2,070	.26	.30	.015
MAR													
05...	--	145	155	187	1	253	<.2	7.13	40.7	648	.05	2.91	.017
MAY													
11...	--	214	--	--	--	201	.3	7.21	52.2	641	E.02	.89	.021
JUL													
26...	--	320	292	--	--	285	.4	12.7	72.4	885	<.04	.44	.020
AUG													
05...	--	263	255	--	--	157	.3	11.8	63.6	633	.09	1.21	.027
430216087532400 NORTH MID-HARBOR MILWAUKEE OUTER HARBOR (LAT 43 02 16N LONG 087 53 24W)													
MAR 2004													
08...	125	129	125	151	1	58.3	<.2	3.76	30.1	281	E.02	1.12	.014
MAY													
10...	--	131	--	--	--	28.3	<.2	1.28	27.4	238	E.02	.49	.010
JUL													
26...	110	124	110	134	.0	23.8	<.2	1.13	25.9	195	<.04	.30	.012
AUG													
05...	111	114	111	134	.0	17.5	<.2	1.04	24.2	195	<.04	.31	.009
430052087531400 SOUTH MID-HARBOR MILWAUKEE OUTER HARBOR (LAT 43 00 52N LONG 087 53 14W)													
MAR 2004													
08...	136	143	136	164	<1	91.5	<.2	5.64	36.4	366	.09	1.95	.020
MAY													
10...	--	156	--	--	--	49.9	<.2	1.53	32.1	306	E.02	.71	.018
JUL													
26...	124	138	124	149	1	31.3	.2	1.62	26.9	217	.05	.40	.021
AUG													
05...	121	127	121	146	1	26.6	<.2	1.22	26.4	215	<.04	.36	.016
430031087511000 SOUTHERN OUTSIDE HARBOR BREAKWALL LAKE SITE (LAT 43 00 31N LONG 087 51 10W)													
MAR 2004													
09...	110	114	110	133	<1	19.2	<.2	1.85	23.6	184	<.04	.45	E.004
MAY													
10...	--	115	--	--	--	14.5	<.2	1.36	23.3	179	<.04	.38	<.008
JUL													
26...	102	109	102	123	.0	11.9	<.2	.88	22.3	162	<.04	.20	<.008
AUG													
09...	103	109	103	124	.0	11.6	<.2	1.05	22.3	165	<.04	.22	<.008

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, wat unf by analysis, mg/L (62855)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	COD, low level, water, unfltrd mg/L (00335)	Chlorophyll a wat unf trichr. method, uncorr, ug/L (32210)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)
040870195 WILLOW CREEK AT MAPLE ROAD NR GERMANTOWN, WI (LAT 43 12 24N LONG 088 08 34W)													
FEB 2004													
18...	.06	.012	.034	1.21	1.0	.2	.8	4.8	<2.0	19	1.97	26	19.4
MAR													
05...	.20	.150	.24	3.46	1.4	<.1	1.3	10.8	>11.7	28	1.64	49	43.9
MAY													
10...	.10	E.005	.048	1.58	.7	<.1	.7	8.5	<2.0	28	11.5	96	60.5
JUL													
26...	.08	.022	.053	1.15	.7	<.1	.7	3.8	2.1	34	15.6	20	17.9
AUG													
04...	.12	.042	.075	.85	1.1	<.1	1.1	4.7	>22.0	65	4.23	36	22.3
04087214 ROOT RIVER AT GRANGE AVENUE AT GREENFIELD, WI (LAT 42 56 42N LONG 088 00 51W)													
FEB 2004													
18...	.02	.008	.033	.83	.3	<.1	.3	4.1	<2.0	20	.330	32	184
MAR													
05...	.12	.047	.155	3.60	1.3	.2	1.1	6.5	<3.0	31	1.59	31	51.8
MAY													
11...	.13	E.005	.074	1.52	.9	<.1	.9	6.7	13.5	44	6.79	62	48.3
JUL													
26...	.08	.022	.113	.82	.7	<.1	.7	4.7	<2.0	35	2.20	28	54.1
AUG													
05...	.11	.028	.086	1.92	.9	<.1	.9	6.7	<2.0	29	2.81	32	54.3
430216087532400 NORTH MID-HARBOR MILWAUKEE OUTER HARBOR (LAT 43 02 16N LONG 087 53 24W)													
MAR 2004													
08...	.04	.019	.048	1.51	.5	<.1	.5	3.1	<2.0	15	1.80	15	4.0
MAY													
10...	.06	<.006	.027	.86	.4	<.1	.4	4.0	>21.0	90	3.74	8	2.2
JUL													
26...	.20	E.003	.033	.73	1.1	<.1	1.1	3.9	<2.0	23	23.5	E6	E.6
AUG													
05...	.10	.007	.031	.63	.8	<.1	.7	2.9	14.4	41	10.6	E3	1.6
430052087531400 SOUTH MID-HARBOR MILWAUKEE OUTER HARBOR (LAT 43 00 52N LONG 087 53 14W)													
MAR 2004													
08...	.11	.035	.088	2.71	.8	<.1	.8	6.6	<2.0	21	1.24	26	5.9
MAY													
10...	.09	<.006	.044	1.36	.6	<.1	.6	6.5	16.1	37	5.49	17	2.6
JUL													
26...	.18	.013	.038	.94	.9	<.1	.9	4.6	<2.0	28	31.5	7	E.5
AUG													
05...	.15	E.005	.053	.84	1.0	<.1	1.0	3.5	5.0	17	19.9	E6	1.3
430031087511000 SOUTHERN OUTSIDE HARBOR BREAKWALL LAKE SITE (LAT 43 00 31N LONG 087 51 10W)													
MAR 2004													
09...	<.02	E.003	.009	.62	.1	<.1	.1	2.1	<2.0	<9	.600	<6	E.8
MAY													
10...	.03	<.006	.008	.57	.2	<.1	.1	2.3	11.2	25	.820	<6	.8
JUL													
26...	.04	<.006	.005	.38	.2	<.1	.2	2.1	<2.0	20	2.07	<6	<.8
AUG													
09...	.03	<.006	.006	.42	.2	<.1	.2	2.0	<2.0	11	4.63	<6	E.4

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Mercury water fltrd, ng/L (50287)	1,4-Di-chloro-benzene water, fltrd, ug/L (34572)	1-Methyl-naphth-alene, water, fltrd, ug/L (62054)	1-Naph-thol, water, fltrd 0.7u GF ug/L (49295)	2,6-Di-ethyl-aniline water fltrd 0.7u GF ug/L (82660)	2,6-Di-methyl-naphth-alene, water, fltrd, ug/L (62055)	2Chloro-2,6'-' diethyl acet-anilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl-6-methyl-aniline water, fltrd, ug/L (61620)	2-Methyl-naphth-alene, water, fltrd, ug/L (62056)	3,4-Di-chloro-aniline water fltrd, ug/L (61625)	3-beta-Copros-tanol, water, fltrd, ug/L (62057)	3-Methyl-1H-indole, water, fltrd, ug/L (62058)
040870195 WILLOW CREEK AT MAPLE ROAD NR GERMANTOWN, WI (LAT 43 12 24N LONG 088 08 34W)													
FEB 2004													
18...	--	<.5	<.5	--	--	<.5	--	--	--	<.5	--	<2	<1
MAR													
05...	--	<.5	<.5	--	--	<.5	--	--	--	<.5	--	<2	M
MAY													
10...	--	<.5	<.5	<.09	<.006	<.5	<.005	E.019	<.004	<.5	<.004	<2	<1
JUL													
26...	.71	<.5	<.5	--	--	<.5	--	--	--	<.5	--	<2	<1
AUG													
04...	1.95	<.5	<.5	<.09	<.006	<.5	<.005	E.008	<.004	<.5	<.004	<2	<1
04087214 ROOT RIVER AT GRANGE AVENUE AT GREENFIELD, WI (LAT 42 56 42N LONG 088 00 51W)													
FEB 2004													
18...	--	<.5	<.5	--	--	<.5	--	--	--	<.5	--	<2	<1
MAR													
05...	--	<.5	<.5	--	--	<.5	--	--	--	<.5	--	<2	M
MAY													
11...	--	E.2	<.5	<.09	<.006	<.5	<.005	E.059	<.004	<.5	<.004	<2	<1
JUL													
26...	.73	<.5	<.5	--	--	<.5	--	--	--	<.5	--	<2	<1
AUG													
05...	1.25	<.5	<.5	E.01	<.006	<.5	<.005	E.014	<.004	<.5	.007	<2	<1
430216087532400 NORTH MID-HARBOR MILWAUKEE OUTER HARBOR (LAT 43 02 16N LONG 087 53 24W)													
MAR 2004													
08...	--	<.5	<.5	--	--	M	--	--	--	<.5	--	<2	<1
MAY													
10...	--	E.2	M	<.09	<.006	<.5	<.005	E.018	<.004	M	<.004	<2	<1
JUL													
26...	.60	<.5	<.5	--	--	<.5	--	--	--	<.5	--	<2	<1
AUG													
05...	1.02	<.5	<.5	<.09	<.006	<.5	<.005	E.018	<.004	<.5	<.004	<2	<1
430052087531400 SOUTH MID-HARBOR MILWAUKEE OUTER HARBOR (LAT 43 00 52N LONG 087 53 14W)													
MAR 2004													
08...	--	M	M	--	--	M	--	--	--	M	--	<2	M
MAY													
10...	--	E.1	<.5	<.09	<.006	<.5	<.005	E.018	<.004	<.5	.016	<2	<1
JUL													
26...	.65	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
05...	.65	<.5	<.5	<.09	<.006	<.5	<.005	E.025	<.004	<.5	.011	<2	<1
430031087511000 SOUTHERN OUTSIDE HARBOR BREAKWALL LAKE SITE (LAT 43 00 31N LONG 087 51 10W)													
MAR 2004													
09...	--	<.5	<.5	--	--	<.5	--	--	--	<.5	--	<2	<1
MAY													
10...	--	E.1	<.5	<.09	<.006	<.5	<.005	E.015	<.004	<.5	<.004	<2	<1
JUL													
26...	--	<.5	<.5	--	--	<.5	--	--	--	<.5	--	<2	<1
AUG													
09...	.06	<.5	<.5	<.09	<.006	<.5	<.005	E.021	<.004	<.5	<.004	<2	<1

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	3-tert-Butyl-4-hydroxyanisole wat flt ug/L (62059)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	4-Cumylphenol, water, fltrd, ug/L (62060)	4-Octylphenol, water, fltrd, ug/L (62061)	4-Nonylphenol, water, fltrd, ug/L (62085)	4-tert-Octylphenol, water, fltrd, ug/L (62062)	5-Methyl-1H-benzotriazole, wat flt ug/L (62063)	9,10-Anthraquinone water, fltrd, ug/L (62066)	Acetochlor, water, fltrd, ug/L (49260)	Acetophenone water, fltrd, ug/L (62064)	AHTN, water, fltrd, ug/L (62065)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH-d6, surrog, Sch2003 wat flt percent recovry (99995)
040870195 WILLOW CREEK AT MAPLE ROAD NR GERMANTOWN, WI (LAT 43 12 24N LONG 088 08 34W)													
FEB 2004													
18...	<5	--	<1	<1	<5	<1	<2	<.5	--	<.5	M	--	--
MAR													
05...	<5	--	<1	<1	<5	<1	<2	<.5	--	<.5	<.5	--	--
MAY													
10...	<5	<.006	<1	<1	E2	<1	<2	<.5	.009	<.5	<.5	<.005	96.9
JUL													
26...	<5	--	<1	<1	<5	<1	<2	<.5	--	<.5	<.5	--	--
AUG													
04...	<5	<.006	<1	<1	<5	<1	<2	<.5	<.006	<.5	<.5	<.005	82.7
04087214 ROOT RIVER AT GRANGE AVENUE AT GREENFIELD, WI (LAT 42 56 42N LONG 088 00 51W)													
FEB 2004													
18...	<5	--	M	<1	E1	<1	<2	E.1	--	<.5	M	--	--
MAR													
05...	<5	--	<1	<1	<5	<1	<2	E.1	--	<.5	<.5	--	--
MAY													
11...	<5	E.005	<1	<1	<5	<1	<2	E.2	1.67	<.5	<.5	<.005	83.7
JUL													
26...	<5	--	<1	<1	<5	M	<2	E.1	--	<.5	<.5	--	--
AUG													
05...	<5	E.010	<1	<1	<5	<1	<2	E.1	<.006	<.5	<.5	<.005	81.1
430216087532400 NORTH MID-HARBOR MILWAUKEE OUTER HARBOR (LAT 43 02 16N LONG 087 53 24W)													
MAR 2004													
08...	<5	--	<1	<1	<5	M	<2	M	--	<.5	<.5	--	--
MAY													
10...	<5	<.006	<1	<1	<5	<1	<2	<.5	.012	<.5	E.1	<.005	89.2
JUL													
26...	<5	--	<1	<1	<5	<1	<2	<.5	--	<.5	E.1	--	--
AUG													
05...	<5	<.006	<1	<1	<5	<1	<2	<.5	<.006	<.5	<.5	<.005	83.5
430052087531400 SOUTH MID-HARBOR MILWAUKEE OUTER HARBOR (LAT 43 00 52N LONG 087 53 14W)													
MAR 2004													
08...	<5	--	<1	<1	E1	<1	<2	E.1	--	E.1	E.1	--	--
MAY													
10...	<5	<.006	<1	<1	E2	<1	<2	E.1	.019	<.5	E.2	<.005	95.3
JUL													
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
05...	<5	<.006	<1	<1	<5	<1	<2	<.5	<.006	<.5	<.5	<.005	78.5
430031087511000 SOUTHERN OUTSIDE HARBOR BREAKWALL LAKE SITE (LAT 43 00 31N LONG 087 51 10W)													
MAR 2004													
09...	<5	--	<1	<1	<5	<1	<2	<.5	--	<.5	<.5	--	--
MAY													
10...	<5	<.006	<1	<1	<5	<1	<2	<.5	.006	<.5	<.5	<.005	88.7
JUL													
26...	<5	--	<1	<1	<5	<1	<2	<.5	--	<.5	<.5	--	--
AUG													
09...	<5	<.006	<1	<1	<5	<1	<2	<.5	.008	<.5	<.5	<.005	85.5

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Anthracene, water, fltrd, ug/L (34221)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl oxon, water, fltrd, ug/L (61635)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Benzo[a]pyrene, water, fltrd, ug/L (34248)	Benzophenone water, fltrd, ug/L (62067)	beta-Sitosterol, water, fltrd, ug/L (62068)	beta-Stigmastanol, water, fltrd, ug/L (62086)	Bisphenol A, water, fltrd, ug/L (62069)	Bisphenol A-d3 sur Sch 2033 & 8033, wat flt pct rcv (99583)	Bromacil, water, fltrd, ug/L (04029)	Caffeine, water, fltrd, ug/L (50305)
040870195 WILLOW CREEK AT MAPLE ROAD NR GERMANTOWN, WI (LAT 43 12 24N LONG 088 08 34W)													
FEB 2004													
18...	<.5	--	--	--	--	<.5	<.5	<2	<2	<1	57.1	<.5	M
MAR													
05...	<.5	--	--	--	--	<.5	<.5	<2	<2	<1	100	<.5	<.5
MAY													
10...	<.5	.050	<.02	<.050	<.010	<.5	<.5	<2	<2	<1	95.2	<.5	<.5
JUL													
26...	<.5	--	--	--	--	<.5	<.5	<20	<20	<1	119	<.5	<.5
AUG													
04...	<.5	.015	<.07	<.050	<.010	<.5	<.5	<2	<2	<1	146	<.5	<.5
04087214 ROOT RIVER AT GRANGE AVENUE AT GREENFIELD, WI (LAT 42 56 42N LONG 088 00 51W)													
FEB 2004													
18...	M	--	--	--	--	<.5	E.1	<2	<2	M	88.9	<.5	E.3
MAR													
05...	<.5	--	--	--	--	<.5	<.5	<2	<2	<1	72.7	<.5	E.1
MAY													
11...	<.5	.950	<.02	<.050	E.003	<.5	<.5	<2	<2	M	159	<.5	E.1
JUL													
26...	E.1	--	--	--	--	<.5	<.5	<2	<2	M	134	<.5	E.1
AUG													
05...	<.5	.017	<.07	<.050	<.010	<.5	<.5	<2	<2	<1	120	<.5	<.5
430216087532400 NORTH MID-HARBOR MILWAUKEE OUTER HARBOR (LAT 43 02 16N LONG 087 53 24W)													
MAR 2004													
08...	<.5	--	--	--	--	<.5	<.5	<2	<2	<1	.0	<.5	M
MAY													
10...	<.5	.066	<.02	<.050	<.010	<.5	<.5	<2	<2	M	105	<.5	E.1
JUL													
26...	<.5	--	--	--	--	<.5	E.1	<20	<20	<1	134	<.5	E.1
AUG													
05...	<.5	.046	<.07	<.050	<.010	<.5	<.5	<2	<2	<1	.0	<.5	<.5
430052087531400 SOUTH MID-HARBOR MILWAUKEE OUTER HARBOR (LAT 43 00 52N LONG 087 53 14W)													
MAR 2004													
08...	<.5	--	--	--	--	<.5	E.1	<2	<2	M	125	<.5	E.1
MAY													
10...	<.5	.080	<.02	<.050	<.010	<.5	E.1	<2	<2	<1	77.3	<.5	E.2
JUL													
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
05...	<.5	.043	<.07	<.050	<.010	<.5	<.5	<2	<2	<1	104	<.5	<.5
430031087511000 SOUTHERN OUTSIDE HARBOR BREAKWALL LAKE SITE (LAT 43 00 31N LONG 087 51 10W)													
MAR 2004													
09...	<.5	--	--	--	--	<.5	M	<2	<2	<1	.0	<.5	<.5
MAY													
10...	<.5	.053	<.02	<.050	<.010	<.5	<.5	<2	<2	<1	54.5	<.5	<.5
JUL													
26...	<.5	--	--	--	--	<.5	M	<20	<20	<1	90.7	<.5	<.5
AUG													
09...	<.5	.044	<.07	<.050	<.010	<.5	<.5	<2	<2	<1	89.6	<.5	<.5

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Caffeine-13C sur Sch 2033 & 8033, wat flt pct rcv (99584)	Camphor water, fltrd, ug/L (62070)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbazole, water, fltrd, ug/L (62071)	Chlorpyrifos oxon, water, fltrd, ug/L (61636)	Chlorpyrifos water, fltrd, ug/L (38933)	Cholesterol, water, fltrd, ug/L (62072)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Cotinine, water, fltrd, ug/L (62005)	Cyfluthrin, water, fltrd, ug/L (61585)	Cypermethrin water, fltrd, ug/L (61586)	DCPA, water fltrd 0.7u GF ug/L (82682)	DecaFbiphenl sur Sch 2033 & 8033, wat flt pct rcv (99585)
040870195 WILLOW CREEK AT MAPLE ROAD NR GERMANTOWN, WI (LAT 43 12 24N LONG 088 08 34W)													
FEB 2004													
18...	105	<.5	<1	<.5	--	<.5	<2	--	<1.00	--	--	--	61.9
MAR													
05...	109	<.5	<1	<.5	--	<.5	<2	--	<1.00	--	--	--	72.7
MAY													
10...	119	<.5	<.041	<.5	<.06	<.005	<2	<.006	<1.00	<.008	<.009	<.003	85.7
JUL													
26...	95.8	<.5	<1	<.5	--	<.5	<20	--	<1.00	--	--	--	41.9
AUG													
04...	96.6	<.5	<.041	<.5	<.06	<.005	<2	<.006	<1.00	<.008	<.009	<.003	71.4
04087214 ROOT RIVER AT GRANGE AVENUE AT GREENFIELD, WI (LAT 42 56 42N LONG 088 00 51W)													
FEB 2004													
18...	106	<.5	<1	M	--	<.5	<2	--	E.2100	--	--	--	72.2
MAR													
05...	86.4	<.5	<1	E.1	--	<.5	<2	--	<1.00	--	--	--	59.1
MAY													
11...	127	M	E.007	E.1	<.06	<.005	<2	<.006	<1.00	<.008	<.009	<.003	90.9
JUL													
26...	115	M	<1	E.1	--	<.5	<2	--	<1.00	--	--	--	55.5
AUG													
05...	91.7	<.5	E.077	<.5	<.06	<.005	<2	<.006	<1.00	<.008	<.009	.004	61.5
430216087532400 NORTH MID-HARBOR MILWAUKEE OUTER HARBOR (LAT 43 02 16N LONG 087 53 24W)													
MAR 2004													
08...	95.2	M	<1	M	--	<.5	<2	--	<1.00	--	--	--	66.7
MAY													
10...	118	M	<.041	<.5	<.06	E.003	<2	<.006	<1.00	<.008	<.009	<.003	81.8
JUL													
26...	106	<.5	<1	<.5	--	<.5	<20	--	<1.00	--	--	--	55.3
AUG													
05...	87.7	<.5	<.041	<.5	<.06	<.005	<2	<.006	<1.00	<.008	<.009	E.002	71.6
430052087531400 SOUTH MID-HARBOR MILWAUKEE OUTER HARBOR (LAT 43 00 52N LONG 087 53 14W)													
MAR 2004													
08...	91.7	M	<1	M	--	<.5	M	--	E.2800	--	--	--	70.8
MAY													
10...	118	E.1	<.041	E.1	<.06	E.004	<2	<.006	E.3400	<.008	<.009	<.003	77.3
JUL													
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
05...	85.4	<.5	<.041	<.5	<.06	<.005	<2	<.006	<1.00	<.008	<.009	<.003	58.7
430031087511000 SOUTHERN OUTSIDE HARBOR BREAKWALL LAKE SITE (LAT 43 00 31N LONG 087 51 10W)													
MAR 2004													
09...	95.7	M	<1	<.5	--	<.5	<2	--	<1.00	--	--	--	60.9
MAY													
10...	118	<.5	<.041	<.5	<.06	<.005	<2	<.006	<1.00	<.008	<.009	<.003	86.4
JUL													
26...	99.2	<.5	<1	<.5	--	<.5	<20	--	<1.00	--	--	--	57.4
AUG													
09...	90.3	<.5	<.041	<.5	<.06	<.005	<2	<.006	<1.00	<.008	<.009	<.003	35.4

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	DEET, water, fltrd, ug/L (62082)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon oxon, water, fltrd, ug/L (61638)	Diazinon, water, fltrd, ug/L (39572)	Diazinon-d10 surrog, Sch2003 wat flt percent recovry (99994)	Dicrotophos, water fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)	Diethoxynonylphenol, water, fltrd, ug/L (62083)	Diethoxyoctylphenol, water, fltrd ug/L (61705)	Dimethoate, water, fltrd 0.7u GF ug/L (82662)	D-Limonene, water, fltrd, ug/L (62073)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)
040870195 WILLOW CREEK AT MAPLE ROAD NR GERMANTOWN, WI (LAT 43 12 24N LONG 088 08 34W)													
FEB 2004													
18...	E.3	--	--	<.5	--	--	--	<5	<1	--	<.5	--	--
MAR													
05...	<.5	--	--	<.5	--	--	--	<5	<1	--	<.5	--	--
MAY													
10...	<.5	<.012	<.01	<.005	102	<.08	<.009	<5	<1	<.006	E.1	<.03	<.004
JUL													
26...	E.1	--	--	<.5	--	--	--	<5	<1	--	<.5	--	--
AUG													
04...	<.5	<.012	<.01	<.005	104	<.08	<.009	<5	<1	<.006	<.5	<.0020	<.004
04087214 ROOT RIVER AT GRANGE AVENUE AT GREENFIELD, WI (LAT 42 56 42N LONG 088 00 51W)													
FEB 2004													
18...	E.1	--	--	<.5	--	--	--	<5	<1	--	<.5	--	--
MAR													
05...	E.1	--	--	<.5	--	--	--	<5	<1	--	<.5	--	--
MAY													
11...	E.1	<.012	<.01	.022	95.7	<.08	<.009	<5	<1	<.006	<.5	<.03	<.004
JUL													
26...	E.2	--	--	<.5	--	--	--	<5	<1	--	<.5	--	--
AUG													
05...	<.5	<.012	<.01	.017	108	<.08	<.009	<5	<1	<.006	<.5	<.0020	<.004
430216087532400 NORTH MID-HARBOR MILWAUKEE OUTER HARBOR (LAT 43 02 16N LONG 087 53 24W)													
MAR 2004													
08...	M	--	--	<.5	--	--	--	<5	<1	--	M	--	--
MAY													
10...	M	<.012	<.01	<.005	99.9	<.08	<.009	<5	<1	<.006	<.5	<.03	<.004
JUL													
26...	E.1	--	--	<.5	--	--	--	<5	<1	--	<.5	--	--
AUG													
05...	<.5	<.012	<.01	<.005	89.6	<.08	<.009	<5	<1	<.006	<.5	<.0020	<.004
430052087531400 SOUTH MID-HARBOR MILWAUKEE OUTER HARBOR (LAT 43 00 52N LONG 087 53 14W)													
MAR 2004													
08...	E.1	--	--	E.1	--	--	--	E2	<1	--	M	--	--
MAY													
10...	E.1	<.012	<.01	<.005	98.1	<.08	<.009	<5	<1	<.006	<.5	<.03	<.004
JUL													
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
05...	<.5	<.012	<.01	.006	84.3	<.08	<.009	<5	<1	<.006	<.5	<.0020	<.004
430031087511000 SOUTHERN OUTSIDE HARBOR BREAKWALL LAKE SITE (LAT 43 00 31N LONG 087 51 10W)													
MAR 2004													
09...	M	--	--	<.5	--	--	--	<5	<1	--	<.5	--	--
MAY													
10...	M	<.012	<.01	<.005	97.5	<.08	<.009	<5	<1	<.006	<.5	<.03	<.004
JUL													
26...	M	--	--	<.5	--	--	--	<5	<1	--	<.5	--	--
AUG													
09...	<.5	<.012	<.01	<.005	88.6	<.08	<.009	<5	<1	<.006	<.5	<.0020	<.004

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Ethoxy-octyl-phenol, water, fltrd ug/L (61706)	Fenami-phos sulfone water, fltrd, ug/L (61645)	Fenami-phos sulf-oxide, water, fltrd, ug/L (61646)	Fenami-phos, water, fltrd, ug/L (61591)	Desulf-inyl-fipro-nil amide, wat flt ug/L (62169)	Fipro-nil sulfide water, fltrd, ug/L (62167)	Fipro-nil sulfone water, fltrd, ug/L (62168)	Fipro-nil, water, fltrd, ug/L (62166)	Fluor-anthene water, fltrd, ug/L (34377)	Fluor-anthene -d10, sur Sch 20/8033 wat flt pct rcv (99586)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	HHCB, water, fltrd, ug/L (62075)
040870195 WILLOW CREEK AT MAPLE ROAD NR GERMANTOWN, WI (LAT 43 12 24N LONG 088 08 34W)													
FEB 2004													
18...	<1	--	--	--	--	--	--	--	<.5	100	--	--	<.5
MAR													
05...	<1	--	--	--	--	--	--	--	<.5	95.5	--	--	<.5
MAY													
10...	<1	<.008	<.03	<.03	<.029	<.013	<.024	<.016	M	119	<.002	<.003	<.5
JUL													
26...	<1	--	--	--	--	--	--	--	<.5	83.3	--	--	<.5
AUG													
04...	<1	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.5	99.9	<.003	<.003	<.5
04087214 ROOT RIVER AT GRANGE AVENUE AT GREENFIELD, WI (LAT 42 56 42N LONG 088 00 51W)													
FEB 2004													
18...	<1	--	--	--	--	--	--	--	E.1	100	--	--	<.5
MAR													
05...	<1	--	--	--	--	--	--	--	E.1	86.4	--	--	<.5
MAY													
11...	<1	<.008	<.03	<.03	<.029	<.013	<.024	<.016	E.1	127	<.002	<.003	<.5
JUL													
26...	<1	--	--	--	--	--	--	--	E.1	114	--	--	<.5
AUG													
05...	<1	<.049	<.04	<.03	<.029	<.013	<.024	<.016	E.1	89.0	<.003	<.003	<.5
430216087532400 NORTH MID-HARBOR MILWAUKEE OUTER HARBOR (LAT 43 02 16N LONG 087 53 24W)													
MAR 2004													
08...	<1	--	--	--	--	--	--	--	M	100	--	--	<.5
MAY													
10...	<1	<.008	<.03	<.03	<.029	<.013	<.024	<.016	M	118	<.002	<.003	<.5
JUL													
26...	<1	--	--	--	--	--	--	--	<.5	138	--	--	<.5
AUG													
05...	<1	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.5	95.2	<.003	<.003	<.5
430052087531400 SOUTH MID-HARBOR MILWAUKEE OUTER HARBOR (LAT 43 00 52N LONG 087 53 14W)													
MAR 2004													
08...	<1	--	--	--	--	--	--	--	M	100	--	--	E.1
MAY													
10...	<1	<.008	<.03	<.03	<.029	<.013	<.024	<.016	E.1	114	<.002	<.003	E.1
JUL													
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
05...	<1	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.5	91.3	<.003	<.003	<.5
430031087511000 SOUTHERN OUTSIDE HARBOR BREAKWALL LAKE SITE (LAT 43 00 31N LONG 087 51 10W)													
MAR 2004													
09...	<1	--	--	--	--	--	--	--	<.5	100	--	--	<.5
MAY													
10...	<1	<.008	<.03	<.03	<.029	<.013	<.024	<.016	M	118	<.002	<.003	<.5
JUL													
26...	<1	--	--	--	--	--	--	--	<.5	148	--	--	<.5
AUG													
09...	<1	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.5	91.1	<.003	<.003	<.5

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Hexazinone, water, fltrd, ug/L (04025)	Indole, water, fltrd, ug/L (62076)	Iprodione, water, fltrd, ug/L (61593)	Isoborneol, water, fltrd, ug/L (62077)	Isofenphos, water, fltrd, ug/L (61594)	Isophorone water, fltrd, ug/L (34409)	Isopropylbenzene water, fltrd, ug/L (62078)	Isoquinoline, water, fltrd, ug/L (62079)	Malaoxon, water, fltrd, ug/L (61652)	Malathion, water, fltrd, ug/L (39532)	Menthol water, fltrd, ug/L (62080)	Metalaxyl, water, fltrd, ug/L (50359)	Metalaxyl, water, fltrd, ug/L (61596)
040870195 WILLOW CREEK AT MAPLE ROAD NR GERMANTOWN, WI (LAT 43 12 24N LONG 088 08 34W)													
FEB 2004													
18...	--	<.5	--	<.5	--	M	<.5	<.5	--	--	<.5	<.5	--
MAR													
05...	--	<.5	--	<.5	--	<.5	<.5	<.5	--	--	<.5	<.5	--
MAY													
10...	<.013	<.5	<1	<.5	<.003	<.5	<.5	<.5	<.008	<.027	<.5	<.5	<.005
JUL													
26...	--	<.5	--	<.5	--	<.5	<.5	<.5	--	--	<.5	<.5	--
AUG													
04...	<.013	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.030	<.027	<.5	<.5	<.005
04087214 ROOT RIVER AT GRANGE AVENUE AT GREENFIELD, WI (LAT 42 56 42N LONG 088 00 51W)													
FEB 2004													
18...	--	<.5	--	<.5	--	<.5	<.5	<.5	--	--	E.1	<.5	--
MAR													
05...	--	<.5	--	<.5	--	<.5	<.5	<.5	--	--	<.5	<.5	--
MAY													
11...	<.013	M	<1	<.5	<.003	<.5	<.5	<.5	<.008	<.027	<.5	<.5	<.005
JUL													
26...	--	<.5	--	<.5	--	E.1	<.5	<.5	--	--	E.1	<.5	--
AUG													
05...	<.013	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.030	<.027	<.5	<.5	<.005
430216087532400 NORTH MID-HARBOR MILWAUKEE OUTER HARBOR (LAT 43 02 16N LONG 087 53 24W)													
MAR 2004													
08...	--	<.5	--	<.5	--	M	<.5	<.5	--	--	<.5	<.5	--
MAY													
10...	<.013	<.5	<1	<.5	<.003	<.5	<.5	<.5	<.008	<.027	<.5	<.5	<.005
JUL													
26...	--	<.5	--	<.5	--	M	<.5	<.5	--	--	<.5	<.5	--
AUG													
05...	<.013	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.030	<.027	<.5	<.5	<.005
430052087531400 SOUTH MID-HARBOR MILWAUKEE OUTER HARBOR (LAT 43 00 52N LONG 087 53 14W)													
MAR 2004													
08...	--	<.5	--	<.5	--	M	<.5	<.5	--	--	M	<.5	--
MAY													
10...	<.013	<.5	<1	<.5	<.003	E.1	<.5	<.5	<.008	<.027	<.5	<.5	<.005
JUL													
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
05...	<.013	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.030	<.027	<.5	<.5	<.005
430031087511000 SOUTHERN OUTSIDE HARBOR BREAKWALL LAKE SITE (LAT 43 00 31N LONG 087 51 10W)													
MAR 2004													
09...	--	<.5	--	<.5	--	M	<.5	<.5	--	--	E.1	<.5	--
MAY													
10...	<.013	<.5	<1	<.5	<.003	<.5	<.5	<.5	<.008	<.027	<.5	<.5	<.005
JUL													
26...	--	<.5	--	<.5	--	M	<.5	<.5	--	--	<.5	<.5	--
AUG													
09...	<.013	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.030	<.027	<.5	<.5	<.005

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Methi-althion water, fltrd, ug/L (61598)	Methyl para-oxon, water, fltrd, ug/L (61664)	Methyl para-thion, water, fltrd 0.7u GF ug/L (82667)	Methyl salicy-late, water, fltrd, ug/L (62081)	Methyl-mercury water fltrd, ng/L (50285)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Myclo-butanil water, fltrd, ug/L (61599)	Naphth-alene, water, fltrd, ug/L (34443)	p-Cresol, water, fltrd, ug/L (62084)	Pendi-meth-alin, water, fltrd 0.7u GF ug/L (82683)	Penta-chloro-phenol, water, fltrd, ug/L (34459)	Phenan-threne, water, fltrd, ug/L (34462)
040870195 WILLOW CREEK AT MAPLE ROAD NR GERMANTOWN, WI (LAT 43 12 24N LONG 088 08 34W)													
FEB 2004													
18...	--	--	--	<.5	--	M	--	--	E.1	<1	--	<2	<.5
MAR													
05...	--	--	--	<.5	--	E.1	--	--	<.5	M	--	<2	<.5
MAY													
10...	<.006	<.03	<.015	E.1	--	.014	<.006	<.008	<.5	<1	<.022	<2	M
JUL													
26...	--	--	--	<.5	<.04	<.5	--	--	<.5	<1	--	<2	<.5
AUG													
04...	<.006	<.03	<.015	<.5	.08	E.008	<.006	<.008	<.5	<1	<.022	<2	<.5
04087214 ROOT RIVER AT GRANGE AVENUE AT GREENFIELD, WI (LAT 42 56 42N LONG 088 00 51W)													
FEB 2004													
18...	--	--	--	<.5	--	<.5	--	--	<.5	M	--	<2	M
MAR													
05...	--	--	--	<.5	--	<.5	--	--	<.5	M	--	<2	E.1
MAY													
11...	<.006	<.03	<.015	<.5	--	.029	<.006	<.008	M	<1	E.023	<2	E.1
JUL													
26...	--	--	--	<.5	.06	<.5	--	--	M	<1	--	<2	E.1
AUG													
05...	<.006	<.03	<.015	<.5	.08	E.007	<.006	<.008	<.5	<1	<.022	<2	<.5
430216087532400 NORTH MID-HARBOR MILWAUKEE OUTER HARBOR (LAT 43 02 16N LONG 087 53 24W)													
MAR 2004													
08...	--	--	--	<.5	--	M	--	--	M	<1	--	<2	M
MAY													
10...	<.006	<.03	<.015	<.5	--	.014	<.006	<.008	M	<1	<.022	<2	M
JUL													
26...	--	--	--	<.5	<.04	M	--	--	<.5	<1	--	<2	<.5
AUG													
05...	<.006	<.03	<.015	<.5	<.04	E.011	<.006	<.008	<.5	<1	<.022	<2	<.5
430052087531400 SOUTH MID-HARBOR MILWAUKEE OUTER HARBOR (LAT 43 00 52N LONG 087 53 14W)													
MAR 2004													
08...	--	--	--	<.5	--	E.1	--	--	M	M	--	M	M
MAY													
10...	<.006	<.03	<.015	<.5	--	.017	<.006	<.008	<.5	<1	<.022	<2	M
JUL													
26...	--	--	--	--	<.04	--	--	--	--	--	--	--	--
AUG													
05...	<.006	<.03	<.015	<.5	<.04	.014	<.006	<.008	<.5	<1	<.022	<2	<.5
430031087511000 SOUTHERN OUTSIDE HARBOR BREAKWALL LAKE SITE (LAT 43 00 31N LONG 087 51 10W)													
MAR 2004													
09...	--	--	--	<.5	--	M	--	--	M	M	--	<2	<.5
MAY													
10...	<.006	<.03	<.015	<.5	--	E.010	<.006	<.008	M	<1	<.022	<2	<.5
JUL													
26...	--	--	--	<.5	<.04	<.5	--	--	<.5	<1	--	<2	<.5
AUG													
09...	<.006	<.03	<.015	<.5	<.04	E.010	<.006	<.008	<.5	<1	<.022	<2	<.5

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Phenol, water, fltrd, ug/L (34466)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Pyrene, water, fltrd, ug/L (34470)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbufos oxon sulfone water, fltrd, ug/L (61674)	Terbufos, water, fltrd 0.7u GF ug/L (82675)
040870195 WILLOW CREEK AT MAPLE ROAD NR GERMANTOWN, WI (LAT 43 12 24N LONG 088 08 34W)													
FEB 2004													
18...	E.1	--	--	--	--	<.5	--	--	<.5	--	--	--	--
MAR													
05...	E.5	--	--	--	--	<.5	--	--	<.5	--	--	--	--
MAY													
10...	<.5	<.10	<.011	--	<.008	.01	<.005	<.004	E.1	.091	<.02	<.07	<.02
JUL													
26...	.6	--	--	--	--	<.5	--	--	<.5	--	--	--	--
AUG													
04...	<.5	<.10	<.011	--	--	E.01	<.005	<.004	<.5	.009	<.02	<.07	<.02
04087214 ROOT RIVER AT GRANGE AVENUE AT GREENFIELD, WI (LAT 42 56 42N LONG 088 00 51W)													
FEB 2004													
18...	<.5	--	--	--	--	<.5	--	--	M	--	--	--	--
MAR													
05...	E.5	--	--	--	--	<.5	--	--	E.1	--	--	--	--
MAY													
11...	<.5	<.10	<.011	<.06	<.008	.01	<.005	<.004	E.1	.009	<.02	<.07	<.02
JUL													
26...	.7	--	--	--	--	<.5	--	--	E.1	--	--	--	--
AUG													
05...	<.5	<.10	<.011	--	--	.06	<.005	<.004	M	<.005	<.02	<.07	<.02
430216087532400 NORTH MID-HARBOR MILWAUKEE OUTER HARBOR (LAT 43 02 16N LONG 087 53 24W)													
MAR 2004													
08...	E.1	--	--	--	--	<.5	--	--	M	--	--	--	--
MAY													
10...	E.3	<.10	<.011	<.06	<.008	.01	<.005	<.004	M	.008	<.02	<.07	<.02
JUL													
26...	E.4	--	--	--	--	<.5	--	--	<.5	--	--	--	--
AUG													
05...	<.5	<.10	<.011	--	--	E.01	<.005	<.004	<.5	.008	<.02	<.07	<.02
430052087531400 SOUTH MID-HARBOR MILWAUKEE OUTER HARBOR (LAT 43 00 52N LONG 087 53 14W)													
MAR 2004													
08...	E.3	--	--	--	--	<.5	--	--	M	--	--	--	--
MAY													
10...	E.2	<.10	<.011	<.06	<.008	.01	<.005	<.004	E.1	.009	<.02	<.07	<.02
JUL													
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
05...	E.3	<.10	<.011	--	--	.01	<.005	<.004	<.5	.011	<.02	<.07	<.02
430031087511000 SOUTHERN OUTSIDE HARBOR BREAKWALL LAKE SITE (LAT 43 00 31N LONG 087 51 10W)													
MAR 2004													
09...	E.2	--	--	--	--	<.5	--	--	<.5	--	--	--	--
MAY													
10...	E.3	<.10	<.011	<.06	<.008	.01	<.005	<.004	M	.006	<.02	<.07	<.02
JUL													
26...	.6	--	--	--	--	<.5	--	--	<.5	--	--	--	--
AUG													
09...	E.4	<.10	<.011	--	--	E.01	<.005	<.004	<.5	.007	<.02	<.07	<.02

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Ter-buthyl-azine, water, fltrd, ug/L (04022)	Tetra-chloro-ethene, water, fltrd, ug/L (34476)	Tri-bromo-methane water, fltrd, ug/L (34288)	Tri-butyl phos-phate, water, fltrd, ug/L (62089)	Triclo-san, water, fltrd, ug/L (62090)	Tri-ethyl citrate water, fltrd, ug/L (62091)	Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661)	Tri-phenyl phos-phate, water, fltrd, ug/L (62092)	Tris(2-butoxy-ethyl) phos-phate, wat flt ug/L (62093)	Tris(2-chloro-ethyl) phos-phate, wat flt ug/L (62087)	Tris(di chloro-i-Pr) phos-phate, wat flt ug/L (62088)	Di-chlor-vos, water fltrd, ug/L (38775)	Methyl-mercury suspnd sedimnt total, ng/L (62977)
040870195 WILLOW CREEK AT MAPLE ROAD NR GERMANTOWN, WI (LAT 43 12 24N LONG 088 08 34W)													
FEB 2004													
18...	--	<.5	<.5	<.5	<1	<.5	--	<.5	<.5	E.1	<.5	<1.00	--
MAR													
05...	--	<.5	<.5	<.5	<1	<.5	--	<.5	<.5	<.5	<.5	<1.00	--
MAY													
10...	<.01	<.5	<.5	<.5	<1	<.5	<.009	<.5	<.5	<.5	<.5	<.01	--
JUL													
26...	--	<.5	<.5	<.5	<1	<.5	--	<.5	<.5	<.5	<.5	--	--
AUG													
04...	<.01	<.5	<.5	<.5	<1	<.5	<.009	<.5	<.5	<.5	<.5	<.01	.023
04087214 ROOT RIVER AT GRANGE AVENUE AT GREENFIELD, WI (LAT 42 56 42N LONG 088 00 51W)													
FEB 2004													
18...	--	<.5	<.5	E.1	<1	<.5	--	M	E.3	E.1	M	<1.00	--
MAR													
05...	--	<.5	<.5	<.5	<1	<.5	--	<.5	E.2	E.1	<.5	<1.00	--
MAY													
11...	<.01	<.5	<.5	<.5	<1	<.5	E.004	E.1	E.4	E.1	<.5	<.01	--
JUL													
26...	--	<.5	<.5	<.5	<1	<.5	--	E.1	E1.3	E.1	E.1	--	--
AUG													
05...	<.01	<.5	<.5	<.5	<1	<.5	<.009	<.5	<.5	<.5	<.5	<.01	.035
430216087532400 NORTH MID-HARBOR MILWAUKEE OUTER HARBOR (LAT 43 02 16N LONG 087 53 24W)													
MAR 2004													
08...	--	M	<.5	E.1	<1	<.5	--	M	M	M	<.5	<1.00	--
MAY													
10...	<.01	<.5	<.5	E.1	<1	<.5	E.004	<.5	E.3	<.5	<.5	<.01	--
JUL													
26...	--	<.5	<.5	<.5	<1	<.5	--	<.5	E2.2	<.5	<.5	--	--
AUG													
05...	<.01	<.5	<.5	<.5	<1	<.5	<.009	<.5	<.5	<.5	<.5	<.01	--
430052087531400 SOUTH MID-HARBOR MILWAUKEE OUTER HARBOR (LAT 43 00 52N LONG 087 53 14W)													
MAR 2004													
08...	--	M	M	E.1	M	E.1	--	E.1	E.4	E.1	E.1	<1.00	--
MAY													
10...	<.01	<.5	<.5	<.5	M	E.1	E.005	E.1	E.4	E.1	E.1	<.01	--
JUL													
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
05...	<.01	<.5	<.5	<.5	<1	<.5	<.009	<.5	<.5	<.5	<.5	<.01	--
430031087511000 SOUTHERN OUTSIDE HARBOR BREAKWALL LAKE SITE (LAT 43 00 31N LONG 087 51 10W)													
MAR 2004													
09...	--	<.5	<.5	<.5	<1	<.5	--	<.5	<.5	<.5	<.5	<1.00	--
MAY													
10...	<.01	M	<.5	<.5	<1	<.5	<.009	<.5	<.5	<.5	<.5	<.01	--
JUL													
26...	--	<.5	<.5	<.5	<1	<.5	--	<.5	<.5	<.5	<.5	--	--
AUG													
09...	<.01	<.5	<.5	<.5	<1	<.5	<.009	<.5	<.5	<.5	<.5	<.01	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Suspended sediment concentration mg/L (80154)
040870195 WILLOW CREEK AT MAPLE ROAD NR GERMANTOWN, WI (LAT 43 12 24N LONG 088 08 34W)	
FEB 2004	
18...	13
MAR	
05...	35
MAY	
10...	<1
JUL	
26...	16
AUG	
04...	8
04087214 ROOT RIVER AT GRANGE AVENUE AT GREENFIELD, WI (LAT 42 56 42N LONG 088 00 51W)	
FEB 2004	
18...	21
MAR	
05...	75
MAY	
11...	10
JUL	
26...	43
AUG	
05...	17
430216087532400 NORTH MID-HARBOR MILWAUKEE OUTER HARBOR (LAT 43 02 16N LONG 087 53 24W)	
MAR 2004	
08...	7
MAY	
10...	4
JUL	
26...	--
AUG	
05...	2
430052087531400 SOUTH MID-HARBOR MILWAUKEE OUTER HARBOR (LAT 43 00 52N LONG 087 53 14W)	
MAR 2004	
08...	10
MAY	
10...	3
JUL	
26...	3
AUG	
05...	5
430031087511000 SOUTHERN OUTSIDE HARBOR BREAKWALL LAKE SITE (LAT 43 00 31N LONG 087 51 10W)	
MAR 2004	
09...	2
MAY	
10...	3
JUL	
26...	2
AUG	
09...	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)
430138087514800 MIDDLE OUTSIDE HARBOR BREAKWATER LAKE SITE (LAT 43 01 38N LONG 087 51 48W)													
MAR 2004													
09...	0747	--	30	--	13.1	--	7.7	355	1.4	37.8	12.7	1.64	11.6
MAY													
10...	1028	--	30	--	11.5	--	8.0	288	7.7	34.4	11.8	1.39	6.80
JUL													
26...	0740	--	30	--	9.1	--	8.4	277	19.1	34.3	11.2	1.34	6.01
AUG													
09...	0731	--	30	--	8.8	--	8.4	279	19.0	33.5	11.5	1.30	6.67
430240087520300 NORTHERN OUTSIDE HARBOR BREAKWATER LAKE SITE (LAT 43 02 40N LONG 087 52 03W)													
MAR 2004													
09...	0937	--	30	--	13.5	--	8.0	289	1.6	37.2	12.1	1.51	8.79
MAY													
10...	1100	--	30	--	11.5	--	8.0	286	8.2	29.8	8.99	1.20	5.90
JUL													
26...	0858	--	30	--	9.2	--	8.5	276	19.4	34.4	11.3	1.34	6.03
AUG													
09...	0810	--	30	--	8.7	--	8.4	279	19.1	33.4	11.3	1.29	6.53
430134087532900 MIDDLE HARBOR MILWAUKEE OUTER HARBOR (LAT 43 01 34N LONG 087 53 29W)													
MAR 2004													
08...	0835	--	30	--	12.1	--	7.7	650	3.1	47.3	19.3	4.06	55.2
MAY													
10...	0802	--	30	--	9.4	--	7.9	491	10.9	45.8	20.0	2.84	27.3
JUL													
26...	1100	--	30	--	8.7	--	8.3	422	20.6	42.7	16.0	2.92	18.9
AUG													
05...	0900	--	30	--	7.9	--	8.0	392	19.3	39.6	15.1	3.14	20.0
04087070 LITTLE MENOMONEE RIVER AT MILWAUKEE, WI (LAT 43 07 25N LONG 088 02 37W)													
FEB 2004													
18...	1600	2.9	70	--	10.6	--	7.6	2,110	.0	118	49.1	4.27	265
MAR													
05...	1045	211	10	--	15.1	--	8.0	845	3.8	32.6	10.9	2.91	99.9
MAY													
11...	0900	164	40	742	2.9	29	7.6	527	14.0	45.7	16.5	3.30	34.3
JUL													
15...	0807	11	--	--	5.3	--	7.6	1,000	21.2	--	--	--	--
26...	1145	4.3	40	--	5.9	--	7.6	952	19.2	81.0	41.0	3.54	54.9
AUG													
04...	1230	11	40	--	4.1	--	7.6	667	22.1	48.6	22.9	3.64	49.6
18...	1320	2.0	--	--	4.1	--	7.6	688	20.0	--	--	--	--
23...	1400	1.1	10	745	5.7	64	7.9	872	19.8	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	ANC, wat unf fixed end pt, field, mg/L as CaCO3 (00410)	Alka-linity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicar-bonate, wat flt incrm. titr., field, mg/L (00453)	Carbon-ate, wat flt incrm. titr., field, mg/L (00452)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)
430138087514800 MIDDLE OUTSIDE HARBOR BREAKWATER LAKE SITE (LAT 43 01 38N LONG 087 51 48W)													
MAR 2004													
09...	109	115	109	132	<1	19.7	<.2	1.88	24.0	189	<.04	.48	<.008
MAY													
10...	--	112	--	--	--	12.0	<.2	1.38	22.4	172	<.04	.36	E.004
JUL													
26...	98	109	98	118	1	10.7	<.2	1.07	21.7	155	<.04	.20	<.008
AUG													
09...	104	109	104	125	1	10.9	<.2	1.04	22.1	158	<.04	.22	<.008
430240087520300 NORTHERN OUTSIDE HARBOR BREAKWATER LAKE SITE (LAT 43 02 40N LONG 087 52 03W)													
MAR 2004													
09...	--	113	110	134	<1	14.5	<.2	1.66	22.8	173	<.04	.35	<.008
MAY													
10...	--	111	--	--	--	11.6	<.2	1.07	22.2	163	<.04	.31	<.008
JUL													
26...	103	108	103	123	1	10.7	<.2	.81	21.6	155	<.04	.19	<.008
AUG													
09...	104	109	104	125	1	10.6	<.2	1.04	21.9	164	<.04	.20	<.008
430134087532900 MIDDLE HARBOR MILWAUKEE OUTER HARBOR (LAT 43 01 34N LONG 087 53 29W)													
MAR 2004													
08...	137	143	137	166	<1	98.9	<.2	5.19	37.2	376	<.04	1.83	.024
MAY													
10...	--	156	--	--	--	48.9	<.2	1.37	33.1	294	.04	.62	.015
JUL													
26...	138	146	138	167	1	33.4	.2	2.08	27.7	241	<.04	.47	.022
AUG													
05...	123	130	123	149	1	32.5	<.2	2.25	27.4	235	.09	.53	.018
04087070 LITTLE MENOMONEE RIVER AT MILWAUKEE, WI (LAT 43 07 25N LONG 088 02 37W)													
FEB 2004													
18...	--	--	293	--	--	458	.3	10.5	113	1,190	E.02	1.01	.044
MAR													
05...	--	90	84	102	1	189	<.2	3.93	29.5	462	<.04	1.12	.099
MAY													
11...	--	140	--	--	--	57.1	<.2	5.84	30.6	316	<.04	1.79	.123
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	273	256	--	--	116	.3	2.69	67.9	574	<.04	.38	.012
AUG													
04...	--	150	153	--	--	89.0	.2	3.53	41.8	370	<.04	.61	.071
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	210	254	--	111	--	--	61.4	--	E.03	.12	E.005

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, wat unf by analysis, mg/L (62855)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	COD, low level, water, unfltrd mg/L (00335)	Chlorophyll a wat unf trichr. method, uncorr, ug/L (32210)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)
430138087514800 MIDDLE OUTSIDE HARBOR BREAKWATER LAKE SITE (LAT 43 01 38N LONG 087 51 48W)													
MAR 2004													
09...	<.02	E.003	.009	.63	<.1	<.1	<.1	1.9	<2.0	10	.290	<6	E.7
MAY													
10...	<.02	<.006	.004	.51	<.1	<.1	<.1	2.0	8.5	31	.440	<6	E.6
JUL													
26...	.03	<.006	E.004	.37	.1	<.1	.1	2.0	<2.0	17	.630	<6	<.8
AUG													
09...	.04	<.006	E.003	.38	.2	<.1	.2	1.9	<2.0	15	1.72	<6	<.8
430240087520300 NORTHERN OUTSIDE HARBOR BREAKWATER LAKE SITE (LAT 43 02 40N LONG 087 52 03W)													
MAR 2004													
09...	<.02	<.006	.005	.51	<.1	<.1	<.1	1.9	<2.0	14	.380	<6	E.4
MAY													
10...	<.02	<.006	.004	.51	<.1	<.1	<.1	1.9	8.7	28	.560	<6	E.5
JUL													
26...	.02	E.003	E.003	.35	<.1	<.1	<.1	2.1	<2.0	19	.730	<6	<.8
AUG													
09...	.03	<.006	E.003	.67	.2	<.1	.2	1.8	<2.0	<9	1.58	E5	<.8
430134087532900 MIDDLE HARBOR MILWAUKEE OUTER HARBOR (LAT 43 01 34N LONG 087 53 29W)													
MAR 2004													
08...	.12	.033	.091	2.44	1.1	<.1	1.1	5.9	5.3	34	3.26	24	7.3
MAY													
10...	.13	<.006	.044	1.22	.9	<.1	.9	6.3	<2.0	20	4.52	17	2.4
JUL													
26...	.15	.014	.062	1.06	.9	<.1	.9	5.7	4.4	30	26.7	8	1.8
AUG													
05...	.14	.026	.095	1.09	1.2	<.1	1.2	4.9	<2.0	19	12.1	12	4.2
04087070 LITTLE MENOMONEE RIVER AT MILWAUKEE, WI (LAT 43 07 25N LONG 088 02 37W)													
FEB 2004													
18...	.06	.060	.115	1.64	.5	<.1	.5	5.2	6.1	31	1.76	44	57.9
MAR													
05...	.20	.031	.164	1.99	2.3	<.1	2.3	5.7	>11.0	41	4.32	25	17.9
MAY													
11...	.36	<.006	.157	2.90	3.3	.2	3.2	8.4	4.1	38	7.61	43	13.0
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	.10	.057	.116	.99	1.1	<.1	1.1	7.3	2.7	39	1.99	28	26.9
AUG													
04...	.14	.039	.130	1.44	1.8	<.1	1.8	7.8	5.5	34	2.94	42	31.9
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	.06	.079	.147	.65	.5	<.1	.5	5.3	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Mercury water fltrd, ng/L (50287)	1,4-Di-chloro-benzene water, fltrd, ug/L (34572)	1-Methyl-naphth-alene, water, fltrd, ug/L (62054)	1-Naph-thol, water, fltrd 0.7u GF ug/L (49295)	2,6-Di-ethyl-aniline water fltrd 0.7u GF ug/L (82660)	2,6-Di-methyl-naphth-alene, water, fltrd, ug/L (62055)	2Chloro-2,6'-' diethyl acet-anilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl-6-methyl-aniline water, fltrd, ug/L (61620)	2-Methyl-naphth-alene, water, fltrd, ug/L (62056)	3,4-Di-chloro-aniline water fltrd, ug/L (61625)	3-beta-Copros-tanol, water, fltrd, ug/L (62057)	3-Methyl-1H-indole, water, fltrd, ug/L (62058)
430138087514800 MIDDLE OUTSIDE HARBOR BREAKWATER LAKE SITE (LAT 43 01 38N LONG 087 51 48W)													
MAR 2004													
09...	--	<.5	<.5	--	--	<.5	--	--	--	<.5	--	<2	<1
MAY													
10...	--	E.2	<.5	<.09	<.006	<.5	<.005	E.015	<.004	<.5	<.004	<2	<1
JUL													
26...	.53	<.5	<.5	--	--	<.5	--	--	--	<.5	--	<2	<1
AUG													
09...	.69	<.5	<.5	<.09	<.006	<.5	<.005	E.018	<.004	<.5	<.004	<2	<1
430240087520300 NORTHERN OUTSIDE HARBOR BREAKWATER LAKE SITE (LAT 43 02 40N LONG 087 52 03W)													
MAR 2004													
09...	--	<.5	<.5	--	--	<.5	--	--	--	<.5	--	<2	<1
MAY													
10...	--	<.5	M	<.09	<.006	<.5	<.005	E.013	<.004	M	<.004	<2	<1
JUL													
26...	.61	<.5	<.5	--	--	<.5	--	--	--	<.5	--	<2	<1
AUG													
09...	.68	<.5	<.5	<.09	<.006	<.5	<.005	E.016	<.004	<.5	<.004	<2	<1
430134087532900 MIDDLE HARBOR MILWAUKEE OUTER HARBOR (LAT 43 01 34N LONG 087 53 29W)													
MAR 2004													
08...	--	E.1	M	--	--	M	--	--	--	M	--	<2	<1
MAY													
10...	--	E.2	M	<.09	<.006	<.5	<.005	E.037	<.004	M	.012	<2	<1
JUL													
26...	.77	<.5	<.5	--	--	<.5	--	--	--	<.5	--	<2	<1
AUG													
05...	3.40	<.5	<.5	E.01	<.006	<.5	<.005	E.029	<.004	<.5	.028	<2	<1
04087070 LITTLE MENOMONEE RIVER AT MILWAUKEE, WI (LAT 43 07 25N LONG 088 02 37W)													
FEB 2004													
18...	--	<.5	<.5	--	--	<.5	--	--	--	<.5	--	M	<1
MAR													
05...	--	<.5	M	--	--	M	--	--	--	M	--	<2	M
MAY													
11...	--	<.5	<.5	M	<.006	<.5	E.005	E.045	<.004	<.5	<.004	<2	M
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	.83	<.5	M	--	--	<.5	--	--	--	<.5	--	<2	<1
AUG													
04...	2.05	<.5	<.5	E.01	<.006	<.5	<.005	E.027	<.004	<.5	.014	<2	<1
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	<.09	<.006	--	<.005	E.024	<.004	--	.029	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	3-tert-Butyl-4-hydroxyanisole wat flt ug/L (62059)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	4-Cumylphenol, water, fltrd, ug/L (62060)	4-Octylphenol, water, fltrd, ug/L (62061)	4-Nonylphenol, water, fltrd, ug/L (62085)	4-tert-Octylphenol, water, fltrd, ug/L (62062)	5-Methyl-1H-benzotriazole, wat flt ug/L (62063)	9,10-Anthraquinone water, fltrd, ug/L (62066)	Acetochlor, water, fltrd, ug/L (49260)	Acetophenone water, fltrd, ug/L (62064)	AHTN, water, fltrd, ug/L (62065)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH-d6, surrog, Sch2003 wat flt percent recovry (99995)
430138087514800 MIDDLE OUTSIDE HARBOR BREAKWATER LAKE SITE (LAT 43 01 38N LONG 087 51 48W)													
MAR 2004													
09...	<5	--	<1	<1	<5	<1	<2	<.5	--	<.5	<.5	--	--
MAY													
10...	<5	<.006	<1	<1	<5	<1	<2	<.5	E.005	<.5	<.5	<.005	88.8
JUL													
26...	<5	--	<1	<1	<5	<1	<2	<.5	--	<.5	<.5	--	--
AUG													
09...	<5	<.006	<1	<1	<5	<1	<2	<.5	.007	<.5	<.5	<.005	78.2
430240087520300 NORTHERN OUTSIDE HARBOR BREAKWATER LAKE SITE (LAT 43 02 40N LONG 087 52 03W)													
MAR 2004													
09...	<5	--	<1	<1	<5	<1	<2	<.5	--	<.5	<.5	--	--
MAY													
10...	<5	<.006	<1	<1	<5	<1	<2	<.5	.006	<.5	E.1	<.005	81.9
JUL													
26...	<5	--	<1	<1	<5	<1	<2	<.5	--	<.5	<.5	--	--
AUG													
09...	<5	<.006	<1	<1	<5	<1	<2	<.5	.007	<.5	<.5	<.005	82.6
430134087532900 MIDDLE HARBOR MILWAUKEE OUTER HARBOR (LAT 43 01 34N LONG 087 53 29W)													
MAR 2004													
08...	<5	--	<1	<1	M	<1	<2	E.1	--	E.1	E.1	--	--
MAY													
10...	<5	<.006	<1	<1	<5	<1	<2	E.1	.029	<.5	E.1	<.005	82.5
JUL													
26...	<5	--	<1	<1	<5	<1	<2	<.5	--	<.5	E.1	--	--
AUG													
05...	<5	<.006	<1	<1	<5	<1	<2	E.2	<.006	<.5	E.2	<.005	87.3
04087070 LITTLE MENOMONEE RIVER AT MILWAUKEE, WI (LAT 43 07 25N LONG 088 02 37W)													
FEB 2004													
18...	<5	--	<1	<1	E1	M	<2	E.1	--	<.5	M	--	--
MAR													
05...	<5	--	<1	<1	E1	<1	<2	E.3	--	E.1	M	--	--
MAY													
11...	<5	<.006	<1	<1	E2	<1	<2	E.2	.050	<.5	<.5	.296	83.0
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<5	--	<1	<1	<5	<1	<2	E.1	--	<.5	<.5	--	--
AUG													
04...	<5	E.007	<1	<1	<5	<1	<2	1.2	<.006	<.5	<.5	<.005	80.6
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	<.006	--	--	--	--	--	--	<.006	--	--	<.005	105

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Anthracene, water, fltrd, ug/L (34221)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl oxon, water, fltrd, ug/L (61635)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Benzo[a]pyrene, water, fltrd, ug/L (34248)	Benzophenone water, fltrd, ug/L (62067)	beta-Sitosterol, water, fltrd, ug/L (62068)	beta-Stigmastanol, water, fltrd, ug/L (62086)	Bisphenol A, water, fltrd, ug/L (62069)	Bisphenol A-d3 sur Sch 2033 & 8033, wat flt pct rcv (99583)	Bromacil, water, fltrd, ug/L (04029)	Caffeine, water, fltrd, ug/L (50305)
430138087514800 MIDDLE OUTSIDE HARBOR BREAKWATER LAKE SITE (LAT 43 01 38N LONG 087 51 48W)													
MAR 2004													
09...	<.5	--	--	--	--	<.5	M	<2	<2	<1	.0	<.5	<.5
MAY													
10...	<.5	.049	<.02	<.050	<.010	<.5	<.5	<2	<2	<1	45.0	<.5	<.5
JUL													
26...	<.5	--	--	--	--	<.5	M	<20	<20	<1	153	<.5	<.5
AUG													
09...	<.5	.041	<.07	<.050	<.010	<.5	<.5	<2	<2	<1	76.3	<.5	<.5
430240087520300 NORTHERN OUTSIDE HARBOR BREAKWATER LAKE SITE (LAT 43 02 40N LONG 087 52 03W)													
MAR 2004													
09...	<.5	--	--	--	--	<.5	M	<2	<2	<1	.0	<.5	<.5
MAY													
10...	<.5	.048	--	<.050	<.010	<.5	<.5	<2	<2	<1	58.3	<.5	<.5
JUL													
26...	<.5	--	--	--	--	<.5	M	<20	<20	<1	166	<.5	<.5
AUG													
09...	<.5	.039	<.07	<.050	<.010	<.5	<.5	<2	<2	<1	61.6	<.5	<.5
430134087532900 MIDDLE HARBOR MILWAUKEE OUTER HARBOR (LAT 43 01 34N LONG 087 53 29W)													
MAR 2004													
08...	<.5	--	--	--	--	<.5	E.1	<2	<2	<1	.0	<.5	E.1
MAY													
10...	<.5	.110	--	<.050	<.010	<.5	<.5	<2	<2	M	130	<.5	E.2
JUL													
26...	<.5	--	--	--	--	<.5	E.1	<20	<20	<1	128	<.5	E.1
AUG													
05...	<.5	.047	<.07	<.050	<.010	<.5	<.5	<2	<2	<1	98.8	<.5	E.2
04087070 LITTLE MENOMONEE RIVER AT MILWAUKEE, WI (LAT 43 07 25N LONG 088 02 37W)													
FEB 2004													
18...	M	--	--	--	--	<.5	E.1	M	E1	M	86.4	<.5	E.4
MAR													
05...	M	--	--	--	--	<.5	E.1	<2	<2	M	68.2	<.5	E.2
MAY													
11...	E.1	.740	<.02	<.050	E.004	<.5	<.5	<2	<2	<1	90.9	<.5	E.1
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	E.1	--	--	--	--	<.5	<.5	<2	<2	M	141	<.5	E.2
AUG													
04...	<.5	.054	<.07	<.050	<.010	<.5	<.5	<2	<2	<1	140	<.5	.5
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	.038	<.07	<.050	<.010	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Caffeine-13C sur Sch 2033 & 8033, wat flt pct rcv (99584)	Camphor water, fltrd, ug/L (62070)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbazole, water, fltrd, ug/L (62071)	Chlorpyrifos oxon, water, fltrd, ug/L (61636)	Chlorpyrifos water, fltrd, ug/L (38933)	Cholesterol, water, fltrd, ug/L (62072)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Cotinine, water, fltrd, ug/L (62005)	Cyfluthrin, water, fltrd, ug/L (61585)	Cypermethrin water, fltrd, ug/L (61586)	DCPA, water fltrd 0.7u GF ug/L (82682)	DecaFbiphenl sur Sch 2033 & 8033, wat flt pct rcv (99585)
430138087514800 MIDDLE OUTSIDE HARBOR BREAKWATER LAKE SITE (LAT 43 01 38N LONG 087 51 48W)													
MAR 2004													
09...	95.5	M	<1	<.5	--	<.5	<2	--	<1.00	--	--	--	63.6
MAY													
10...	127	<.5	<.041	<.5	<.06	<.005	<2	<.006	<1.00	<.008	<.009	<.003	90.9
JUL													
26...	110	<.5	<1	<.5	--	<.5	<20	--	<1.00	--	--	--	38.8
AUG													
09...	93.2	<.5	<.041	<.5	<.06	<.005	<2	<.006	<1.00	<.008	<.009	E.002	42.2
430240087520300 NORTHERN OUTSIDE HARBOR BREAKWATER LAKE SITE (LAT 43 02 40N LONG 087 52 03W)													
MAR 2004													
09...	95.5	M	<1	<.5	--	<.5	<2	--	<1.00	--	--	--	63.6
MAY													
10...	117	<.5	<.041	<.5	<.06	<.005	<2	<.006	<1.00	<.008	<.009	<.003	83.3
JUL													
26...	113	<.5	<1	<.5	--	<.5	<20	--	<1.00	--	--	--	40.2
AUG													
09...	89.6	<.5	<.041	<.5	<.06	<.005	<2	<.006	<1.00	<.008	<.009	E.002	39.1
430134087532900 MIDDLE HARBOR MILWAUKEE OUTER HARBOR (LAT 43 01 34N LONG 087 53 29W)													
MAR 2004													
08...	87.0	M	<1	M	--	<.5	<2	--	<1.00	--	--	--	69.6
MAY													
10...	117	<.5	E.009	M	<.06	.005	<2	<.006	<1.00	<.008	<.009	<.003	91.3
JUL													
26...	106	<.5	<1	<.5	--	<.5	<20	--	<1.00	--	--	--	61.4
AUG													
05...	82.2	<.5	E.017	<.5	<.06	<.005	<2	<.006	<1.00	<.008	<.009	.005	50.7
04087070 LITTLE MENOMONEE RIVER AT MILWAUKEE, WI (LAT 43 07 25N LONG 088 02 37W)													
FEB 2004													
18...	105	M	<1	<.5	--	<.5	E1	--	E.2100	--	--	--	77.3
MAR													
05...	86.4	M	<1	E.2	--	<.5	<2	--	E.2600	--	--	--	72.7
MAY													
11...	123	E.1	E.032	E.1	<.06	<.005	<2	<.006	<1.00	<.008	<.009	<.003	81.8
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	119	M	<1	<.5	--	<.5	<2	--	<1.00	--	--	--	55.7
AUG													
04...	82.4	<.5	E.071	E.3	<.06	<.005	<2	<.006	<1.00	<.008	<.009	.004	58.9
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	<.041	--	<.06	<.005	--	<.006	--	<.008	<.009	<.003	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	DEET, water, fltrd, ug/L (62082)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon oxon, water, fltrd, ug/L (61638)	Diazinon, water, fltrd, ug/L (39572)	Diazinon-d10 surrog, Sch2003 wat flt percent recovry (99994)	Dicrotophos, water fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)	Diethoxynonylphenol, water, fltrd, ug/L (62083)	Diethoxyoctylphenol, water, fltrd ug/L (61705)	Dimethoate, water, fltrd 0.7u GF ug/L (82662)	D-Limonene, water, fltrd, ug/L (62073)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)
430138087514800 MIDDLE OUTSIDE HARBOR BREAKWATER LAKE SITE (LAT 43 01 38N LONG 087 51 48W)													
MAR 2004													
09...	M	--	--	<.5	--	--	--	<5	<1	--	<.5	--	--
MAY													
10...	<.5	<.012	<.01	<.005	96.5	<.08	<.009	<5	<1	<.006	<.5	<.03	<.004
JUL													
26...	<.5	--	--	<.5	--	--	--	<5	<1	--	<.5	--	--
AUG													
09...	<.5	<.012	<.01	<.005	79.5	<.08	<.009	<5	<1	<.006	<.5	<.0020	<.004
430240087520300 NORTHERN OUTSIDE HARBOR BREAKWATER LAKE SITE (LAT 43 02 40N LONG 087 52 03W)													
MAR 2004													
09...	M	--	--	<.5	--	--	--	<5	<1	--	<.5	--	--
MAY													
10...	<.5	<.012	<.01	<.005	59.5	--	<.009	<5	<1	<.006	<.5	<.03	<.004
JUL													
26...	M	--	--	<.5	--	--	--	<5	<1	--	<.5	--	--
AUG													
09...	<.5	<.012	<.01	<.005	79.0	<.08	<.009	<5	<1	<.006	<.5	<.0020	<.004
430134087532900 MIDDLE HARBOR MILWAUKEE OUTER HARBOR (LAT 43 01 34N LONG 087 53 29W)													
MAR 2004													
08...	E.1	--	--	<.5	--	--	--	E1	<1	--	M	--	--
MAY													
10...	E.1	<.012	<.01	.007	65.5	--	<.009	<5	<1	<.006	<.5	<.03	<.004
JUL													
26...	E.1	--	--	<.5	--	--	--	<5	<1	--	<.5	--	--
AUG													
05...	<.5	<.012	<.01	.010	107	<.08	<.009	<5	<1	<.006	<.5	<.0020	<.004
04087070 LITTLE MENOMONEE RIVER AT MILWAUKEE, WI (LAT 43 07 25N LONG 088 02 37W)													
FEB 2004													
18...	E.1	--	--	<.5	--	--	--	E3	M	--	<.5	--	--
MAR													
05...	E.1	--	--	<.5	--	--	--	M	M	--	M	--	--
MAY													
11...	E.1	<.012	<.01	.010	102	<.08	<.009	<5	<1	<.006	<.5	<.03	<.004
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	E.2	--	--	<.5	--	--	--	<5	<1	--	<.5	--	--
AUG													
04...	E.4	<.012	<.01	<.013	123	<.08	<.009	<5	<1	<.006	<.5	<.0020	<.004
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	<.012	<.01	<.005	127	<.08	<.009	--	--	<.006	--	<.0020	<.004

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Ethoxy-octyl-phenol, water, fltrd ug/L (61706)	Fenami-phos sulfone water, fltrd, ug/L (61645)	Fenami-phos sulf-oxide, water, fltrd, ug/L (61646)	Fenami-phos, water, fltrd, ug/L (61591)	Desulf-inyl-fipro-nil amide, wat flt ug/L (62169)	Fipro-nil sulfide water, fltrd, ug/L (62167)	Fipro-nil sulfone water, fltrd, ug/L (62168)	Fipro-nil, water, fltrd, ug/L (62166)	Fluor-anthene water, fltrd, ug/L (34377)	Fluor-anthene -d10, sur Sch 20/8033 wat flt pct rcv (99586)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	HHCB, water, fltrd, ug/L (62075)
430138087514800 MIDDLE OUTSIDE HARBOR BREAKWATER LAKE SITE (LAT 43 01 38N LONG 087 51 48W)													
MAR 2004													
09...	<1	--	--	--	--	--	--	--	<.5	100	--	--	<.5
MAY													
10...	<1	<.008	<.03	<.03	<.029	<.013	<.024	<.016	<.5	123	<.002	<.003	<.5
JUL													
26...	<1	--	--	--	--	--	--	--	<.5	89.6	--	--	<.5
AUG													
09...	<1	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.5	93.7	<.003	<.003	<.5
430240087520300 NORTHERN OUTSIDE HARBOR BREAKWATER LAKE SITE (LAT 43 02 40N LONG 087 52 03W)													
MAR 2004													
09...	<1	--	--	--	--	--	--	--	<.5	95.5	--	--	<.5
MAY													
10...	<1	<.008	--	<.03	<.029	<.013	<.024	<.016	<.5	112	<.002	<.003	<.5
JUL													
26...	<1	--	--	--	--	--	--	--	<.5	88.6	--	--	<.5
AUG													
09...	<1	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.5	94.9	<.003	<.003	<.5
430134087532900 MIDDLE HARBOR MILWAUKEE OUTER HARBOR (LAT 43 01 34N LONG 087 53 29W)													
MAR 2004													
08...	<1	--	--	--	--	--	--	--	M	95.7	--	--	E.1
MAY													
10...	<1	<.008	--	<.03	<.029	<.013	<.024	<.016	E.1	113	<.002	<.003	<.5
JUL													
26...	<1	--	--	--	--	--	--	--	M	160	--	--	<.5
AUG													
05...	<1	<.049	<.04	<.03	<.029	<.013	<.024	E.004	<.5	83.3	<.003	<.003	<.5
04087070 LITTLE MENOMONEE RIVER AT MILWAUKEE, WI (LAT 43 07 25N LONG 088 02 37W)													
FEB 2004													
18...	M	--	--	--	--	--	--	--	E.1	105	--	--	<.5
MAR													
05...	<1	--	--	--	--	--	--	--	E.2	105	--	--	<.5
MAY													
11...	<1	<.008	<.03	<.03	<.029	<.013	<.024	<.016	E.2	118	<.002	<.003	<.5
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<1	--	--	--	--	--	--	--	E.2	120	--	--	<.5
AUG													
04...	<1	<.049	<.04	<.03	<.029	<.013	<.024	<.016	E.2	81.4	<.003	<.003	<.5
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	<.049	<.04	<.03	<.029	<.013	<.024	<.016	--	--	<.003	<.003	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Hexazinone, water, fltrd, ug/L (04025)	Indole, water, fltrd, ug/L (62076)	Iprodione, water, fltrd, ug/L (61593)	Isoborneol, water, fltrd, ug/L (62077)	Isofenphos, water, fltrd, ug/L (61594)	Isophorone water, fltrd, ug/L (34409)	Isopropylbenzene water, fltrd, ug/L (62078)	Isoquinoline, water, fltrd, ug/L (62079)	Malaoxon, water, fltrd, ug/L (61652)	Malathion, water, fltrd, ug/L (39532)	Menthol water, fltrd, ug/L (62080)	Metalaxyl, water, fltrd, ug/L (50359)	Metalaxyl, water, fltrd, ug/L (61596)
430138087514800 MIDDLE OUTSIDE HARBOR BREAKWATER LAKE SITE (LAT 43 01 38N LONG 087 51 48W)													
MAR 2004													
09...	--	<.5	--	<.5	--	M	<.5	<.5	--	--	E.1	<.5	--
MAY													
10...	<.013	<.5	<1	<.5	<.003	<.5	<.5	<.5	<.008	<.027	<.5	<.5	<.005
JUL													
26...	--	<.5	--	<.5	--	<.5	<.5	<.5	--	--	<.5	<.5	--
AUG													
09...	<.013	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.030	<.027	<.5	<.5	<.005
430240087520300 NORTHERN OUTSIDE HARBOR BREAKWATER LAKE SITE (LAT 43 02 40N LONG 087 52 03W)													
MAR 2004													
09...	--	<.5	--	<.5	--	M	<.5	<.5	--	--	E.2	<.5	--
MAY													
10...	<.013	<.5	<1	<.5	<.003	<.5	M	<.5	<.008	<.027	<.5	<.5	<.005
JUL													
26...	--	<.5	--	<.5	--	M	<.5	<.5	--	--	<.5	<.5	--
AUG													
09...	<.013	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.030	<.027	<.5	<.5	<.005
430134087532900 MIDDLE HARBOR MILWAUKEE OUTER HARBOR (LAT 43 01 34N LONG 087 53 29W)													
MAR 2004													
08...	--	<.5	--	<.5	--	M	<.5	<.5	--	--	M	<.5	--
MAY													
10...	<.013	<.5	<1	<.5	<.003	<.5	<.5	<.5	<.008	<.027	<.5	<.5	<.005
JUL													
26...	--	<.5	--	<.5	--	M	<.5	<.5	--	--	<.5	<.5	--
AUG													
05...	<.013	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.030	<.027	<.5	<.5	<.005
04087070 LITTLE MENOMONEE RIVER AT MILWAUKEE, WI (LAT 43 07 25N LONG 088 02 37W)													
FEB 2004													
18...	--	<.5	--	M	--	M	<.5	<.5	--	--	<.5	<.5	--
MAR													
05...	--	<.5	--	<.5	--	M	<.5	<.5	--	--	M	<.5	--
MAY													
11...	<.013	<.5	<1	<.5	<.003	E.1	<.5	<.5	<.008	<.027	<.5	<.5	<.005
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	<.5	--	<.5	--	E.1	<.5	<.5	--	--	<.5	<.5	--
AUG													
04...	<.013	<.5	<.387	<.5	<.003	<.5	<.5	<.5	E.138	.332	<.5	<.5	<.005
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	<.013	--	<.387	--	<.003	--	--	--	<.030	<.027	--	--	<.005

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Methi-althion water, fltrd, ug/L (61598)	Methyl para-oxon, water, fltrd, ug/L (61664)	Methyl para-thion, water, fltrd 0.7u GF ug/L (82667)	Methyl salicy-late, water, fltrd, ug/L (62081)	Methyl-mercury water fltrd, ng/L (50285)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Myclo-butanil water, fltrd, ug/L (61599)	Naphth-alene, water, fltrd, ug/L (34443)	p-Cresol, water, fltrd, ug/L (62084)	Pendi-meth-alin, water, fltrd 0.7u GF ug/L (82683)	Penta-chloro-phenol, water, fltrd, ug/L (34459)	Phenan-threne, water, fltrd, ug/L (34462)
430138087514800 MIDDLE OUTSIDE HARBOR BREAKWATER LAKE SITE (LAT 43 01 38N LONG 087 51 48W)													
MAR 2004													
09...	--	--	--	<.5	--	M	--	--	M	M	--	<2	<.5
MAY													
10...	<.006	<.03	<.015	<.5	--	E.008	<.006	<.008	<.5	<1	<.022	<2	<.5
JUL													
26...	--	--	--	<.5	<.04	<.5	--	--	<.5	<1	--	<2	<.5
AUG													
09...	<.006	<.03	<.015	<.5	<.04	E.009	<.006	<.008	<.5	<1	<.022	<2	<.5
430240087520300 NORTHERN OUTSIDE HARBOR BREAKWATER LAKE SITE (LAT 43 02 40N LONG 087 52 03W)													
MAR 2004													
09...	--	--	--	<.5	--	M	--	--	M	M	--	<2	<.5
MAY													
10...	<.006	<.03	<.015	<.5	--	E.008	<.006	<.008	M	<1	<.022	<2	<.5
JUL													
26...	--	--	--	<.5	<.04	<.5	--	--	<.5	<1	--	<2	<.5
AUG													
09...	<.006	<.03	<.015	<.5	<.04	E.009	<.006	<.008	<.5	<1	<.022	<2	<.5
430134087532900 MIDDLE HARBOR MILWAUKEE OUTER HARBOR (LAT 43 01 34N LONG 087 53 29W)													
MAR 2004													
08...	--	--	--	<.5	--	E.1	--	--	M	M	--	<2	M
MAY													
10...	<.006	<.03	<.015	<.5	--	.020	<.006	<.008	M	<1	<.022	<2	M
JUL													
26...	--	--	--	<.5	.04	M	--	--	<.5	<1	--	<2	M
AUG													
05...	<.006	<.03	<.015	<.5	<.04	.016	<.006	<.008	<.5	<1	<.022	<2	<.5
04087070 LITTLE MENOMONEE RIVER AT MILWAUKEE, WI (LAT 43 07 25N LONG 088 02 37W)													
FEB 2004													
18...	--	--	--	<.5	--	<.5	--	--	<.5	<1	--	<2	M
MAR													
05...	--	--	--	<.5	--	<.5	--	--	E.1	M	--	M	E.3
MAY													
11...	<.006	<.03	<.015	E.1	--	.408	<.006	E.008	E.1	<1	<.022	E1	E.1
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	<.5	.06	E.1	--	--	M	<1	--	<2	E.1
AUG													
04...	<.017	<.03	<.015	<.5	.06	.017	<.006	<.008	<.5	<1	<.022	<2	E.1
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	<.006	<.03	<.015	--	--	<.013	<.006	<.008	--	--	<.022	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Phenol, water, fltrd, ug/L (34466)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Pyrene, water, fltrd, ug/L (34470)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbufos oxon sulfone water, fltrd, ug/L (61674)	Terbufos, water, fltrd 0.7u GF ug/L (82675)
430138087514800 MIDDLE OUTSIDE HARBOR BREAKWATER LAKE SITE (LAT 43 01 38N LONG 087 51 48W)													
MAR 2004													
09...	E.2	--	--	--	--	<.5	--	--	<.5	--	--	--	--
MAY													
10...	<.5	<.10	<.011	<.06	<.008	M	<.005	<.004	<.5	E.005	<.02	<.07	<.02
JUL													
26...	<.5	--	--	--	--	<.5	--	--	<.5	--	--	--	--
AUG													
09...	.5	<.10	<.011	--	--	E.01	<.005	<.004	<.5	.007	<.02	<.07	<.02
430240087520300 NORTHERN OUTSIDE HARBOR BREAKWATER LAKE SITE (LAT 43 02 40N LONG 087 52 03W)													
MAR 2004													
09...	E.2	--	--	--	--	<.5	--	--	<.5	--	--	--	--
MAY													
10...	E.3	<.10	<.011	--	<.008	<.01	<.005	<.004	<.5	.009	<.02	<.07	<.02
JUL													
26...	.6	--	--	--	--	<.5	--	--	<.5	--	--	--	--
AUG													
09...	E.2	<.10	<.011	--	--	E.01	<.005	<.004	<.5	.006	<.02	<.07	<.02
430134087532900 MIDDLE HARBOR MILWAUKEE OUTER HARBOR (LAT 43 01 34N LONG 087 53 29W)													
MAR 2004													
08...	<.5	--	--	--	--	<.5	--	--	M	--	--	--	--
MAY													
10...	E.2	<.10	<.011	--	<.008	.01	<.005	<.004	M	.013	<.02	<.07	<.02
JUL													
26...	.9	--	--	--	--	<.5	--	--	M	--	--	--	--
AUG													
05...	<.5	<.10	<.011	--	--	.03	<.005	<.004	<.5	.013	<.02	<.07	<.02
04087070 LITTLE MENOMONEE RIVER AT MILWAUKEE, WI (LAT 43 07 25N LONG 088 02 37W)													
FEB 2004													
18...	<.5	--	--	--	--	<.5	--	--	M	--	--	--	--
MAR													
05...	E.4	--	--	--	--	<.5	--	--	E.1	--	--	--	--
MAY													
11...	<.5	<.10	<.011	<.06	<.008	.01	<.005	<.004	E.1	.177	E.01	<.07	<.02
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	.8	--	--	--	--	<.5	--	--	E.1	--	--	--	--
AUG													
04...	<.5	<.10	<.011	--	--	.03	<.005	<.004	E.1	<.005	E.03	<.07	<.02
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	<.10	<.011	<.05	<.008	.02	<.005	<.004	--	<.005	<.05	<.07	<.02

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Ter-buthyl-azine, water, fltrd, ug/L (04022)	Tetra-chloro-ethene, water, fltrd, ug/L (34476)	Tri-bromo-methane water, fltrd, ug/L (34288)	Tri-butyl phos-phate, water, fltrd, ug/L (62089)	Triclo-san, water, fltrd, ug/L (62090)	Tri-ethyl citrate water, fltrd, ug/L (62091)	Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661)	Tri-phenyl phos-phate, water, fltrd, ug/L (62092)	Tris(2-butoxy-ethyl) phos-phate, wat flt ug/L (62093)	Tris(2-chloro-ethyl) phos-phate, wat flt ug/L (62087)	Tris(di chloro-i-Pr) phos-phate, wat flt ug/L (62088)	Di-chlor-vos, water fltrd, ug/L (38775)	Methyl-mercury suspnd sedimnt total, ng/L (62977)
430138087514800 MIDDLE OUTSIDE HARBOR BREAKWATER LAKE SITE (LAT 43 01 38N LONG 087 51 48W)													
MAR 2004													
09...	--	<.5	<.5	<.5	<1	<.5	--	<.5	<.5	<.5	<.5	<1.00	--
MAY													
10...	<.01	<.5	<.5	<.5	<1	<.5	<.009	<.5	E.3	<.5	<.5	<.01	--
JUL													
26...	--	<.5	<.5	<.5	<1	<.5	--	<.5	<.5	<.5	<.5	--	--
AUG													
09...	<.01	<.5	<.5	<.5	<1	<.5	<.009	<.5	<.5	<.5	<.5	<.01	--
430240087520300 NORTHERN OUTSIDE HARBOR BREAKWATER LAKE SITE (LAT 43 02 40N LONG 087 52 03W)													
MAR 2004													
09...	--	<.5	<.5	<.5	<1	<.5	--	<.5	<.5	<.5	<.5	<1.00	--
MAY													
10...	<.01	<.5	<.5	<.5	<1	<.5	<.009	<.5	<.5	<.5	<.5	<.01	--
JUL													
26...	--	<.5	<.5	<.5	<1	<.5	--	<.5	<.5	<.5	<.5	--	--
AUG													
09...	<.01	<.5	<.5	<.5	<1	<.5	<.009	<.5	<.5	<.5	<.5	<.01	--
430134087532900 MIDDLE HARBOR MILWAUKEE OUTER HARBOR (LAT 43 01 34N LONG 087 53 29W)													
MAR 2004													
08...	--	M	<.5	E.1	<1	E.1	--	E.1	E.3	E.1	E.1	<1.00	--
MAY													
10...	<.01	<.5	<.5	E.1	<1	<.5	<.009	E.1	E.3	E.1	E.1	<.01	--
JUL													
26...	--	E.1	<.5	E.1	<1	<.5	--	<.5	E2.5	M	<.5	--	--
AUG													
05...	<.01	<.5	<.5	<.5	<1	<.5	<.009	<.5	<.5	<.5	<.5	<.01	--
04087070 LITTLE MENOMONEE RIVER AT MILWAUKEE, WI (LAT 43 07 25N LONG 088 02 37W)													
FEB 2004													
18...	--	<.5	<.5	E.1	M	<.5	--	M	E.2	E.1	E.1	<1.00	--
MAR													
05...	--	M	<.5	E.1	<1	<.5	--	E.1	E.3	E.1	E.1	<1.00	--
MAY													
11...	<.01	<.5	<.5	<.5	<1	<.5	E.005	E.1	E.3	E.1	E.1	<.01	--
JUL													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	<.5	<.5	<.5	<1	<.5	--	<.5	E.3	E.1	E.1	--	--
AUG													
04...	<.01	<.5	<.5	<.5	<1	<.5	<.009	<.5	E25.0	<.5	<.5	<.01	.072
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	<.01	--	--	--	--	--	<.009	--	--	--	--	<.01	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Suspended sediment concentration mg/L (80154)
430138087514800 MIDDLE OUTSIDE HARBOR BREAKWATER LAKE SITE (LAT 43 01 38N LONG 087 51 48W)	
MAR 2004	
09...	1
MAY	
10...	1
JUL	
26...	3
AUG	
09...	1
430240087520300 NORTHERN OUTSIDE HARBOR BREAKWATER LAKE SITE (LAT 43 02 40N LONG 087 52 03W)	
MAR 2004	
09...	1
MAY	
10...	2
JUL	
26...	1
AUG	
09...	1
430134087532900 MIDDLE HARBOR MILWAUKEE OUTER HARBOR (LAT 43 01 34N LONG 087 53 29W)	
MAR 2004	
08...	13
MAY	
10...	--
JUL	
26...	7
AUG	
05...	10
04087070 LITTLE MENOMONEE RIVER AT MILWAUKEE, WI (LAT 43 07 25N LONG 088 02 37W)	
FEB 2004	
18...	7
MAR	
05...	72
MAY	
11...	60
JUL	
15...	--
26...	25
AUG	
04...	23
18...	--
23...	109

MISCELLANEOUS WATER-QUALITY DATA

MISCELLANEOUS STATION ANALYSES

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)
430327088224900 NAGAWICKA LAKE TRIB AT GARRISON CT AT DELAFIELD,WI (LAT 43 03 27N LONG 088 22 49W)					
NOV 2003					
04...	1200	--	50	.332	567
DEC					
10...	1200	--	50	.271	205
MAR 2004					
04...	0001	--	50	.266	35
04...	0002	--	50	.274	19
05...	0945	.63	70	.203	23
05...	1150	--	70	.191	19
APR					
21...	1200	--	50	1.05	2,690
MAY					
13...	0001	--	50	.489	796
13...	0905	.35	70	.101	9
24...	1201	--	50	3.51	10,900
24...	1202	--	50	.272	314
30...	1200	--	50	.230	251
JUN					
11...	1200	--	50	.372	--
11...	1300	--	50	.367	--
16...	2200	--	50	.736	543
17...	0600	--	50	.680	850
AUG					
03...	2000	--	50	1.68	279
03...	2100	--	50	.709	910
03...	2200	--	50	1.33	3,370
430328088230300 NAGAWICKA LAKE TRIB @ MILWAUKEE ST AT DELAFIELD,WI (LAT 43 03 28N LONG 088 23 03W)					
OCT 2003					
02...	1530	.35	70	.056	5
DEC					
18...	1405	.55	70	.033	99
FEB 2004					
04...	1200	.30	70	.025	36
MAR					
04...	1330	.86	70	.068	10
05...	1215	2.4	70	.092	16
MAY					
13...	1230	4.4	70	.091	20
28...	1515	2.2	70	.086	36
JUL					
08...	1440	.68	70	.084	64
AUG					
11...	1020	--	30	.175	39
SEP					
13...	1430	.43	70	.060	14

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Sampling method, code (82398)	Phosphorus, water, unfltrd mg/L (00665)	Suspended sediment concentration mg/L (80154)
430501088235400 NAGAWICKA LAKE TRIBUTARY NR NASHOTAH, WI (LAT 43 05 01N LONG 088 23 54W)				
AUG 2004				
03...	2000	50	.863	85
03...	2100	50	.716	247

MISCELLANEOUS WATER-QUALITY DATA

MISCELLANEOUS STATION ANALYSES

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)
05358177 BUTTERNUT LAKE TRIBUTARY AT CTH B NR BUTTERNUT, WI (LAT 45 59 05N LONG 090 30 55W)					
MAR 2004					
29...	1545	.06	70	--	.065
APR					
20...	1910	1.6	10	--	.031
MAY					
17...	1600	.29	10	--	.032
05358179 SCHNUR LAKE OUTLET AT LAKESIDE DR NR PARK FALLS,WI (LAT 45 58 32N LONG 090 30 43W)					
NOV 2003					
18...	0825	E.02	70	.630	.665
DEC					
19...	1045	E.03	70	.025	.069
MAR 2004					
29...	1240	4.9	10	.009	.015
APR					
20...	1510	7.9	10	.008	.020
MAY					
04...	1735	2.3	70	--	.025
17...	1850	2.5	10	.006	.017
JUN					
24...	1230	.55	10	.008	.018
JUL					
21...	1640	.24	10	--	.018
SEP					
21...	1015	.22	10	.006	.023
OCT					
26...	0750	.05	70	.011	.022
05358186 SE TRIB TO BUTTERNUT L @ LAKESIDE DR NR PARK FALLS (LAT 45 57 22N LONG 090 30 51W)					
OCT 2003					
23...	1315	E.02	70	--	.039
NOV					
18...	0845	.59	10	--	.065
DEC					
19...	1055	E.02	70	--	.102
JAN 2004					
21...	1545	E.01	70	--	.102
MAR					
29...	1205	.58	10	--	.068
APR					
20...	1545	.40	10	--	.039
MAY					
04...	1730	.06	70	--	.045
17...	1710	.16	70	--	.035
JUN					
23...	1745	.01	70	--	.052
AUG					
18...	1305	E.02	70	--	.058
SEP					
21...	1135	.03	70	--	.050
OCT					
26...	0825	.08	70	--	.040
OCT 2003					
23...	1315	E.02	70	--	.039
NOV					
18...	0845	.59	10	--	.065
DEC					
19...	1055	E.02	70	--	.102
JAN 2004					
21...	1545	E.01	70	--	.102
MAR					
29...	1205	.58	10	--	.068
APR					
20...	1545	.40	10	--	.039

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Phosphorus, water, unfltrd mg/L (00665)
05358186 SE TRIB TO BUTTERNUT L @ LAKESIDE DR NR PARK FALLS (LAT 45 57 22N LONG 090 30 51W)				
MAY 2004				
04...	1730	.06	70	.045
17...	1710	.16	70	.035
JUN				
23...	1745	.01	70	.052
AUG				
18...	1305	E.02	70	.058
SEP				
21...	1135	.03	70	.050
OCT				
26...	0825	.08	70	.040
OCT 2003				
23...	1315	E.02	70	.039
NOV				
18...	0845	.59	10	.065
DEC				
19...	1055	E.02	70	.102
JAN 2004				
21...	1545	E.01	70	.102
MAR				
29...	1205	.58	10	.068
APR				
20...	1545	.40	10	.039
MAY				
04...	1730	.06	70	.045
17...	1710	.16	70	.035
JUN				
23...	1745	.01	70	.052
AUG				
18...	1305	E.02	70	.058
SEP				
21...	1135	.03	70	.050
OCT				
26...	0825	.08	70	.040
OCT 2003				
23...	1315	E.02	70	.039
NOV				
18...	0845	.59	10	.065
DEC				
19...	1055	E.02	70	.102
JAN 2004				
21...	1545	E.01	70	.102
MAR				
29...	1205	.58	10	.068
APR				
20...	1545	.40	10	.039
MAY				
04...	1730	.06	70	.045
17...	1710	.16	70	.035
JUN				
23...	1745	.01	70	.052
AUG				
18...	1305	E.02	70	.058
SEP				
21...	1135	.03	70	.050
OCT				
26...	0825	.08	70	.040

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)
053581865 SW TRIB NO.1 TO BUTTERNUT L @ CTH B NR PARK FALLS (LAT 45 57 17N LONG 090 31 49W)					
NOV 2003					
18...	0805	E.05	70	--	.147
DEC					
19...	0830	E.01	70	--	.043
JAN 2004					
20...	1655	E.01	70	--	.129
MAR					
30...	0910	5.1	10	--	.244
APR					
20...	1835	4.7	10	--	.084
MAY					
17...	1300	.72	10	--	.063
JUN					
23...	1650	<.01	70	--	.145
SEP					
21...	1715	E.03	70	--	.363
OCT					
25...	1520	.11	70	--	.052
05358187 SW TRIB NO.2 TO BUTTERNUT L @ CTH B NR PARK FALLS (LAT 45 57 14N LONG 090 31 53W)					
NOV 2003					
18...	0755	E.22	10	--	.084
DEC					
19...	0825	E.03	70	--	.024
MAR 2004					
30...	0935	3.9	10	--	.139
APR					
20...	1805	2.5	10	--	.064
MAY					
17...	1240	.93	10	--	.078
JUN					
23...	1650	.03	70	--	.123
SEP					
21...	1705	E.02	70	--	.149
OCT					
25...	1445	.22	10	--	.091
05358188 MUD LAKE OUTLET NR BUTTERNUT LAKE NR PARK FALLS,WI (LAT 45 56 38N LONG 090 31 32W)					
NOV 2003					
18...	0730	1.3	10	.021	.038
DEC					
19...	0735	.07	70	.016	.028
JAN 2004					
20...	1615	E.02	70	.034	.230
MAR					
30...	1105	2.5	10	.037	.054
APR					
20...	1640	7.2	10	.023	.043
MAY					
04...	1825	1.9	70	--	.034
17...	1040	2.9	10	.021	.037
JUN					
24...	1535	.40	10	.043	.101
JUL					
21...	1715	.09	70	--	.072
AUG					
19...	0845	.05	70	.037	.059
SEP					
22...	1615	.06	70	.033	.048
OCT					
25...	1200	.06	70	.038	.066

MISCELLANEOUS WATER-QUALITY DATA

MISCELLANEOUS STATION ANALYSES

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Phosphorus, water, unfltrd mg/L (00665)
054279505 TRIB TO PHEASANT BRANCH TRIB AT MIDDLETON, WI (LAT 43 07 20N LONG 089 29 19W)								
NOV 2003								
04...	0930	>5.0	55	735	20	--	.022	.720
23...	0935	E5.1	70	1,020	29	--	<.019	9.97
MAY 2004								
21...	1020	E1.6	70	655	18	--	.346	4.98
21...	1830	>6.0	55	1,240	27	--	.074	9.54
30...	1240	E3.5	70	725	23	--	<.019	6.20
AUG								
03...	2330	>5.0	50	1,700	8.1	--	.301	2.50
430734089291500 TRIB TO PHEASANT BRANCH TRIB SITE2 AT MIDDLETON,WI (LAT 43 07 34N LONG 089 29 15W)								
NOV 2003								
02...	1130	E1.6	50	385	60	20.5	4.60	18.3
04...	0200	>5.0	50	500	42	--	.043	13.0
23...	0900	E5.8	70	720	28	--	<.019	12.9
MAR 2004								
26...	0100	E2.0	50	4,940	54	--	.328	2.20
MAY								
21...	0950	E4.5	70	960	52	--	2.96	13.9
21...	1730	>6.0	55	1,920	98	--	1.87	37.7
30...	1200	E2.3	70	803	45	--	<.019	14.0
AUG								
03...	2100	>5.0	55	980	78	--	<.019	15.3

MISCELLANEOUS WATER-QUALITY DATA

MISCELLANEOUS STATION ANALYSES

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Turbidity, wat unf lab, Hach 2100AN NTU (99872)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
05427900 SIXMILE CREEK NEAR WAUNAKEE, WI (LAT 43 10 29N LONG 089 25 58W)													
APR 2004													
29...	0730	10	10	3.7	744	8.0	81	8.1	690	15.0	--	--	--
JUN													
30...	1410	10	10	4.6	751	9.9	115	8.2	739	22.0	--	--	--
JUL													
29...	1100	7.3	10	2.3	748	10.9	125	8.2	754	21.0	--	--	--
AUG													
11...	1400	10	10	7.6	752	10.6	109	8.2	743	16.0	86.0	45.6	2.77
25...	0635	10	10	7.7	746	6.4	71	7.7	489	19.0	--	--	--
OCT													
14...	1110	10	10	--	748	10.7	98	8.1	766	10.5	--	--	--

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)
05427900 SIXMILE CREEK NEAR WAUNAKEE, WI (LAT 43 10 29N LONG 089 25 58W)													
APR 2004													
29...	--	289	36.8	<.2	--	28.0	--	.51	<.04	2.34	.040	.08	.10
JUN													
30...	--	298	35.9	<.2	--	20.3	--	.44	<.04	4.01	.023	.11	.14
JUL													
29...	--	280	37.9	<.2	--	21.0	--	.41	<.04	4.08	.016	.12	.14
AUG													
11...	13.1	--	36.9	<.2	17.2	20.1	385	.52	<.04	4.24	.014	.14	.15
25...	--	198	24.5	<.2	--	13.8	--	.40	E.03	2.62	.028	.07	.10
OCT													
14...	--	310	38.5	.1	--	20.2	--	.38	<.04	4.66	.013	.07	.09

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Phosphorus, water, unfltrd mg/L (00665)	COD, high level, water, unfltrd mg/L (00340)	Fecal coliform, M-FC 0.7u MF col/ 100 mL (31625)	Fecal streptococci KF MF, col/ 100 mL (31673)	Arsenic water unfltrd ug/L (01002)	Boron, water, unfltrd recoverable, ug/L (01022)	Cadmium water, unfltrd ug/L (01027)	Chromium, water, unfltrd recoverable, ug/L (01034)	Cobalt water, unfltrd recoverable, ug/L (01037)	Copper, water, unfltrd recoverable, ug/L (01042)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recoverable, ug/L (01045)	Lead, water, unfltrd recoverable, ug/L (01051)
05427900 SIXMILE CREEK NEAR WAUNAKEE, WI (LAT 43 10 29N LONG 089 25 58W)													
APR 2004													
29...	.16	20	87	--	--	--	--	--	--	--	--	--	--
JUN													
30...	.17	<10	490	--	--	--	--	--	--	--	--	--	--
JUL													
29...	.16	10	500	--	--	--	--	--	--	--	--	--	--
AUG													
11...	.19	20	460	260	E1	16	<.2	<.8	<3.4	2.6	15	210	<1.0
25...	.14	20	5,800	--	--	--	--	--	--	--	--	--	--
OCT													
14...	.11	<10	220	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recoverable, ug/L (01055)	Mercury water, unfltrd recoverable, ug/L (71900)	Nickel, water, unfltrd recoverable, ug/L (01067)	Zinc, water, unfltrd recoverable, ug/L (01092)	Suspended sediment concentration mg/L (80154)
05427900 SIXMILE CREEK NEAR WAUNAKEE, WI (LAT 43 10 29N LONG 089 25 58W)						
APR 2004						
29...	--	--	--	--	--	52
JUN						
30...	--	--	--	--	--	10
JUL						
29...	--	--	--	--	--	23
AUG						
11...	35.5	47.8	<.02	<2.0	<4	31
25...	--	--	--	--	--	14
OCT						
14...	--	--	--	--	--	8

Date	Time	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
AUG 2004					
25...	0520	6.4	7.7	456	19.0
25...	0550	6.3	7.7	439	19.0
25...	0620	6.3	7.7	462	19.0
25...	0635	6.4	7.7	489	19.0
25...	0650	6.4	7.7	503	19.0
25...	0720	6.5	7.7	538	19.0
25...	0750	6.7	7.8	568	18.5
25...	0820	6.9	7.8	598	18.5
25...	0850	7.2	7.8	625	18.5
25...	0920	7.5	7.8	649	18.5
25...	0950	7.8	7.9	669	18.5
25...	1020	8.0	7.9	683	18.5

MISCELLANEOUS WATER-QUALITY DATA

MISCELLANEOUS STATION ANALYSES

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Turbidity, wat unf lab, Hach 2100AN NTU (99872)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
05429720 YAHARA RIVER NEAR STOUGHTON, WI (LAT 42 52 52N LONG 089 12 39W)													
APR 2004													
28...	0815	318	10	3.5	748	11.4	105	8.8	550	11.0	--	--	--
JUL													
28...	1130	485	10	13	752	9.2	112	8.7	501	24.5	--	--	--
AUG													
10...	1000	389	10	22	748	8.3	99	8.8	484	23.0	34.4	32.5	2.86
24...	0820	288	10	10	750	8.1	94	8.7	479	22.0	--	--	--
SEP													
03...	0830	304	10	4.7	754	8.5	102	8.6	488	24.0	--	--	--
OCT													
14...	0755	174	10	--	749	10.1	100	8.6	524	14.0	--	--	--

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)
05429720 YAHARA RIVER NEAR STOUGHTON, WI (LAT 42 52 52N LONG 089 12 39W)													
APR 2004													
28...	--	198	47.3	<.2	--	25.1	--	.84	.18	.65	.019	<.02	E.02
JUL													
28...	--	184	44.6	<.2	--	19.1	--	.74	<.04	.16	E.004	<.02	E.02
AUG													
10...	21.2	--	44.7	<.2	6.43	19.2	275	.71	<.04	.23	.009	<.02	<.04
24...	--	169	46.0	<.2	--	18.9	--	.79	E.04	.28	.011	<.02	<.04
SEP													
03...	--	176	44.1	<.2	--	17.1	--	.84	<.04	.31	.018	<.02	E.02
OCT													
14...	--	190	46.4	.1	--	17.4	--	.79	.08	.58	.023	<.02	<.04

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Phosphorus, water, unfltrd mg/L (00665)	COD, high level, water, unfltrd mg/L (00340)	Fecal coliform, M-FC 0.7u MF col/ 100 mL (31625)	Fecal streptococci KF MF, col/ 100 mL (31673)	Arsenic water unfltrd ug/L (01002)	Boron, water, unfltrd recoverable, ug/L (01022)	Cadmium water, unfltrd ug/L (01027)	Chromium, water, unfltrd recoverable, ug/L (01034)	Cobalt water, unfltrd recoverable, ug/L (01037)	Copper, water, unfltrd recoverable, ug/L (01042)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recoverable, ug/L (01045)	Lead, water, unfltrd recoverable, ug/L (01051)
05429720 YAHARA RIVER NEAR STOUGHTON, WI (LAT 42 52 52N LONG 089 12 39W)													
APR 2004													
28...	.04	20	E63	--	--	--	--	--	--	--	--	--	--
JUL													
28...	.09	30	54	--	--	--	--	--	--	--	--	--	--
AUG													
10...	.10	40	50	55	E2	21	<.2	E.6	<3.4	1.3	14	130	E.7
24...	.12	40	42	--	--	--	--	--	--	--	--	--	--
SEP													
03...	.12	30	87	--	--	--	--	--	--	--	--	--	--
OCT													
14...	.05	20	30	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recoverable, ug/L (01055)	Mercury water, unfltrd recoverable, ug/L (71900)	Nickel, water, unfltrd recoverable, ug/L (01067)	Zinc, water, unfltrd recoverable, ug/L (01092)	Suspended sediment concentration mg/L (80154)
05429720 YAHARA RIVER NEAR STOUGHTON, WI (LAT 42 52 52N LONG 089 12 39W)						
APR 2004						
28...	--	--	--	--	--	7
JUL						
28...	--	--	--	--	--	13
AUG						
10...	3.2	31.1	<.02	<2.0	E2	16
24...	--	--	--	--	--	9
SEP						
03...	--	--	--	--	--	33
OCT						
14...	--	--	--	--	--	3

Date	Time	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
AUG 2004					
24...	0535	8.3	8.6	479	22.0
24...	0605	8.2	8.7	479	22.0
24...	0635	8.1	8.7	479	22.0
24...	0705	8.0	8.7	479	22.0
24...	0735	8.0	8.7	480	22.0
24...	0805	8.1	8.7	479	22.0
24...	0820	8.1	8.7	479	22.0
24...	0835	8.2	8.7	479	22.0
24...	0905	8.3	8.7	478	22.0
24...	0935	8.3	8.7	479	22.0
24...	1005	8.4	8.7	478	22.0
24...	1035	8.5	8.7	478	22.0

MISCELLANEOUS WATER-QUALITY DATA

MISCELLANEOUS STATION ANALYSES

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Turbidity, wat unf lab, Hach 2100AN NTU (99872)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
05429580 DOOR CREEK NEAR COTTAGE GROVE, WI (LAT 43 02 54N LONG 089 13 54W)													
APR 2004													
28...	1245	7.9	10	3.9	744	17.1	178	8.4	785	16.0	--	--	--
JUN													
30...	1200	10	10	<2.0	753	6.0	66	7.4	756	19.5	--	--	--
JUL													
29...	0745	5.7	10	<2.0	751	1.1	12	7.3	806	17.5	--	--	--
AUG													
11...	1105	9.5	10	5.0	753	2.4	25	7.4	763	16.0	85.7	44.9	1.51
23...	0840	7.0	10	<2.0	749	2.1	22	7.5	798	16.0	--	--	--
OCT													
13...	0710	5.3	10	--	751	6.2	55	7.6	823	9.5	--	--	--

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)
05429580 DOOR CREEK NEAR COTTAGE GROVE, WI (LAT 43 02 54N LONG 089 13 54W)													
APR 2004													
28...	--	316	40.6	<.2	--	49.9	--	.71	E.03	3.95	.028	E.01	<.04
JUN													
30...	--	327	38.8	<.2	--	27.3	--	.88	<.04	1.03	.055	.08	.10
JUL													
29...	--	303	45.6	<.2	--	26.1	--	.53	.05	2.81	.134	.05	.07
AUG													
11...	16.1	--	39.3	<.2	18.1	25.6	454	.90	.06	1.14	.070	.15	.18
23...	--	312	45.2	<.2	--	27.4	--	.42	<.04	3.85	.078	.03	.04
OCT													
13...	--	346	43.8	.2	--	29.3	--	.68	.11	4.95	.056	.02	E.03

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Phosphorus, water, unfltrd mg/L (00665)	COD, high level, water, unfltrd mg/L (00340)	Fecal coliform, M-FC 0.7u MF col/ 100 mL (31625)	Fecal streptococci KF MF, col/ 100 mL (31673)	Arsenic water unfltrd ug/L (01002)	Boron, water, unfltrd recoverable, ug/L (01022)	Cadmium water, unfltrd ug/L (01027)	Chromium, water, unfltrd recoverable, ug/L (01034)	Cobalt water, unfltrd recoverable, ug/L (01037)	Copper, water, unfltrd recoverable, ug/L (01042)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recoverable, ug/L (01045)	Lead, water, unfltrd recoverable, ug/L (01051)
05429580 DOOR CREEK NEAR COTTAGE GROVE, WI (LAT 43 02 54N LONG 089 13 54W)													
APR 2004													
28...	.06	20	100	--	--	--	--	--	--	--	--	--	--
JUN													
30...	.12	20	48	--	--	--	--	--	--	--	--	--	--
JUL													
29...	.08	--	110	--	--	--	--	--	--	--	--	--	--
AUG													
11...	.21	20	31	180	2	15	<.2	<.8	<3.4	E1.0	57	160	<1.0
23...	.06	20	51	--	--	--	--	--	--	--	--	--	--
OCT													
13...	.10	<10	180	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recoverable, ug/L (01055)	Mercury water, unfltrd recoverable, ug/L (71900)	Nickel, water, unfltrd recoverable, ug/L (01067)	Zinc, water, unfltrd recoverable, ug/L (01092)	Suspended sediment concentration mg/L (80154)
05429580 DOOR CREEK NEAR COTTAGE GROVE, WI (LAT 43 02 54N LONG 089 13 54W)						
APR 2004						
28...	--	--	--	--	--	68
JUN						
30...	--	--	--	--	--	4
JUL						
29...	--	--	--	--	--	14
AUG						
11...	73.4	77.9	<.02	<2.0	<4	7
23...	--	--	--	--	--	45
OCT						
13...	--	--	--	--	--	36

Date	Time	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
AUG 2004					
23...	0525	2.5	7.5	797	15.5
23...	0555	2.3	7.5	797	15.5
23...	0625	2.2	7.5	796	15.5
23...	0655	2.0	7.5	797	15.5
23...	0725	1.9	7.5	797	15.5
23...	0755	1.9	7.5	798	15.5
23...	0825	2.0	7.5	798	15.5
23...	0840	2.1	7.5	798	16.0
23...	0855	2.3	7.5	797	16.0
23...	0925	2.7	7.5	797	16.0
23...	0955	3.1	7.5	796	16.0
23...	1025	3.4	7.5	797	16.0

MISCELLANEOUS WATER-QUALITY DATA

MISCELLANEOUS STATION ANALYSES

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Turbidity, wat unf lab, Hach 2100AN NTU (99872)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
05436000 MOUNT VERNON CREEK NEAR MOUNT VERNON, WI (LAT 42 55 15N LONG 089 37 13W)													
APR 2004													
29...	1015	17	10	3.4	745	11.9	114	8.2	559	12.5	--	--	--
JUN													
30...	0925	24	10	<2.0	752	10.9	104	7.6	587	12.5	--	--	--
JUL													
28...	0840	23	10	<2.0	752	10.2	97	7.8	586	12.5	--	--	--
AUG													
11...	0800	21	10	6.0	752	9.7	91	7.9	585	12.0	67.7	38.0	1.28
26...	0845	21	10	3.3	749	9.2	89	7.8	581	13.0	--	--	--
OCT													
13...	1200	18	10	--	749	10.6	95	8.0	583	9.5	--	--	--

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)
05436000 MOUNT VERNON CREEK NEAR MOUNT VERNON, WI (LAT 42 55 15N LONG 089 37 13W)													
APR 2004													
29...	--	253	14.1	<.2	--	14.4	--	.15	<.04	4.36	.017	.02	E.02
JUN													
30...	--	220	15.4	<.2	--	14.1	--	.12	<.04	4.86	E.007	E.01	<.04
JUL													
28...	--	232	14.9	<.2	--	14.4	--	.13	<.04	4.74	E.006	E.02	E.02
AUG													
11...	6.31	--	14.4	<.2	10.6	14.7	310	.17	<.04	4.86	E.006	E.01	E.02
26...	--	252	13.4	<.2	--	14.3	--	.30	<.04	4.75	.011	<.02	E.02
OCT													
13...	--	254	13.3	.1	--	12.4	--	.15	<.04	4.89	.008	.02	E.03

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Phosphorus, water, unfltrd mg/L (00665)	COD, high level, water, unfltrd mg/L (00340)	Fecal coliform, M-FC 0.7u MF col/ 100 mL (31625)	Fecal streptococci KF MF, col/ 100 mL (31673)	Arsenic water unfltrd ug/L (01002)	Boron, water, unfltrd recoverable, ug/L (01022)	Cadmium water, unfltrd ug/L (01027)	Chromium, water, unfltrd recoverable, ug/L (01034)	Cobalt water, unfltrd recoverable, ug/L (01037)	Copper, water, unfltrd recoverable, ug/L (01042)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recoverable, ug/L (01045)	Lead, water, unfltrd recoverable, ug/L (01051)
05436000 MOUNT VERNON CREEK NEAR MOUNT VERNON, WI (LAT 42 55 15N LONG 089 37 13W)													
APR 2004													
29...	E.04	<10	110	--	--	--	--	--	--	--	--	--	--
JUN													
30...	E.03	<10	670	--	--	--	--	--	--	--	--	--	--
JUL													
28...	E.03	<10	310	--	--	--	--	--	--	--	--	--	--
AUG													
11...	.04	10	180	230	<2	8.1	<.2	<.8	<3.4	E.9	E5	190	<1.0
26...	.05	<10	280	--	--	--	--	--	--	--	--	--	--
OCT													
13...	E.03	<10	140	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recoverable, ug/L (01055)	Mercury water, unfltrd recoverable, ug/L (71900)	Nickel, water, unfltrd recoverable, ug/L (01067)	Zinc, water, unfltrd recoverable, ug/L (01092)	Suspended sediment concentration mg/L (80154)
05436000 MOUNT VERNON CREEK NEAR MOUNT VERNON, WI (LAT 42 55 15N LONG 089 37 13W)						
APR 2004						
29...	--	--	--	--	--	49
JUN						
30...	--	--	--	--	--	24
JUL						
28...	--	--	--	--	--	12
AUG						
11...	16.2	27.8	<.02	<2.0	<4	21
26...	--	--	--	--	--	24
OCT						
13...	--	--	--	--	--	9

Date	Time	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
AUG 2004					
26...	0530	9.1	7.7	582	13.5
26...	0600	9.0	7.8	582	13.0
26...	0630	9.0	7.8	582	13.0
26...	0700	9.0	7.8	581	13.0
26...	0730	9.0	7.8	581	13.0
26...	0800	9.1	7.8	581	13.0
26...	0830	9.2	7.8	581	13.0
26...	0845	9.2	7.8	581	13.0
26...	0900	9.3	7.8	581	13.0
26...	0930	9.4	7.9	581	13.0
26...	1000	9.4	7.9	581	13.0

430515089300601 STONEFIELD INFILTRATION POND AT MIDDLETON, WI

Samples with a medium code of 6 are samples taken from the water table below the Stonefield Infiltration Basin; samples collected from monitoring well ST Deep with 6-inch screen about 34 ft below ground level. Samples with a medium code of 9 are samples of ponded stormwater runoff collected from the Stonefield Infiltration Basin, a dry basin that fills with stormwater runoff during precipitation events. Samples with a medium code of F are samples taken from the vadose zone below the Stonefield Infiltration Basin; samples collected from suction lysimeter ST-19 with porous cup about 19 ft below ground level. *Outlying well.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Medium code	Tur-bidity, NTU (00076)	pH, water, unfltrd lab, std units (00403)	Specif. conduc-tance, wat unf lab, uS/cm 25 degC (90095)	Calcium water, fltrd, mg/L (00915)	Calcium water unfltrd recover-able, mg/L (00916)	Magnes-ium, water, fltrd, mg/L (00925)	Magnes-ium, water, unfltrd recover-able, mg/L (00921)	Sodium, water, fltrd, mg/L (00930)	Sodium, water, unfltrd recover-able, mg/L (00923)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (00417)	Chlor-ide, water, fltrd, mg/L (00940)
FEB													
27...	1400	6	<1.0	7.7	814	73.1	78.4	34.8	39	43.9	48	368	34.5
MAR													
12...	1530	6	<1.0	7.5	842	80.5	82.1	38.5	40	43.9	47	383	36.5
19...	1046	6	<1.0	7.6	833	78.7	80.5	37.7	39	41.1	42	378	35.5
26...	1145	6	<1.0	7.6	911	85.0	87.9	41.8	43	40.5	40	365	74.0
APR													
02...	1320	6	<1.0	8.1	1,220	114	122	54.6	57	48.0	47	348	179
09...	1245	6	<1.0	7.5	1,650	141	153	67.9	74	62.3	65	319	349
23...	1100	6	<1.0	7.6	1,650	129	144	62.8	69	88.9	90	322	351
29...	1130	6	<1.0	7.7	1,490	114	114	53.3	57	96.1	100	329	279
MAY													
*02...	1200	6	<1.0	6.7	136	11.0	11.4	3.30	3.4	6.30	6.2	21	11.0
06...	1130	6	<1.0	7.6	1,320	94.7	97.3	46.2	47	110	120	342	214
13...	1100	6	<1.0	7.5	1,220	80.0	86.9	38.3	42	107	110	336	188
21...	1240	6	<1.0	7.5	1,210	80.7	77.0	39.0	38	112	110	342	189
27...	1440	6	<1.0	7.4	1,060	71.5	74.7	32.4	34	88.9	91	304	153
JUN													
03...	1115	6	<1.0	7.5	983	60.5	64.2	28.7	31	96.2	100	312	126
MAR													
01...	1525	9	--	7.5	255	9.80	10.4	3.70	4.1	31.0	32	45	45.8
01...	1541	9	--	7.3	187	--	--	--	--	--	--	34	30.3
01...	1555	9	--	7.3	146	--	--	--	--	--	--	28	21.0
01...	1612	9	--	7.3	213	--	--	--	--	--	--	38	35.2
MAY													
08...	2300	9	1.5	7.1	183	12.8	13.0	4.10	4.3	10.9	11	49	15.1
10...	0825	9	--	7.2	167	--	--	--	--	--	--	41	13.5
10...	0837	9	--	7.5	197	--	--	--	--	--	--	53	16.1
10...	0845	9	--	7.4	183	--	--	--	--	--	--	49	14.6
10...	0855	9	1.5	7.5	189	14.1	15.1	4.80	5.2	10.4	11	55	13.9
10...	1430	9	1.5	7.2	88	6.50	7.4	1.60	2.0	5.10	5.5	28	4.4
10...	1445	9	2.8	7.3	76	5.80	6.3	1.40	1.7	4.70	5.1	23	3.7
10...	1500	9	2.4	7.2	47	3.80	4.2	.90	1.1	2.30	2.6	16	1.9
10...	1515	9	<1.0	7.3	52	4.50	5.0	1.10	1.3	2.40	2.7	19	1.7
13...	1130	9	<1.0	6.8	56	3.20	9.8	.60	3.9	1.90	2.3	16	1.8
13...	1135	9	1.3	7.1	122	11.8	13.9	2.60	3.7	6.40	6.7	44	5.0
13...	1150	9	2.0	6.9	122	8.60	10.5	2.40	3.2	6.30	6.9	37	6.9
13...	1210	9	2.2	7.1	75	5.70	6.3	1.60	2.0	6.20	6.3	24	3.2
13...	1230	9	1.5	7.2	66	4.90	5.6	1.30	1.6	4.00	4.4	23	2.6
13...	1300	9	1.8	7.2	88	7.30	8.2	2.30	2.6	5.20	5.4	33	2.7
21...	0840	9	14	6.8	86	6.50	6.8	2.10	2.2	2.70	2.5	20	9.2
23...	1810	9	7.5	7.2	100	9.40	10.2	3.80	4.1	1.80	1.9	43	2.1
30...	1120	9	<1.0	6.9	41	3.40	3.4	1.10	1.1	1.10	1.1	15	1.5
12...	1725	F	<1.0	7.7	920	55.2	--	23.1	--	93.3	--	254	132
27...	1340	F	<1.0	8.0	848	47.8	47.7	19.2	20	100	100	317	76.0
30...	1430	F	<1.0	7.9	698	36.7	43.4	14.8	18	71.4	86	285	50.4
JUN													
03...	1040	F	<1.0	8.0	712	40.1	47.2	16.2	20	70.1	87	287	53.4

430515089300601 STONEFIELD INFILTRATION POND AT MIDDLETON, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Residue on evap. at 105degC wat unf mg/L (00500)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01094)
FEB				
27...	498	4	<20	<20
MAR				
12...	551	9	<20	<20
19...	516	3	<20	<20
26...	550	--	<20	<20
APR				
02...	790	3	<20	<20
09...	--	--	<20	<20
23...	--	--	<20	<20
29...	--	--	<20	<20
MAY				
02...	--	--	<20	<20
06...	--	--	<20	<20
13...	--	--	<20	<20
21...	--	--	<20	<20
27...	--	--	<20	<20
JUN				
03...	--	--	<20	<20
MAR				
01...	240	77	<20	<20
01...	170	60	--	--
01...	134	48	--	--
01...	164	29	--	--
MAY				
08...	178	78	<20	20
10...	156	36	--	--
10...	152	15	--	--
10...	140	11	--	--
10...	156	16	<20	20
10...	100	34	<20	<20
10...	74	12	<20	<20
10...	<50	11	<20	<20
10...	<50	7	<20	<20
13...	240	128	<20	140
13...	156	52	<20	30
13...	148	45	<20	20
13...	76	15	<20	20
13...	66	10	<20	<20
13...	110	15	<20	20
21...	68	15	<20	<20
23...	86	11	<20	<20
30...	<50	13	<20	<20
12...	--	--	<20	--
27...	--	--	<20	<20
30...	--	--	<20	<20
JUN				
03...	--	--	<20	<20

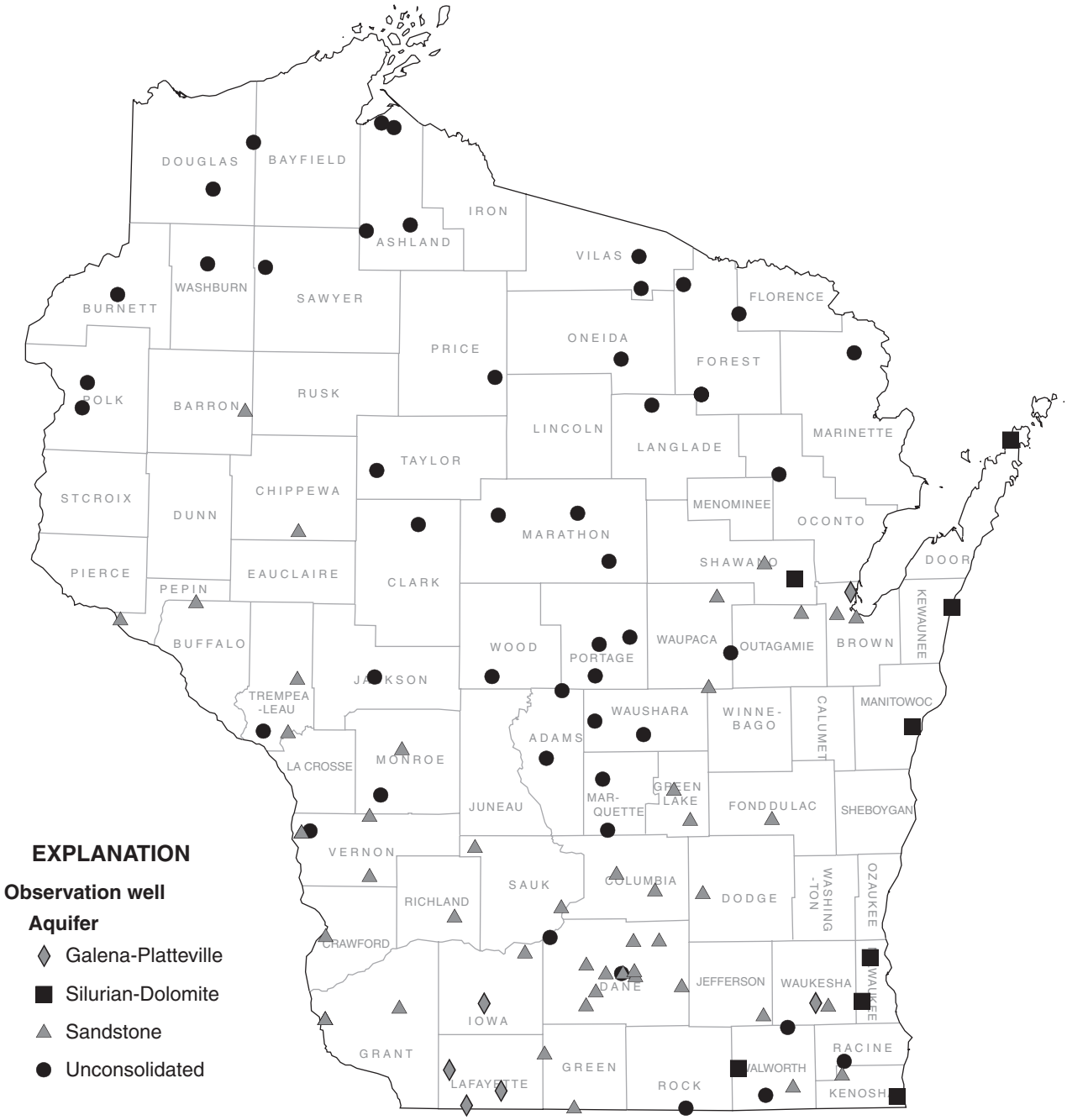


Figure 5. Location of observation wells in Wisconsin.

GROUND-WATER RECORDS

ADAMS COUNTY

435759089490001. Local number, AD-17/06E/08-0076.

LOCATION.--Lat 43°57'59"N, long 89°48'60"W, Hydrologic Unit 07070003. Owner: Dept. of Natural Resources.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 1.25 in., depth 21 ft, well point 19-21 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of the land-surface datum is 994.94 ft above sea level. Measuring point: top of casing, 1.50 ft above land-surface datum.

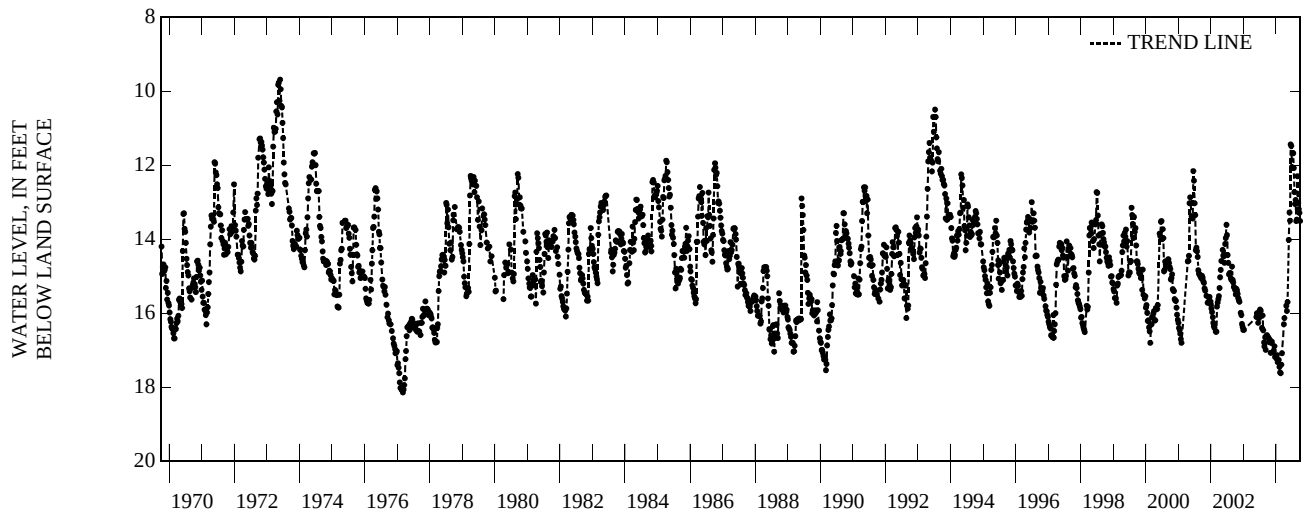
PERIOD OF RECORD.--September 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 9.69 ft below land-surface datum on May 29, 1973. Lowest recorded water level is 18.14 ft below land-surface datum on Mar. 7, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07	16.65	DEC 08	17.01	FEB 10	17.45	MAY 03	15.94	JUL 07	11.67	AUG 30	12.30
15	16.78	15	16.89	17	17.60	10	15.70	13	11.68	SEP 07	13.02
20	16.70	22	17.18	23	17.62	24	14.02	19	12.08	13	13.19
27	16.78	29	17.16	MAR 01	17.39	JUN 01	13.28	26	12.73	20	13.29
NOV 03	17.07	JAN 08	17.23	09	17.08	07	13.50	AUG 02	13.05	27	13.51
10	16.80	12	17.13	30	16.30	14	11.44	09	12.94		
17	16.77	20	17.32	APR 05	16.13	21	11.48	16	13.51		
DEC 01	17.05	FEB 02	17.26	26	15.80	28	12.05	23	13.47		

WATER YEAR 2004 HIGHEST 11.44 JUN 14, 2004 LOWEST 17.62 FEB 23, 2004



ASHLAND COUNTY

461109090373001. Local number, AS-43/02W/21-0054.

LOCATION.--Lat 46°11'09" long 90°37'31"W, Hydrologic Unit 07050001. Owner: WI Dept. of Transportation.

AQUIFER.--Sand and gravel.

WELL CHARACTERISTICS.--Drilled well, diameter 6.0 in.,depth 72 ft, open end.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of the land-surface datum is 1523.05 ft above sea level. Measuring point: hole in pump base, 2.00 ft above land-surface datum.

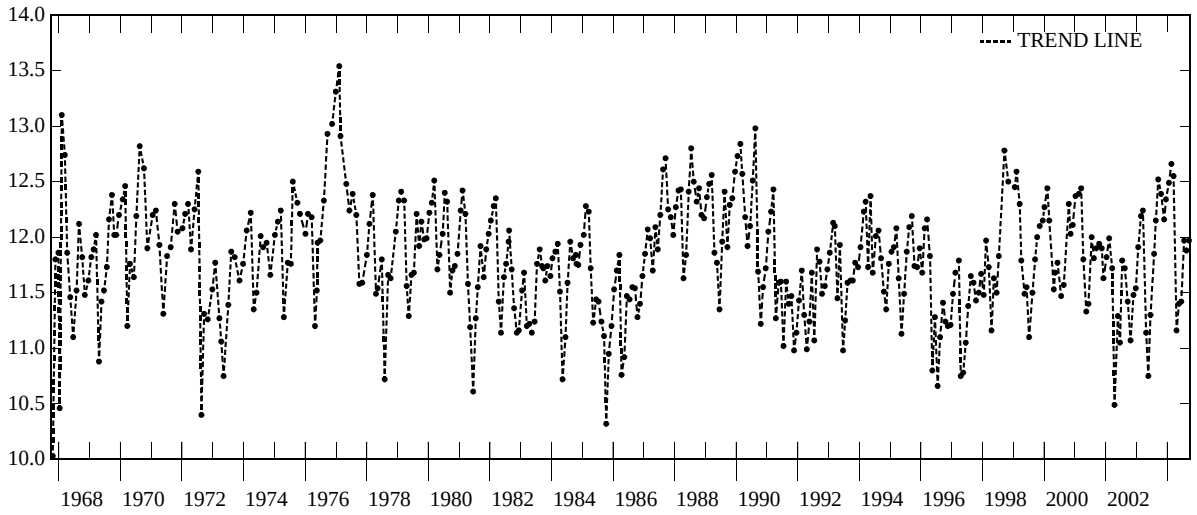
PERIOD OF RECORD.--September 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 9.48 ft below land-surface datum on Sept 29, 1967. Lowest recorded water level is 14.00 ft below land-surface datum on Sept 17, 1963.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20	12.39	DEC 17	12.34	FEB 19	12.66	APR 20	11.16	JUN 15	11.42	AUG 16	11.88
NOV 25	12.16	JAN 21	12.49	MAR 16	12.55	MAY 19	11.40	JUL 19	11.97	SEP 15	11.97

WATER YEAR 2004 HIGHEST 11.16 APR 20, 2004 LOWEST 12.66 FEB 19, 2004



463527090434201. Local number, AS-48/03W/34-0349.

LOCATION.--Lat 46°35'27", long 90°43'43", Hydrologic Unit 04010302. Owner: Bad River Indian Reservation.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 304.8 ft, open end.

INSTRUMENTATION.--Continuous water-level recorder.

DATUM.--The elevation of the land-surface datum is 655.00 ft above sea level. Measuring point: top of casing, 3.00 ft above land-surface datum.

PERIOD OF RECORD.--March 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 40.81 ft below land-surface datum on May 14, 2003. Lowest recorded water level is 43.59 ft below land-surface datum on Dec. 6, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	41.73	---	---	---	---	---	---	---	---	---	---	---
10	41.62	---	---	---	---	---	---	---	---	---	---	---
15	41.71	---	---	---	---	---	---	---	---	---	---	---
20	41.63	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
EOM	---	---	---	---	---	---	---	---	---	---	---	---

WATER YEAR 2004 HIGHEST 41.45 OCT 22, 2003 LOWEST 41.89 OCT 01, 2003 OCT 02, 2003

BARRON COUNTY

452430091353201. Local number, BR-34/10W/22-0153.

LOCATION.--Lat 45°24'30", long 91°35'33", Hydrologic Unit 07050007. Owner: WI Department of Transportation.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 92 ft, open end 40-92 ft.

INSTRUMENTATION.--Water level measured by USGS personnel.

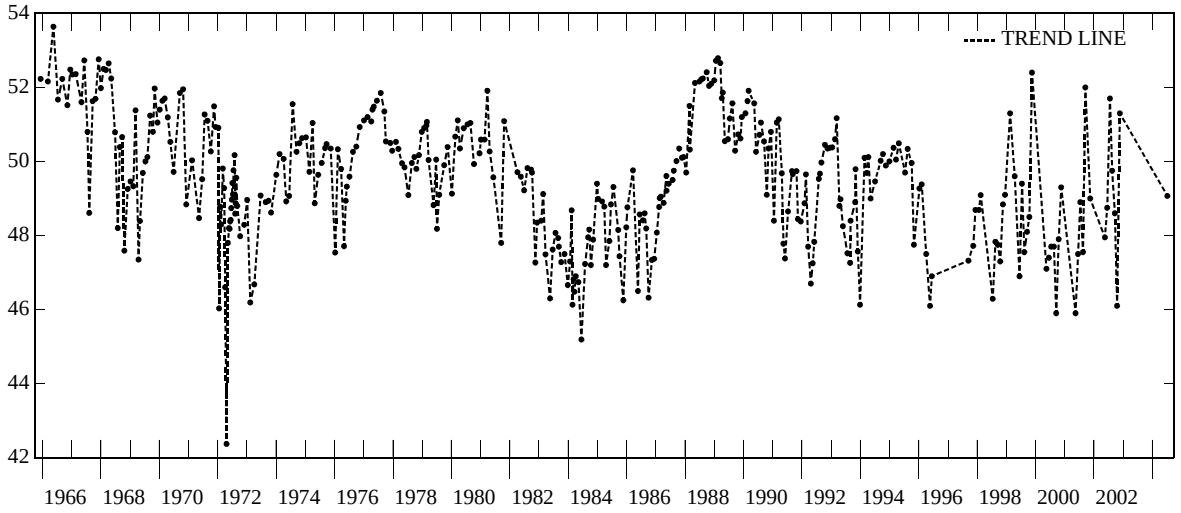
DATUM.--The elevation of the land-surface datum is 1265.06 ft above sea level. Measuring point: hole in pump base, 2.50 ft above land-surface datum.

PERIOD OF RECORD.--March 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 42.37 ft below land-surface datum on Apr. 21, 1972. Lowest recorded water level is 53.64 ft below land-surface datum on May 18, 1966.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL
JUL 05	49.07



BROWN COUNTY

443325088071301. Local number, BN-24/20E/18-0013.

LOCATION.--Lat 44°33'25", long 88°07'17", Hydrologic Unit 04030103. Owner: Wis. Dept. of Transportation.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in.,depth 250 ft, casing depth 90 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of the land-surface datum is 689.89 ft above sea level. Measuring point: top of hole in pump base, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--September 1947 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 9.00 ft below land-surface datum on June 21, 2004. Lowest recorded water level is 41.44 ft below land-surface datum on July 18, 1995.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 17	34.65	DEC 09	27.30	FEB 17	30.40	APR 16	19.20	JUN 21	9.00	AUG 12	24.20
NOV 17	33.70	JAN 21	30.00	MAR 26	20.80	MAY 26	16.30	JUL 14	20.60	SEP 14	32.80

WATER YEAR 2004 HIGHEST 9.00 JUN 21, 2004 LOWEST 34.65 OCT 17, 2003

BROWN COUNTY—Continued

443228088003101. Local number, BN-24/20E/24-0076.

LOCATION.--Lat 44°32'28", long 88°00'31", Hydrologic Unit 04030103. Owner: Wis. Public Service Corp.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 5 in., depth 500 ft, casing depth 150 ft, open hole 150-500 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of the land-surface datum is 589.87 ft above sea level. Measuring point: top of 3-in. pipe, 4.00 ft above land-surface datum.

PERIOD OF RECORD.--September 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 41.24 ft below land-surface datum on May 3, 1961. Lowest recorded water level is 248.97 ft below land-surface datum on Aug. 16, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	155.10	DEC 26	155.00	FEB 27	146.40	APR 30	142.10	JUN 30	144.30	AUG 31	153.55
NOV 20	154.80	JAN 27	149.50	MAR 31	143.45	MAY 27	141.10	JUL 26	145.40	SEP 30	157.22

WATER YEAR 2004 HIGHEST 141.10 MAY 27, 2004 LOWEST 157.22 SEP 30, 2004

443833088021801. Local number, BN-25/20E/14-0890.

LOCATION.--Lat 44°38'33", long 88°02'18", Hydrologic Unit 04030103. Owner: Randy Peters.

AQUIFER--Dolomite.

WELL CHARACTERISTICS.--Drilled well, diameter 6.0 in., depth 56 ft, open hole.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of the land-surface datum is 604.90 ft above sea level. Measuring point: top of casing, 0.90 ft above land-surface datum.

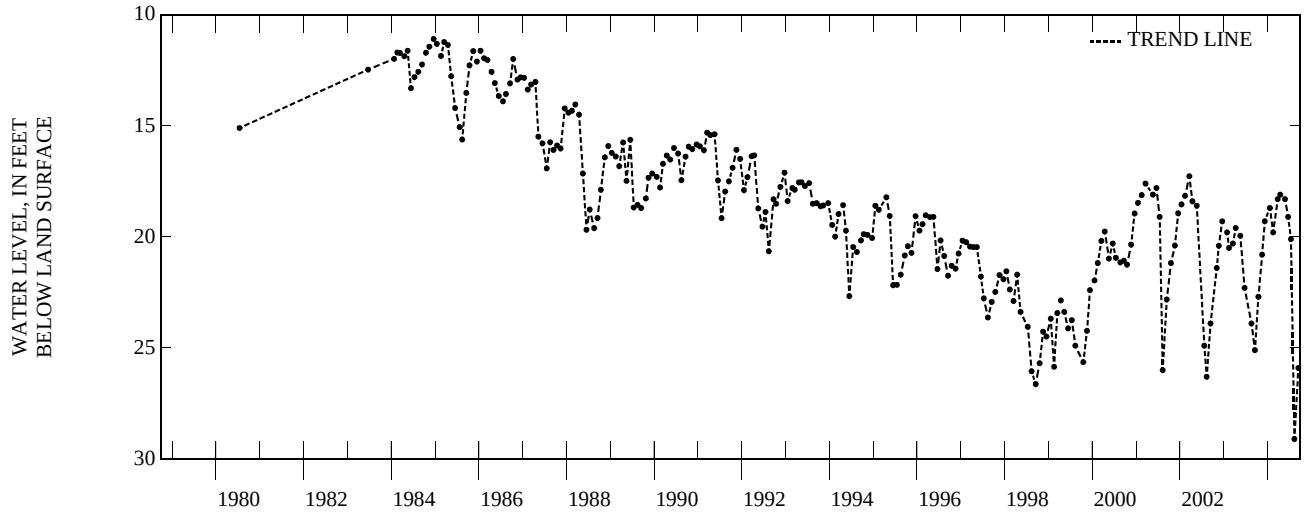
PERIOD OF RECORD.--September 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 11.09 ft below land-surface datum on Dec. 20, 1984. Lowest recorded water level is 29.10 ft below land-surface datum on Aug. 12, 2004.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 17	22.70	DEC 09	19.30	FEB 17	19.80	APR 16	18.10	JUN 21	19.10	AUG 12	29.10
NOV 17	20.80	JAN 21	18.70	MAR 26	18.30	MAY 26	18.30	JUL 14	20.10	SEP 14	25.90

WATER YEAR 2004 HIGHEST 18.10 APR 16, 2004 LOWEST 29.10 AUG 12, 2004



BURNETT COUNTY

455224092215601. Local number, BT-39/16W/17-0002.

LOCATION.--Lat 45°52'24", long 92°21'57", Hydrologic Unit 07030001. Owner: Dept. of Natural Resources.

AQUIFER--Sand and Gravel.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8.0 in., depth 46, cased to 44.5 ft, perforated 44.5-46 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of the land-surface datum is 981.08 ft above sea level. Measuring point: top of casing, 0.00 ft above land-surface datum.

PERIOD OF RECORD.--May 1937 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 30.60 ft below land-surface datum on Apr. 30, 1954. Lowest recorded water level is 37.32 ft below land-surface datum on Mar. 3, 1938.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03	31.34	NOV 28	31.76	JAN 23	31.84	MAR 19	32.00	MAY 14	32.09	AUG 13	31.70
10	31.47	DEC 05	31.58	30	31.88	26	32.09	21	32.06	20	31.71
17	31.55	12	31.68	FEB 06	31.92	APR 02	32.09	28	32.05	27	31.68
24	31.54	19	31.78	13	31.81	09	32.22	JUN 04	32.03		
31	31.63	26	31.75	20	31.87	16	32.16	11	31.97		
NOV 07	31.58	JAN 02	31.79	27	31.95	23	32.17	18	31.85		
14	31.61	09	31.83	MAR 05	32.08	30	32.16	25	31.79		
21	31.65	16	31.81	12	32.05	MAY 07	32.12	AUG 06	31.70		

WATER YEAR 2004 HIGHEST 31.34 OCT 03, 2003 LOWEST 32.22 APR 09, 2004

CHIPPEWA COUNTY

445544091155701. Local number, CH-28/07W/17-0142.

LOCATION.--Lat 44°54'39", long 91°15'58", Hydrologic Unit 07050005. Owner: Wis. Dept. of Transportation.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 6.0 in., depth 60 ft, cased to 39 ft, open hole 39-60 ft.

INSTRUMENTATION.--Water level measured by USGS personnel.

DATUM.--The elevation of the land-surface datum is 965.01 ft above sea level. Measuring point: hole cut in casing, 0.00 ft above land-surface datum.

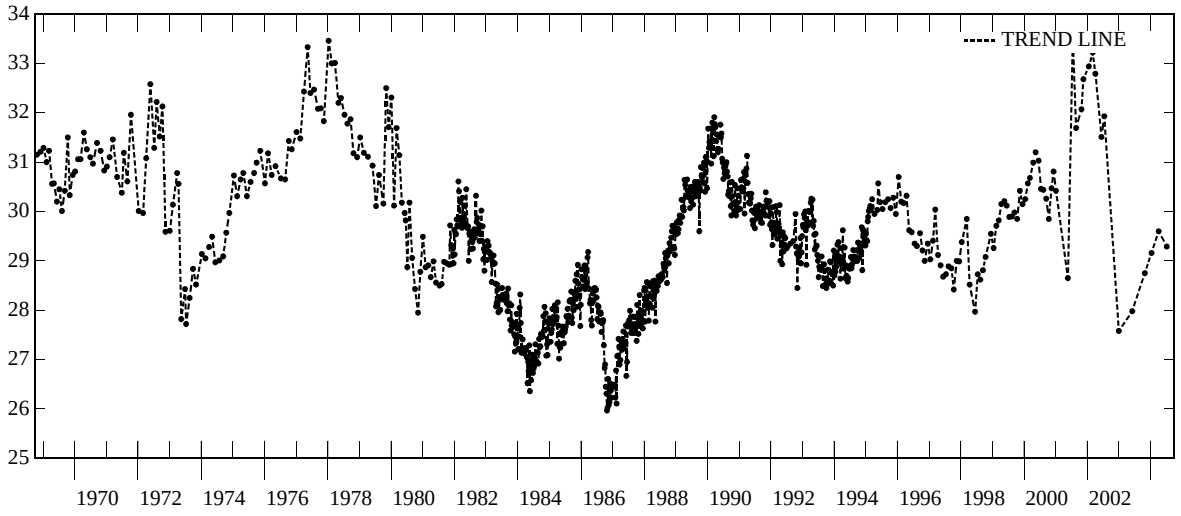
PERIOD OF RECORD.--April 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 25.97 ft below land-surface datum on Oct. 28, 1986. Lowest recorded water level is 33.52 ft below land-surface datum on July 16, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26	28.75	JAN 12	29.16	APR 03	29.60	JUL 05	29.29

WATER YEAR 2004 HIGHEST 28.75 OCT 26, 2003 LOWEST 29.60 APR 03, 2004



COLUMBIA COUNTY

432504089114801. Local number, CO-11/11E/16-0134.

LOCATION.--Lat 43°25'04", long 89°11'48", Hydrologic Unit 07090002. Owner: Wis. Dept. of Transportation.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 6.0 in., depth 71 ft, open hole 42-71 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of the land-surface datum is 989.86 ft above sea level. Measuring point: hole in pump base, 2.00 ft above land-surface datum.

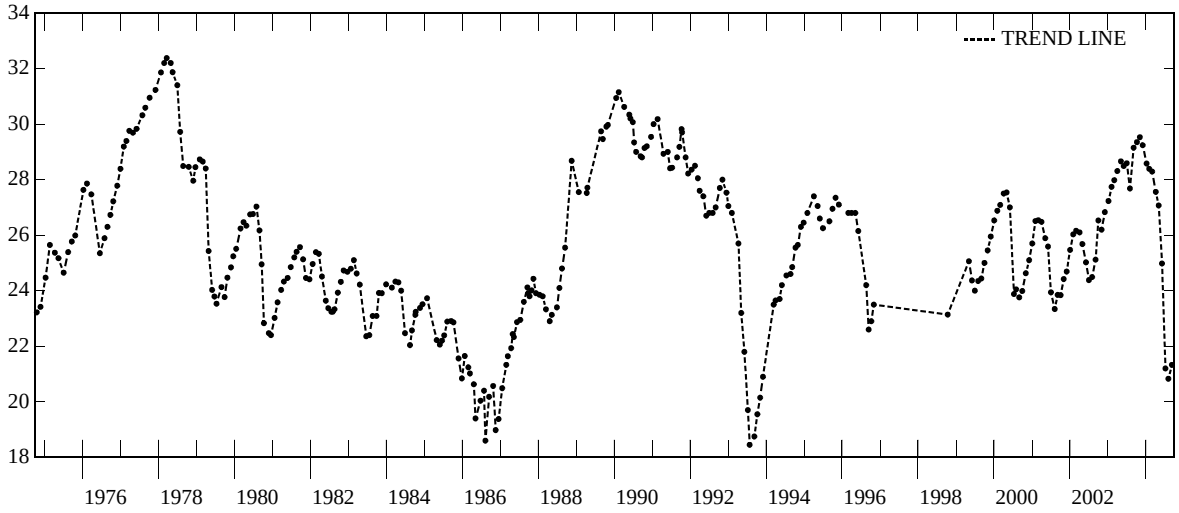
PERIOD OF RECORD.--July 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 18.45 ft below land-surface datum on July 26, 1993. Lowest recorded water level is 32.38 ft below land-surface datum on Mar. 20, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07	29.35	DEC 01	29.24	FEB 02	28.39	APR 05	27.56	JUN 04	24.98	AUG 04	20.83
NOV 04	29.53	JAN 08	28.58	MAR 01	28.29	MAY 03	27.07	JUL 07	21.20	SEP 07	21.33

WATER YEAR 2004 HIGHEST 20.83 AUG 04, 2004 LOWEST 29.53 NOV 04, 2003



COLUMBIA COUNTY—Continued

432921089245901. Local number, CO-12/09E/27-0620.

LOCATION.--Lat 43°57'59", long 89°48'60", Hydrologic Unit 07070003. Owner: Wis. Power and Light Co.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Driven observation well, diameter 1.25 in., depth 80 ft, cased to 80 ft, screen interval 78-80 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of the land-surface datum is 819.85 ft above sea level. Measuring point: top of casing, 2.00 ft above land-surface datum.

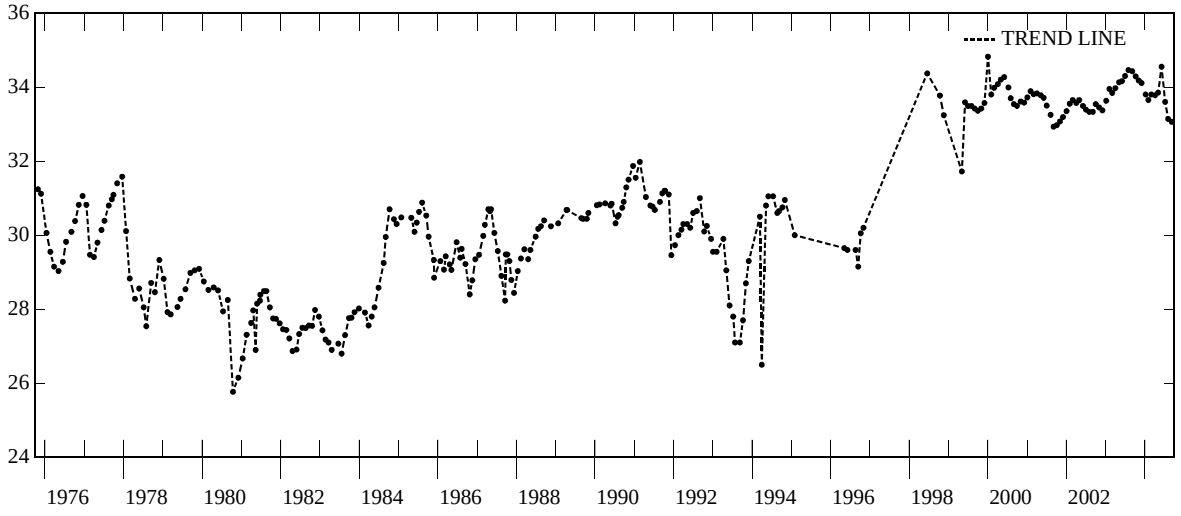
PERIOD OF RECORD.--July 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 25.77 ft below land-surface datum on Oct. 14, 1980. Lowest recorded water level is 34.82 ft below land-surface datum on Jan. 3, 2000.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07	34.29	DEC 01	34.11	FEB 02	33.65	APR 05	33.78	JUN 04	34.55	AUG 04	33.14
NOV 04	34.18	JAN 08	33.80	MAR 01	33.80	MAY 03	33.85	JUL 07	33.60	SEP 07	33.06

WATER YEAR 2004 HIGHEST 33.06 SEP 07, 2004 LOWEST 34.55 JUN 04, 2004



CRAWFORD COUNTY

431332091043401. Local number, CR-09/06W/27-0059.

LOCATION.--Lat 43°13'32", long 91°04'34", Hydrologic Unit 07060001. Owner: Wis. Dept. of Transportation.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 6.0 in., depth 113 ft, cased to 93, open hole 93-113 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of the land-surface datum is 651.83 ft above sea level. Measuring point: hole in pump base, -2.00 ft above land-surface datum.

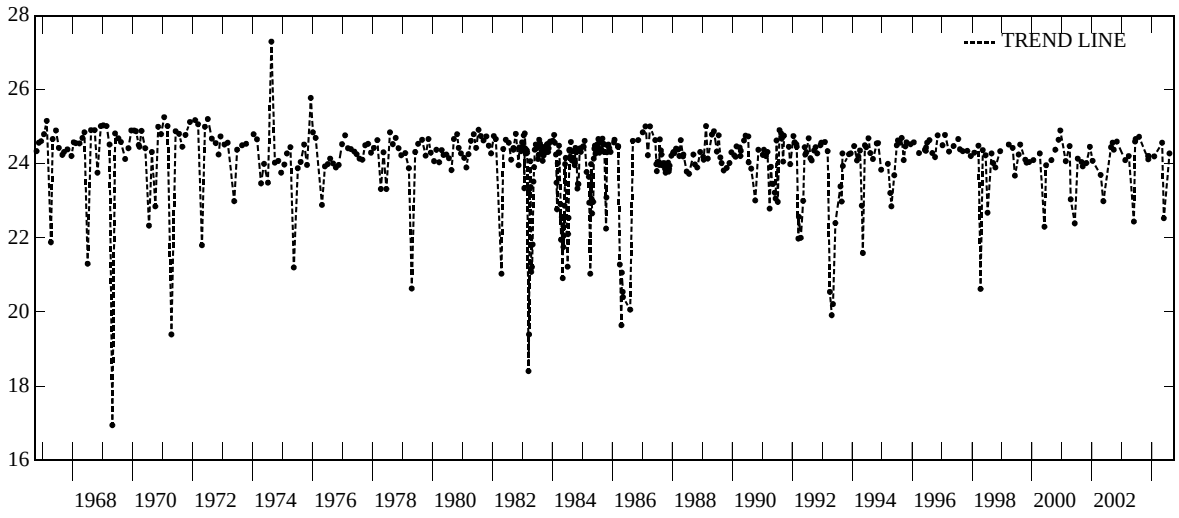
PERIOD OF RECORD.--April 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 16.94 ft below land-surface datum on Apr. 29, 1969. Lowest recorded water level is 27.30 ft below land-surface datum on Aug. 19, 1974.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 18	24.12	NOV 19	24.21	JAN 30	24.20	MAY 05	24.57	MAY 26	22.53	AUG 03	24.28

WATER YEAR 2004 HIGHEST 22.53 MAY 26, 2004 LOWEST 24.57 MAY 05, 2004



DANE COUNTY

430429089230301. Local number, DN-07/09E/23-0005.

LOCATION.--Lat 43°04'27", long 89°23'00", Hydrologic Unit 07090001. Owner: State of Wis.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 8.0 in., depth 346 ft, cased to 265 ft., open hole 265-346 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of the land-surface datum is 929.79 ft above sea level. Measuring point: hole in pump base, 3.50 ft below land-surface datum.

PERIOD OF RECORD.--July 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 82.76 ft below land-surface datum on May 28, 2003. Lowest recorded water level is 130.70 ft below land-surface datum on Aug. 10, 1998.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13	100.50	DEC 15	92.09	FEB 10	89.19	APR 05	89.05	JUN 02	91.63	AUG 09	96.65
20	94.16	22	92.05	16	90.39	12	87.14	07	92.86	16	95.47
27	94.56	29	94.54	23	91.28	19	90.28	21	84.69	23	91.96
NOV 03	98.74	JAN 05	93.49	MAR 01	91.68	26	91.74	28	91.46	30	94.88
10	97.99	12	92.65	08	91.05	MAY 03	86.04	JUL 06	95.99	SEP 13	97.22
17	91.94	20	87.71	15	90.74	10	93.57	12	95.12	20	94.74
DEC 01	88.19	26	89.70	22	88.78	17	95.35	26	93.05	27	96.02
08	87.74	FEB 03	90.59	29	91.05	24	90.86	AUG 02	91.50		

WATER YEAR 2004 HIGHEST 84.69 JUN 21, 2004 LOWEST 100.50 OCT 13, 2003

DANE COUNTY—Continued

430427089284901. Local number, DN-07/09E/19-0064.

LOCATION.--Lat 43°04'27", long 89°28'49", Hydrologic Unit 07090001. Owner: City of Madison.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 8.0 in., depth 300 ft, cased to 150 ft., open hole 150-300 ft.

INSTRUMENTATION.--Continuous water-level recorder.

DATUM.--The elevation of the land-surface datum is 920.80 ft above sea level. Measuring point: top of plastic platform -3.00 ft above land-surface datum.

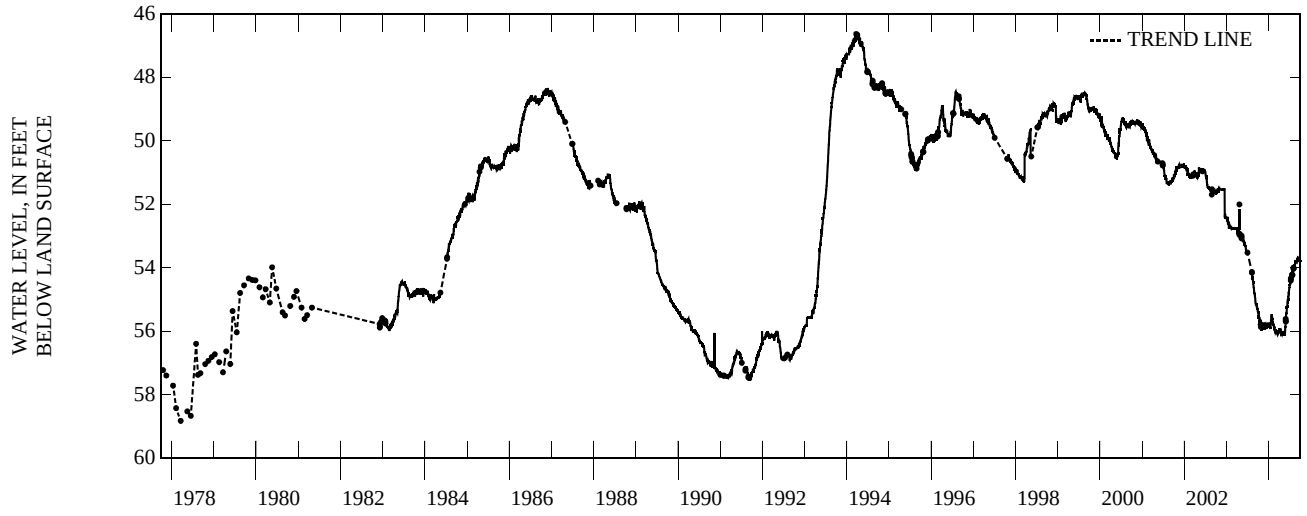
PERIOD OF RECORD.--September 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 46.63 ft below land-surface datum on Mar. 23, 1994. Lowest recorded water level is 58.82 ft below land-surface datum on Mar. 20, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	55.48	55.93	55.84	55.83	55.71	56.00	55.98	56.05	55.28	54.52	54.02	53.71
10	55.56	55.84	55.83	55.84	55.77	56.00	56.04	56.04	55.18	54.34	53.91	53.72
15	55.66	55.84	55.74	55.89	55.88	56.04	56.01	56.09	55.00	54.36	53.88	53.70
20	55.70	55.88	55.83	55.71	55.92	56.10	56.11	56.00	54.81	54.21	53.82	53.73
25	55.86	55.89	55.83	55.52	55.98	56.04	56.03	55.78	54.70	54.19	53.80	53.80
EOM	55.94	55.84	55.83	55.59	55.94	56.00	56.06	55.45	54.56	54.08	53.78	53.80

WATER YEAR 2004 HIGHEST 53.70 SEP 13, 2004 SEP 15, 2004 LOWEST 56.12 APR 19, 2004 MAY 07, 2004



DANE COUNTY—Continued

431312089475301. Local number, DN-09/06E/29-0083.

LOCATION.--Lat 43°13'12", long 89°47'53", Hydrologic Unit 07070005. Owner: Wis. Dept. of Natural Resources.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6.0 in., depth 146 ft, cased to 136 ft., screened interval 136-146 ft.

INSTRUMENTATION.--Continuous water-level recorder.

DATUM.--The elevation of the land-surface datum is 740.00 ft above sea level. Measuring point: top of casing, 0.50 ft above land-surface datum.

PERIOD OF RECORD.--April 1954 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 5.09 ft below land-surface datum on Apr. 24, 1993. Lowest recorded water level is 13.93 ft below land-surface datum on Aug. 31, 1967.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.32	11.37	10.42	10.93	11.36	11.18	9.62	9.92	7.88	8.40	9.83	10.99
10	12.35	10.80	10.49	11.01	11.38	10.52	9.59	10.02	8.02	8.56	10.06	11.13
15	12.38	10.72	10.39	11.11	11.42	10.35	9.63	9.85	8.01	8.89	10.31	11.26
20	12.40	10.78	10.60	11.19	11.45	10.27	9.59	9.63	7.95	9.10	10.52	11.38
25	12.42	10.32	10.73	11.25	11.47	10.07	9.57	7.65	7.96	9.36	10.70	11.48
EOM	12.44	10.29	10.84	11.34	11.40	9.66	9.75	7.47	8.26	9.75	10.87	11.57

WATER YEAR 2004 HIGHEST 7.47 MAY 31, 2004
LOWEST 12.44 OCT 30, 2003 OCT 31, 2003 NOV 01, 2003 NOV 02, 2003 NOV 03, 2003

DANE COUNTY—Continued

430456089190601. Local number, DN-07/10E/09-0105.

LOCATION.--Lat 43°04'56", long 89°19'06", Hydrologic Unit 07090001. Owner: City of Madison.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 10 in., depth 380 ft, cased to 85 ft, open hole 85-380 ft.

INSTRUMENTATION.--Continuous water-level recorder.

DATUM.--The elevation of the land-surface datum is 868.80 ft above sea level. Measuring point: top of casing, 1.00 ft above land-surface datum.

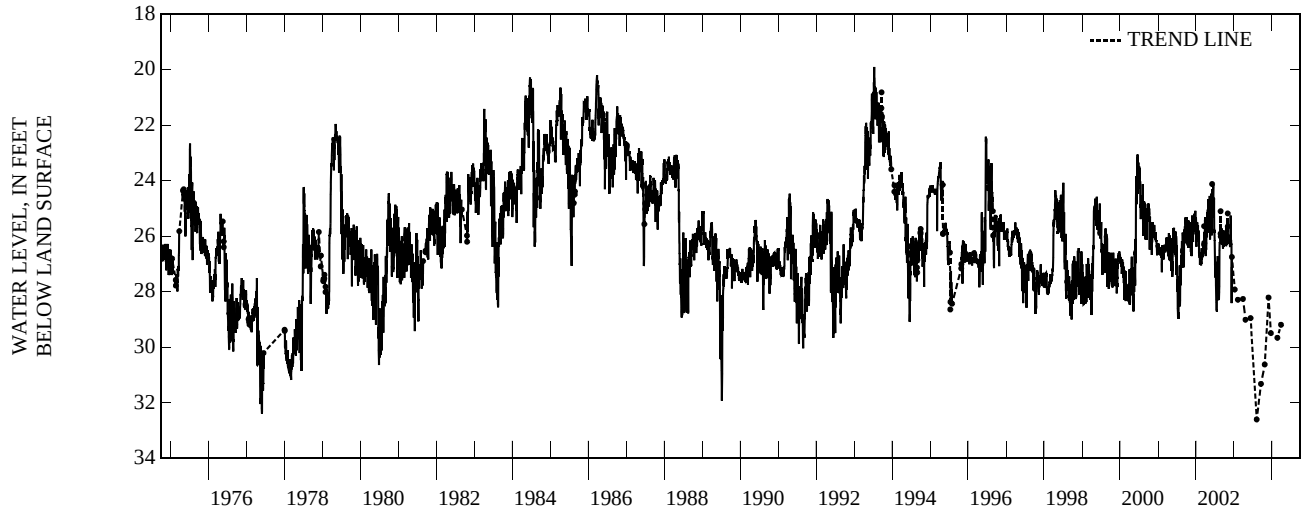
PERIOD OF RECORD.--September 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 16.00 ft below land-surface datum on May 22, 1953. Lowest recorded water level is 32.60 ft below land-surface datum on May 27, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
EOM	---	28.21	---	---	---	---	---	---	---	---	---	---

WATER YEAR 2004 HIGHEST 28.21 NOV 30, 2003 LOWEST 30.62 OCT 24, 2003



DANE COUNTY—Continued

430343089184701. Local number, DN-07/10E/21-0146.

LOCATION.--Lat 43°03'43", long 89°18'47", Hydrologic Unit 07090001. Owner: City of Madison.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 14 in., depth 457 ft, cased to 151 ft, open hole from 151-457.

INSTRUMENTATION.--Water level measured by USGS personnel.

DATUM.--The elevation of the land-surface datum is 900.00 ft above sea level. Measuring point: breather hole in pump base, 1.00 ft above land-surface datum.

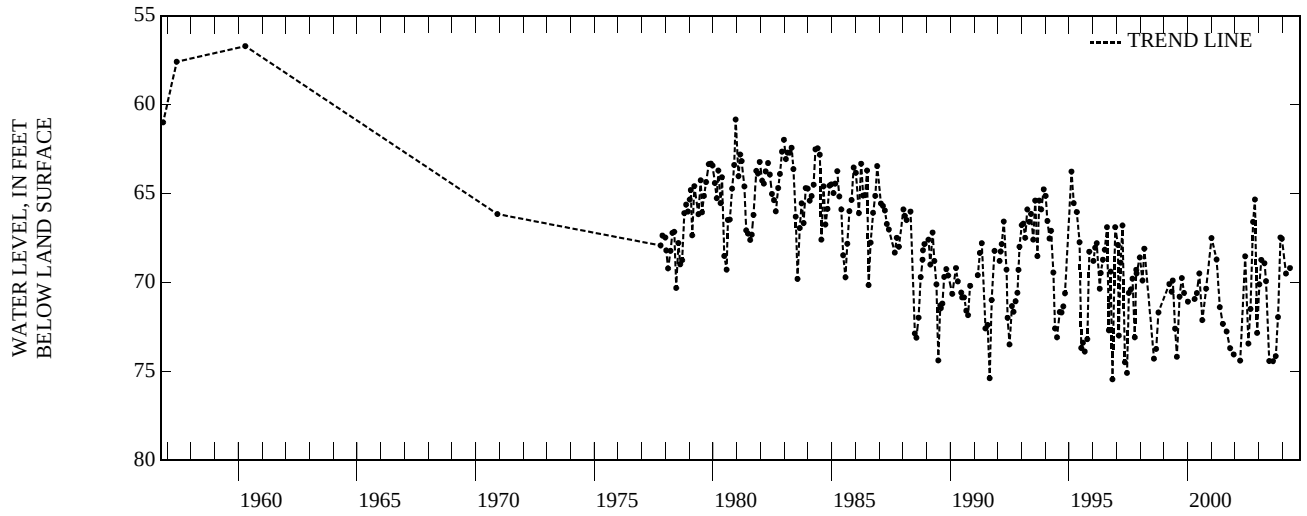
PERIOD OF RECORD.--November 1956 to current year. Measured monthly.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 56.71 ft below land-surface datum on Apr. 19, 1960. Lowest recorded water level is 75.46 ft below land-surface datum on Nov. 1, 1996.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	71.96	NOV 30	67.48	DEC 22	67.55	FEB 23	69.51	APR 26	69.20

WATER YEAR 2004 HIGHEST 67.48 NOV 30, 2003 LOWEST 71.96 OCT 24, 2003



431231089192101. Local number, DN-09/10E/33-0441.

LOCATION.--Lat 43°12'31", long 89°19'21", Hydrologic Unit 07090001. Owner: Wis. Dept. of Transportation.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 105 ft, cased to 43 ft, open hole 43-105 ft.

INSTRUMENTATION.--Water level measured by USGS personnel.

DATUM.--The elevation of the land-surface datum is 964.83 ft above sea level. Measuring point: top of casing, 1.50 ft above land-surface datum.

PERIOD OF RECORD.--July 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 65.08 ft below land-surface datum on June 4, 1986. Lowest recorded water level is 80.48 ft below land-surface datum on Feb. 28, 1967.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	74.30	JAN 21	73.46	MAR 29	73.02	MAY 27	71.83	AUG 07	70.09		
NOV 26	73.85	FEB 23	73.75	APR 26	73.08	JUL 06	70.45	SEP 06	69.95		

WATER YEAR 2004 HIGHEST 69.95 SEP 06, 2004 LOWEST 74.30 OCT 24, 2003

DANE COUNTY—Continued

435629089353901. Local number, DN-05/08E/06-0927.

LOCATION.--Lat 42°56'29", long 89°35'39", Hydrologic Unit 07090004. Owner: Madison Board of Education.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 4 in., depth 340 ft, cased to 165 ft, open hole 165-340 ft.

INSTRUMENTATION.--Water level measured by USGS personnel.

DATUM.--The elevation of the land-surface datum is 1029.78 ft above sea level. Measuring point: top of casing, 1.00 ft above land-surface datum.

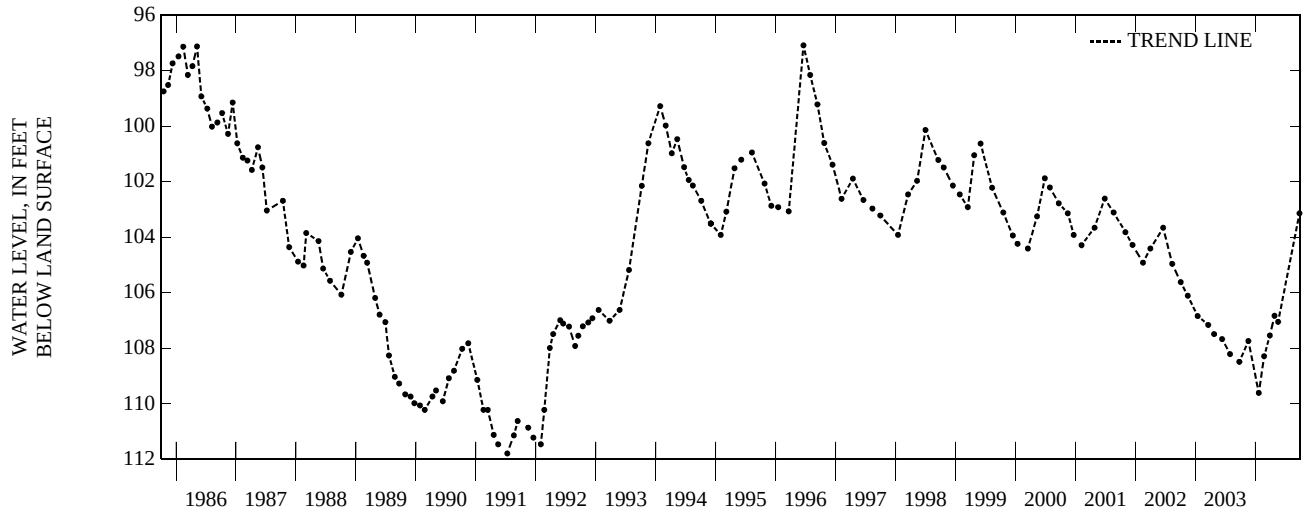
PERIOD OF RECORD.--June 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 97.09 ft below land-surface datum on June 18, 1996. Lowest recorded water level is 116.00 ft below land-surface datum in 1965.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 19	107.74	FEB 23	108.29	APR 26	106.83	SEP 25	103.14				
JAN 21	109.61	MAR 29	107.54	MAY 18	107.05						

WATER YEAR 2004 HIGHEST 103.14 SEP 25, 2004 LOWEST 109.61 JAN 21, 2004



DANE COUNTY—Continued

425958089321601. Local number, DN-06/08E/15-1289.

LOCATION.--Lat 42°59'58", long 89°32'16", Hydrologic Unit 07090004. Owner: Dane County Park Commission.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 182 ft, cased to 43 ft.

INSTRUMENTATION.--Water level measured by USGS personnel.

DATUM.--The elevation of the land-surface datum is 985.00 ft above sea level. Measuring point: top of casing, 2.00 ft above land-surface datum.

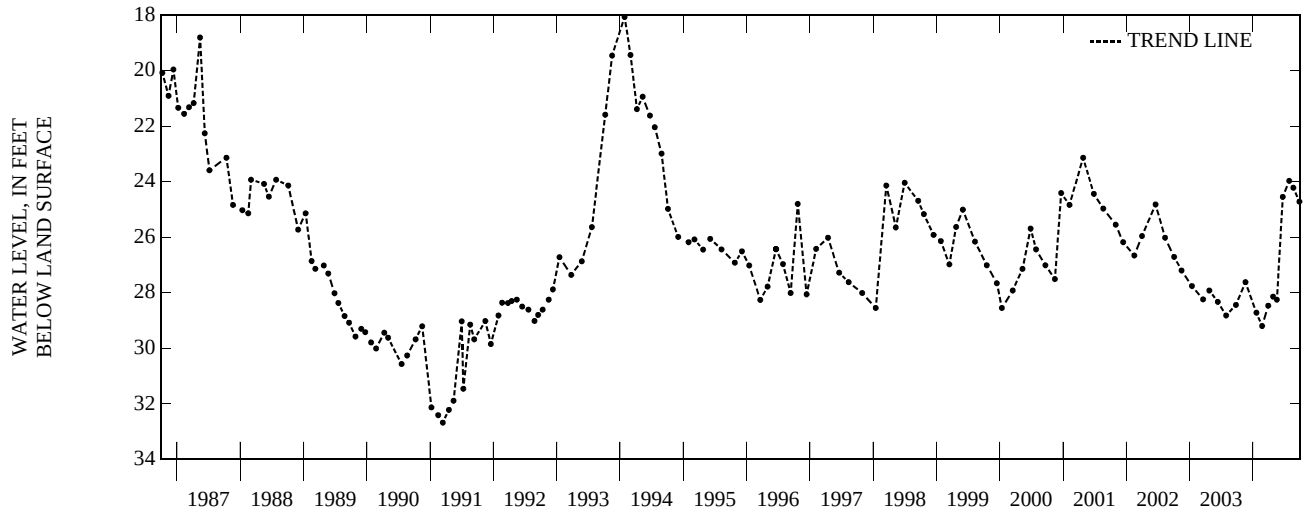
PERIOD OF RECORD.--June 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 18.07 ft below land-surface datum on Jan. 27, 1994. Lowest recorded water level is 32.68 ft below land-surface datum on Mar. 15, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 19	27.62	FEB 23	29.20	APR 26	28.14	JUN 21	24.55	AUG 21	24.22		
JAN 21	28.72	MAR 29	28.47	MAY 18	28.25	JUL 28	23.97	SEP 25	24.72		

WATER YEAR 2004 HIGHEST 23.97 JUL 28, 2004 LOWEST 29.20 FEB 23, 2004



DANE COUNTY—Continued

430406089232901. Local number, DN-07/09E/23-1297.

LOCATION.--Lat 43°04'06", long 89°23'29", Hydrologic Unit 07090001. Owner: Unkown.

AQUIFER--Unknown.

WELL CHARACTERISTICS.--Unknown.

INSTRUMENTATION.--Water level measured by USGS personnel.

DATUM.--The elevation of the land-surface datum is 864.79 ft above sea level. Measuring point: top of casing, 2.42 ft above land-surface datum.

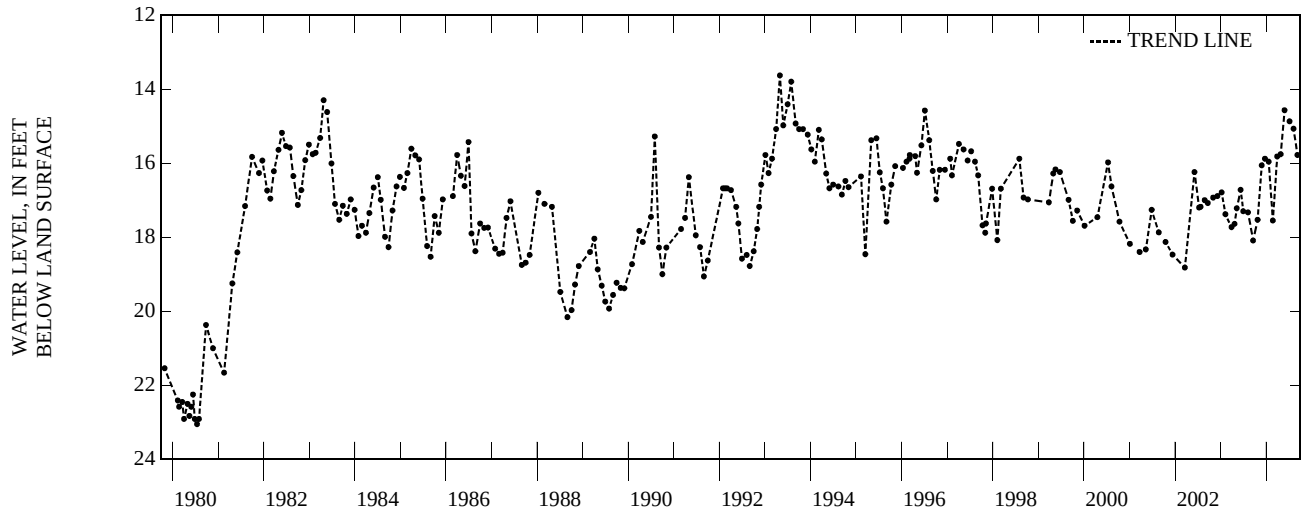
PERIOD OF RECORD.--February 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 13.63 ft below land-surface datum on Apr. 30, 1993. Lowest recorded water level is 23.05 ft below land-surface datum on July 15, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	17.53	DEC 22	15.88	FEB 23	17.55	APR 26	15.76	JUL 06	14.87	SEP 07	15.78
NOV 26	16.06	JAN 21	15.96	MAR 29	15.82	MAY 27	14.57	AUG 07	15.07		

WATER YEAR 2004 HIGHEST 14.57 MAY 27, 2004 LOWEST 17.55 FEB 23, 2004



DANE COUNTY—Continued

431233089103201. Local number, DN-09/11E/34-1355.

LOCATION.--Lat 43°12'33", long 89°10'32", Hydrologic Unit 07090002. Owner: Mashua Contractors.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 70 ft, cased to 20 ft.

INSTRUMENTATION.--Continuous water-level recorder.

DATUM.--The elevation of the land-surface datum is 950.00 ft above sea level. Measuring point: top of recorder platform, 13.34 ft below land-surface datum.

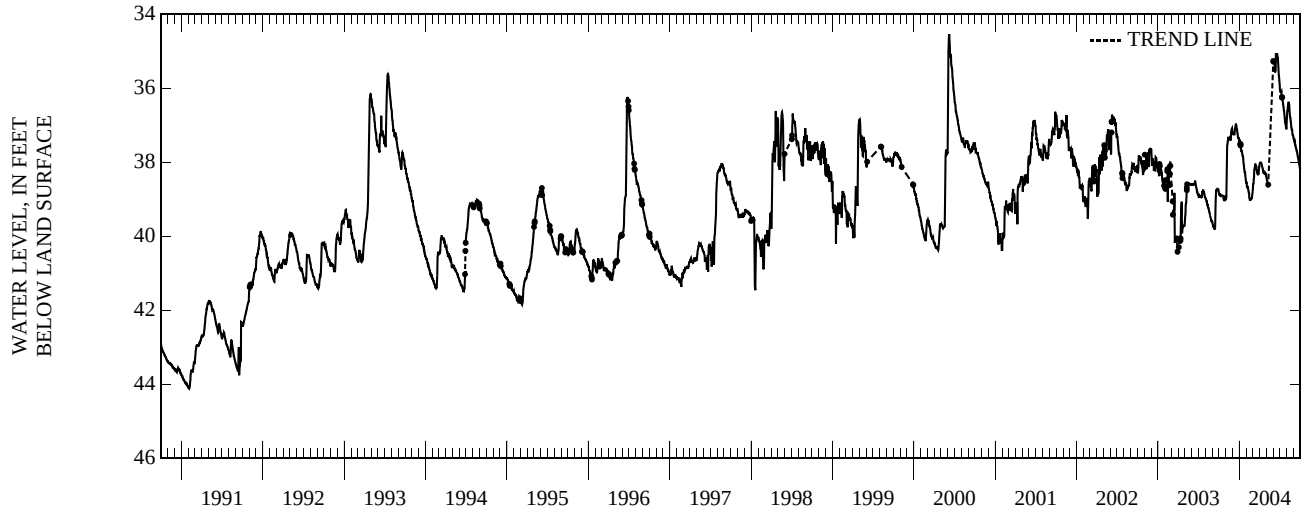
PERIOD OF RECORD.--August 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 34.55 ft below land-surface datum on June 7, 2000. Lowest recorded water level is 44.12 ft below land-surface datum on Feb. 4, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	38.89	38.08	37.23	37.51	38.68	38.48	38.01	38.52	35.22	36.13	36.51	37.43
10	38.92	37.41	37.25	37.70	38.77	38.14	38.07	---	35.56	36.25	36.40	37.61
15	38.90	37.38	37.00	37.83	38.98	38.12	38.19	---	34.92	36.44	36.77	37.71
20	38.91	37.36	37.11	38.04	39.01	38.28	38.28	---	35.14	36.68	37.02	37.87
25	39.03	37.21	37.32	38.27	38.98	38.33	38.32	---	35.59	36.94	37.17	38.05
EOM	38.99	37.13	37.47	38.54	38.80	38.07	38.38	---	35.96	36.92	37.36	38.19

WATER YEAR 2004 HIGHEST 34.85 JUN 14, 2004 LOWEST 39.03 OCT 25, 2003 OCT 26, 2003



DODGE COUNTY

432407088552701. Local number, DG-11/13E/22-0081.

LOCATION.--Lat 43°24'15", long 88°55'26"", Hydrologic Unit 07090002. Owner: Wis. Dept. of Transportation.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 6.0 in., depth 125 ft, cased to 57 ft, open hole 57-125 ft.

INSTRUMENTATION.--Water level measured by USGS personnel.

DATUM.--The elevation of the land-surface datum is 879.84 ft above sea level. Measuring point: hole in pump base, 1.30 ft above land-surface datum.

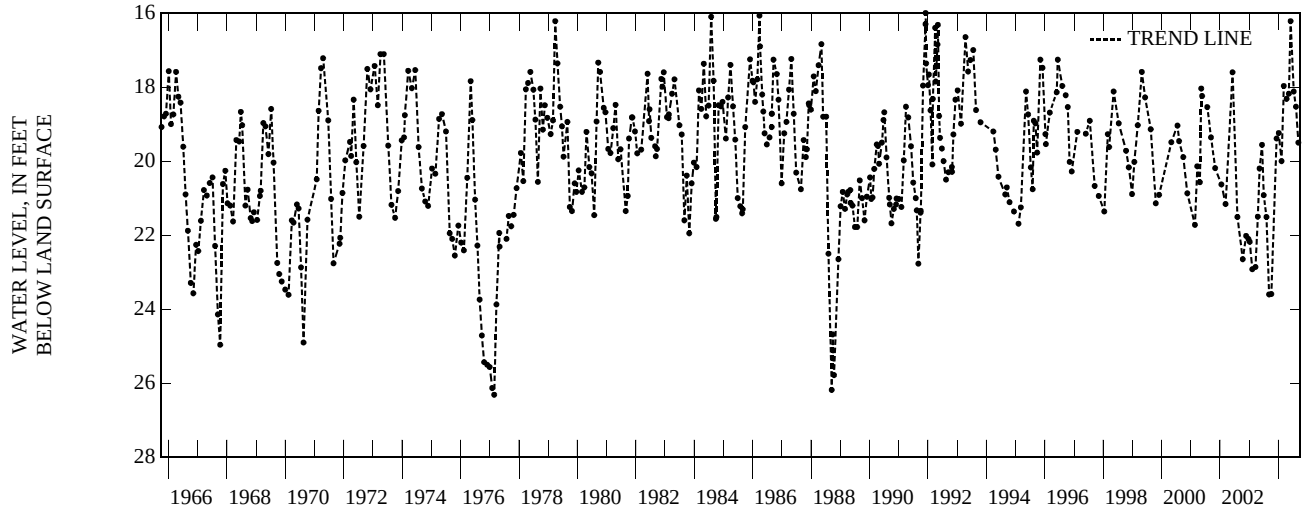
PERIOD OF RECORD.--February 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 16.00 ft below land-surface datum on Dec. 4, 1991. Lowest recorded water level is 26.67 ft below land-surface datum on Feb. 3, 1965.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	23.59	JAN 05	19.24	MAR 08	17.97	MAY 10	18.18	JUL 10	18.12	SEP 06	19.50
DEC 09	19.39	FEB 09	20.00	APR 12	18.32	JUN 01	16.22	AUG 07	18.53		

WATER YEAR 2004 HIGHEST 16.22 JUN 01, 2004 LOWEST 23.59 OCT 04, 2003



DOOR COUNTY

451518087042601. Local number, DR-32/28E/15-0317.

LOCATION.--Lat 45°15'18", long 87°04'26", Hydrologic Unit 04030102. Owner: City of Ellison Bay.

AQUIFER--Silurian dolomite.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 157 ft, cased to 117 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of the land-surface datum is 583.93 ft above sea level. Measuring point: top of casing, 1.00 ft above land-surface datum.

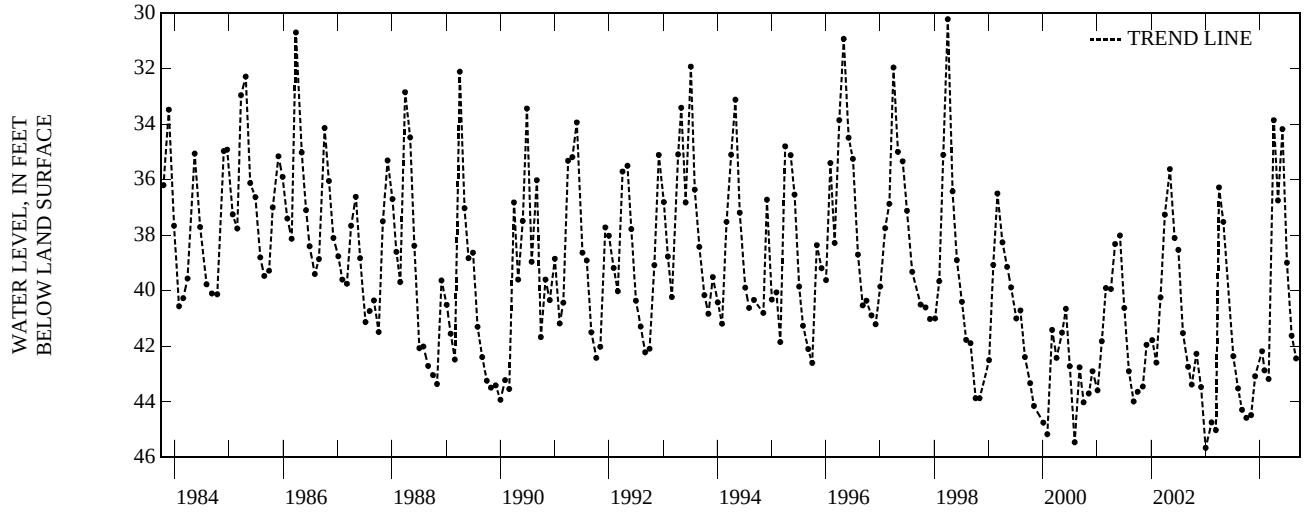
PERIOD OF RECORD.--June 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 30.22 ft below land-surface datum on Apr. 2, 1998. Lowest recorded water level is 45.66 ft below land-surface datum on Jan. 2, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03	44.58	DEC 01	43.08	FEB 02	42.87	APR 05	33.86	JUN 02	34.18	AUG 03	41.62
NOV 04	44.48	JAN 17	42.18	MAR 01	43.18	MAY 03	36.75	JUL 02	38.99	SEP 02	42.44

WATER YEAR 2004 HIGHEST 33.86 APR 05, 2004 LOWEST 44.58 OCT 03, 2003



DOUGLAS COUNTY

463217091342801. Local number, DS-47/10W/23-0001.

LOCATION.--Lat 46°31'17", long 91°34'29", Hydrologic Unit 04010301. Owner: Wis. Dept. of Natural Resources.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled well, diameter 8 in., depth 40 ft, cased to 37 ft, screened from 37-40 ft. with open end.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of the land-surface datum is 1018.99 ft above sea level. Measuring point: pointer on floatgage, 4.33 ft above land-surface datum.

PERIOD OF RECORD.--June 1937 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 1.18 ft above land-surface datum on Apr. 28, 1978. Lowest recorded water level is 29.59 ft below land-surface datum on July 29, 1939.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+"), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	9.42	APR 21	+.16	JUN 02	.09	JUL 19	6.09	AUG 23	10.42		
DEC 11	4.67	MAY 04	1.67	11	1.67	30	8.17	SEP 08	11.84		
APR 09	.17	13	.92	28	3.00	AUG 02	8.42	20	12.67		
16	.75	17	+.16	JUL 02	3.34	12	9.42				

WATER YEAR 2004 HIGHEST +.16 APR 21, 2004 MAY 17, 2004 LOWEST 12.67 SEP 20, 2004

DOUGLAS COUNTY—Continued

461921091484201. Local number, DS-44/12W/01-0327.

LOCATION.--Lat 46°19'21", long 91°48'43", Hydrologic Unit 07030001. Owner: Wis. Dept. of Transportation.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 148 ft, cased to 145, screened from 145-148 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of the land-surface datum is 1089.90 ft above sea level. Measuring point: hole in pump base, 2.00 ft above land-surface datum.

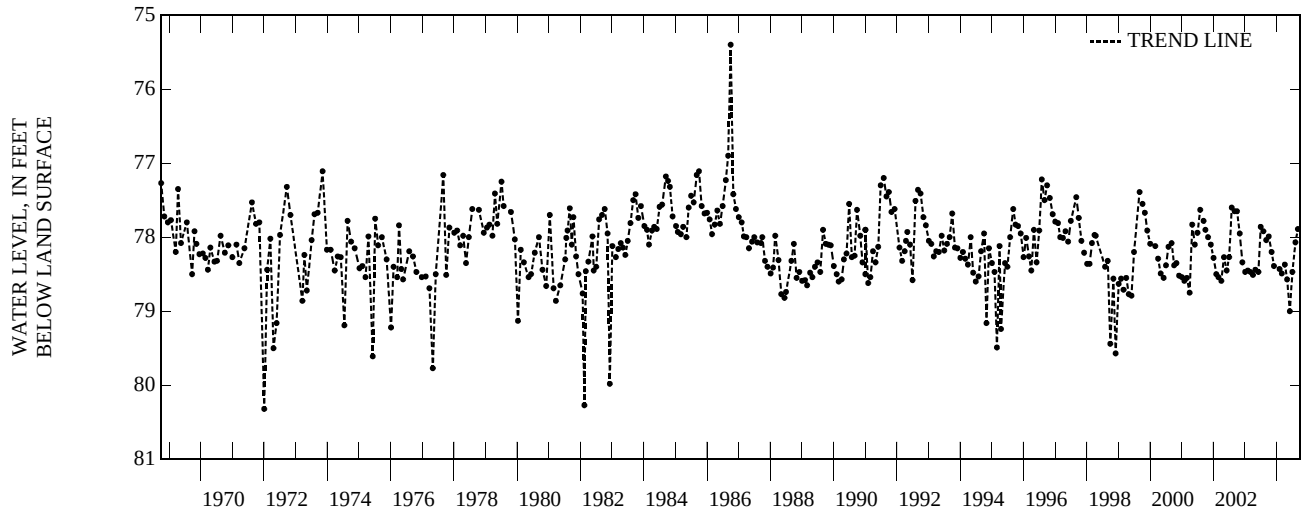
PERIOD OF RECORD.--May 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 75.40 ft below land-surface datum on Oct. 1, 1986. Lowest recorded water level is 80.32 ft below land-surface datum on Jan. 4, 1972.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02	77.99	DEC 01	78.39	MAR 01	78.49	MAY 01	78.57	JUL 01	78.47	SEP 02	77.89
NOV 04	78.20	FEB 04	78.43	APR 05	78.37	JUN 01	79.00	AUG 05	78.07		

WATER YEAR 2004 HIGHEST 77.89 SEP 02, 2004 LOWEST 79.00 JUN 01, 2004



FLORENCE COUNTY

454836088394901. Local number, FC-39/15E/31-0004.

LOCATION.--Lat 45°48'36", long 88°39'49", Hydrologic Unit 04030108. Owner: United State Forest Service.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 53 ft, cased to 43 ft, screened interval 43-53 ft.

INSTRUMENTATION.--Continuous water-level recorder.

DATUM.--The elevation of the land-surface datum is 1550.08 ft above sea level. Measuring point: top of recorder platform, 0.66 ft above land-surface datum.

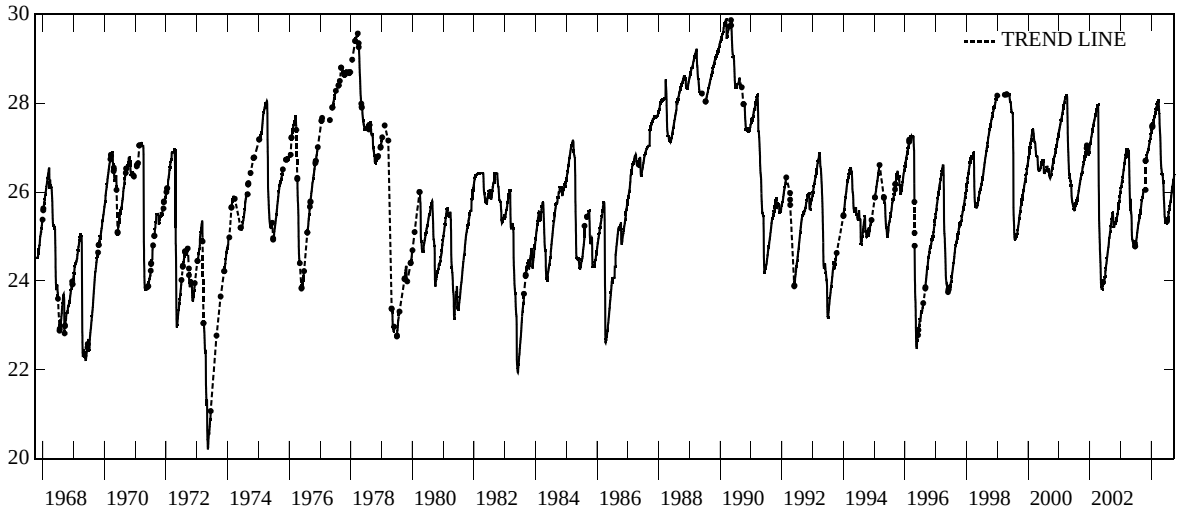
PERIOD OF RECORD.--March 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 20.21 ft below land-surface datum on May 12, 1973. Lowest recorded water level is 29.89 ft below land-surface datum on Mar. 11, 1990.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	26.04	26.77	27.04	27.39	27.68	27.90	27.78	26.43	25.56	25.37	25.66	26.08
10	26.05	26.83	27.09	27.43	27.70	27.98	27.49	26.39	25.43	25.38	25.70	26.14
15	26.05	26.88	27.15	27.51	27.76	28.01	27.31	26.38	25.38	25.38	25.79	26.21
20	26.05	26.90	27.20	27.54	27.79	28.04	27.03	26.22	25.34	25.44	25.83	26.26
25	26.70	26.94	27.28	27.58	27.86	28.06	26.68	26.12	25.30	25.53	25.91	26.32
EOM	26.73	26.98	27.34	27.63	27.88	27.92	26.53	25.80	25.31	25.60	26.02	26.39

WATER YEAR 2004 HIGHEST 25.30 JUN 22, 2004 JUN 23, 2004 JUN 24, 2004 JUN 25, 2004 JUN 26, 2004 JUN 27, 2004 JUN 28, 2,004
LOWEST 28.06 MAR 24, 2004 MAR 25, 2004 MAR 26, 2004 MAR 27, 2004 MAR 28, 2004 MAR 29, 2004



FOREST COUNTY

455620088593901. Local number, FR-40/12E/21-0087.

LOCATION.--Lat 45°56'06", long 88°59'30", Hydrologic Unit 04030108. Owner: United State Forest Service.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 102 ft.

INSTRUMENTATION.--Continuous water-level recorder.

DATUM.--The elevation of the land-surface datum is 1750.01 ft above sea level. Measuring point: top of recorder platform, 1.67 ft above land-surface datum.

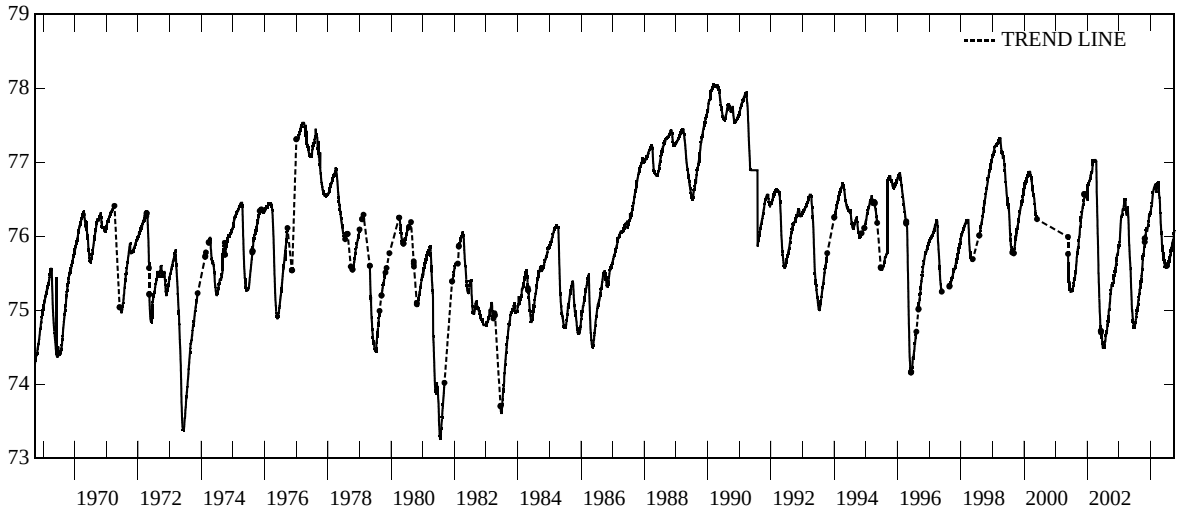
PERIOD OF RECORD.--March 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 73.25 ft below land-surface datum on July 20, 1981. Lowest recorded water level is 78.05 ft below land-surface datum on Mar. 8, 1990.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	75.73	76.02	76.19	76.35	76.63	76.62	76.61	76.03	75.69	75.60	75.68	75.90
10	75.76	76.08	76.20	76.40	76.65	76.62	76.54	75.88	75.63	75.60	75.70	75.91
15	75.79	76.08	76.30	76.43	76.66	76.69	76.52	75.87	75.58	75.61	75.74	75.93
20	75.86	76.07	76.31	76.50	76.68	76.70	76.32	75.80	75.59	75.61	75.77	75.93
25	75.97	76.10	76.34	76.55	76.70	76.73	76.20	75.76	75.58	75.63	75.81	76.04
EOM	76.00	76.13	76.30	76.61	76.70	76.65	76.12	75.69	75.60	75.66	75.86	76.08

WATER YEAR 2004 HIGHEST 75.57 JUN 14, 2004 LOWEST 76.73 MAR 25, 2004 MAR 26, 2004 MAR 27, 2004



FOREST COUNTY—Continued

452836088534001. Local number, FR-35/13E/31-0866.

LOCATION.--Lat 45°28'36", long 88°53'40", Hydrologic Unit 04030202. Owner: Wis. Dept. of Natural Resources.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 in., depth 13.5 ft, cased to 3.5 ft, screen interval 3.5-13.5 ft.

INSTRUMENTATION.--Continuous water-level recorder.

DATUM.--The elevation of the land-surface datum is 1595.00 ft above sea level. Measuring point: top of casing, 2.50 ft above land-surface datum.

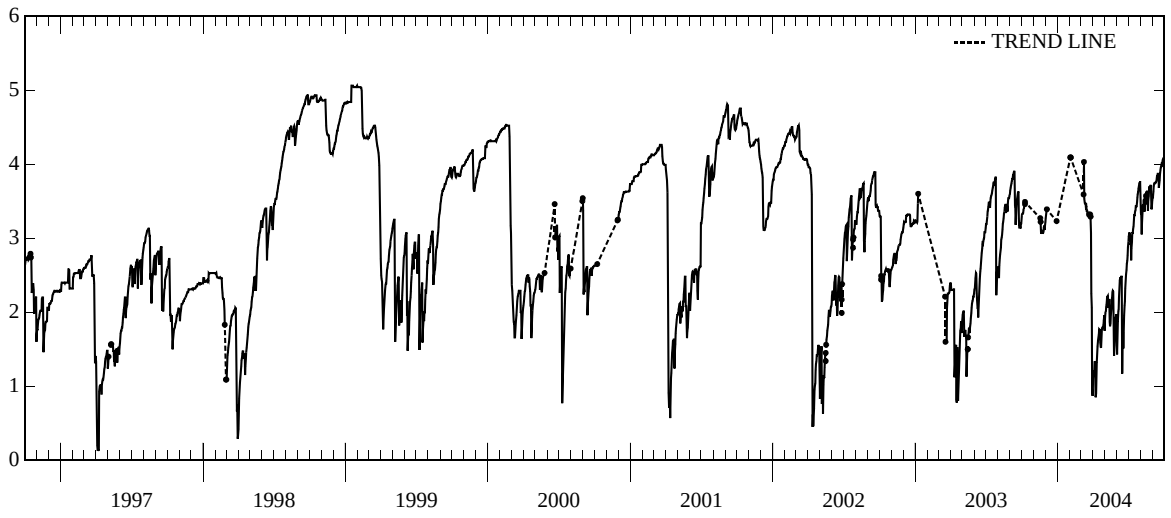
PERIOD OF RECORD.--September 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 0.13 ft below land-surface datum on Apr. 5, 1997. Lowest recorded water level is 5.06 ft below land-surface datum on Jan. 16, 1999.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	3.38	---	---	---	---	---	1.34	2.10	2.04	2.91	3.35	3.74
10	---	---	---	---	---	3.48	1.32	2.08	2.42	3.07	3.37	3.77
15	---	---	---	---	---	3.37	1.70	1.85	1.57	3.31	3.63	3.87
20	---	3.08	---	---	---	3.33	1.53	2.27	2.09	3.43	3.51	3.92
25	---	3.08	---	---	---	3.29	1.79	1.57	2.57	3.63	3.68	4.02
EOM	---	3.22	---	---	---	1.09	1.75	1.55	2.95	3.65	3.54	4.08

WATER YEAR 2004 HIGHEST .85 APR 07, 2004 LOWEST 4.09 FEB 02, 2004 FEB 03, 2004



FOREST COUNTY—Continued

452837088534001. Local number, FR-35/13E/31-0867.

LOCATION.--Lat 45°28'37", long 88°53'40", Hydrologic Unit 04030202. Owner: Wis. Dept. of Natural Resources.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 in., depth 21.5 ft, cased to 19.5 ft, screen interval 19.5- 21.5 ft.

INSTRUMENTATION.--Continuous water-level recorder.

DATUM.--The elevation of the land-surface datum is 1595.00 ft above sea level. Measuring point: top of casing, 2.50 ft above land-surface datum.

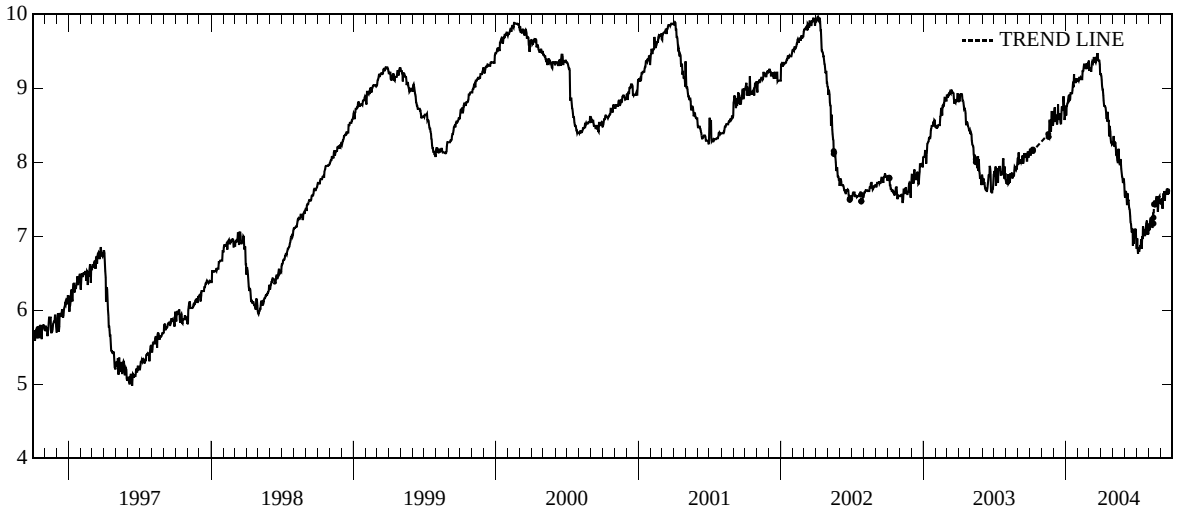
PERIOD OF RECORD.--March 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 4.98 ft below land-surface datum on July 7, 1996. Lowest recorded water level is 9.95 ft below land-surface datum on Apr. 4, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.17	---	8.55	8.79	9.14	9.27	8.98	8.28	7.51	6.84	7.24	7.37
10	---	---	8.52	8.90	9.12	9.35	8.76	8.09	7.48	6.88	7.11	7.61
15	---	---	8.58	8.93	9.24	9.38	8.60	8.18	7.19	7.00	7.48	7.56
20	---	8.56	8.51	9.04	9.27	9.39	8.57	8.03	7.10	7.05	7.51	7.64
25	---	8.61	8.75	9.13	9.27	9.37	8.32	7.80	7.10	7.17	7.41	---
EOM	---	8.54	8.75	9.10	9.37	9.19	8.24	7.55	6.85	7.04	7.46	---

WATER YEAR 2004 HIGHEST 6.76 JUL 04, 2004 LOWEST 9.57 MAR 22, 2004



FOREST COUNTY—Continued

452836088533801. Local number, FR-35/13E/31-0868.

LOCATION.--Lat 45°28'36", long 88°53'38", Hydrologic Unit 04030202. Owner: Wis. Dept. of Natural Resources.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 in., depth 30 ft, cased to 20 ft, screen interval 20-30 ft.

INSTRUMENTATION.--Continuous water-level recorder.

DATUM.--The elevation of the land-surface datum is 1595.00 ft above sea level. Measuring point: top of casing, 2.50 ft above land-surface datum.

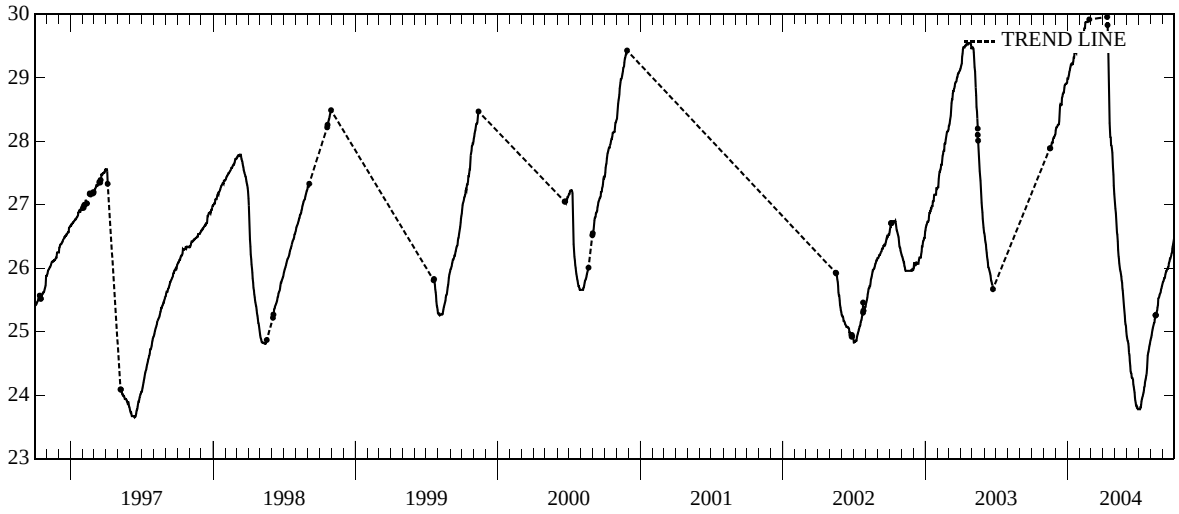
PERIOD OF RECORD.--April 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 23.27 ft below land-surface datum on July 8, 1996. Lowest recorded water level is 29.55 ft below land-surface datum on Apr. 23, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	28.23	29.09	29.67	---	---	26.68	24.76	23.81	25.03	25.84
10	---	---	28.32	29.22	29.72	---	---	26.19	24.38	23.96	25.14	25.95
15	---	---	28.58	29.26	29.87	---	28.99	25.95	24.27	24.12	25.28	26.02
20	---	27.94	28.75	29.40	29.88	---	28.06	25.68	24.04	24.31	25.52	26.15
25	---	28.05	28.89	29.49	29.92	---	27.70	25.34	23.84	24.67	25.60	26.31
EOM	---	28.11	28.99	29.63	---	---	27.11	24.93	23.78	24.86	25.76	26.46

WATER YEAR 2004 HIGHEST 23.78 JUN 29, 2004 JUN 30, 2004 JUL 01, 2004 JUL 02, 2004 JUL 03, 2004 JUL 04, 2004
LOWEST 29.96 APR 11, 2004



GRANT COUNTY

425551090391301. Local number, GR-05/02W/06-0005.

LOCATION.--Lat 42°55'51", long 90°39'13", Hydrologic Unit 07060003. Owner: R. Shadeelfond.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 5 in., depth 35 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of the land-surface datum is 979.80 ft above sea level. Measuring point: edge of pump base, 0.50 ft above land-surface datum.

PERIOD OF RECORD.--July 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 7.52 ft below land-surface datum on July 22, 1993. Lowest recorded water level is 19.03 ft below land-surface datum on Aug. 17, 1965.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	17.95	DEC 02	17.88	APR 06	15.14	JUN 08	11.93	SEP 03	12.30		
NOV 06	17.36	MAR 05	14.20	MAY 07	15.55	JUL 07	10.44				

WATER YEAR 2004 HIGHEST 10.44 JUL 07, 2004 LOWEST 17.95 OCT 09, 2003

GRANT COUNTY—Continued

425246091042101. Local number, GR-05/06W/27-0029.

LOCATION.--Lat 42°52'46", long 91°04'21", Hydrologic Unit 07060003. Owner: USGS.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 2 in., depth 37 ft, cased to 37 ft, open end.

INSTRUMENTATION.--Water level measured by USGS personnel.

DATUM.--The elevation of the land-surface datum is 634.85 ft above sea level. Measuring point: top of coupling, 2.90 ft above land-surface datum.

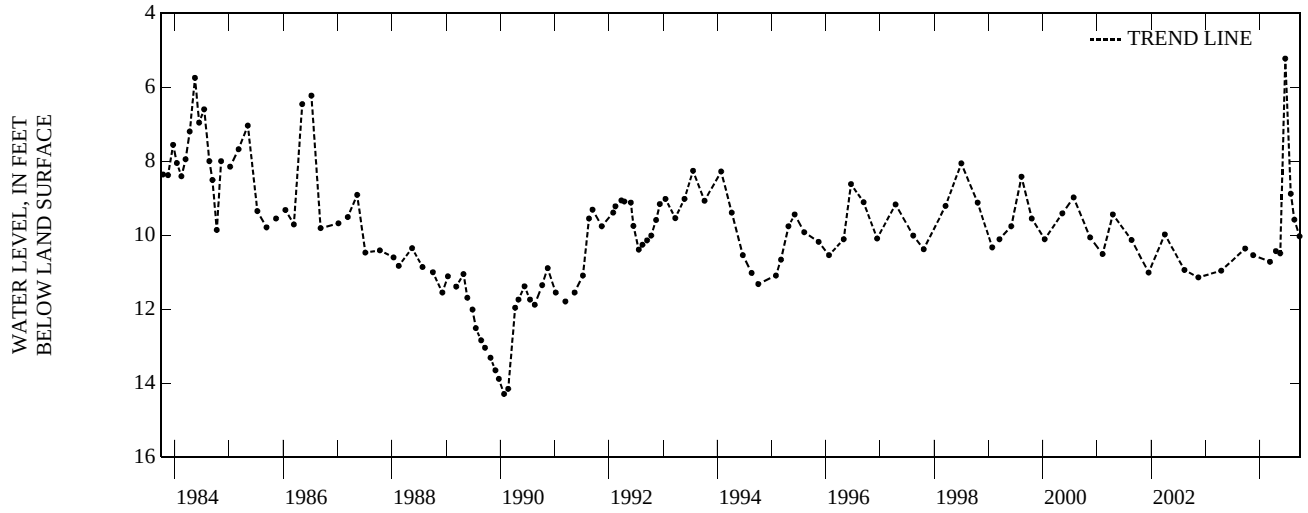
PERIOD OF RECORD.--February 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 3.50 ft above land-surface datum on Mar. 3, 1981. Lowest recorded water level is 14.29 ft below land-surface datum on Jan. 26, 1990.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 18	10.54	APR 19	10.43	JUN 21	5.23	AUG 21	9.58				
MAR 10	10.72	MAY 18	10.49	JUL 28	8.88	SEP 25	10.03				

WATER YEAR 2004 HIGHEST 5.23 JUN 21, 2004 LOWEST 10.72 MAR 10, 2004



GRANT COUNTY—Continued

425246091042102. Local number, GR-05/06W/27-0132.

LOCATION.--Lat 42°52'46", long 91°04'21", Hydrologic Unit 07060003. Owner: USGS.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 1.5 in., depth 1414 ft, cased to 1399 ft screen interval 1399-1414 ft.

INSTRUMENTATION.--The artesion well is capped and manual reading pressure gage is installed. Water level measured by USGS personnel.

DATUM.--The elevation of the land-surface datum is 634.85 ft above sea level. Measuring point: top of coupling, 0.00 ft above land-surface datum.

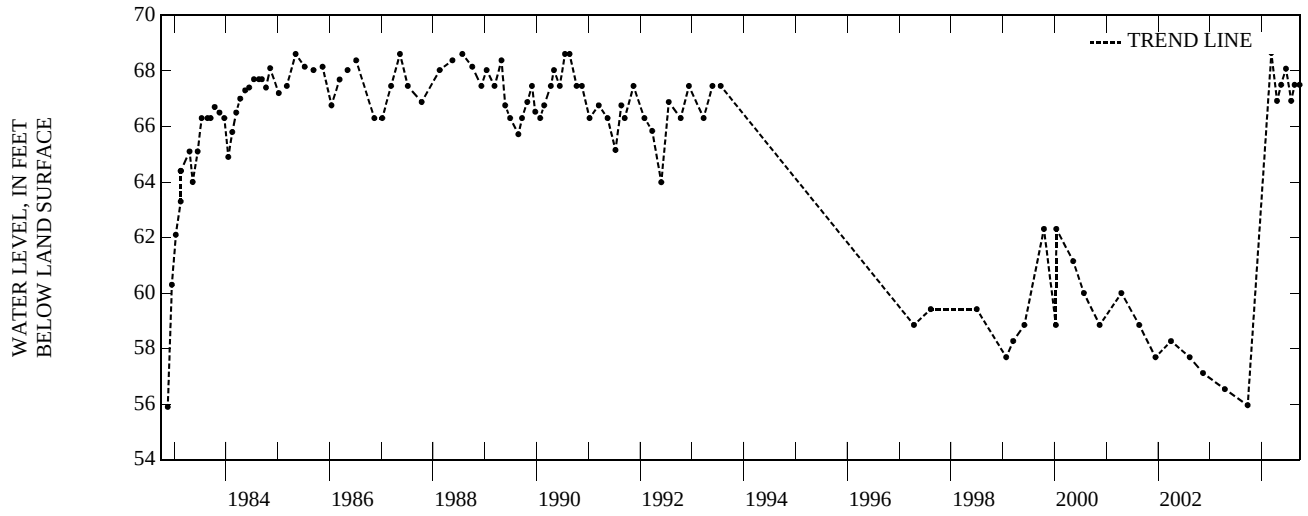
PERIOD OF RECORD.--November 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 68.65 ft above land-surface datum on Mar. 10, 2004. Lowest recorded water level is 55.90 ft above land-surface datum on Nov. 17, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+"), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 10	+68.65	MAY 18	+67.50	JUL 28	+66.92	SEP 25	+67.50				
APR 19	+66.92	JUN 21	+68.08	AUG 21	+67.50						

WATER YEAR 2004 HIGHEST +68.65 MAR 10, 2004 LOWEST +66.92 APR 19, 2004 JUL 28, 2004



GRANT COUNTY—Continued

425246091042103. Local number, GR-05/06W/27-0133.

LOCATION.--Lat 42°52'46", long 91°04'21", Hydrologic Unit 07060003. Owner: USGS.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 1.5 in., depth 1414 ft, cased to 819 ft screen interval 819-834 ft.

INSTRUMENTATION.--The artesion well is capped and manual reading pressure gage is installed. Water level measured by USGS personnel.

DATUM.--The elevation of the land-surface datum is 634.85 ft above sea level. Measuring point: top of coupling, 0.00 ft above land-surface datum.

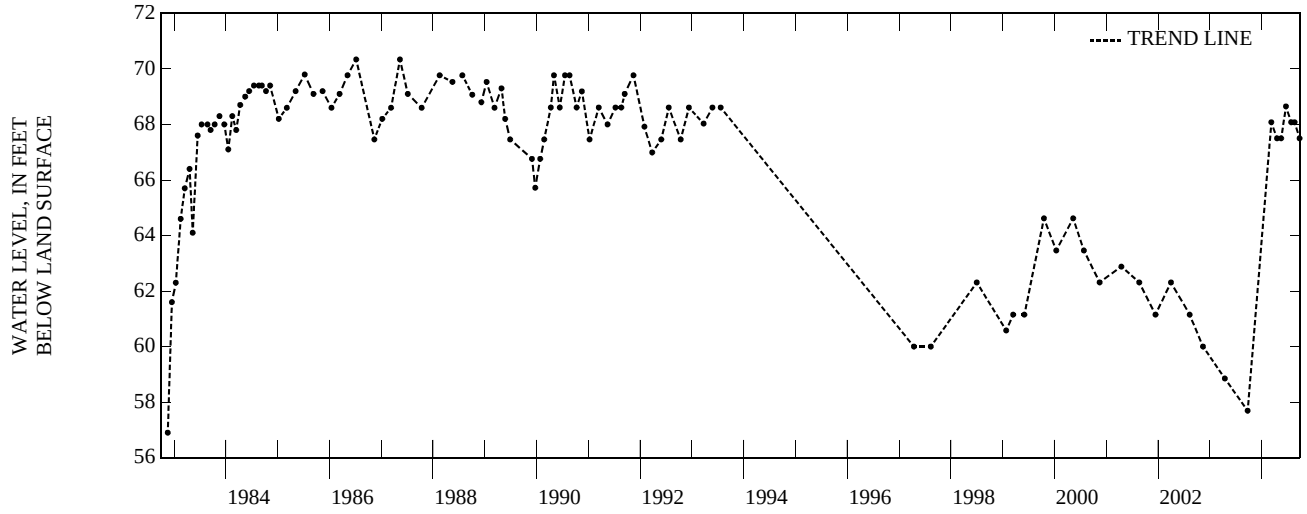
PERIOD OF RECORD.--November 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 70.34 ft above land-surface datum on July 8, 1986. Lowest recorded water level is 56.90 ft above land-surface datum on Nov. 17, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+"), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 10	+68.08	MAY 18	+67.50	JUL 28	+68.08	SEP 25	+67.50				
APR 19	+67.50	JUN 21	+68.65	AUG 21	+68.08						

WATER YEAR 2004 HIGHEST +68.65 JUN 21, 2004 LOWEST +67.50 APR 19, 2004 MAY 18, 2004 SEP 25, 2004



GRANT COUNTY—Continued

425246091042104. Local number, GR-05/06W/27-0134.

LOCATION.--Lat 42°52'46", long 91°04'21", Hydrologic Unit 07060003. Owner: USGS.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 1.5 in., depth 534 ft, cased to 519 ft, screen interval 519-534 ft.

INSTRUMENTATION.--The artesion well is capped and manual reading pressure gage is installed. Water level measured by USGS personnel.

DATUM.--The elevation of the land-surface datum is 634.85 ft above sea level. Measuring point: top of coupling, 0.00 ft above land-surface datum.

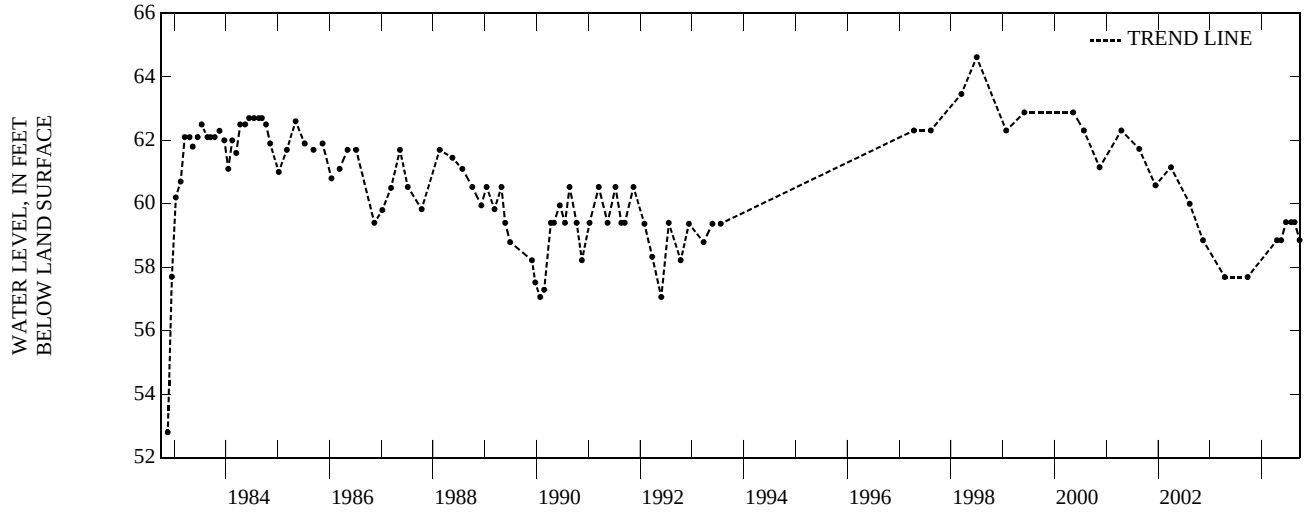
PERIOD OF RECORD.--November 1982 to current year. Measured irregularly.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 64.62 ft above land-surface datum on July 2, 1998. Lowest recorded water level is 52.80 ft above land-surface datum on Nov. 17, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+"), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 19	+58.85	MAY 18	+58.85	JUN 21	+59.42	JUL 28	+59.42	AUG 21	+59.42	SEP 25	+58.85

WATER YEAR 2004 HIGHEST +59.42 JUN 21, 2004 JUL 28, 2004 AUG 21, 2004
LOWEST +58.85 APR 19, 2004 MAY 18, 2004 SEP 25, 2004



GREEN COUNTY

424427089494701. Local number, GN-03/06E/18-0002.

LOCATION.--Lat 42°44'27", long 89°49'47", Hydrologic Unit 07090003. Owner: Earl Waddington.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled domestic water-table well, diameter 6 in., depth 150 ft.

INSTRUMENTATION.--Water level measured by USGS personnel.

DATUM.--The elevation of the land-surface datum is 1019.70 ft above sea level. Measuring point: breather hole in pump base, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--July 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 118.96 ft below land-surface datum on Sept. 16, 1998. Lowest recorded water level is 143.94 ft below land-surface datum on Feb. 18, 1960.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 19	133.41	FEB 08	131.44	APR 19	131.84	JUN 21	130.49	AUG 21	129.10		
JAN 07	130.10	MAR 10	131.16	MAY 18	131.58	JUL 28	129.49	SEP 25	128.80		

WATER YEAR 2004 HIGHEST 128.80 SEP 25, 2004 LOWEST 133.41 NOV 19, 2003

GREEN LAKE COUNTY

434238088592501. Local number, GL-14/13E/06-0032.

LOCATION.--Lat 43°42'38", long 88°59'25", Hydrologic Unit 04030201. Owner: City of Markesan.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter: 16 in. casing, 8 in. screen, depth 400 ft, cased to 99 ft, screen intervals: 99-100 ft, 119-159 ft, 174-189 ft.

INSTRUMENTATION.--Water level measured by USGS personnel.

DATUM.--The elevation of the land-surface datum is 849.89 ft above sea level. Measuring point: breather hole in pump base, 1.00 ft above land-surface datum.

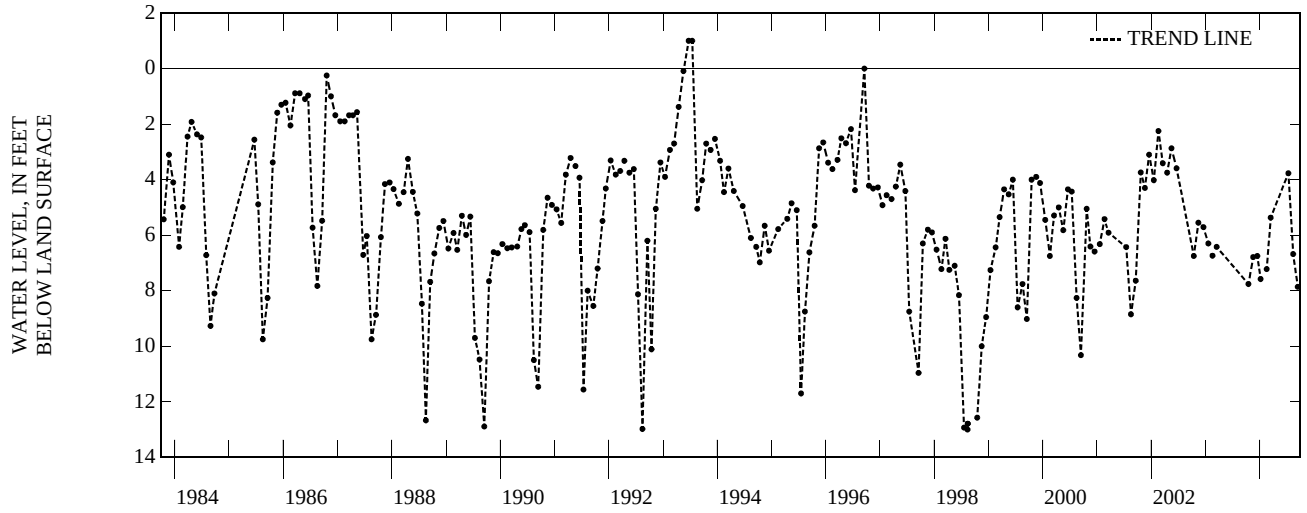
PERIOD OF RECORD.--September 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 1.00 ft above land-surface datum on June 22, 1993. Lowest recorded water level is 13.00 ft below land-surface datum on Aug. 13, 1998.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 17	7.76	DEC 16	6.75	FEB 17	7.22	JUL 12	3.77	SEP 13	7.86		
NOV 18	6.79	JAN 07	7.58	MAR 15	5.37	AUG 13	6.68				

WATER YEAR 2004 HIGHEST 3.77 JUL 12, 2004 LOWEST 7.86 SEP 13, 2004



GREEN LAKE COUNTY—Continued

435011089045701. Local number, GL-16/12E/21-0047.

LOCATION.--Lat 43°50'11", long 89°04'57", Hydrologic Unit 04030201. Owner: Wis. Dept. of Transportation.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 65 ft, cased to 56 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of the land-surface datum is 859.91 ft above sea level. Measuring point: hole in pump base, 2.00 ft above land-surface datum.

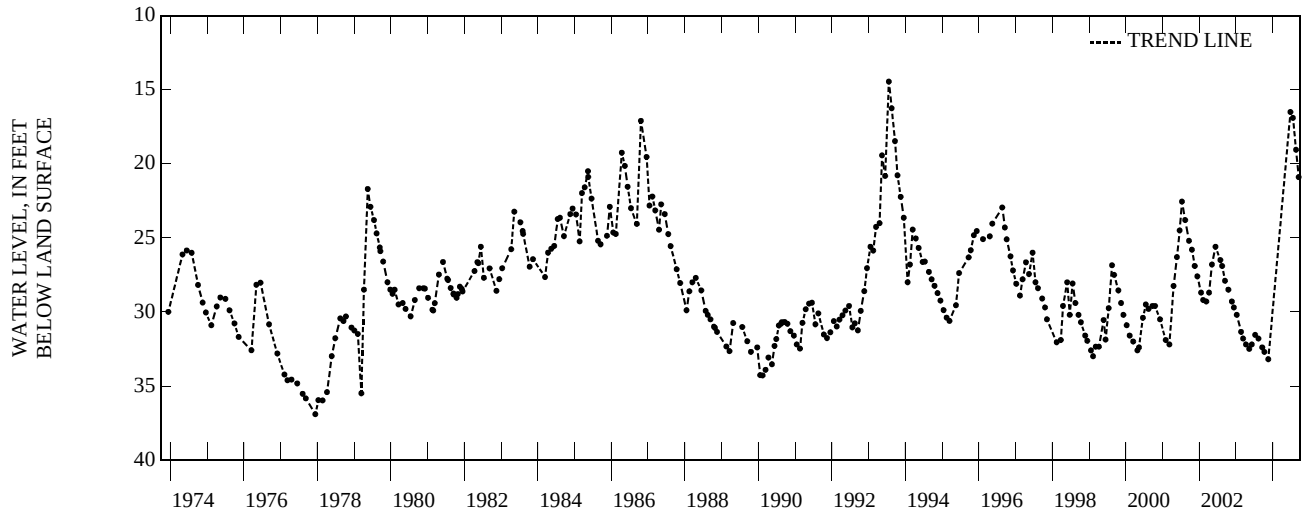
PERIOD OF RECORD.--December 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 14.45 ft below land-surface datum on July 21, 1993. Lowest recorded water level is 36.91 ft below land-surface datum on Dec. 12, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	32.70	NOV 17	33.20	JUN 24	16.50	JUL 19	16.90	AUG 19	19.05	SEP 14	20.90

WATER YEAR 2004 HIGHEST 16.50 JUN 24, 2004 LOWEST 33.20 NOV 17, 2003



GREEN COUNTY

423059089395201. Local number, GN-01/07E/33-0074.

LOCATION.--Lat 42°30'59", long 89°39'52", Hydrologic Unit 07090003. Owner: Wis. Dept. of Transportation.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 201 ft, cased to 150 ft.

INSTRUMENTATION.--Water level measured by USGS personnel.

DATUM.--The elevation of the land-surface datum is 949.69 ft above sea level. Measuring point: hole in pump base, 2.00 ft above land-surface datum.

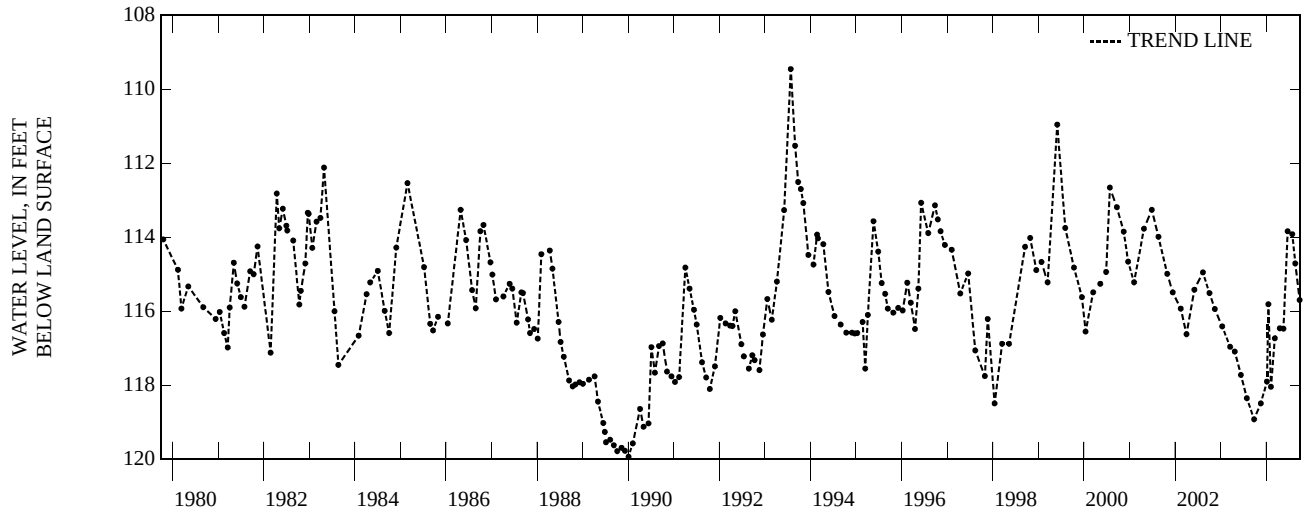
PERIOD OF RECORD.--April 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 109.46 ft below land-surface datum on July 26, 1993. Lowest recorded water level is 119.93 ft below land-surface datum on Jan. 3, 1990.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 19	118.49	JAN 18	115.81	MAR 10	116.73	MAY 18	116.47	JUL 28	113.92	SEP 25	115.70
JAN 07	117.90	FEB 08	118.04	APR 19	116.46	JUN 21	113.84	AUG 21	114.71		

WATER YEAR 2004 HIGHEST 113.84 JUN 21, 2004 LOWEST 118.49 NOV 19, 2003



IOWA COUNTY

425644090101901. Local number, IW-06/03E/32-0032.

LOCATION.--Lat 42°56'44", long 90°10'19", Hydrologic Unit 07090003. Owner: Dane Archie Lee.

AQUIFER--Dolomite.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 92 ft.

INSTRUMENTATION.--Water level measured by USGS personnel.

DATUM.--The elevation of the land-surface datum is 1199.74 ft above sea level. Measuring point: top of well casing, 0.00 ft above land-surface datum.

PERIOD OF RECORD.--August 1957 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 36.02 ft below land-surface datum on July 22, 1993. Lowest recorded water level is 68.81 ft below land-surface datum on Aug. 18, 1965.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 19	59.59	JAN 21	55.79	MAR 29	54.42	MAY 18	54.71	JUL 28	53.26	SEP 25	56.37
JAN 07	56.69	FEB 23	56.48	APR 26	51.66	JUN 21	47.29	AUG 21	54.87		

WATER YEAR 2004 HIGHEST 47.29 JUN 21, 2004 LOWEST 59.59 NOV 19, 2003

IOWA COUNTY—Continued

430943089562601. Local number, IW-08/05E/18-0110.

LOCATION.--Lat 43°09'43", long 89°56'26", Hydrologic Unit 07070005. Owner: Wis. Dept. of Transportation.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 188 ft, cased to 156 ft, open hole 156-188 ft.

INSTRUMENTATION.--Water level measured by USGS personnel.

DATUM.--The elevation of the land-surface datum is 734.80 ft above sea level. Measuring point: hole in the pump base, 2.00 ft above land-surface datum.

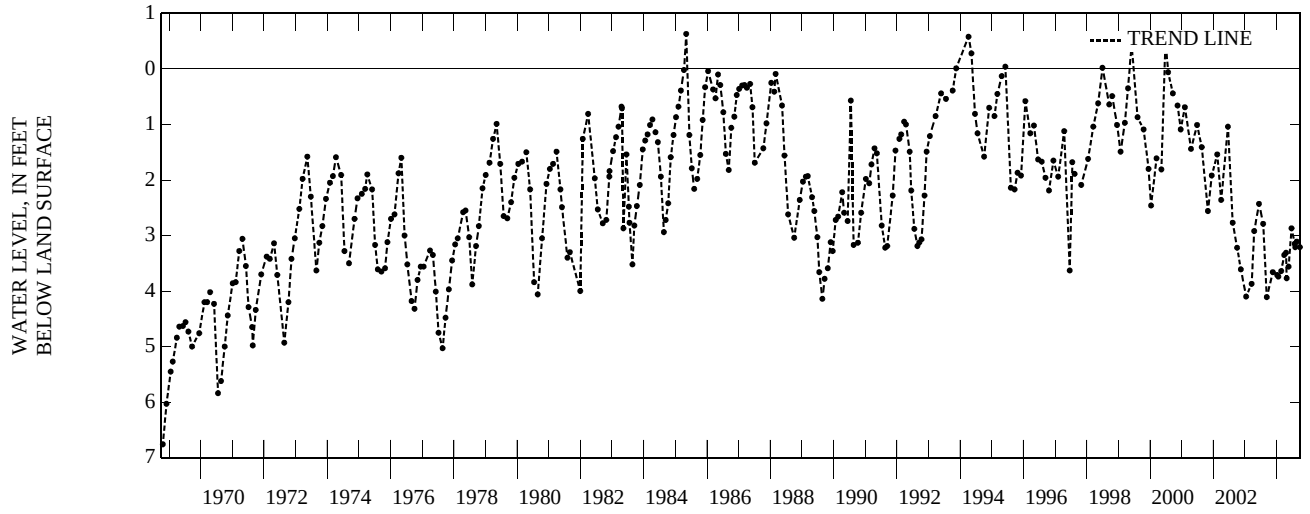
PERIOD OF RECORD.--August 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 0.51 ft above land-surface datum on June 27, 2000. Lowest recorded water level is 7.65 ft below land-surface datum on Aug. 15, 1968.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 18	3.66	FEB 23	3.64	APR 26	3.77	JUL 28	3.15	SEP 25	3.21		
JAN 07	3.71	MAR 29	3.35	MAY 18	3.56	AUG 03	3.21				
21	3.74	APR 19	3.31	JUN 21	2.87	21	3.11				

WATER YEAR 2004 HIGHEST 2.87 JUN 21, 2004 LOWEST 3.77 APR 26, 2004



JACKSON COUNTY

441810090484001. Local number, JA-21/04W/13-0038.

LOCATION.--Lat 44°18'10", long 90°48'41", Hydrologic Unit 07040007. Owner: Brockway Township.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled well, diameter 18 in., depth 80 ft, cased to 70 ft, screen interval 70-80 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of the land-surface datum is 855.99 ft above sea level. Measuring point: top of vent pipe, 2.50 ft above land-surface datum.

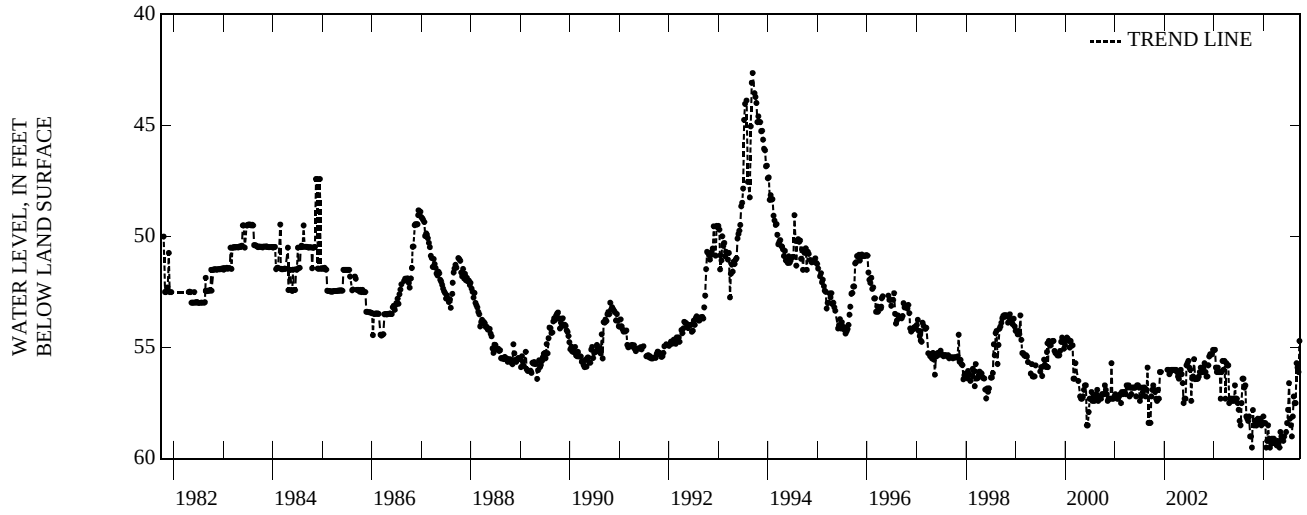
PERIOD OF RECORD.--October 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 42.64 ft below land-surface datum on Sept. 10, 1993. Lowest recorded water level is 59.50 ft below land-surface datum on Oct. 10, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03	59.00	DEC 05	58.30	FEB 06	58.50	APR 09	59.40	JUN 18	58.80	AUG 20	57.50
10	59.50	12	58.20	13	59.10	16	59.20	25	58.40	27	57.50
17	57.81	19	58.50	20	59.50	23	59.30	JUL 02	57.80	SEP 03	55.70
24	58.50	26	58.40	27	59.30	30	59.50	09	56.60	10	55.90
31	58.30	JAN 02	58.10	MAR 05	59.10	MAY 07	58.80	16	58.20	17	56.10
NOV 07	58.50	09	58.40	12	59.30	14	59.00	23	58.50	24	54.70
14	58.50	16	58.40	19	59.10	21	59.00	30	59.00		
21	58.20	23	59.50	26	59.20	28	59.20	AUG 06	58.10		
28	58.40	30	59.20	APR 02	59.30	JUN 04	59.00	13	57.20		

WATER YEAR 2004 HIGHEST 54.70 SEP 24, 2004 LOWEST 59.50 OCT 10, 2003 JAN 23, 2004 FEB 20, 2004 APR 30, 2004



JEFFERSON COUNTY

425332088352201. Local number, JE-05/16E/15-0849.

LOCATION.--Lat 42°53'32", long 88°35'22", Hydrologic Unit 07090001. Owner: Henry Stoffers.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 7 in., depth 122 ft, cased to 96 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of the land-surface datum is 889.77 ft above sea level. Measuring point: top of casing, 1.00 ft above land-surface datum.

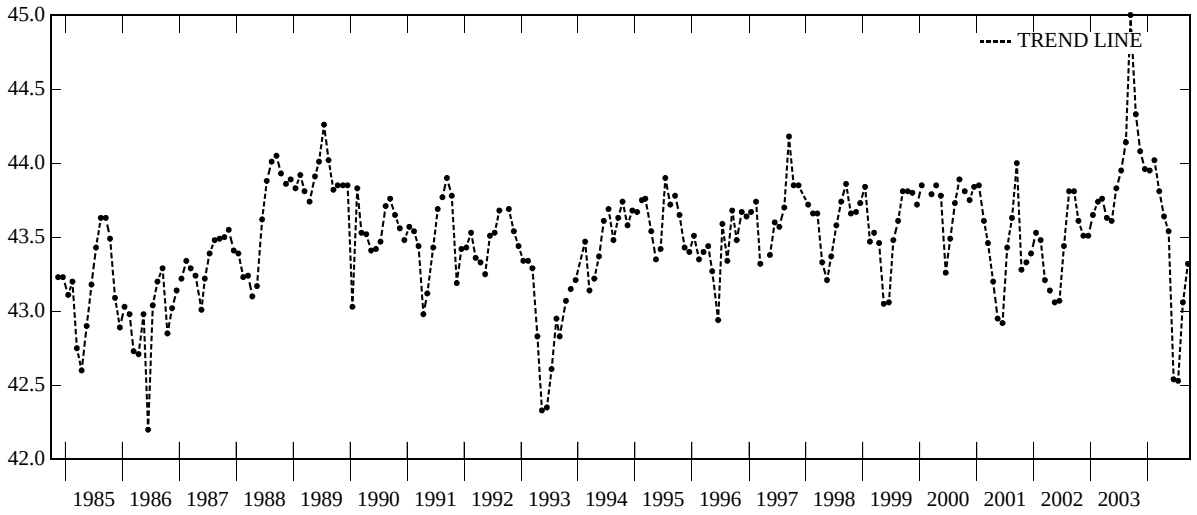
PERIOD OF RECORD.--June 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 42.20 ft below land-surface datum on June 15, 1986. Lowest recorded water level is 47.00 ft below land-surface datum on Aug. 5, 1970.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 17	44.33	DEC 14	43.96	FEB 13	44.02	APR 15	43.64	JUN 15	42.54	AUG 14	43.06
NOV 14	44.08	JAN 14	43.95	MAR 15	43.81	MAY 14	43.54	JUL 14	42.53	SEP 15	43.32

WATER YEAR 2004 HIGHEST 42.53 JUL 14, 2004 LOWEST 44.33 OCT 17, 2003



KENOSHA COUNTY

423819088090301. Local number, KE-02/20E/17-0021.

LOCATION.--Lat 42°38'19", long 88°09'03", Hydrologic Unit 07120006. Owner: Wis. Dept. of Natural Resources.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 16 in., depth 1,908 ft, cased to 386 ft, open hole 386-1,908 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of the land-surface datum is 801.75 ft above sea level. Measuring point: top of casing, 1.80 ft above land-surface datum.

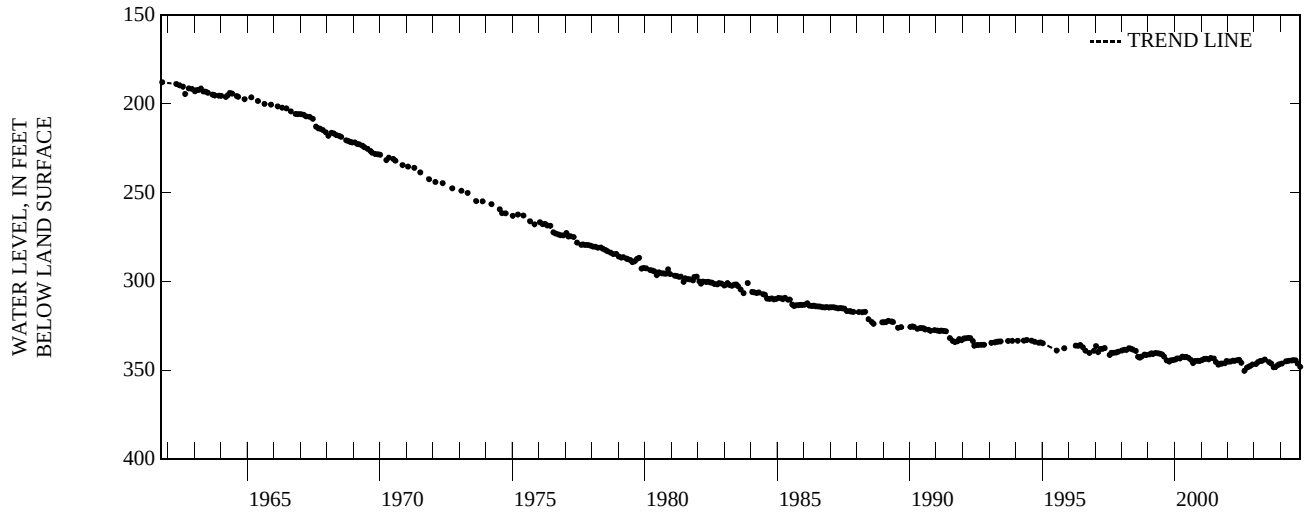
PERIOD OF RECORD.--March 1961 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 180.00 ft below land-surface datum on Mar. 20, 1958. Lowest recorded water level is 350.24 ft below land-surface datum on Mar. 15, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	348.05	DEC 17	346.50	MAR 17	344.84	JUN 03	344.36	JUL 28	344.31	SEP 29	347.92
NOV 26	346.96	JAN 21	346.10	APR 20	344.61	30	344.21	AUG 25	346.13		

WATER YEAR 2004 HIGHEST 344.21 JUN 30, 2004 LOWEST 348.05 OCT 24, 2003



KENOSHA COUNTY—Continued

423214087503801. Local number, KE-0$^{1}/_{2}$2E/13-0046.

LOCATION.--Lat 42°32'14", long 87°50'38", Hydrologic Unit 04040002. Owner: St Joseph Home.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 135 ft, cased to 82 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of the land-surface datum is 644.73 ft above sea level. Measuring point: top of casing, 1.60 ft above land-surface datum.

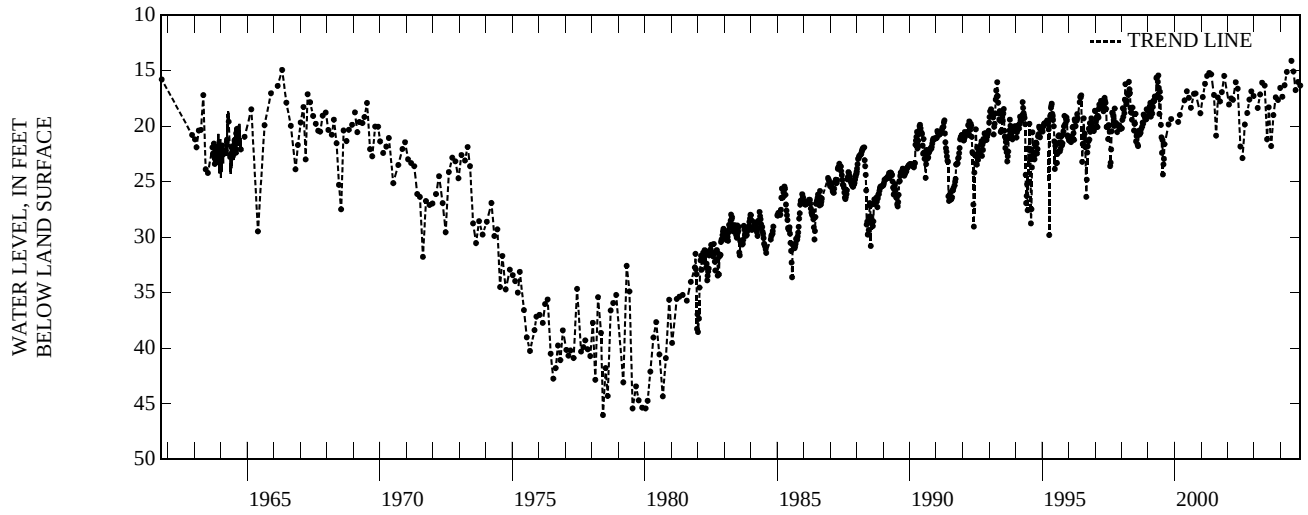
PERIOD OF RECORD.--March 1961 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 14.00 ft below land-surface datum on Mar. 16, 1961. Lowest recorded water level is 46.02 ft below land-surface datum on June 6, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	17.41	DEC 28	16.56	FEB 27	16.32	MAY 31	14.12	JUL 27	16.76	SEP 30	16.35
NOV 28	17.65	JAN 27	17.36	MAR 29	15.12	JUN 28	15.08	AUG 30	16.02		

WATER YEAR 2004 HIGHEST 14.12 MAY 31, 2004 LOWEST 17.65 NOV 28, 2003



KEWAUNEE COUNTY

443400087270001. Local number, KW-24/25E/10-0030.

LOCATION.--Lat 44°34'00", long 87°27'00", Hydrologic Unit 04030102. Owner: Wis. Dept. of Transportation.

AQUIFER--Silurian dolomite.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 203 ft, cased to 112 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of the land-surface datum is 619.88 ft above sea level. Measuring point: hole in pump base, 0.00 ft above land-surface datum.

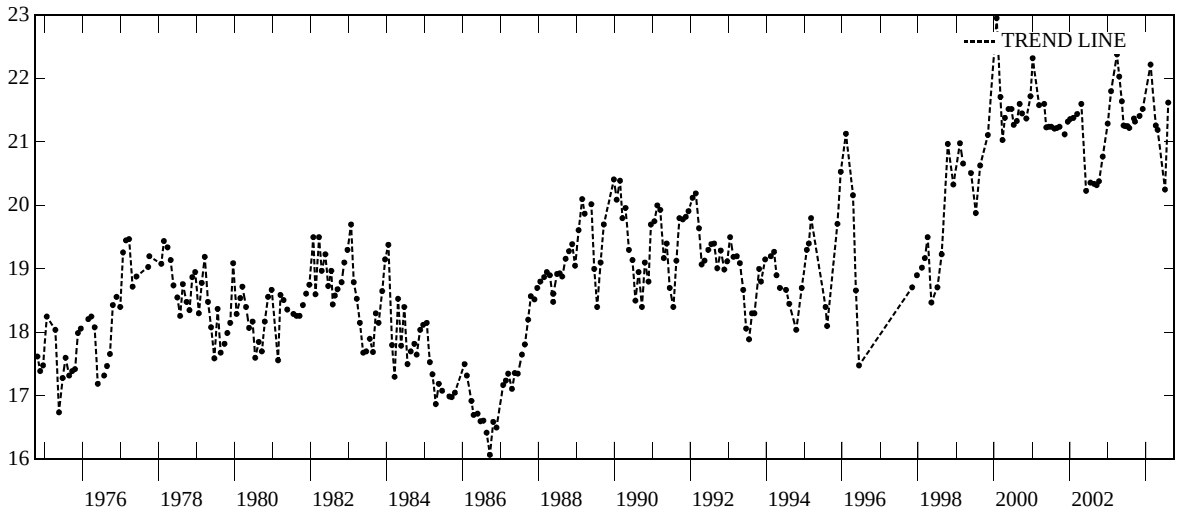
PERIOD OF RECORD.--July 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 16.07 ft below land-surface datum on Sept. 22, 1986. Lowest recorded water level is 22.95 ft below land-surface datum on Jan. 7, 2000.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 01	21.41	FEB 15	22.22	APR 23	21.19	AUG 03	21.62				
DEC 01	21.52	APR 05	21.26	JUL 03	20.25						

WATER YEAR 2004 HIGHEST 20.25 JUL 03, 2004 LOWEST 22.22 FEB 15, 2004



LAFAYETTE COUNTY

424004090220601. Local number, LF-02/01E/04-0011.

LOCATION.--Lat 42°40'04", long 90°22'06", Hydrologic Unit 07060005. Owner: Ed Wiegel.

AQUIFER--Platteville-Galena dolomite.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 64 ft.

INSTRUMENTATION.--Water level measured by USGS personnel.

DATUM.--The elevation of the land-surface datum is 1009.76 ft above sea level. Measuring point: edge of pump base, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--March 1947 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 15.58 ft below land-surface datum on July 22, 1993. Lowest recorded water level is 38.81 ft below land-surface datum in August 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 19	26.22	APR 19	28.50	JUN 21	24.23	AUG 21	25.81				
MAR 10	28.71	MAY 18	29.50	JUL 28	25.09	SEP 25	26.77				

WATER YEAR 2004 HIGHEST 24.23 JUN 21, 2004 LOWEST 29.50 MAY 18, 2004

423114090161101. Local number, LF-01/02E/33-0057.

LOCATION.--Lat 42°31'13", long 90°16'11", Hydrologic Unit 07060005. Owner: Coulthard Estates.

AQUIFER--Galena-Platteville dolomite.

WELL CHARACTERISTICS.--Drilled well, diameter 10 in., depth 265 ft, cased to 16 ft, open hole 16-265 ft.

INSTRUMENTATION.--Water level measured by USGS personnel.

DATUM.--The elevation of the land-surface datum is 999.80 ft above sea level. Measuring point: top of casing, 3.00 ft above land-surface datum.

PERIOD OF RECORD.--April 1952 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 18.29 ft below land-surface datum on July 18, 1993. Lowest recorded water level is 130.99 ft below land-surface datum on Oct. 27, 1959.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 19	26.58	FEB 08	37.90	APR 19	35.32	JUN 21	24.84	SEP 25	31.33		
JAN 07	38.45	MAR 10	37.42	MAY 18	35.29	JUL 28	27.87				

WATER YEAR 2004 HIGHEST 24.84 JUN 21, 2004 LOWEST 38.45 JAN 07, 2004

LAFAYETTE COUNTY—Continued

423455090043301. Local number, LF-01/03E/01-0294.

LOCATION.--Lat 42°34'55", long 90°04'33", Hydrologic Unit 07090003. Owner: Wis. Dept. of Transportation.

AQUIFER--Galena-Platteville dolomite.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 200 ft, cased to 50 ft, open end.

INSTRUMENTATION.--Water level measured by USGS personnel.

DATUM.--The elevation of the land-surface datum is 979.73 ft above sea level. Measuring point: hole in pump base, 2.00 ft above land-surface datum.

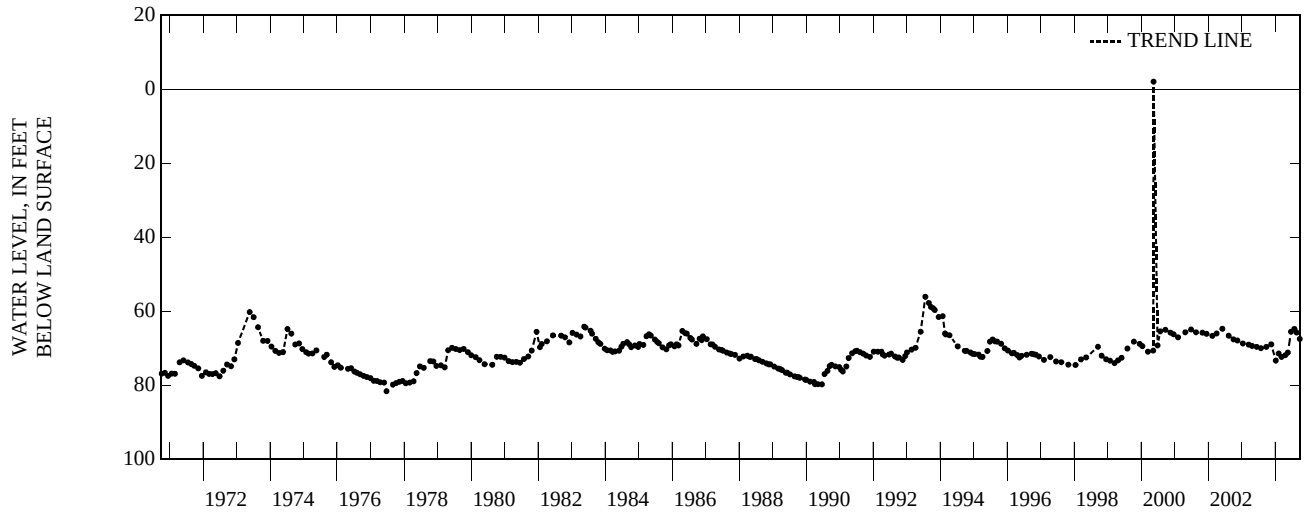
PERIOD OF RECORD.--March 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 56.10 ft below land-surface datum on July. 23, 1993. Lowest recorded water level is 81.62 ft below land-surface datum on June 23, 1997.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 19	68.94	FEB 08	71.41	APR 19	71.88	JUN 21	65.54	AUG 21	65.76		
JAN 07	73.33	MAR 10	72.34	MAY 18	71.18	JUL 28	64.79	SEP 25	67.50		

WATER YEAR 2004 HIGHEST 64.79 JUL 28, 2004 LOWEST 73.33 JAN 07, 2004



LANGLADE COUNTY

452603089111601. Local number, LA-34/10E/13-0537.

LOCATION.--Lat 45°26'03", long 89°11'16", Hydrologic Unit 04030202. Owner: Mabel West.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled well, diameter 5 in., depth 97 ft, cased to 94 ft, screen interval 94-97 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of the land-surface datum is 1625.07 ft above sea level. Measuring point: top of casing, 0.50 ft above land-surface datum.

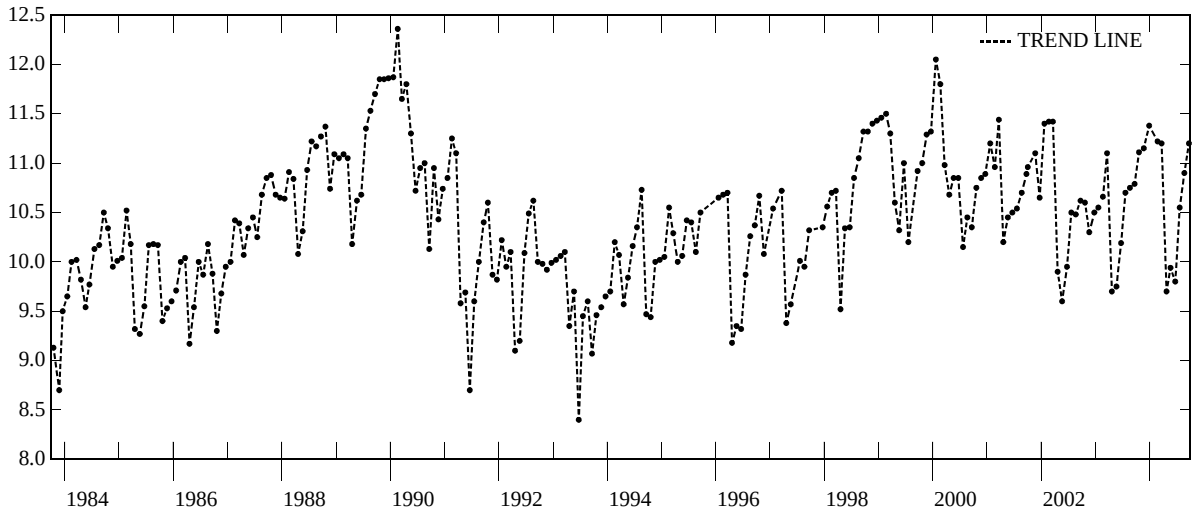
PERIOD OF RECORD.--August 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 8.40 ft below land-surface datum on June 23, 1993. Lowest recorded water level is 18.00 ft below land-surface datum on Sept. 21, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	11.11	DEC 28	11.38	MAR 21	11.20	MAY 20	9.94	JUL 21	10.55	SEP 21	11.20
NOV 22	11.15	FEB 23	11.22	APR 23	9.70	JUN 21	9.80	AUG 21	10.90		

WATER YEAR 2004 HIGHEST 9.70 APR 23, 2004 LOWEST 11.38 DEC 28, 2003



MANITOWOC COUNTY

440430087420401. Local number, MN-19/23E/35-0028.

LOCATION.--Lat 44°04'30", long 87°42'04", Hydrologic Unit 04030101. Owner: Wis. Dept. of Transportation.

AQUIFER--Silurian dolomite.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 147 ft, cased to 133 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of the land-surface datum is 669.98 ft above sea level. Measuring point: hole in pump base, 1.00 ft above land-surface datum.

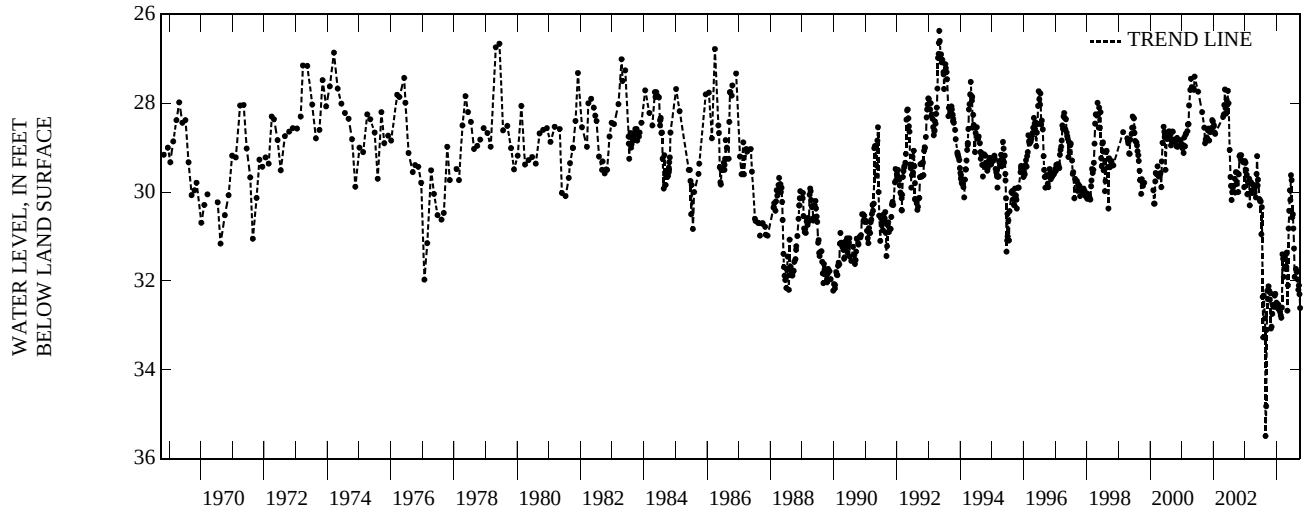
PERIOD OF RECORD.--June 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 26.37 ft below land-surface datum on May 4, 1993. Lowest recorded water level is 35.49 ft below land-surface datum on Aug. 26, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07	32.22	DEC 10	32.33	FEB 24	32.83	APR 28	31.36	JUN 29	30.57	SEP 08	32.20
15	32.42	16	32.29	MAR 02	32.60	MAY 04	32.67	JUL 06	30.50	14	32.10
20	32.27	30	32.49	08	31.40	11	32.10	13	30.82	21	32.30
28	33.07	JAN 09	32.52	16	31.50	18	30.82	20	31.27	28	32.61
NOV 04	33.03	13	32.61	23	31.91	25	30.42	27	31.91		
12	32.74	20	32.53	30	31.72	JUN 02	29.96	AUG 11	31.73		
18	32.54	28	32.64	APR 06	31.46	07	30.18	18	31.79		
25	32.58	FEB 10	32.70	13	31.40	15	29.62	27	31.79		
DEC 04	32.58	17	32.77	20	31.67	22	29.73	SEP 02	31.97		

WATER YEAR 2004 HIGHEST 29.62 JUN 15, 2004 LOWEST 33.07 OCT 28, 2003



MARATHON COUNTY

445814090045501. Local number, MR-29/03E/24-0027.

LOCATION.--Lat 44°58'45", long 90°05'44", Hydrologic Unit 07070002. Owner: Conrad Ktemstreiter.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 42 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of the land-surface datum is 1444.98 ft above sea level. Measuring point: top of casing, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--February 1945 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 0.99 ft above land-surface datum on June 2, 1960. Lowest recorded water level is 11.79 ft below land-surface datum on Feb. 15, 1990.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	9.81	DEC 22	10.59	JAN 21	9.97	MAY 31	3.22	JUL 21	7.13		
NOV 21	9.80	JAN 16	11.02	APR 19	10.06	JUN 23	3.50	29	7.13		

WATER YEAR 2004 HIGHEST 3.22 MAY 31, 2004 LOWEST 11.02 JAN 16, 2004

444709089265301. Local number, MR-27/09E/31-0028.

LOCATION.--Lat 44°47'09", long 89°26'53", Hydrologic Unit 07070002. Owner: USGS.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Driven observation water-table well, diameter 1.25 in., depth 27 ft, cased to 25 ft, well point 25-27 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of the land-surface datum is 1228.97 ft above sea level. Measuring point: top of pipe, 1.80 ft above land-surface datum.

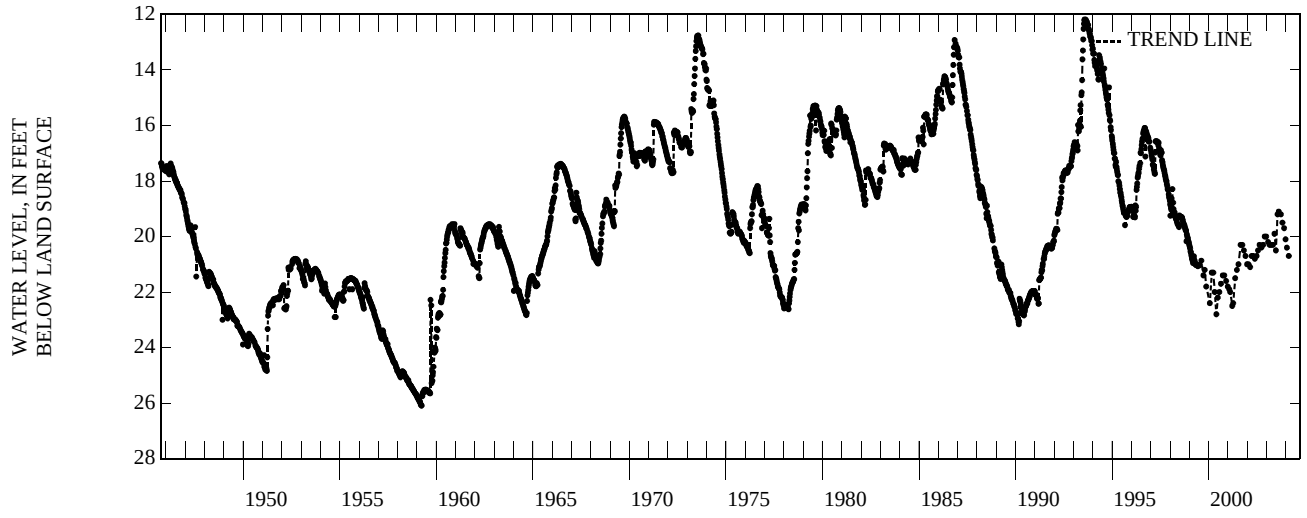
PERIOD OF RECORD.--March 1945 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 12.18 ft below land-surface datum on Aug. 1, 1993. Lowest recorded water level is 26.09 ft below land-surface datum on Mar. 30, 1959.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	19.50	NOV 30	19.70	DEC 27	20.10	JAN 21	20.40	FEB 26	20.70

WATER YEAR 2004 HIGHEST 19.50 OCT 28, 2003 LOWEST 20.70 FEB 26, 2004



MARATHON COUNTY—Continued

445913089374501. Local number, MR-29/07E/24-0100.

LOCATION.--Lat 44°59'13", long 89°37'45", Hydrologic Unit 07070002. Owner: City of Wausau.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 104 ft, cased to 84 ft, screen interval 84-106.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of the land-surface datum is 1221.97 ft above sea level. Measuring point: top of steel casing, 2.00 ft above land-surface datum.

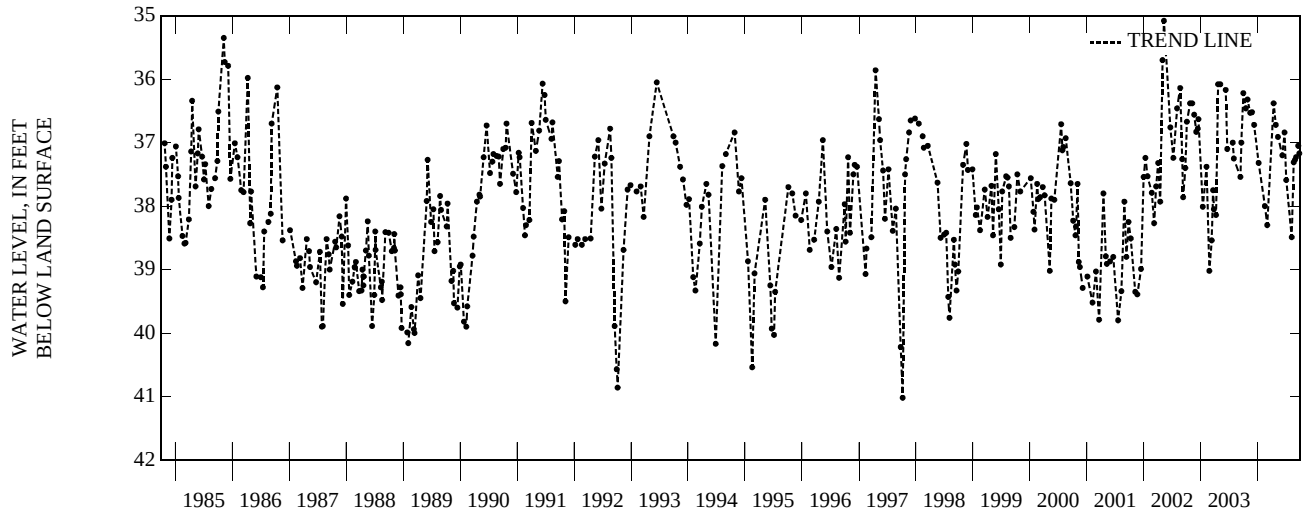
PERIOD OF RECORD.--August 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 35.08 ft below land-surface datum on May 10, 2002. Lowest recorded water level is 41.02 ft below land-surface datum on Oct. 8, 1997.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	36.22	NOV 26	36.52	MAR 02	38.30	JUN 07	37.20	AUG 19	37.31	SEP 24	37.17
17	36.46	DEC 09	36.72	APR 12	36.38	21	36.84	27	37.27		
28	36.32	JAN 07	37.32	26	36.72	JUL 02	37.59	SEP 03	37.23		
NOV 14	36.53	FEB 16	38.00	MAY 10	36.91	AUG 06	38.49	17	37.05		

WATER YEAR 2004 HIGHEST 36.22 OCT 01, 2003 LOWEST 38.49 AUG 06, 2004



MARINETTE COUNTY

453816087590101. Local number, MT-37/20E/34-0007.

LOCATION.--Lat 45°38'16", long 87°59'01", Hydrologic Unit 04030108. Owner: Wis. Dept. of Natural Resources.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled well, diameter 8 in., depth 33 ft, cased to 33 ft, open end.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of the land-surface datum is 979.98 ft above sea level. Measuring point: pointer on float gage, 4.20 ft above land-surface datum.

PERIOD OF RECORD.--November 1938 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 18.01 ft below land-surface datum on May 17, 1960. Lowest recorded water level is 24.06 ft below land-surface datum on Nov. 17, 1938.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07	21.04	DEC 02	21.25	FEB 26	21.95	MAY 11	20.05	JUL 06	19.81	AUG 31	20.50
15	21.10	09	21.27	MAR 25	21.79	18	20.04	13	19.83	SEP 07	20.58
21	21.16	16	21.33	30	21.31	25	20.06	20	19.90	14	20.64
28	21.21	23	21.33	APR 06	20.88	JUN 01	19.83	28	20.03	21	20.68
NOV 04	21.24	JAN 06	21.33	13	20.49	08	19.69	AUG 03	20.15	28	20.76
11	21.25	13	21.13	20	20.29	15	19.69	10	20.26		
18	21.26	20	21.65	27	20.17	22	19.63	17	20.33		
25	21.25	27	21.67	MAY 04	20.07	29	19.69	24	20.45		

WATER YEAR 2004 HIGHEST 19.63 JUN 22, 2004 LOWEST 21.95 FEB 26, 2004

MARQUETTE COUNTY

435244089293401. Local number, MQ-16/08E/12-0009.

LOCATION.--Lat 43°52'44", long 89°29'34", Hydrologic Unit 04030201. Owner: Village of Westfield.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 274 ft.

INSTRUMENTATION.--Water level measured by USGS personnel.

DATUM.--The elevation of the land-surface datum is 879.90 ft above sea level. Measuring point: top of casing, 0.00 ft above land-surface datum.

PERIOD OF RECORD.--October 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 12.15 ft below land-surface datum on July 13, 1993. Lowest recorded water level is 19.69 ft below land-surface datum on Jan. 25, 1999.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	16.19	DEC 22	16.12	MAR 29	15.70	MAY 31	14.91	SEP 07	14.12		
24	16.12	JAN 13	16.11	APR 04	15.67	JUL 02	14.01				
NOV 30	16.12	FEB 23	16.23	26	15.65	AUG 10	13.87				

WATER YEAR 2004 HIGHEST 13.87 AUG 10, 2004 LOWEST 16.23 FEB 23, 2004

33956089275601. Local number, MQ-14/09E/30-0026.

LOCATION.--Lat 43°39'56", long 89°27'56", Hydrologic Unit 04030201. Owner: Leslie Mountford.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 170 ft, cased to 145 ft.

INSTRUMENTATION.--Water level measured by USGS personnel.

DATUM.--The elevation of the land-surface datum is 799.89 ft above sea level. Measuring point: top of casing cover, 1.00 ft above land-surface datum.

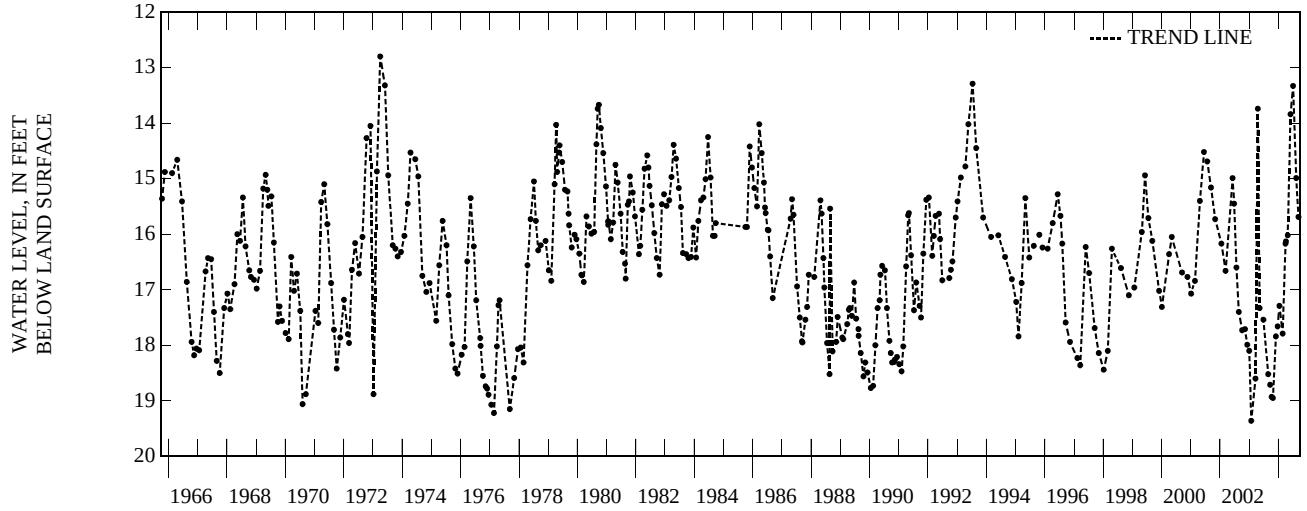
PERIOD OF RECORD.--May 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 12.80 ft below land-surface datum on Apr. 2, 1973. Lowest recorded water level is 20.00 ft below land-surface datum on June 11, 1960.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	18.93	DEC 22	17.66	MAR 29	16.17	MAY 31	13.84	SEP 07	15.69		
24	18.95	JAN 13	17.29	APR 04	16.13	JUL 02	13.33				
NOV 30	17.84	FEB 23	17.79	26	16.02	AUG 10	14.99				

WATER YEAR 2004 HIGHEST 13.33 JUL 02, 2004 LOWEST 18.95 OCT 24, 2003



MILWAUKEE COUNTY

430706087583601. Local number, ML-08/21E/35-0118.

LOCATION.--Lat 43°07'06", long 87°58'36", Hydrologic Unit 04040003. Owner: Private - unknown who owns currently.

AQUIFER--Silurian dolomite.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 136 ft, cased to 124 ft, open end.

INSTRUMENTATION.--Water level measured by USGS personnel.

DATUM.--The elevation of the land-surface datum is 678.94 ft above sea level. Measuring point: top of casing, 0.60 ft above land-surface datum.

PERIOD OF RECORD.--June 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 19.33 ft below land-surface datum on May 2, 1984. Lowest recorded water level is 48.99 ft below land-surface datum in February 1957.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	44.06	JAN 05	43.93	MAR 08	43.71	MAY 10	42.46	JUL 10	41.68	SEP 06	43.31
DEC 09	43.81	FEB 09	44.31	APR 12	42.94	JUN 01	39.33	AUG 07	42.39		

WATER YEAR 2004 HIGHEST 39.33 JUN 01, 2004 LOWEST 44.31 FEB 09, 2004

425613088014301. Local number, ML-06/21E/32-0148.

LOCATION.--Lat 42°56'13"", long 88°01'43", Hydrologic Unit 04040002. Owner: Milwaukee county.

AQUIFER--Platteville-Galena dolomite.

WELL CHARACTERISTICS.--Drilled well, diameter 5 in., depth 180 ft, cased to 43 ft.

INSTRUMENTATION.--Water level measured by USGS personnel.

DATUM.--The elevation of the land-surface datum is 773.88 ft above sea level. Measuring point: top of 3/8" pipe, 0.00 ft above land-surface datum.

PERIOD OF RECORD.--September 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 25.56 ft below land-surface datum on May 4, 1951. Lowest recorded water level is 40.03 ft below land-surface datum on Aug. 13, 1971.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	36.35	FEB 09	36.58	APR 12	34.15	JUN 01	30.54				
DEC 09	36.21	MAR 08	35.92	MAY 10	33.77	SEP 06	31.26				

WATER YEAR 2004 HIGHEST 30.54 JUN 01, 2004 LOWEST 36.58 FEB 09, 2004

MONROE COUNTY

434342090495601. Local number, MO-15/04W/34-0002.

LOCATION.--Lat 43°43'42", long 90°49'56", Hydrologic Unit 07060001. Owner: Joseph Anderson.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 5 in., depth 44 ft, cased to 43 ft.

INSTRUMENTATION.--Water level measured by USGS personnel.

DATUM.--The elevation of the land-surface datum is 1100.01 ft above sea level. Measuring point: top of well casing, 0.00 ft above land-surface datum.

PERIOD OF RECORD.--August 1934 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 0.08 ft below land-surface datum on June 18, 1993. Lowest recorded water level is 7.87 ft below land-surface datum on Mar. 19, 1959.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26	8.43	MAR 10	7.59	MAY 18	7.26	JUL 28	7.32				
JAN 12	8.82	APR 19	7.79	JUN 21	6.64	SEP 25	7.82				

WATER YEAR 2004 HIGHEST 6.64 JUN 21, 2004 LOWEST 8.82 JAN 12, 2004

434823090461401. Local number, MO-15/03W/05-0010.

LOCATION.--Lat 43°48'40", long 90°46'13", Hydrologic Unit 07040006. Owner: Lester Cooley.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled well, diameter 7 in., depth 16.7 ft, cased to 16.7 ft, open end.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of the land-surface datum is 879.98 ft above sea level. Measuring point: top of casing, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--August 1934 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 0.60 ft below land-surface datum on Apr. 27, 1965. Lowest recorded water level is 12.01 ft below land-surface datum on Feb. 28, 1959.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	7.31	DEC 19	7.67	FEB 15	8.00	APR 17	7.40	JUN 13	6.00	AUG 20	2.35
NOV 19	7.50	JAN 16	7.85	MAR 20	8.30	MAY 15	7.47	JUL 17	2.44	SEP 20	2.25

WATER YEAR 2004 HIGHEST 2.25 SEP 20, 2004 LOWEST 8.30 MAR 20, 2004

440026090390101. Local number, MO-18/02W/29-0017.

LOCATION.--Lat 44°00'26", long 90°39'01", Hydrologic Unit 07040006. Owner: U.S. Army.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 9 in., depth 192 ft, cased to 109 ft.

INSTRUMENTATION.--Continuous water-level recorder.

DATUM.--The elevation of the land-surface datum is 909.00 ft above sea level. Measuring point: top of steel casing, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--June 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 0.48 ft below land-surface datum on Sept. 29, 1965. Lowest recorded water level is 8.62 ft below land-surface datum on Jan. 29, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.35	6.93	6.88	7.52	7.58	6.66	6.26	6.40	4.09	3.42	4.13	4.91
10	6.45	7.28	6.97	7.52	7.50	5.89	6.27	6.40	4.12	3.55	4.25	5.09
15	6.79	7.26	6.97	7.34	7.52	6.43	6.32	6.18	3.61	3.64	4.39	5.20
20	6.98	7.05	7.05	7.36	7.55	6.13	6.30	5.84	3.00	3.80	4.52	5.37
25	7.16	6.85	7.03	7.42	7.57	6.19	6.28	5.31	3.05	3.92	4.68	5.41
EOM	7.07	6.85	7.18	7.61	7.57	6.16	6.33	4.69	3.24	4.05	4.84	5.49

WATER YEAR 2004 HIGHEST 2.98 JUN 21, 2004 LOWEST 7.62 FEB 03, 2004 FEB 27, 2004

OCONTO COUNTY

450819088263901. Local number, OC-31/16E/25-0179.

LOCATION.--Lat 45°08'19", long 88°26'39", Hydrologic Unit 04030104. Owner: US. Forest Service.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled public water-table well, diameter 6 in., depth 46 ft, cased to 38 ft, open end.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of the land-surface datum is 919.98 ft above sea level. Measuring point: hole in pump base, 0.50 ft above land-surface datum.

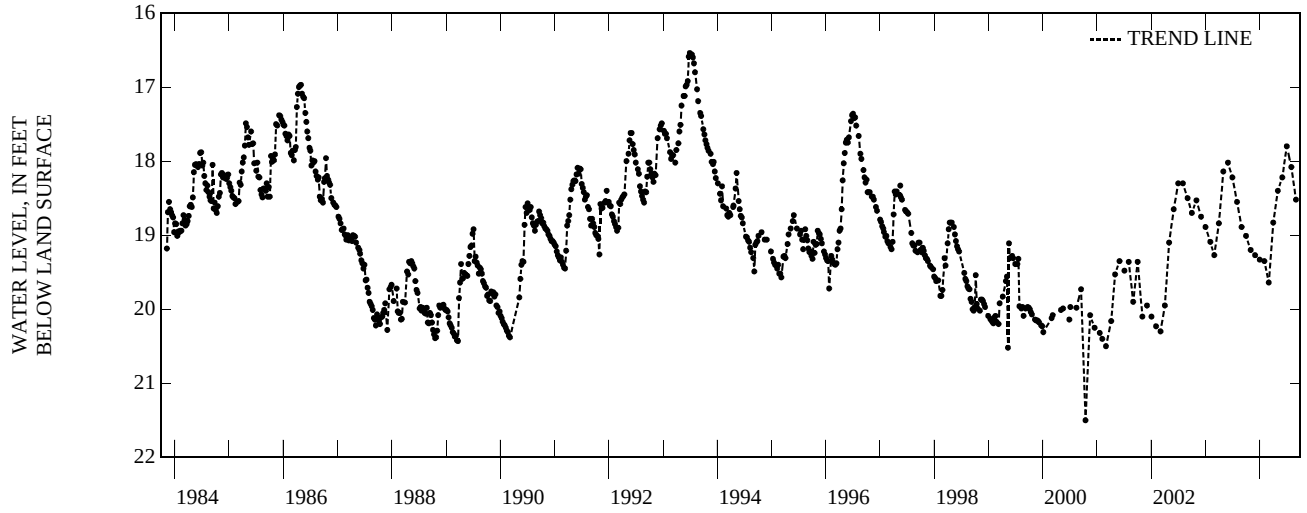
PERIOD OF RECORD.--September 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 16.54 ft below land-surface datum on June 30, 1993. Lowest recorded water level is 21.50 ft below land-surface datum on Nov. 15, 2000.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	19.01	DEC 01	19.27	FEB 01	19.35	APR 01	18.83	JUN 01	18.22	AUG 01	18.08
NOV 01	19.20	JAN 01	19.33	MAR 02	19.64	MAY 02	18.40	JUL 01	17.80	SEP 01	18.52

WATER YEAR 2004 HIGHEST 17.80 JUL 01, 2004 LOWEST 19.64 MAR 02, 2004



ONEIDA COUNTY

453720089215401. Local number, ON-36/09E/09-0024.

LOCATION.--Lat 45°37'39", long 89°21'60", Hydrologic Unit 07070001. Owner: USGS.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 1.25 in., depth 33 ft, cased to 31 ft, screen interval 31-33 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of land-surface datum is 1560.03 ft above sea level. Measuring point: top of collar on casing, 0.80 ft above land-surface datum.

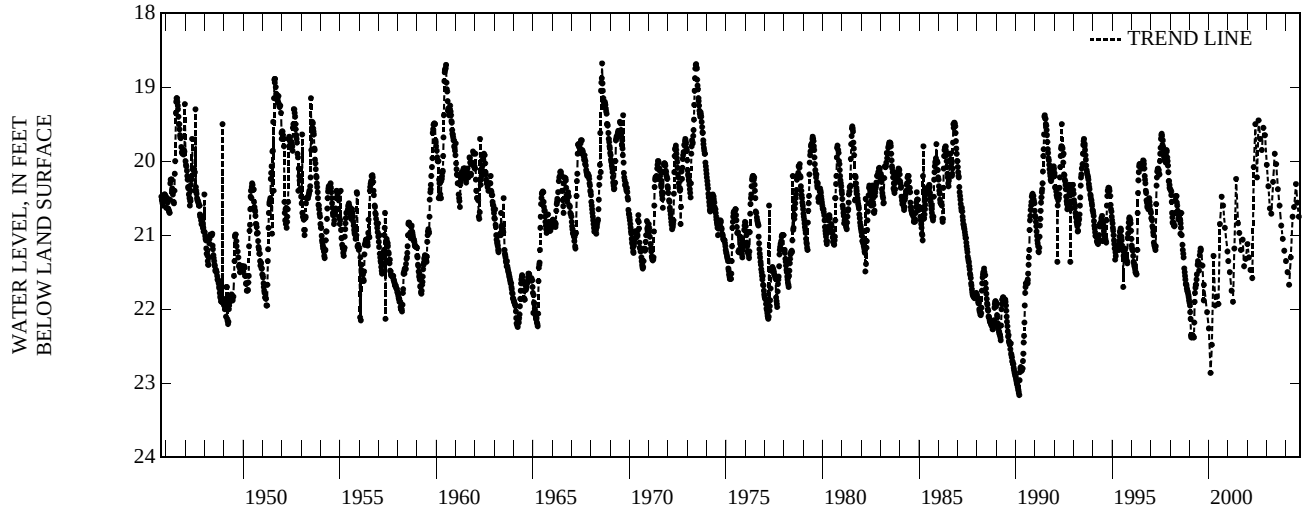
PERIOD OF RECORD.--March 1945 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 18.68 ft below land-sufrace datum on Aug. 3, 1968. Lowest recorded water level is 23.16 ft below land-surface datum on Mar. 12, 1990.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06	20.87	DEC 03	21.21	FEB 02	21.50	APR 03	21.30	JUN 04	20.62	AUG 03	20.56
NOV 04	21.05	JAN 03	21.35	MAR 03	21.67	MAY 08	20.75	JUL 11	20.31	SEP 03	20.75

WATER YEAR 2004 HIGHEST 20.31 JUL 11, 2004 LOWEST 21.67 MAR 03, 2004



OUTAGAMIE COUNTY

443353088194201. Local number, OU-24/18E/08-0416.

LOCATION.--Lat 44°33'53", long 88°19'42", Hydrologic Unit 04030202. Owner: USGS.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 740 ft, cased to 18 ft, open hole from 18-740 ft.

INSTRUMENTATION.--Water level measured by USGS personnel.

DATUM.--The elevation of land-surface datum is 985.00 ft above sea level. Measuring point: top of well casing, 2.50 ft above land-surface datum.

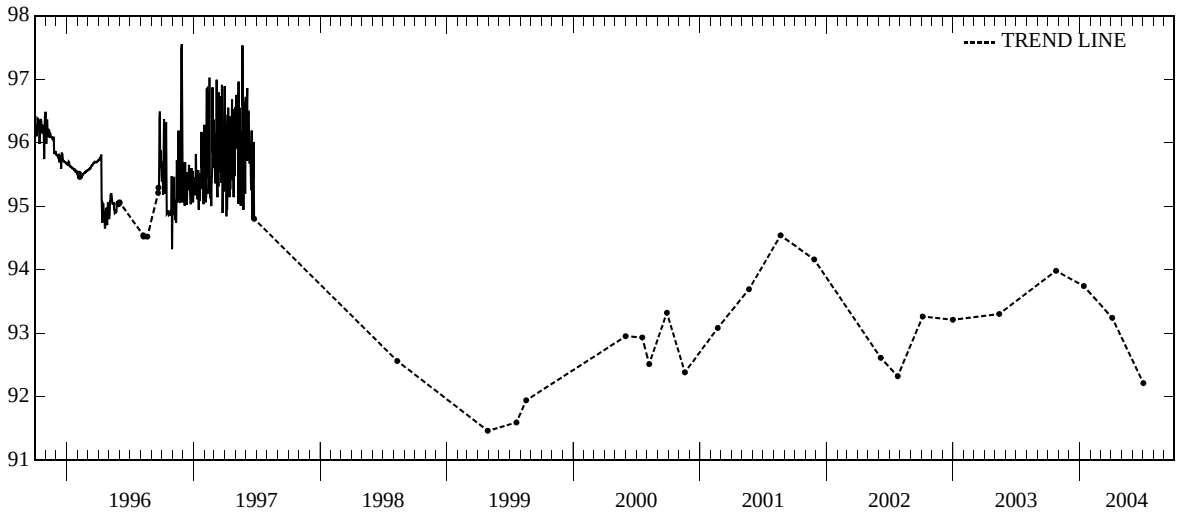
PERIOD OF RECORD.--July 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 91.46 ft below land-surface datum on Apr. 29, 1999. Lowest recorded water level is 105.50 ft below land-surface datum on Sept 3, 1992.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	93.98	JAN 13	93.74	APR 04	93.24	JUL 03	92.21

WATER YEAR 2004 HIGHEST 92.21 JUL 03, 2004 LOWEST 93.98 OCT 25, 2003



PEPIN COUNTY

443046092170401. Local number, PP-24/16W/26-0039.

LOCATION.--Lat 44°31'38", long 92°17'41", Hydrologic Unit 07040001. Owner: Wis. Dept. of Transportation.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 140 ft, cased to 41 ft, open hole 41-140 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of land-surface datum is 740.12 ft above sea level. Measuring point: hole in pump base, 1.70 ft above land-surface datum.

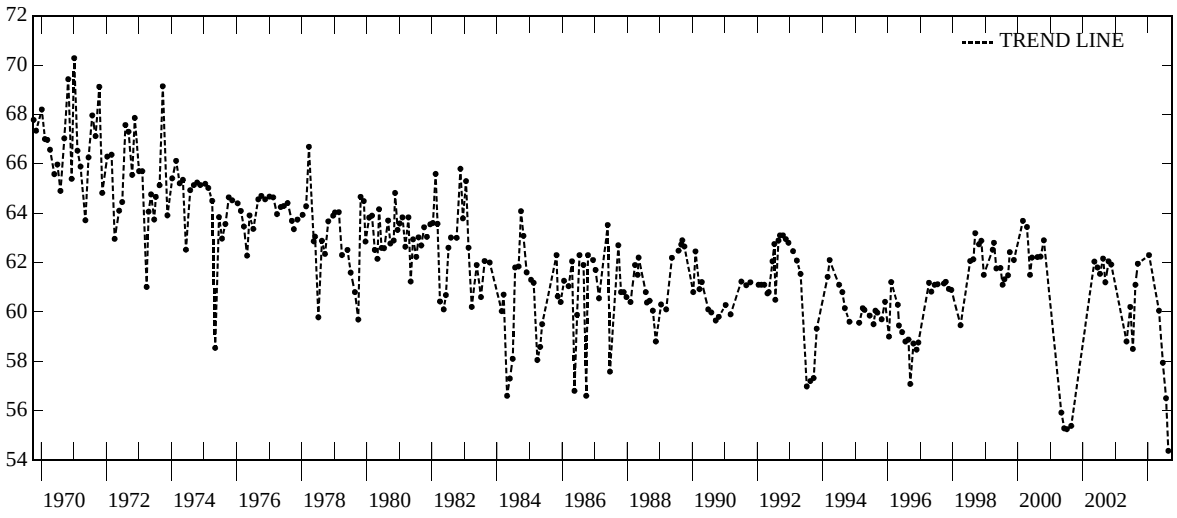
PERIOD OF RECORD.--May 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 55.25 ft below land-surface datum on Apr. 24, 1984. Lowest recorded water level is 70.28 ft below land-surface datum on Jan. 5, 1971.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 13	62.30	MAY 04	60.05	JUN 16	57.94	JUL 22	56.50	AUG 17	54.37

WATER YEAR 2004 HIGHEST 54.37 AUG 17, 2004 LOWEST 62.30 JAN 13, 2004



PEPIN COUNTY—Continued

443624091512401. Local number, PP-25/12W/32-0040.

LOCATION.--Lat 44°36'24", long 91°51'25", Hydrologic Unit 07050005. Owner: Wis. Dept. of Transportation.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 160 ft, cased to 124 ft, open hole 124-160 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of land-surface datum is 833.11 ft above sea level. Measuring point: hole in pump base, 2.50 ft above land-surface datum.

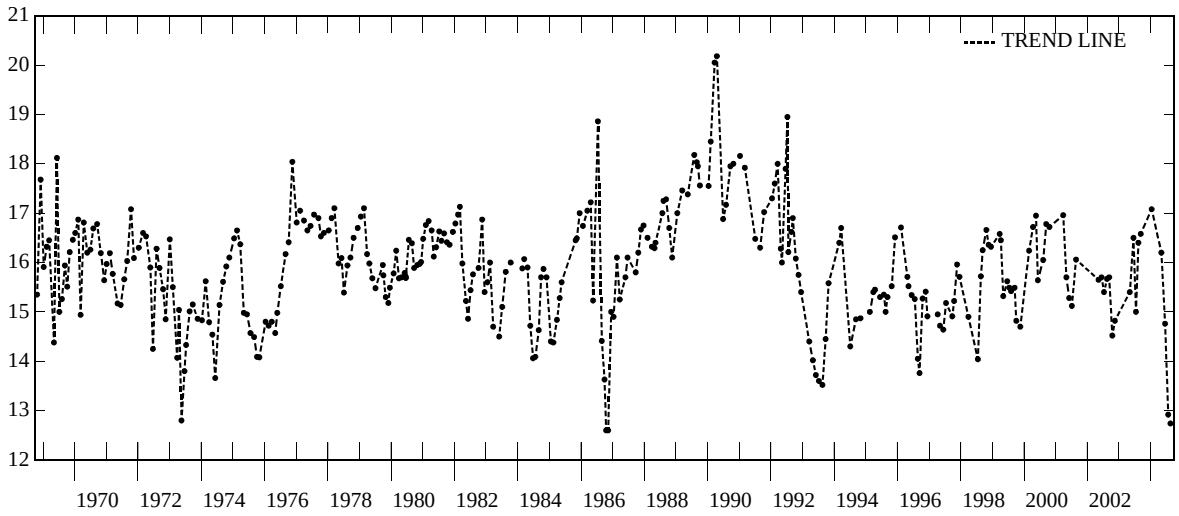
PERIOD OF RECORD.-- May 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 12.60 ft below land-surface datum on Oct. 18, 1986. Lowest recorded water level is 20.18 ft below land-surface datum on Apr. 18, 1990.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 13	17.08	MAY 04	16.20	JUN 16	14.76	JUL 22	12.92	AUG 17	12.74

WATER YEAR 2004 HIGHEST 12.74 AUG 17, 2004 LOWEST 17.08 JAN 13, 2004



POLK COUNTY

453013092314601. Local number, PK-35/17W/08-0040.

LOCATION.--Lat 45°30'13", long 92°31'47", Hydrologic Unit 07030005. Owner: Dane Village of Milltown.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled well, diameter 5 in., depth 52 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of land-surface datum is 1250.15 ft above sea level. Measuring point: hole in pump base, 0.00 ft above land-surface datum.

PERIOD OF RECORD.--September 1957 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 29.55 ft below and-lurface datum on July 23, 1986. Lowest recorded water level is 41.38 ft below land-surface datum on July 22, 1959.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	30.50	DEC 15	31.30	FEB 16	32.30	APR 15	32.55	JUN 10	32.70	SEP 15	32.00
NOV 17	30.80	JAN 16	31.50	MAR 17	32.40	MAY 13	32.70	JUL 14	32.10		

WATER YEAR 2004 HIGHEST 30.50 OCT 15, 2003 LOWEST 32.70 MAY 13, 2004 JUN 10, 2004

POLK COUNTY—Continued

452352092332001. Local number, PK-34/18W/26-0093.

LOCATION.--Lat 45°23'52", long 92°33'21", Hydrologic Unit 07030005. Owner: Wis. Dept. of Transportation.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled domestic well, diameter 6 in., depth 64 ft, cased to 60 ft, open end.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of land-surface datum is 1160.13 ft above sea level. Measuring point: hole in pump base, 2.00 ft above land-surface datum.

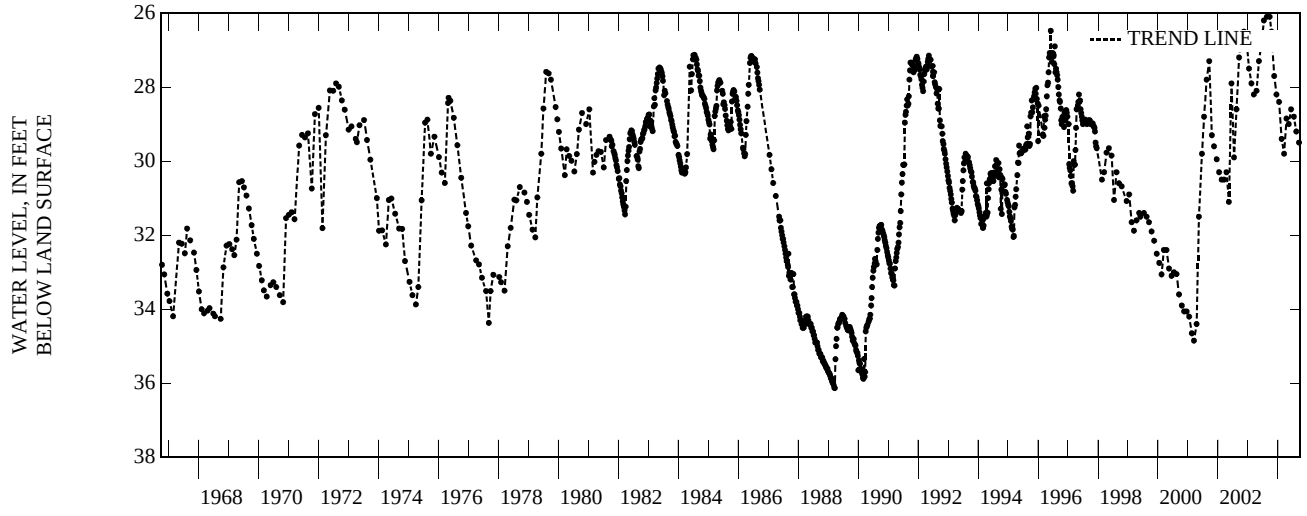
PERIOD OF RECORD.--May 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 26.10 ft below land-surface datum on Aug. 20, 2003. Lowest recorded water level is 36.13 ft below land-surface datum on Mar. 22, 1989.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	26.50	DEC 15	28.20	FEB 16	29.40	APR 15	28.85	JUN 10	28.60	AUG 12	29.20
NOV 17	27.70	JAN 16	28.40	MAR 17	29.80	MAY 13	29.00	JUL 14	28.80	SEP 15	29.50

WATER YEAR 2004 HIGHEST 26.50 OCT 15, 2003 LOWEST 29.80 MAR 17, 2004



PORTAGE COUNTY

441833089315601. Local number, PT-21/08E/10-0036.

LOCATION.--Lat 44°18'33", long 89°31'56", Hydrologic Unit 07070003. Owner: USGS.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Driven observation water-table well, diameter 1.25 in., depth 10 ft, cased to 8 ft screen interval 8-10 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of land-surface datum is 1074.25 ft above sea level. Measuring point: top of casing, 3.40 ft above land-surface datum.

PERIOD OF RECORD.--September 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 0.88 ft below land-surface datum on May 10, 1973. Lowest recorded water level is 7.10 ft below land-surface datum on July 20, 1995.

441454089432801. Local number, PT-21/07E/31-0059.

LOCATION.--Lat 44°14'54", long 89°43'28", Hydrologic Unit 07070003. Owner: USGS.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Driven observation water-table well, diameter 1.25 in., depth 15 ft, cased to 13 ft, screen interval 13-15 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of land-surface datum is 1033.95 ft above sea level. Measuring point: top of casing, 2.00 ft above land-surface datum.

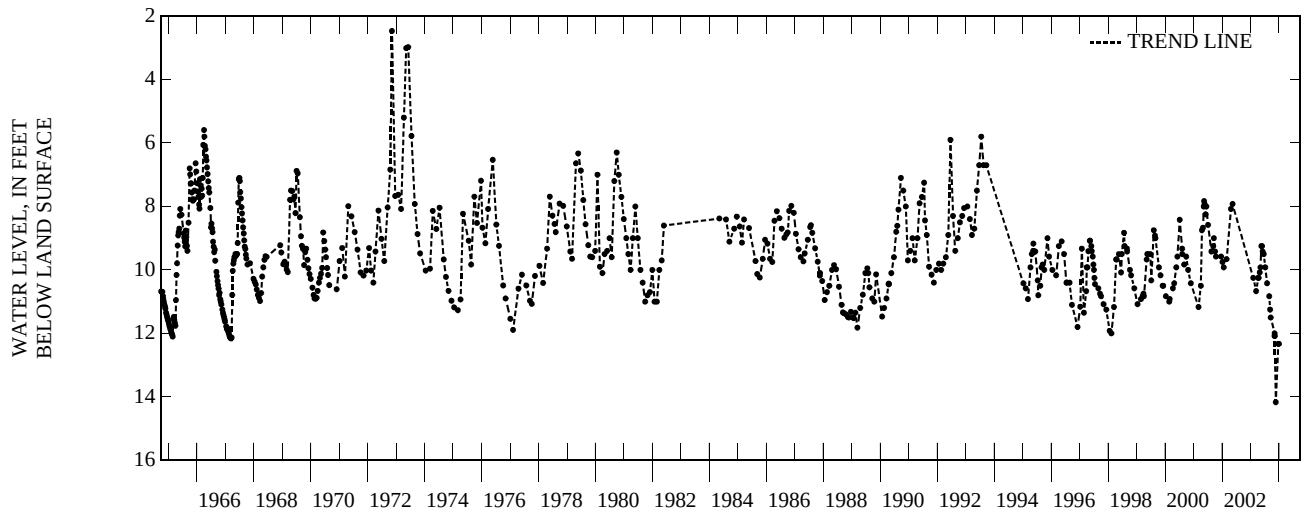
PERIOD OF RECORD.--August 1964 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 2.47 ft below land-surface datum on Nov 9, 1972. Lowest recorded water level is 14.17 ft below land-surface datum on Nov. 21, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06	12.00	NOV 07	12.08	NOV 21	14.17	DEC 23	12.33	DEC 31	12.33

WATER YEAR 2004 HIGHEST 12.00 NOV 06, 2003 LOWEST 14.17 NOV 21, 2003



PORTAGE COUNTY—Continued

442810089194501. Local number, PT-23/10E/18-0276.

LOCATION.--Lat 44°28'10", long 89°19'45", Hydrologic Unit 04030202. Owner: Portage County.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Driven unused water-table well, diameter 1.25 in., depth 17 ft, cased to 15 ft.

INSTRUMENTATION.--Water level measured by USGS personnel.

DATUM.--The elevation of land-surface datum is 1,119.97 ft above sea level. Measuring point: top of hole in casing cover, 3.50 ft above land-surface datum.

PERIOD OF RECORD.--July 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 20.21 ft below land-surface datum on May 12, 1973. Lowest recorded water level is 29.89 ft below land-surface datum on Mar. 11, 1990.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	7.89	OCT 29	8.00	JAN 22	8.70	APR 04	6.90	JUL 03	5.00

WATER YEAR 2004 HIGHEST 5.00 JUL 03, 2004 LOWEST 8.70 JAN 22, 2004

442623089302701. Local number, PT-23/08E/25-0376.

LOCATION.--Lat 44°26'23", long 89°30'27", Hydrologic Unit 07070003. Owner: USGS.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled well, diameter 1.25 in., depth 36 ft, cased to 34 ft, screen interval 34-36 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of land-surface datum is 1098.94 ft above sea level. Measuring point: top of casing, 3.30 ft above land-surface datum.

PERIOD OF RECORD.--March 1960 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 4.77 ft below land-surface datum on June 5, 1973. Lowest recorded water level is 15.47 ft below land-surface datum on Feb, 24, 2000.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 07	15.12	NOV 21	15.12	DEC 05	15.03	DEC 23	15.28	DEC 31	15.37

WATER YEAR 2004 HIGHEST 15.03 DEC 05, 2003 LOWEST 15.37 DEC 31, 2003

PRICE COUNTY

453311090065301. Local number, PR-35/03E/04-0065.

LOCATION.--Lat 45°33'11", long 90°06'54", Hydrologic Unit 07070001. Owner: Town of Knox.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled domestice water-table well, diameter 6 in., depth 118 ft, cased to 118 ft, open end.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of land-surface datum is 1695.00 ft above sea level. Measuring point: top of casing, 2.00 ft above land-surface datum.

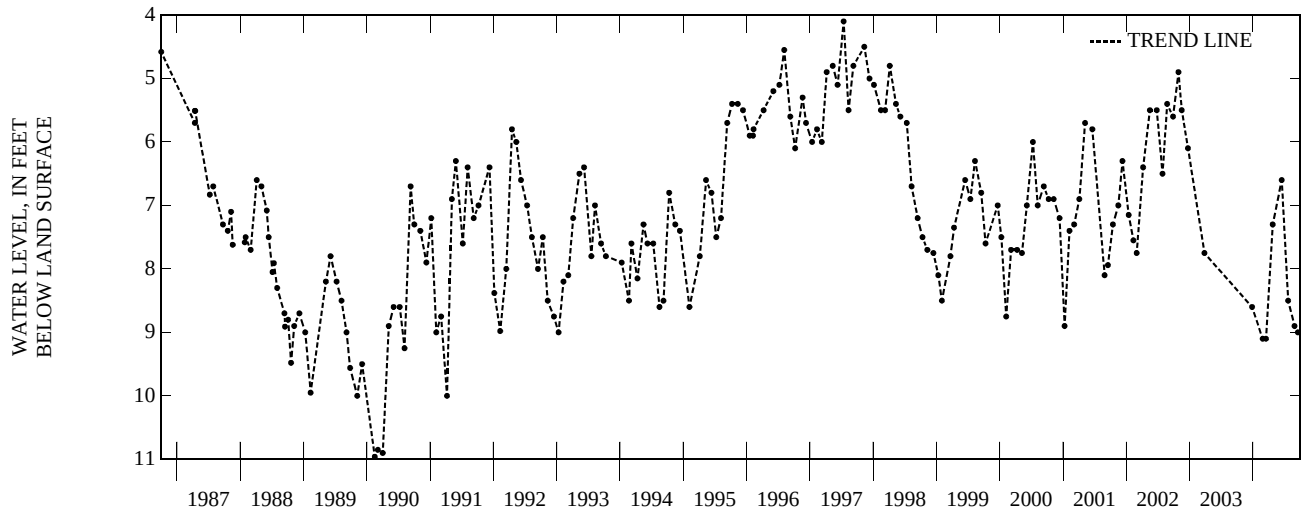
PERIOD OF RECORD.--October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 4.10 ft below land-surface datum on July 14, 1997. Lowest recorded water level is 10.96 ft below land-surface datum on Feb. 15, 1990.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 27	8.60	MAR 16	9.10	JUN 15	6.60	AUG 28	8.90				
FEB 26	9.10	APR 24	7.30	JUL 22	8.50	SEP 16	9.00				

WATER YEAR 2004 HIGHEST 6.60 JUN 15, 2004 LOWEST 9.10 FEB 26, 2004 MAR 16, 2004



RACINE COUNTY

424119088081801. Local number, RA-03/20E/28-0062.

LOCATION.--Lat 42°41'19", long 88°08'18", Hydrologic Unit 07120006. Owner: Wis. Dept. of Transportation.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 104 ft, open end.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of land-surface datum is 799.75 ft above sea level. Measuring point: top of casing, 1.50 ft above land-surface datum.

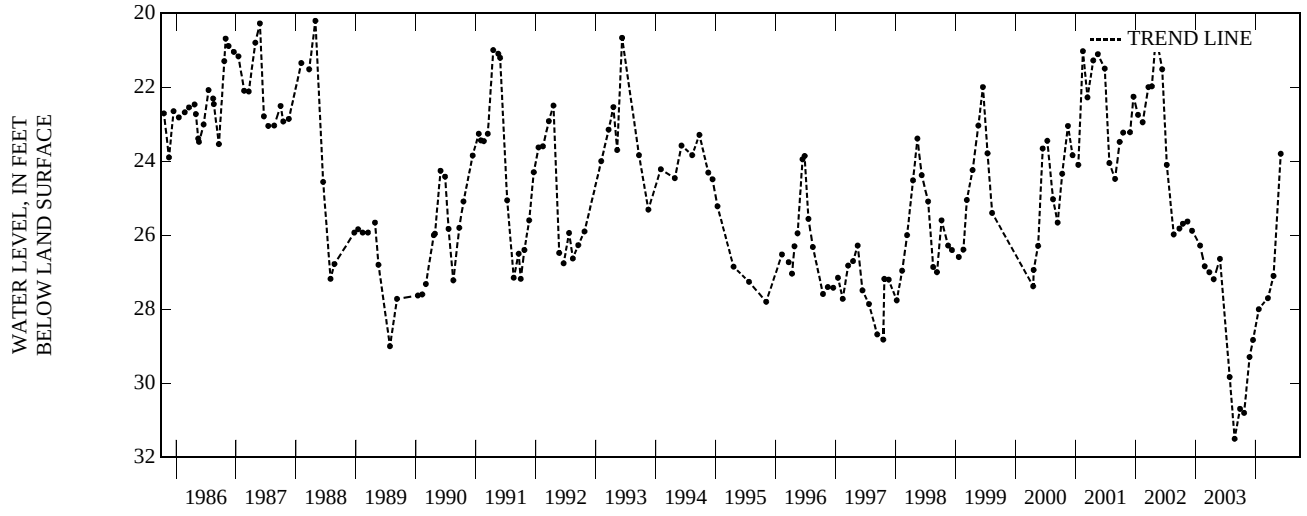
PERIOD OF RECORD.--September 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 20.21 ft below land-surface datum on Apr. 28, 1988. Lowest recorded water level is 31.50 ft below land-surface datum on Nov. 14, 1963.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	30.80	DEC 17	28.83	MAR 17	27.70	JUN 03	23.80				
NOV 26	29.29	JAN 21	28.00	APR 20	27.10						

WATER YEAR 2004 HIGHEST 23.80 JUN 03, 2004 LOWEST 30.80 OCT 24, 2003



RICHLAND COUNTY

431840090203201. Local number, RI-10/01E/26-0023.

LOCATION.--Lat 43°18'40", long 90°20'32", Hydrologic Unit 07070005. Owner: Koch Tractor Company.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled domestic well, diameter 6 in., depth 160 ft, cased to 135 ft, open hole 135-160 ft.

INSTRUMENTATION.--Water level measured by USGS personnel.

DATUM.--The elevtion of land-surface datum is 724.86 ft above sea level. Measuring point: top of 1-in. breather pipe, 1.00 ft above land-surface datum.

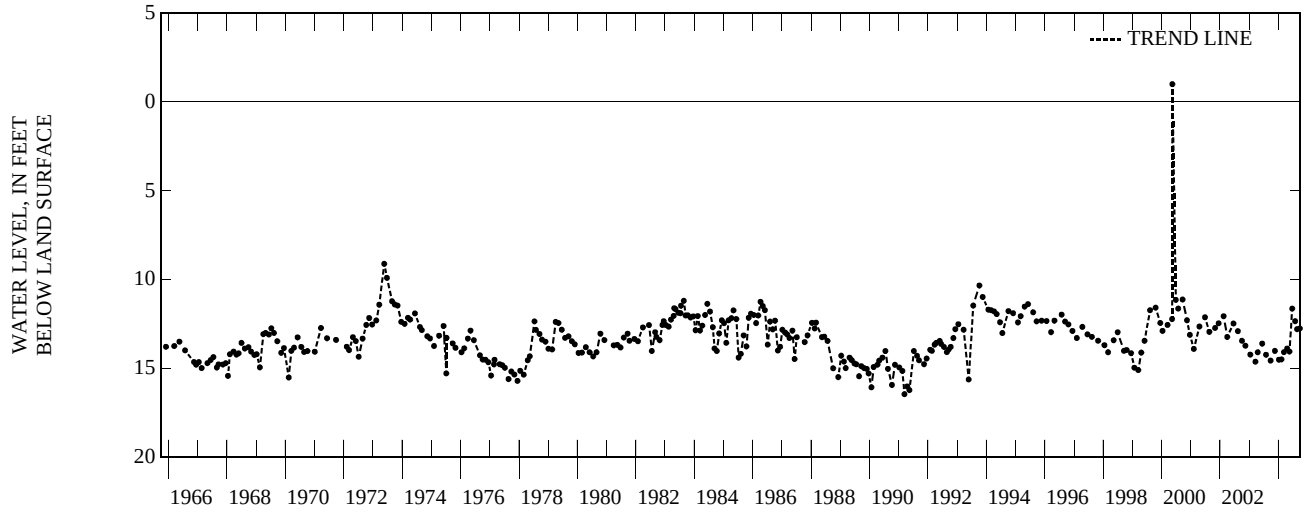
PERIOD OF RECORD.--February 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 9.11 ft below land-surface datum on May 22, 1973. Lowest recorded water level is 16.45 ft below land-surface datum on Mar. 14, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 18	14.01	FEB 08	14.49	APR 19	13.88	JUN 21	11.63	AUG 21	12.79		
JAN 07	14.51	MAR 10	14.08	MAY 18	14.05	JUL 28	12.34	SEP 25	12.75		

WATER YEAR 2004 HIGHEST 11.63 JUN 21, 2004 LOWEST 14.51 JAN 07, 2004



ROCK COUNTY

423019089020401. Local number, RO-01/12E/35-0040.

LOCATION.--Lat 42°30'19", long 89°02'04", Hydrologic Unit 07090001. Owner: Beloit Box Board Co.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled undustrial well, diameter 13 in., depth 133 ft, cased to 92 ft, screen interval 92-125 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of land-surface datum is 744.80 ft above sea level. Measuring point: breather hole in pump base, 1.00 ft above land-surface datum.

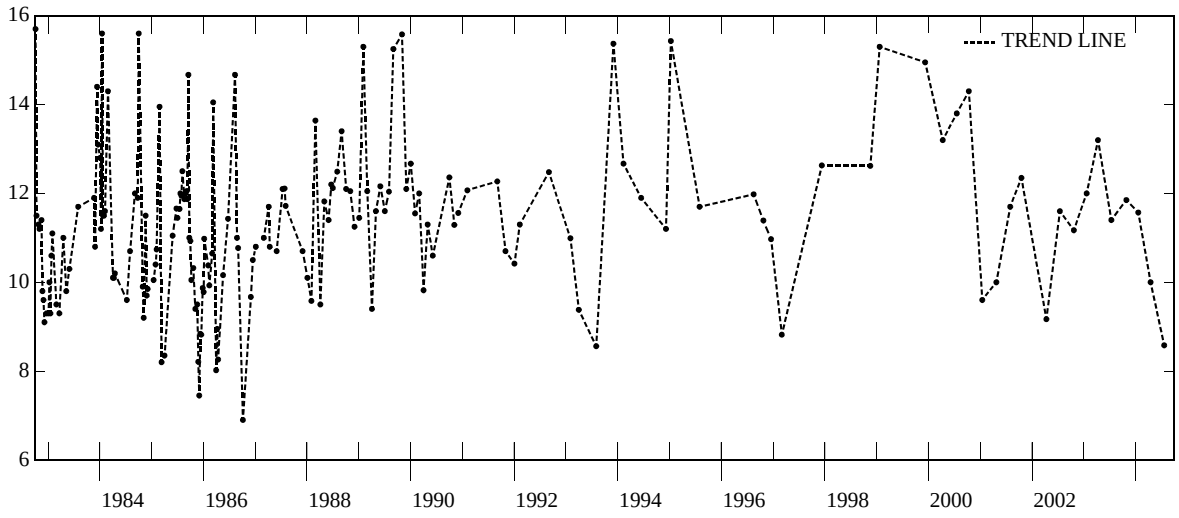
PERIOD OF RECORD.--July 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 6.90 ft below land-surface datum on Oct. 6, 1986. Lowest recorded water level is 36.00 ft below land-surface datum on Feb. 19, 1957.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	11.85	JAN 20	11.57	APR 16	10.00	JUL 21	8.58

WATER YEAR 2004 HIGHEST 8.58 JUL 21, 2004 LOWEST 11.85 OCT 28, 2003



SAUK COUNTY

432100089440001. Local number, SK-10/06E/02-0003.

LOCATION.--Lat 43°21'00", long 89°44'00", Hydrologic Unit 07070005. Owner: Badger Aumunition Plant.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 12 in., depth 451 ft, cased to 160 ft open hole 160-451 ft.

INSTRUMENTATION.--Continuous water-level recorder.

DATUM.--The elevation of land-surface datum is 883.83 ft above sea level. Measuring point: top of recorder platform, 1.00 ft above land-surface datum.

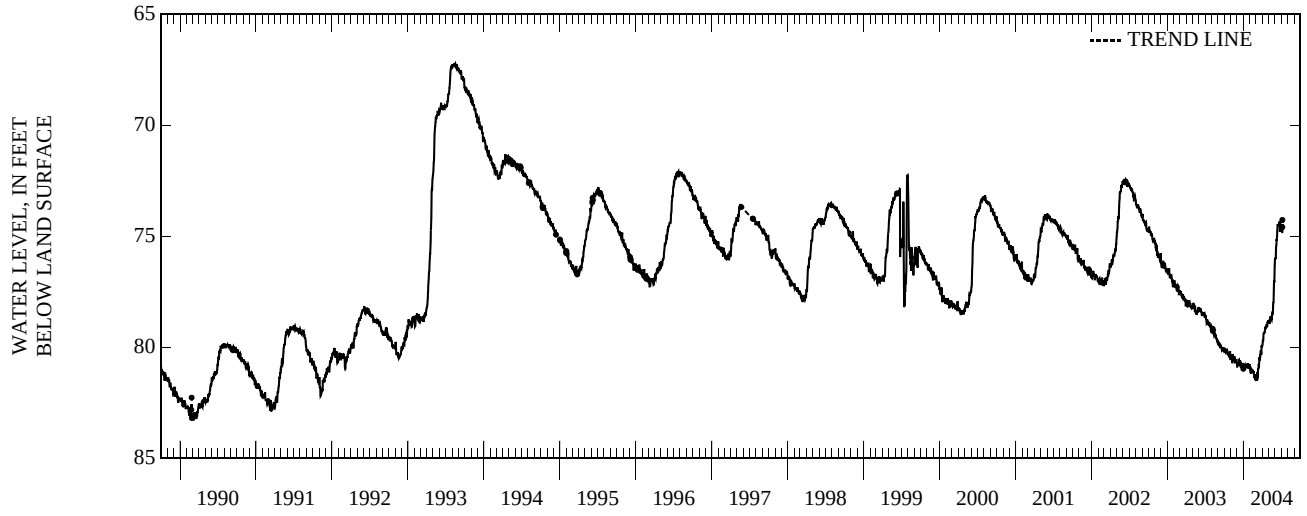
PERIOD OF RECORD.--February 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 67.23 ft below land-surface datum on Aug. 10, 1993. Lowest recorded water level is 90.00 ft below land-surface datum on Jan. 1, 1942.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	80.17	80.52	80.75	80.88	81.15	81.49	79.63	78.80	75.67	74.85	---	---
10	80.17	80.52	80.59	80.92	81.01	81.16	79.35	78.70	74.96	---	---	---
15	80.20	80.45	80.58	80.83	81.12	80.78	79.13	78.76	74.50	---	---	---
20	80.21	80.56	80.87	80.86	81.14	80.46	79.10	78.39	74.37	---	---	---
25	80.43	80.66	80.89	80.92	81.42	80.24	78.85	77.75	74.36	---	---	---
EOM	80.52	80.72	80.97	80.93	81.34	79.97	78.88	76.02	74.50	---	---	---

WATER YEAR 2004 HIGHEST 74.27 JUL 06, 2004 LOWEST 81.49 MAR 05, 2004



SAUK COUNTY—Continued

433605090133701. Local number, SK-13/02E/14-0230.

LOCATION.--Lat 43°36'05", long 90°13'37", Hydrologic Unit 07070004. Owner: Alvin Hageremann.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 160 ft, cased to 40.5 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of land-surface datum is 1,119.93 ft above sea level. Measuring point: top of casing, 0.50 ft above land-surface datum.

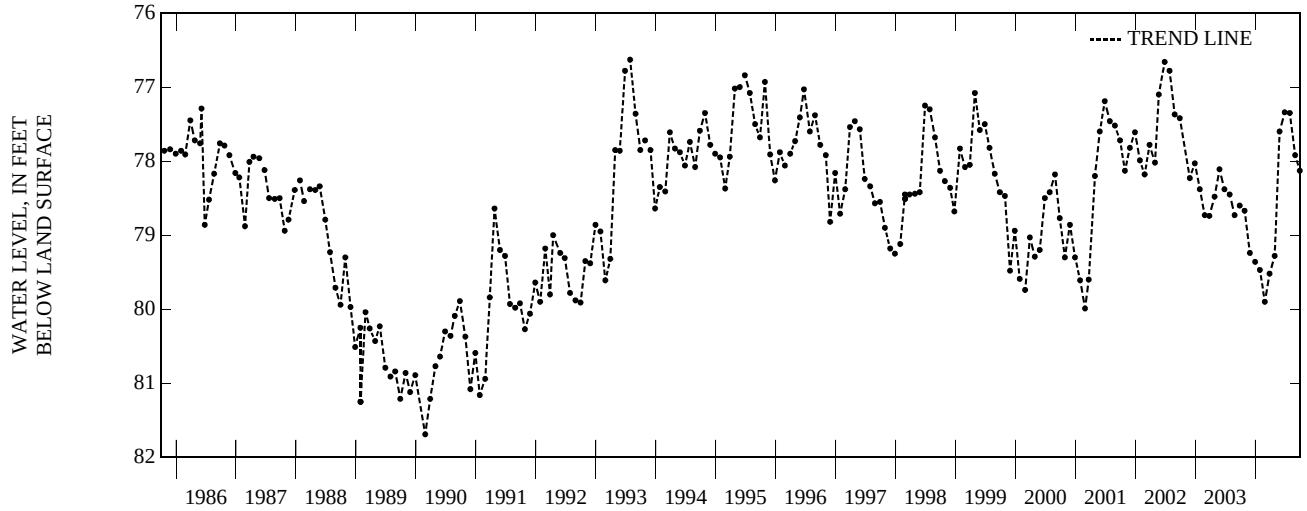
PERIOD OF RECORD.--April 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 76.63 ft below land-surface datum on July 28, 1993. Lowest recorded water level is 110.00 ft below land-surface datum on Oct. 13, 1953.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	78.67	DEC 30	79.36	FEB 27	79.90	APR 27	79.28	JUN 27	77.34	AUG 30	77.92
NOV 28	79.24	JAN 28	79.47	MAR 27	79.52	MAY 27	77.60	JUL 28	77.35	SEP 27	78.13

WATER YEAR 2004 HIGHEST 77.34 JUN 27, 2004 LOWEST 79.90 FEB 27, 2004



SAWYER COUNTY

460005091291801. Local number, SW-41/09W/28-0007.

LOCATION.--Lat 46°00'05", long 91°29'19", Hydrologic Unit 07030002. Owner: Wis. Dept. of Natural Resources.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled well, diameter 8 in., depth 25 ft, cased to 22 ft, screen interval 22-25 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of land-surface datum is 1189.93 ft above sea level. Measuring point: pointer on float gage, 4.58 ft above land-surface datum.

PERIOD OF RECORD.--May 1937 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 13.07 ft below land-surface datum on Sept. 2, 1941. Lowest recorded water level is June 28, 2004 ft below land-surface datum on June 28, 2004.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 03	15.62	JUN 07	17.22	JUL 05	16.14	AUG 02	16.26	AUG 30	16.41	SEP 27	16.41
10	15.52	14	18.12	12	15.95	09	16.28	SEP 06	16.38		
17	15.67	21	18.52	19	15.98	16	16.33	13	16.37		
24	15.86	28	20.12	26	16.24	23	16.34	20	16.40		

WATER YEAR 2004 HIGHEST 15.52 MAY 10, 2004 LOWEST 20.12 JUN 28, 2004

SHAWANO COUNTY

444627088321401. Local number, SH-27/16E/34-0027.

LOCATION.--Lat 44°46'27", long 88°32'14", Hydrologic Unit 04030202. Owner: Wis. Dept. of Transportation.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 95 ft, cased to 51 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of land-surface datum is 839.92 ft above sea level. Measuring point: hole in pump base, 2.00 ft above land-surface datum.

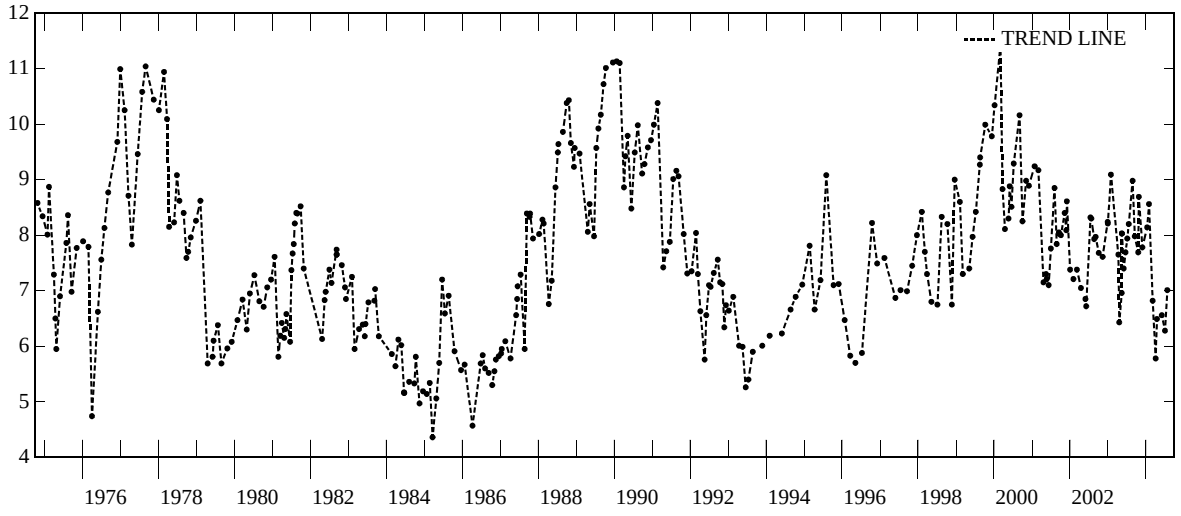
PERIOD OF RECORD.--September 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 4.36 ft below land-surface datum on Mar. 20, 1985. Lowest recorded water level is 15.00 ft below land-surface datum on Mar. 25, 1970.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	7.69	NOV 28	7.78	JAN 31	8.56	APR 04	5.78	JUN 02	6.56	JUL 25	7.01
25	8.69	JAN 13	8.14	MAR 06	6.82	16	6.49	JUL 03	6.28		

WATER YEAR 2004 HIGHEST 5.78 APR 04, 2004 LOWEST 8.69 OCT 25, 2003



SHAWANO COUNTY—Continued

444204088214701. Local number, SH-26/18E/30-0225.

LOCATION.--Lat 44°42'04", long 88°21'47", Hydrologic Unit 04030202. Owner: USGS.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 54 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of land-surface datum is 918.00 ft above sea level. Measuring point: hole in casing cover, 2.50 ft above land-surface datum.

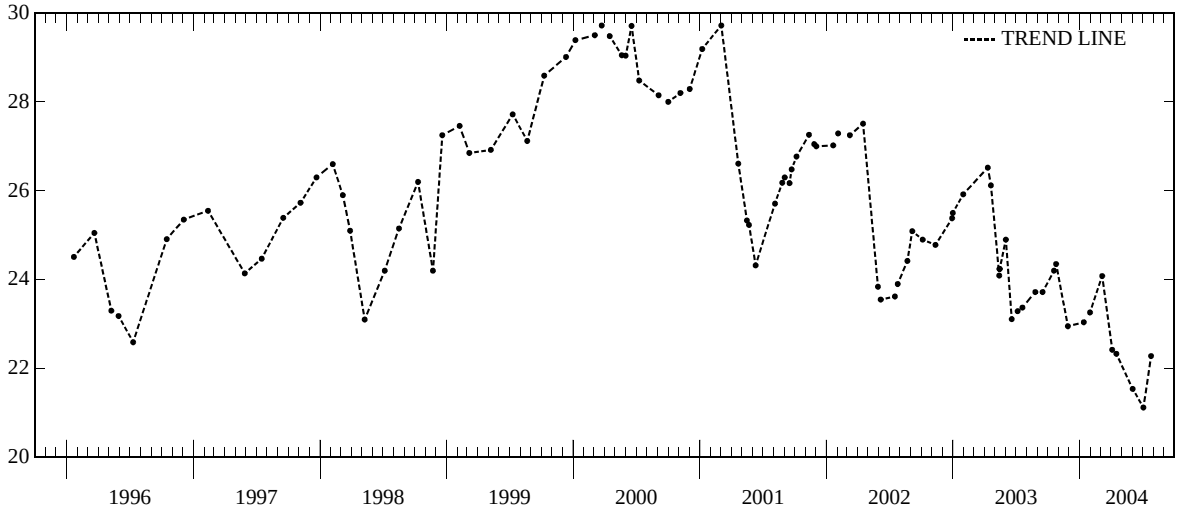
PERIOD OF RECORD.--August 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 21.12 ft below land-surface datum on July 10, 1996. Lowest recorded water level is 29.72 ft below land-surface datum on Mar. 23, 2000.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	24.20	NOV 28	22.95	JAN 31	23.26	APR 04	22.42	JUN 02	21.54	JUL 25	22.28
25	24.35	JAN 13	23.04	MAR 06	24.08	16	22.33	JUL 03	21.12		

WATER YEAR 2004 HIGHEST 21.12 JUL 03, 2004 LOWEST 24.35 OCT 25, 2003



TAYLOR COUNTY

450947090483902. Local number, TA-31/04W/13-0001.

LOCATION.--Lat 45°09'47", long 90°48'39", Hydrologic Unit 07050005. Owner: Village of Gilman.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 18 in., depth 26 ft, cased to 16 ft, screened interval 16-26 ft.

INSTRUMENTATION.--Countinuous water-level recorder.

DATUM.--The elevation of land-surface datum is 1199.98 ft above sea level. Measuring point: top of recorder platform, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--April 1957 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 3.69 ft below land-surface datum on June 21, 1993. Lowest recorded water level is 15.35 ft below land-surface datum on Apr. 22, 1998.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.36	10.06	9.89	9.72	9.50	9.22	7.01	8.95	7.39	9.82	10.47	10.56
10	10.36	10.06	9.85	9.64	9.50	8.89	7.85	9.09	8.17	9.95	10.44	10.55
15	10.33	10.03	9.70	9.79	9.62	8.86	8.48	8.28	8.37	10.08	10.52	10.52
20	10.31	9.78	9.93	9.77	9.64	8.93	8.21	8.77	9.04	10.24	10.52	10.45
25	10.29	9.66	9.82	9.62	9.37	8.83	8.28	8.36	9.47	10.42	10.45	10.43
EOM	10.18	9.81	9.73	9.64	9.40	5.82	8.53	6.85	9.73	10.38	10.55	10.46

WATER YEAR 2004 HIGHEST 5.71 MAR 30, 2004
LOWEST 10.56 SEP 03, 2004 SEP 04, 2004 SEP 05, 2004 SEP 12, 2004 SEP 13, 2004 SEP 14, 2004

TREMPEALEAU COUNTY

440422091182901. Local number, TR-19/08W/35-0001.

LOCATION.--Lat 44°04'22", long 91°18'30", Hydrologic Unit 07040007. Owner: Mrs. William Davidson.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in., depth 195 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of land-surface datum is 819.96 ft above sea level. Measuring point: top of casing, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--October 1947 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 131.38 ft below land-surface datum on Sept. 7, 1993. Lowest recorded water level is 146.56 ft below land-surface datum on Sept. 1, 1959.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	140.97	DEC 01	141.21	FEB 01	141.25	APR 01	140.19	JUN 11	138.38	AUG 14	139.08
NOV 01	141.50	JAN 01	141.20	MAR 01	141.09	MAY 01	139.88	JUL 14	138.30	SEP 01	140.26

WATER YEAR 2004 HIGHEST 138.30 JUL 14, 2004 LOWEST 141.50 NOV 01, 2003

440414091270401. Local number, TR-19/09W/33-0009.

LOCATION.--Lat 44°04'14", long 91°27'05", Hydrologic Unit 07040005. Owner: Village of Centerville.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled public supply water-table well, diameter 6 in., depth 71 ft, cased to 66 ft, screened interval 66-71 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of land-surface datum is 739.95 ft above sea level. Measuring point: top of breather pipe, 0.00 ft above land-surface datum.

PERIOD OF RECORD.--May 1953 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 42.80 ft below land-surface datum on Oct. 12, 1993. Lowest recorded water level is 57.11 ft below land-surface datum on Mar. 16, 1965.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	51.60	DEC 01	51.70	FEB 03	52.20	MAY 10	52.40	JUL 02	52.60	SEP 02	51.90
NOV 03	51.90	JAN 02	51.90	APR 06	52.20	JUN 08	52.40	AUG 03	51.80		

WATER YEAR 2004 HIGHEST 51.60 OCT 01, 2003 LOWEST 52.60 JUL 02, 2004

TREMPEALEAU COUNTY—Continued

441743091153101. Local number, TR-21/07W/17-0071.

LOCATION.--Lat 44°17'43", long 91°15'32", Hydrologic Unit 07040003. Owner: Wis. Dept. of Transporation.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled recased water-table well, diameter 4 in., depth 83, cased to 42 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of land-surface datum is 884.97 ft above sea level. Measuring point: hole in pump base, 2.00 ft above land-surface datum.

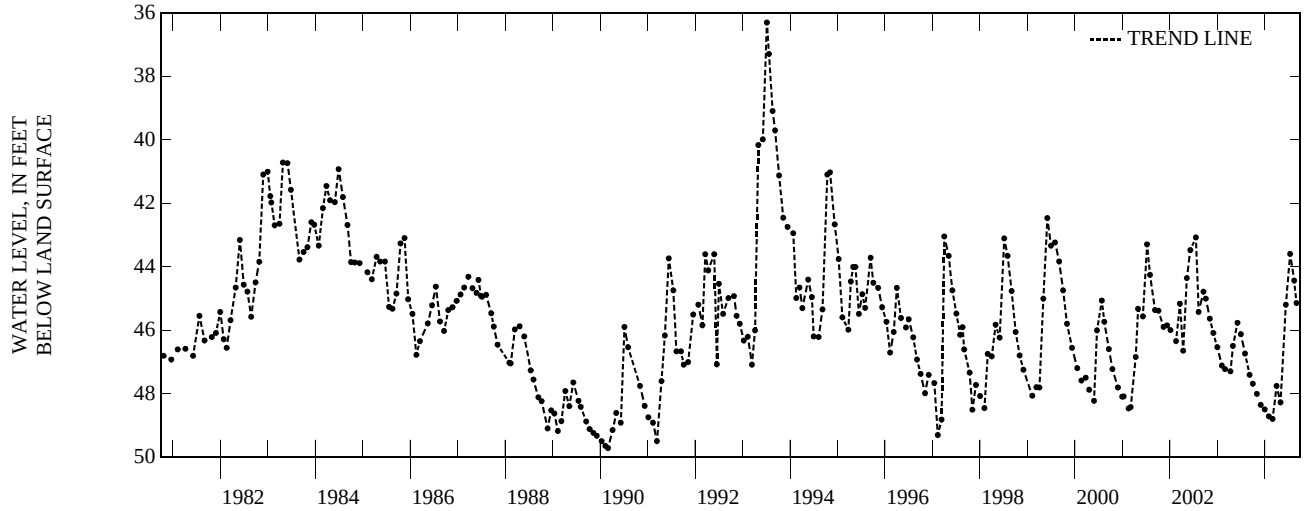
PERIOD OF RECORD.--March 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 36.30 ft below land-surface datum on July 6, 1993. Lowest recorded water level is 49.71 ft below land-surface datum on Mar. 2, 1990.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	47.68	DEC 01	48.35	FEB 01	48.71	APR 01	47.75	JUN 11	45.19	AUG 14	44.43
NOV 01	48.00	JAN 01	48.49	MAR 01	48.79	MAY 01	48.27	JUL 14	43.59	SEP 01	45.14

WATER YEAR 2004 HIGHEST 43.59 JUL 14, 2004 LOWEST 48.79 MAR 01, 2004



VERNON COUNTY

433928091102501. Local number, VE-14/07W/26-0008.

LOCATION.--Lat 43°39'28", long 91°10'25", Hydrologic Unit 07060001. Owner: Wis. Dept. of Transportation.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Dug well, diameter 4 in., depth 53 ft, cased to 53 ft, open end.

INSTRUMENTATION.--Water level measured by USGS personnel.

DATUM.--The elevation of land-surface datum is 709.97 ft above sea level. Measuring point: breather hole in pump base, 0.50 ft above land-surface datum.

PERIOD OF RECORD.--July 1934 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 38.18 ft below land-surface datum on Nov. 16, 1993. Lowest recorded water level is 52.01 ft below land-surface datum on Nov. 11, 1934.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 18	44.61	APR 19	45.05	JUN 21	44.13	AUG 21	43.88				
MAR 10	45.33	MAY 18	45.24	JUL 28	43.79	SEP 25	44.11				

WATER YEAR 2004 HIGHEST 43.79 JUL 28, 2004 LOWEST 45.33 MAR 10, 2004

VERNON COUNTY—Continued

432842090494401. Local number, VE-12/04W/34-0052.

LOCATION.--Lat 43°28'42", long 90°49'44", Hydrologic Unit 07070006. Owner: Wis. Dept. of Transportation.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 8 in., depth 100 ft, cased to 49 ft.

INSTRUMENTATION.--Water level measured by USGS personnel.

DATUM.--The elevation of land-surface datum is 899.92 ft above sea level. Measuring point: hole in pump base, 1.00 ft above land-surface datum.

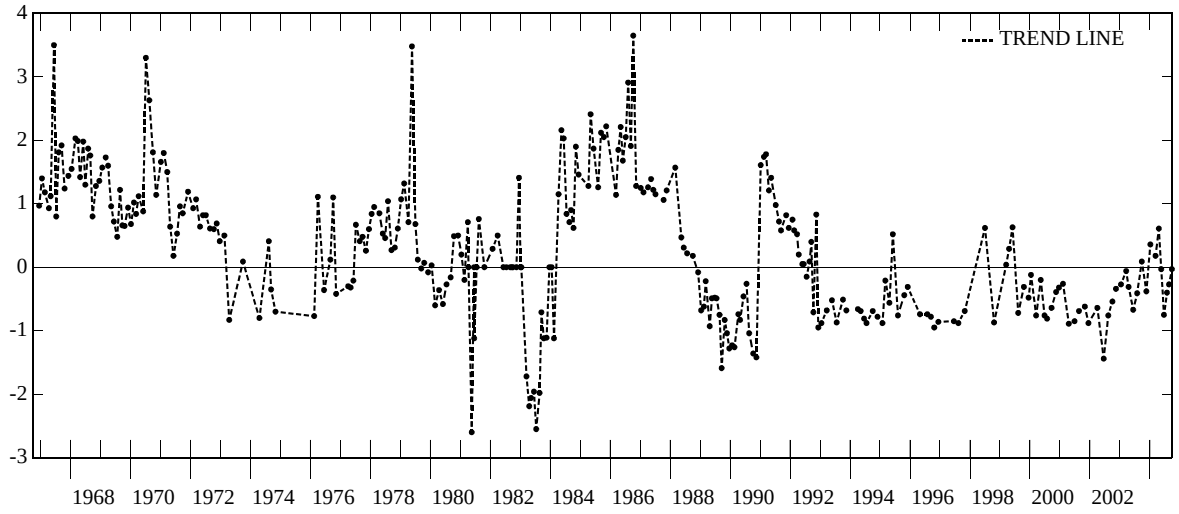
PERIOD OF RECORD.--September 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 2.60 ft above land-surface datum on May 19, 1981. Lowest recorded water level is 3.65 ft below land-surface datum on Oct 8, 1986.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+"), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 19	+.38	MAR 10	.18	MAY 18	+.03	JUL 28	+.40	SEP 25	+.03		
JAN 07	.36	APR 19	.61	JUN 21	+.75	AUG 21	+.27				

WATER YEAR 2004 HIGHEST +.75 JUN 21, 2004 LOWEST .61 APR 19, 2004



VERNON COUNTY—Continued

433921091132101. Local number, VE-14/07W/28-0117.

LOCATION.--Lat 43°39'21", long 91°13'21", Hydrologic Unit 07060001. Owner: USGS.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 1.5 in., depth 64 ft, open end.

INSTRUMENTATION.--Water level measured by USGS personnel.

DATUM.--The elevation of land-surface datum is 649.96 ft above sea level. Measuring point: top of pipe coupling, 3.23 ft above land-surface datum.

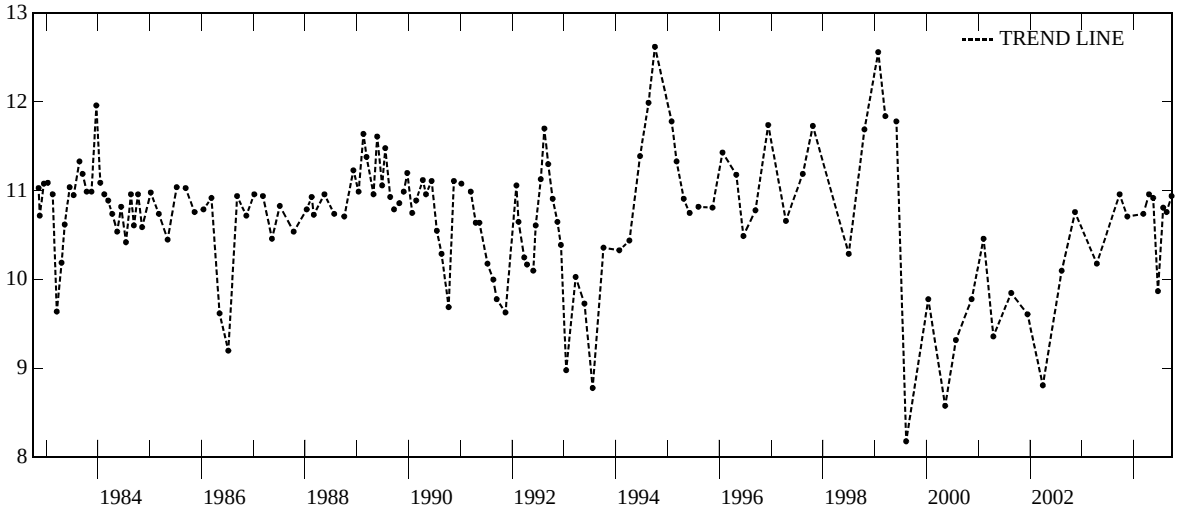
PERIOD OF RECORD.--September 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 8.18 ft below land-surface datum on Aug. 11, 1999. Lowest recorded water level is 12.62 ft below land-surfce datum on Oct. 4, 1994.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 18	10.71	APR 19	10.96	JUN 21	9.87	AUG 21	10.76				
MAR 10	10.74	MAY 18	10.92	JUL 28	10.81	SEP 25	10.94				

WATER YEAR 2004 HIGHEST 9.87 JUN 21, 2004 LOWEST 10.96 APR 19, 2004



VERNON COUNTY—Continued

433921091132102. Local number, VE-14/07W/28-0271.

LOCATION.--Lat 43°39'21", long 91°13'21", Hydrologic Unit 07060001. Owner: USGS.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 1.5 in., depth 622 ft, cased to 607, screen interval 607-622

INSTRUMENTATION.--Water level measured by USGS personnel.

DATUM.--The elevation of land-surface datum is 649.96 ft above sea level. Measuring point: top of pipe coupling, 0.00 ft above land-surface datum.

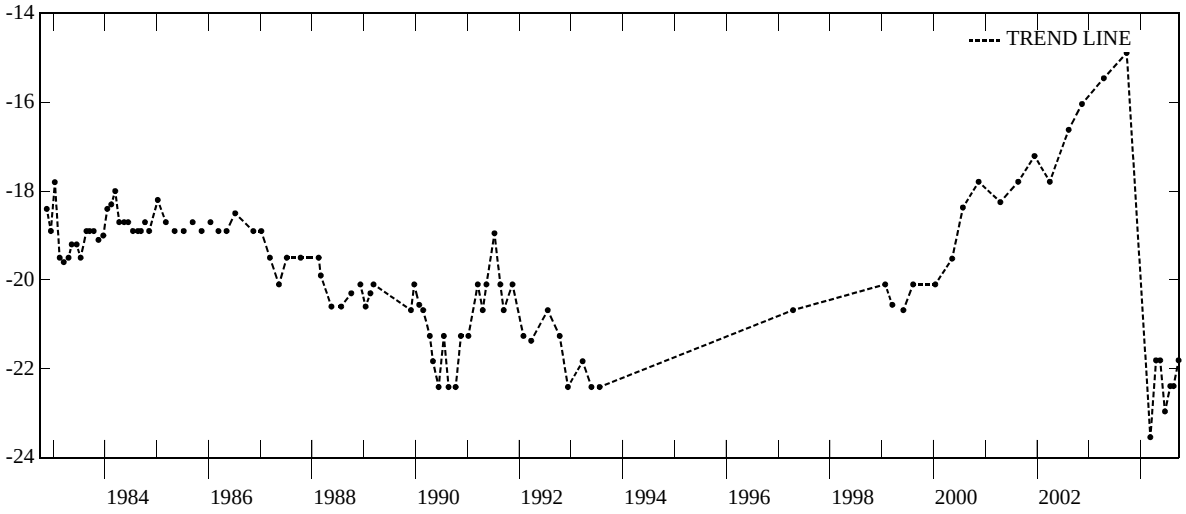
PERIOD OF RECORD.--November 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 23.54 ft above land-surface datum on Mar. 10, 2004. Lowest recorded water level is 14.89 ft below land-surface datum on Sept. 25, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+"), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 10	+23.54	MAY 18	+21.81	JUL 29	+22.39	SEP 25	+21.81				
APR 19	+21.81	JUN 21	+22.96	AUG 21	+22.39						

WATER YEAR 2004 HIGHEST +23.54 MAR 10, 2004 LOWEST +21.81 APR 19, 2004 MAY 18, 2004 SEP 25, 2004



VERNON COUNTY—Continued

433921091132103. Local number, VE-14/07W/28-0272.

LOCATION.--Lat 43°39'21", long 91°13'21", Hydrologic Unit 07060001. Owner: USGS.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 1.5 in., depth 317 ft, cased to 302, screen interval 302-317 ft.

INSTRUMENTATION.--Water level measured by USGS personnel.

DATUM.--The elevation of land-surface datum is 649.96 ft above sea level. Measuring point: top of pipe coupling, 0.00 ft above land-surface datum.

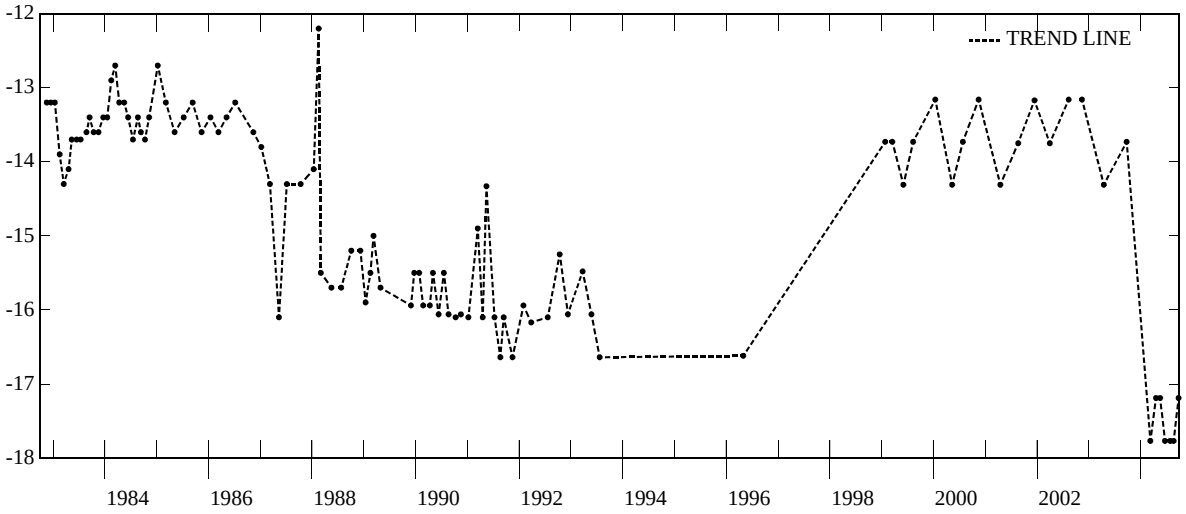
PERIOD OF RECORD.--November 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 17.77 ft above land-surface datum on Mar. 10, 2004. Lowest recorded water level is 12.20 ft above land-surface datum on Feb. 17, 1988.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+"), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 10	+17.77	MAY 18	+17.19	JUL 28	+17.77	SEP 25	+17.19				
APR 19	+17.19	JUN 21	+17.77	AUG 21	+17.77						

WATER YEAR 2004 HIGHEST +17.77 MAR 10, 2004 JUN 21, 2004 JUL 28, 2004 AUG 21, 2004
LOWEST +17.19 APR 19, 2004 MAY 18, 2004 SEP 25, 2004



VILAS COUNTY

460258089151901. Local number, VI-41/10E/09-0003.

LOCATION.--Lat 46°03'16", long 89°15'21", Hydrologic Unit 07070001. Owner: Wis. Dept. of Natural Resources.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Driven well, diameter 2 in., depth 20 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of land-surface datum is 1657.97 ft above sea level. Measuring point: breather hole in pump base, 2.00 ft above land-surface datum.

PERIOD OF RECORD.--September 1939 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 5.98 ft below land-surface datum on June 17, 1939. Lowest recorded water level is 12.93 ft below land-surface datum on Nov. 23, 1957.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03	11.11	DEC 02	11.00	FEB 05	10.90	APR 02	10.70	JUN 02	10.25	AUG 02	11.80
NOV 05	11.70	31	10.90	MAR 04	10.80	MAY 06	10.50	JUL 02	11.40	SEP 01	11.40

WATER YEAR 2004 HIGHEST 10.25 JUN 02, 2004 LOWEST 11.80 AUG 02, 2004

VILAS COUNTY—Continued

455517089144001. Local number, VI-40/10E/28-0033.

LOCATION.--Lat 45°55'17", long 89°14'40", Hydrologic Unit 07070001. Owner: Trees for Tomorrow, Inc.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 37 ft, cased to 37 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of land-surface datum is 985.00 ft above sea level. Measuring point: top of casing, 0.75 ft above land-surface datum.

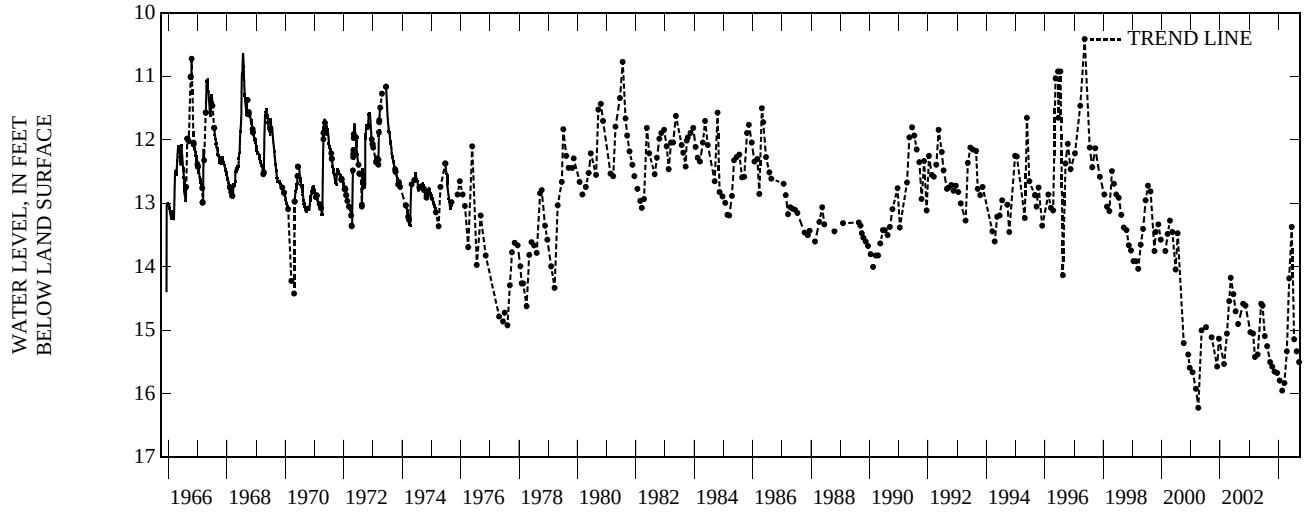
PERIOD OF RECORD.--December 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 10.41 ft below land-surface datum on May 14, 1997. Lowest recorded water level is 16.22 ft below land-surface datum on Apr. 4, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	15.57	DEC 16	15.67	FEB 17	15.95	APR 15	15.33	JUN 15	13.37	AUG 16	15.33
NOV 13	15.65	JAN 16	15.79	MAR 15	15.83	MAY 14	14.18	JUL 15	15.14	SEP 15	15.50

WATER YEAR 2004 HIGHEST 13.37 JUN 15, 2004 LOWEST 15.95 FEB 17, 2004



WALWORTH COUNTY

424004088440601. Local number, WW-03/15E/33-0009.

LOCATION.--Lat 42'40'4", long 88'44'6", Hydrologic Unit 07090001. Owner: Stewart Bros.

AQUIFER--Silurian dolomite.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 287 ft, cased to 287 ft, open end.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of land-surface datum is 964.79 ft above sea level. Measuring point: hole in pump base, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--May 1947 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 67.99 ft below land-surface datum on July 22, 1974. Lowest recorded water level is 80.98 ft below land-surface datum on Oct. 30, 1958.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	77.75	JAN 05	77.98	MAR 08	78.11	MAY 10	78.16	JUL 10	77.34	SEP 06	77.24
DEC 09	77.82	FEB 09	78.01	APR 12	78.20	JUN 01	78.19	AUG 07	77.49		

WATER YEAR 2004 HIGHEST 77.24 SEP 06, 2004 LOWEST 78.20 APR 12, 2004

WALWORTH COUNTY—Continued

423532088254601. Local number, WW-02/17E/36-0037.

LOCATION.--Lat 42°35'32", long 88°25'46", Hydrologic Unit 07120006. Owner: Dane City of Lake Geneva.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 10 in., depth 820 ft, cased to 10 in., 0-214 ft; 8 in., 214-227 ft, open end.

INSTRUMENTATION.--Water level measured by USGS personnel.

DATUM.--The elevation of land-surface datum is 859.78 ft above sea level. Measuring point: top of casing, 2.00 ft above land-surface datum.

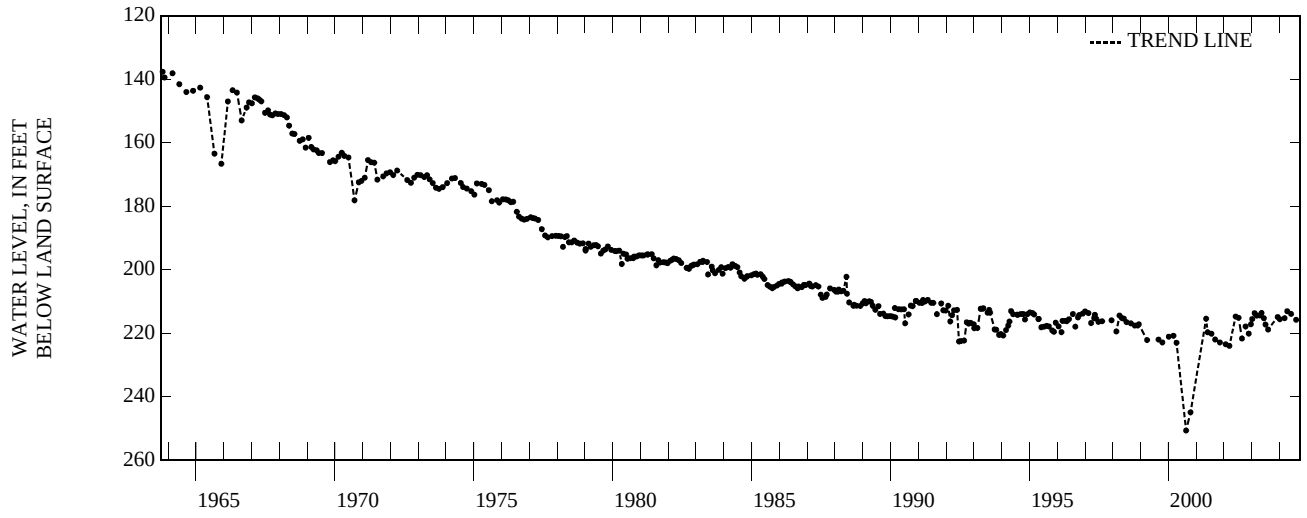
PERIOD OF RECORD.--October 1963 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 59 ft below land-surface datum in 1902. Lowest recorded water level is 250.71 ft below land-surface datum on Aug. 21, 2000.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 09	214.95	JAN 05	215.66	MAR 08	215.33	APR 12	213.12	JUN 01	213.96	AUG 07	215.83

WATER YEAR 2004 HIGHEST 213.12 APR 12, 2004 LOWEST 215.83 AUG 07, 2004



WALWORTH COUNTY—Continued

423315088350301. Local number, WW-01/16E/10-0083.

LOCATION.--Lat 42°33'15", long 88°35'03", Hydrologic Unit 07120006. Owner: Village of Fontana.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., cased to 134 ft., 4 in diameter screen 134-149 ft.

INSTRUMENTATION.--Water level measured by USGS personnel.

DATUM.--The elevation of land-surface datum is 1029.81 ft above sea level. Measuring point: top of casing, 1.30 ft above land-surface datum.

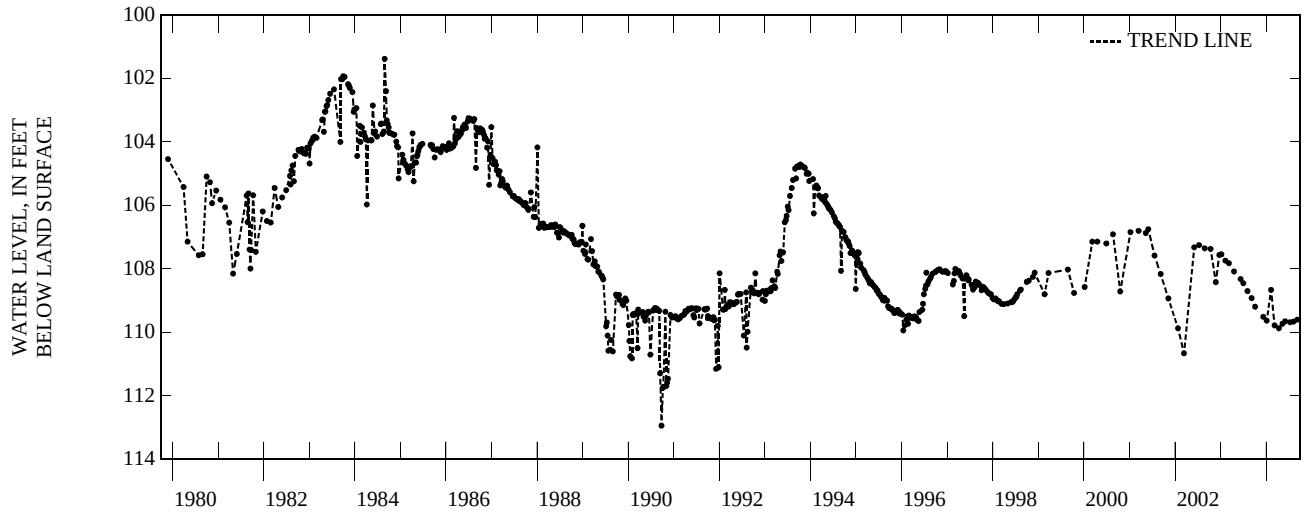
PERIOD OF RECORD.--February 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 101.38 ft below land-surface datum on Aug. 27, 1984. Lowest recorded water level is 112.94 ft below land-surface datum on Sep.24, 1990.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	109.19	JAN 05	109.63	MAR 08	109.78	MAY 10	109.73	JUL 10	109.68	SEP 06	109.60
DEC 09	109.51	FEB 09	108.66	APR 12	109.87	JUN 01	109.65	AUG 07	109.66		

WATER YEAR 2004 HIGHEST 108.66 FEB 09, 2004 LOWEST 109.87 APR 12, 2004



WALWORTH COUNTY—Continued

425006088271501. Local number, WW-04/17E/02-0908.

LOCATION.--Lat 42°50'06", long 88°27'15", Hydrologic Unit 07120006. Owner: The Nature Conservancy of Wisconsin.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled well, diameter 20 in. from 0-20 ft., diameter 16 in. from 20-85 ft, screen interval 70-85 ft.

INSTRUMENTATION.--Continuous water-level recorder.

DATUM.--The elevation of land-surface datum is 845.00 ft above sea level. Measuring point: top of platform marked with arrow, 4.00 ft above land-surface datum.

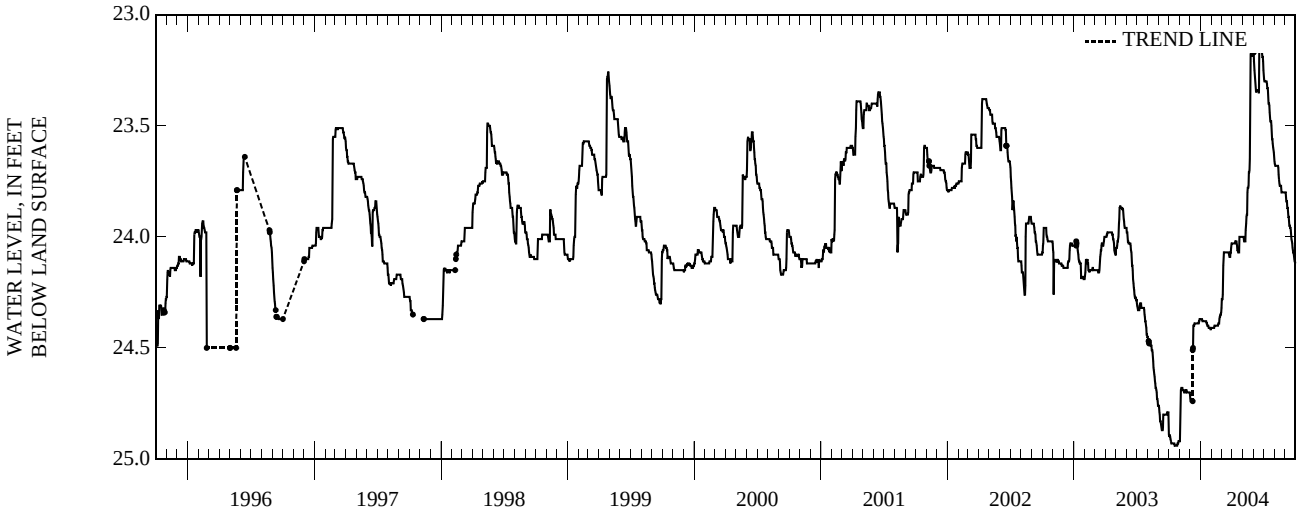
PERIOD OF RECORD.--June 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 23.16 ft below land-surface datum on Jun. 1, 2004. Lowest recorded water level is 27.00 ft below land-surface datum on Apr. 9, 1985.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	24.89	NOV 18	24.70	JAN 04	24.37	FEB 21	24.39	APR 09	24.03	MAY 27	23.17
02	24.90	19	24.69	05	24.37	22	24.39	10	24.02	28	23.17
03	24.89	20	24.69	06	24.38	23	24.39	11	24.02	29	23.18
04	24.90	21	24.69	07	24.38	24	24.37	12	24.02	30	23.19
05	24.90	22	24.70	08	24.38	25	24.36	13	24.02	31	23.18
06	24.91	23	24.70	09	24.38	26	24.36	14	24.03	JUN 01	23.17
07	24.92	24	24.70	10	24.38	27	24.35	15	24.04	01	23.16
08	24.93	25	24.70	11	24.38	28	24.35	16	24.06	02	23.17
09	24.93	26	24.70	12	24.38	29	24.34	17	24.06	03	23.21
10	24.93	27	24.70	13	24.38	MAR 01	24.32	18	24.07	04	23.25
11	24.93	28	24.70	14	24.38	02	24.28	19	24.07	05	23.27
12	24.93	29	24.70	15	24.38	03	24.28	20	24.07	06	23.29
13	24.93	30	24.70	16	24.38	04	24.28	21	24.07	07	23.31
14	24.93	DEC 01	24.71	17	24.38	05	24.26	22	24.00	08	23.33
15	24.93	02	24.73	18	24.39	06	24.13	23	24.00	09	23.35
16	24.93	03	24.74	19	24.39	07	24.10	24	24.00	10	23.34
17	24.93	04	24.74	20	24.40	08	24.07	25	24.00	11	23.34
18	24.94	05	24.74	21	24.40	09	24.07	26	24.00	12	23.34
19	24.94	06	24.74	22	24.40	10	24.07	27	24.00	13	23.34
20	24.94	07	24.74	23	24.40	11	24.07	28	24.00	14	23.34
21	24.94	08	24.74	24	24.41	12	24.07	29	24.00	15	23.34
22	24.94	09	24.74	25	24.41	13	24.07	30	24.00	16	23.35
23	24.94	09	24.51	26	24.41	14	24.07	MAY 01	24.00	17	23.35
24	24.94	10	24.50	27	24.41	15	24.07	02	24.00	18	23.16
25	24.94	11	24.40	28	24.41	16	24.07	03	24.00	19	23.14
26	24.93	12	24.40	29	24.41	17	24.07	04	24.00	20	23.14
27	24.93	13	24.40	30	24.42	18	24.07	05	24.02	21	23.14
28	24.93	14	24.39	31	24.41	19	24.07	06	24.02	22	23.14
29	24.92	15	24.39	FEB 01	24.41	20	24.07	07	24.02	23	23.14
30	24.92	16	24.39	02	24.41	21	24.07	08	24.02	24	23.14
31	24.92	17	24.39	03	24.41	22	24.07	09	24.02	25	23.14
NOV 01	24.92	18	24.39	04	24.41	23	24.08	10	23.97	26	23.17
02	24.92	19	24.39	05	24.41	24	24.09	11	23.94	27	23.19
03	24.83	20	24.39	06	24.41	25	24.09	12	23.91	28	23.19
04	24.76	21	24.39	07	24.41	26	24.09	13	23.90	29	23.21
05	24.69	22	24.39	08	24.41	27	24.07	14	23.90	30	23.25
06	24.68	23	24.39	09	24.41	28	24.07	15	23.80	JUL 01	23.27
07	24.68	24	24.39	10	24.40	29	24.05	16	23.78	02	23.29
08	24.68	25	24.39	11	24.40	30	24.03	17	23.78	03	23.30
09	24.68	26	24.39	12	24.40	31	24.03	18	23.77	04	23.30
10	24.69	27	24.38	13	24.40	APR 01	24.03	19	23.71	05	23.30
11	24.69	28	24.38	14	24.40	02	24.03	20	23.71	06	23.30
12	24.69	29	24.37	15	24.40	03	24.03	21	23.70	07	23.30
13	24.69	30	24.37	16	24.40	04	24.03	22	23.65	08	23.30
14	24.70	31	24.37	17	24.40	05	24.03	23	23.31	09	23.30
15	24.70	JAN 01	24.37	18	24.40	06	24.03	24	23.18	10	23.31
16	24.70	02	24.37	19	24.40	07	24.03	25	23.17	11	23.33
17	24.70	03	24.37	20	24.40	08	24.03	26	23.17	12	23.33

TABLE_ HEADING



WASHBURN COUNTY

460039091500101. Local number, WB-41/12W/26-0048.

LOCATION.--Lat 46°00'39", long 91°50'02", Hydrologic Unit 07030002. Owner: Wis. Dept. of Transportation.

AQUIFER--Sand and gravel.

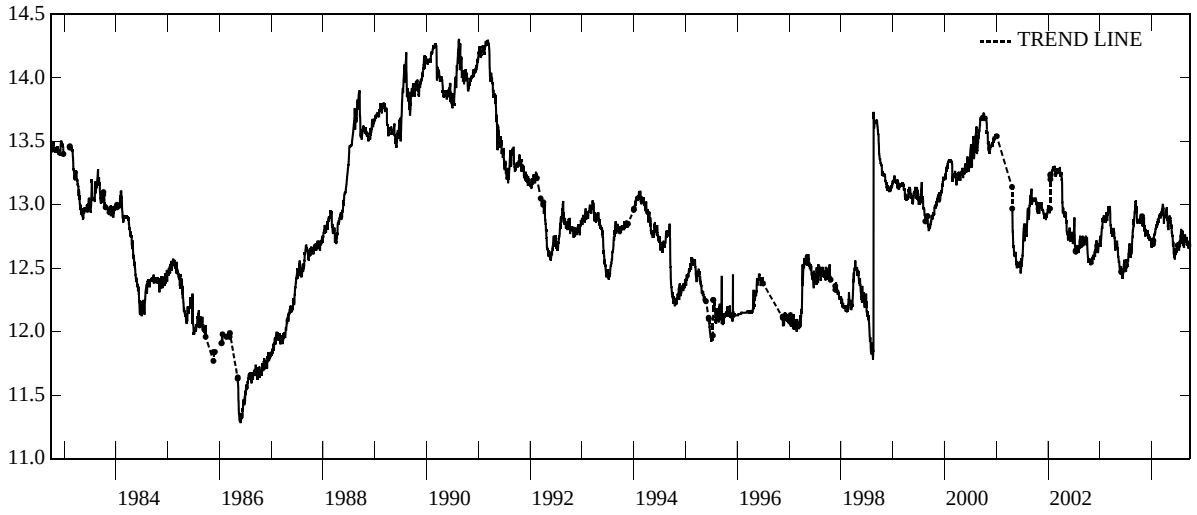
WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 87 ft, cased to 84 ft, screen interval 84-87 ft.

INSTRUMENTATION.--Continuous water-level recorder.

DATUM.--The elevation of land-surface datum is 985.00 ft above sea level. Measuring point: top of casing, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--August 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 11.28 ft below land-surface datum on May 30, 1986. Lowest recorded water level is 14.30 ft below land-surface datum on Aug. 15, 1990.



WAUKESHA COUNTY

425535088131701. Local number, WK-05/19E/02-0031.

LOCATION.--Lat 42°55'35", long 88°13'17", Hydrologic Unit 07120006. Owner: William Bahl.

AQUIFER--Silurian dolomite.

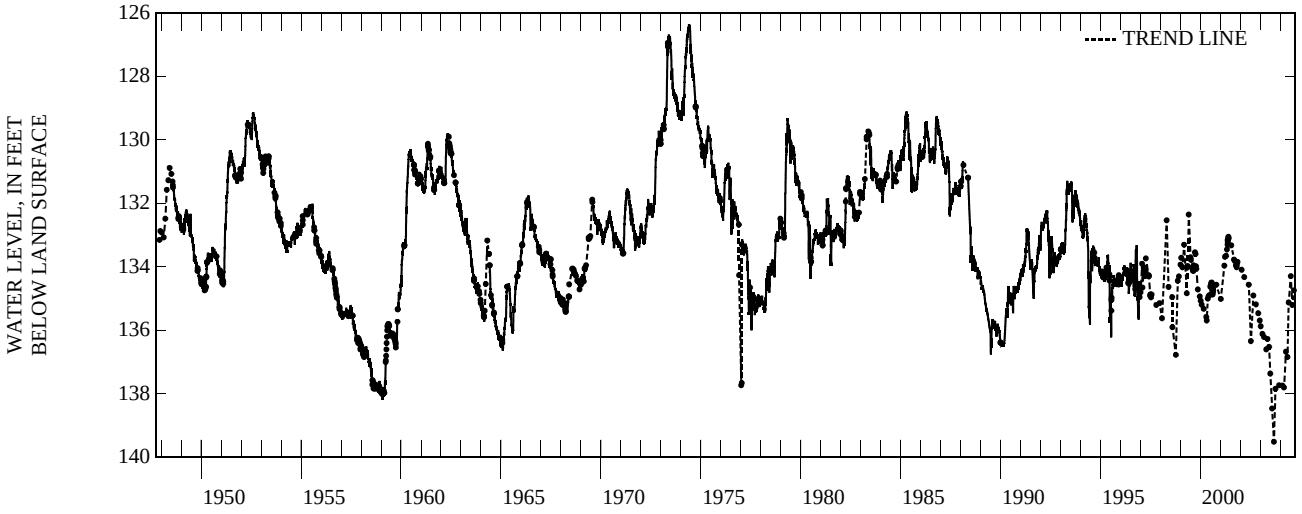
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in., depth 508 ft, cased to 434 ft, open end.

INSTRUMENTATION.--Water level measured by USGS personnel.

DATUM.--The elevation of land-surface datum is 961.77 ft above sea level. Measuring point: top of casing, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--May 1947 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 126.06 ft below land-surface datum on May 10, 1973. Lowest recorded water level is 139.51 ft below land-surface datum on Sept. 6, 2003.



WAUKESHA COUNTY—Continued

425607088173001. Local number, WK-06/19E/31-1301.

LOCATION.--Lat 42°56'07", long 88°17'30", Hydrologic Unit 07120006. Owner: Waukesha Water Utility.

AQUIFER--Sand and gravel.

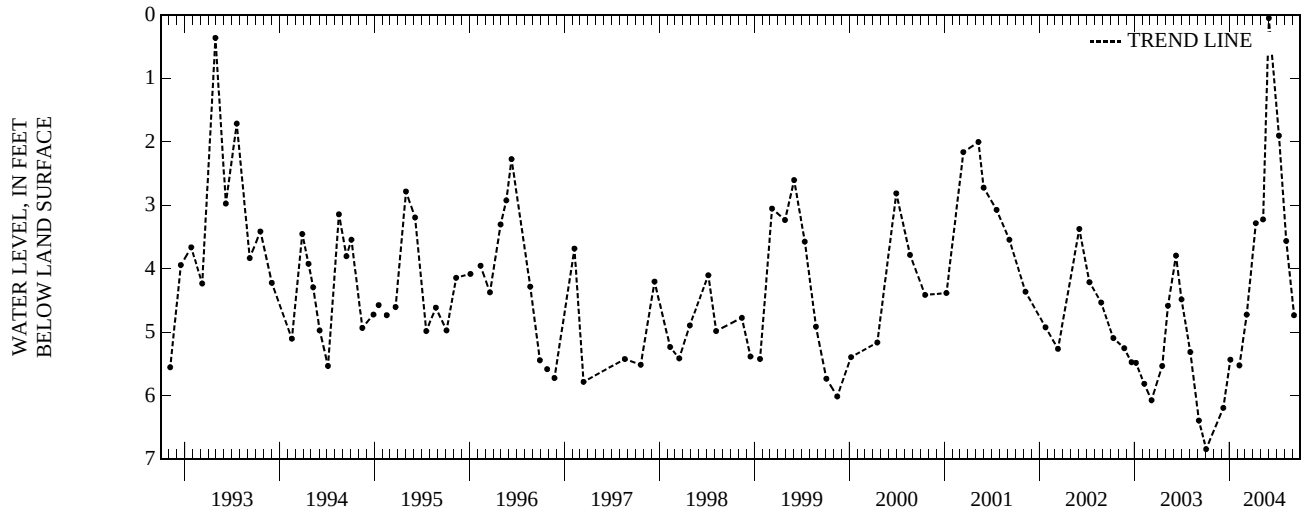
WELL CHARACTERISTICS.--Drilled well, diameter 2 in., depth 238 ft, cased to 195 ft, screen interval 195-238 ft.

INSTRUMENTATION.--Water level measured by USGS personnel.

DATUM.--The elevation of land-surface datum is 788.00 ft above sea level. Measuring point: top of PVC pipe, 2.50 ft above land-surface datum.

PERIOD OF RECORD.--November 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 6.84 ft below land-surface datum on Oct. 4, 2003. Lowest recorded water level is 0.05ft ft below land-surface datum on June 1, 2004.



WAUPACA COUNTY

441545088522901. Local number, WP-21/13E/25-0002.

LOCATION.--Lat 44°15'45", long 88°52'29", Hydrologic Unit 04030202. Owner: Village of Fremont.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 8 in., depth 205 ft, cased to 109 ft, open hole 109-205 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of land-surface datum is 763.93 ft above sea level. Measuring point: hole in cap, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--August 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 8.65 ft below land-surface datum on Apr. 7, 1979. Lowest recorded water level is 15.91 ft below land-surface datum on Feb. 23, 1954.

442353088443801. Local number, WP-22/14E/12-0013.

LOCATION.--Lat 44°23'55", long 88°44'38", Hydrologic Unit 04030202. Owner: Green Bay and Western Railway Co.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled unused artesion well, diameter 10 in., depth 203 ft, cased to 188 ft, screen interval 188-203 ft.

INSTRUMENTATION.--Continuous water-level recorder.

DATUM.--The elevation of land-surface datum is 763.86 ft above sea level. Measuring point: hole in casing cover, 0.50 ft above land-surface datum.

PERIOD OF RECORD.--May 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.-- Highest recorded water level is 2.20 ft below land-surface datum on June 25, 1993. Lowest recorded water level is 22.49 ft below land-surface datum on July 23, 1977.

WAUPACA COUNTY—Continued

443821088490801. Local number, WP-25/14E/17-0771.

LOCATION.--Lat 44°38'21", long 88°49'08", Hydrologic Unit 04030202. Owner: Waupaca County.

AQUIFER--Sandstone.

WELL CHARACTERISTICS.--Drilled well, diameter 5 in., depth 146 ft, cased to 85 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--The elevation of land-surface datum is 829.92 ft above sea level. Measuring point: breather hole, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--July 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 14.00 ft below land-surface datum on Apr. 26, 1996. Lowest recorded water level is 23.00 ft below land-surface datum on Jan. 2, 2001.

WAUSHARA COUNTY

440713089320801. Local number, WS-19/08E/15-0008.

LOCATION.--Lat 44°07'13", long 89°32'08", Hydrologic Unit 07070003. Owner: University WI Reserch Station, Hancock.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 4 in., depth 18 ft, cased to 18 ft.

INSTRUMENTATION.--Continuous water-level recorder.

DATUM.--The elevation of land-surface datum is 1080.00 ft above sea level. Measuring point: top of casing, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--May 1951 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 5.88 ft below land-surface datum on July 5, 1973. Lowest recorded water level is 15.34 ft below land-surface datum on Apr. 25, 1959.

440345089151701. Local number, WS-18/10E/01-0105.

LOCATION.--Lat 44°03'45", long 89°15'17", Hydrologic Unit 04030202. Owner: Ronald Campbell.

AQUIFER--Sand and gravel.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 4 in., depth 14 ft, cased to 14 ft.

INSTRUMENTATION.--Water level by USGS personnel.

DATUM.--The elevation of land-surface datum is 872.92 ft above sea level. Measuring point: top of casing, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--May 1956 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 0.08 ft below land-surface datum on June 18, 1993. Lowest recorded water level is 7.87 ft below land-surface datum on Mar. 19, 1959.

WOOD COUNTY

441827090075001. Local number, WD-21/03E/10-0066.

LOCATION.--Lat 44°18'27", long 90°07'50", Hydrologic Unit 07070003. Owner: Wis. Dept. of Natural Resources.

AQUIFER--Sand and gravel.

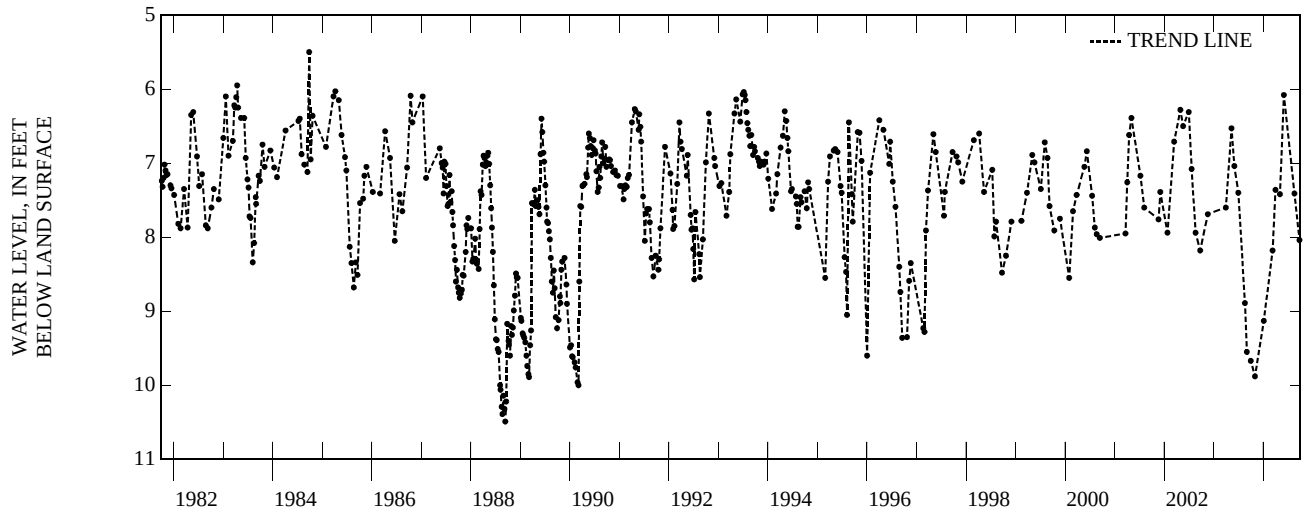
WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 73 ft, cased to 68 ft, screen interval 68-73 ft.

INSTRUMENTATION.--Water level by observer.

DATUM.--The elevation of land-surface datum is 985.00 ft above sea level. Measuring point: hole in cap, 2.00 ft above land-surface datum.

PERIOD OF RECORD.--August 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest recorded water level is 5.50 ft below land-surface datum on Sept. 27, 1984. Lowest recorded water level is 10.49 ft below land-surface datum on Sept. 12, 1988.



MULTIPLE STATION ANALYSES

Data for the following sites represent ground-water samples collected as part of an agricultural flow-system study conducted in the Western Lake Michigan Drainages study unit of the National Water-Quality Assessment (NAWQA) Program. Samples were collected from nests of shallow monitor wells located along an inferred ground-water flow path in the sand and gravel aquifer. Data for samples collected from a stream (station number 04080791) at this study location are also included in this publication.

GEOLOGICAL UNIT.--100SDGV, sand and gravel aquifer, consists of unconsolidated deposits of the Quaternary System.

MULTIPLE STATION ANALYSES

Local identifier	Station number	Date	Time	Geologic unit	Depth of well, feet below LSD (72008)	Depth to water level, feet below LSD (72019)	Sampling method, code (82398)
PORTAGE COUNTY							
PT-24/09E/14-1437	443338089221501	06-02-04	1420	100SDGV	33	28.02	4040
PT-24/09E/14-1438	443338089221502	06-02-04	1200	100SDGV	63	27.39	4040
PT-24/09E/14-1439	443338089221503	06-02-04	1000	100SDGV	93	28.67	4040
PT-24/09E/13-1440	443328089213601	06-07-04	1600	100SDGV	38	30.04	4040
PT-24/09E/13-1441	443328089213602	06-07-04	1400	100SDGV	46	29.97	4040
PT-24/09E/13-1442	443328089213603	06-07-04	1100	100SDGV	80	30.16	4040
PT-24/09E/13-1443	443328089213604	06-03-04	0900	100SDGV	83	30.59	4040
PT-24/09E/13-1444	443328089213605	06-03-04	1100	100SDGV	99	30.36	4040
PT-24/09E/13-1445	443320089212301	06-01-04	1700	100SDGV	28	26.92	4040
PT-24/09E/13-1446	443320089212302	06-01-04	1500	100SDGV	53	27.08	4040
PT-24/09E/13-1447	443320089212303	06-01-04	1100	100SDGV	83	27.22	4040
PT-24/09E/13-1448	443317089211701	06-08-04	0900	100SDGV	11.5	8.30	4040
PT-24/09E/13-1449	443317089211702	06-08-04	1100	100SDGV	23.5	8.94	4040
PT-24/09E/13-1450	443317089211703	06-08-04	1300	100SDGV	31.5	8.92	4040
PT-24/09E/13-1451	443317089211704	06-08-04	1430	100SDGV	44	8.74	4040
PT-24/09E/13-1452	443317089211705	06-14-04	1100	100SDGV	61	8.87	4040
PT-24/09E/13-1453	443317089211706	06-14-04	1400	100SDGV	76	8.49	4040
FSS MP1	443317089211501	06-15-04	0900	100SDGV	--	-.58	4080
FSS MP2	443317089211502	06-15-04	1300	100SDGV	--	-.57	4080

MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bromide water, fltrd, mg/L (71870)
PORTAGE COUNTY											
PT-24/09E/14-1437	06-02-04	9.7	7.5	492	8.3	67.1	34.1	1.03	2.94	264	.02
PT-24/09E/14-1438	06-02-04	6.4	7.6	477	9.6	63.6	32.5	1.31	2.75	250	.04
PT-24/09E/14-1439	06-02-04	4.4	7.7	403	9.9	60.9	32.2	.93	2.25	211	.02
PT-24/09E/13-1440	06-07-04	7.8	7.2	640	10.5	79.2	34.7	1.80	6.85	276	.02
PT-24/09E/13-1441	06-07-04	8.2	7.3	694	10.4	81.3	39.9	1.19	4.08	269	.05
PT-24/09E/13-1442	06-07-04	7.5	7.5	531	10.3	61.3	33.6	1.10	2.58	255	.05
PT-24/09E/13-1443	06-03-04	5.8	7.7	454	9.7	54.6	27.2	1.02	2.13	225	.02
PT-24/09E/13-1444	06-03-04	3.1	7.6	450	10.3	54.8	27.2	1.20	2.36	222	E.01
PT-24/09E/13-1445	06-01-04	9.6	7.3	565	8.9	72.3	35.7	.75	6.74	249	.02
PT-24/09E/13-1446	06-01-04	7.6	7.7	470	9.7	54.5	27.3	1.08	2.40	239	.02
PT-24/09E/13-1447	06-01-04	5.7	7.7	426	9.8	56.4	28.7	1.15	2.27	215	E.02
PT-24/09E/13-1448	06-08-04	9.5	7.1	278	9.2	34.6	17.2	.43	1.78	143	.02
PT-24/09E/13-1449	06-08-04	9.1	7.3	650	8.7	78.9	39.2	.96	3.91	296	.05
PT-24/09E/13-1450	06-08-04	9.0	7.4	627	9.2	75.4	38.1	1.09	3.42	292	.04
PT-24/09E/13-1451	06-08-04	4.4	7.6	441	9.8	53.3	27.2	1.00	2.30	216	.04
PT-24/09E/13-1452	06-14-04	5.5	7.5	452	9.8	52.3	27.5	1.51	2.27	209	.03
PT-24/09E/13-1453	06-14-04	4.9	7.6	454	10.1	51.7	27.2	1.77	2.45	213	.03
FSS MP1	06-15-04	7.0	7.4	499	11.6	59.0	31.0	1.02	2.35	237	.04
FSS MP2	06-15-04	8.9	7.0	600	11.9	71.1	37.2	1.07	3.18	280	.04

MULTIPLE STATION ANALYSES—Continued

MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Total nitrogen, wat flt by analysis, mg/L (62854)
PORTAGE COUNTY											
PT-24/09E/14-1437	06-02-04	4.66	.2	15.8	8.5	240	<.04	3.75	<.008	.006	3.84
PT-24/09E/14-1438	06-02-04	6.82	.2	16.3	10.0	219	<.04	3.15	<.008	.008	3.25
PT-24/09E/14-1439	06-02-04	4.99	.2	16.3	10.8	259	<.04	3.76	<.008	.008	3.88
PT-24/09E/13-1440	06-07-04	11.1	.2	15.3	19.6	325	<.04	8.45	<.008	E.004	8.42
PT-24/09E/13-1441	06-07-04	20.3	.2	16.9	23.3	341	<.04	10.8	<.008	E.004	10.7
PT-24/09E/13-1442	06-07-04	4.83	.2	16.9	11.5	316	<.04	4.45	.031	.011	4.59
PT-24/09E/13-1443	06-03-04	4.75	.2	16.2	8.9	257	<.04	2.71	<.008	.017	2.67
PT-24/09E/13-1444	06-03-04	4.58	.3	14.9	10.8	237	<.04	2.30	E.007	E.004	2.35
PT-24/09E/13-1445	06-01-04	10.2	<.2	17.9	10.8	300	<.04	11.9	<.008	E.005	11.4
PT-24/09E/13-1446	06-01-04	6.52	.2	16.3	9.9	192	<.04	1.44	<.008	.017	1.45
PT-24/09E/13-1447	06-01-04	5.13	.3	16.6	9.5	243	<.04	2.79	<.008	.016	2.83
PT-24/09E/13-1448	06-08-04	1.43	<.2	13.4	4.9	166	<.04	1.08	<.008	.007	1.14
PT-24/09E/13-1449	06-08-04	9.50	.2	17.3	13.5	346	<.04	8.08	<.008	E.004	8.39
PT-24/09E/13-1450	06-08-04	7.59	.2	17.2	13.1	301	<.04	7.04	<.008	E.005	6.80
PT-24/09E/13-1451	06-08-04	4.01	.2	16.9	9.5	199	<.04	2.70	<.008	.015	2.65
PT-24/09E/13-1452	06-14-04	4.82	.3	16.4	9.5	234	<.04	2.74	<.008	.019	2.69
PT-24/09E/13-1453	06-14-04	4.95	.3	16.2	9.2	234	<.04	2.71	<.008	.017	2.75
FSS MP1	06-15-04	5.24	.2	16.7	8.8	236	<.04	4.13	<.008	.015	4.20
FSS MP2	06-15-04	7.71	.2	16.7	11.6	269	<.04	6.64	<.008	.006	6.55

MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Organic carbon, water, fltrd, mg/L (00681)	Hydrogen sulfide water unfltrd mg/L (71875)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	1-Naphthol, water, fltrd 0.7u GF ug/L (49295)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	2-[(2-Ethyl-6methylphenyl) amino]2 oxoESA ug/L (62850)	2Chloro-2,6'-'diethyl acetanilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl-6-methylaniline water, fltrd, ug/L (61620)
PORTAGE COUNTY											
PT-24/09E/14-1437	06-02-04	.6	ND	<6	.9	<.09	<.006	<.02	<.005	E.015	<.004
PT-24/09E/14-1438	06-02-04	.5	ND	E4	E.7	<.09	<.006	<.02	<.005	E.037	<.004
PT-24/09E/14-1439	06-02-04	.5	ND	E5	E.7	<.09	<.006	<.02	<.005	E.029	<.004
PT-24/09E/13-1440	06-07-04	1.1	ND	<6	E.7	<.09	<.006	<.02	<.005	E.018	<.004
PT-24/09E/13-1441	06-07-04	.9	ND	<6	E.5	<.09	<.006	<.02	<.005	E.019	<.004
PT-24/09E/13-1442	06-07-04	11.6	ND	E4	2.2	<.09	<.006	<.02	<.005	E.024	<.004
PT-24/09E/13-1443	06-03-04	.4	ND	<6	<.8	--	<.015	<.02	<.005	E.005	<.004
PT-24/09E/13-1444	06-03-04	.4	ND	23	83.9	--	<.006	<.02	<.005	E.006	<.004
PT-24/09E/13-1445	06-01-04	1.1	ND	<6	.9	<.09	<.006	<.02	<.005	E.068	<.004
PT-24/09E/13-1446	06-01-04	.4	ND	E4	E.6	<.09	<.006	<.02	<.005	E.019	<.004
PT-24/09E/13-1447	06-01-04	.4	ND	E6	1.1	<.09	<.006	<.02	<.005	E.010	<.004
PT-24/09E/13-1448	06-08-04	.9	ND	<6	5.4	<.09	<.006	<.02	<.005	E.011	<.004
PT-24/09E/13-1449	06-08-04	.7	ND	<6	<.8	<.09	<.006	<.02	<.005	E.019	<.004
PT-24/09E/13-1450	06-08-04	.7	ND	<6	1.6	<.09	<.006	<.02	<.005	E.021	<.004
PT-24/09E/13-1451	06-08-04	.6	ND	<6	<.8	<.09	<.006	<.02	<.005	E.010	<.004
PT-24/09E/13-1452	06-14-04	.5	ND	<6	8.6	<.09	<.006	<.02	<.005	E.011	<.004
PT-24/09E/13-1453	06-14-04	.6	ND	<6	7.4	<.09	<.006	<.02	<.005	E.011	<.004
FSS MP1	06-15-04	.5	ND	<6	E.5	<.09	<.006	<.02	<.005	E.021	<.004
FSS MP2	06-15-04	.6	ND	<6	2.4	<.09	<.006	<.02	<.005	E.025	<.004

MULTIPLE STATION ANALYSES—Continued

MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	3,4-Dichloroaniline water fltrd, ug/L (61625)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	Acetochlor ESA, water, fltrd 0.7u GF ug/L (61029)	Acetochlor OA, water, fltrd 0.7u GF ug/L (61030)	Acetochlor SAA, water, fltrd, ug/L (62847)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor ESA SA, water, fltrd, ug/L (62849)	Alachlor ESA, water, fltrd 0.7u GF ug/L (50009)	Alachlor OA, water, fltrd 0.7u GF ug/L (61031)	Alachlor SAA, water, fltrd, ug/L (62848)
PORTAGE COUNTY											
PT-24/09E/14-1437	06-02-04	<.004	<.006	<.02	<.02	<.02	<.006	<.02	<.02	<.02	<.02
PT-24/09E/14-1438	06-02-04	<.004	<.006	<.02	<.02	<.02	<.006	<.02	.03	<.02	<.02
PT-24/09E/14-1439	06-02-04	<.004	<.006	<.02	<.02	<.02	<.006	<.02	.04	<.02	<.02
PT-24/09E/13-1440	06-07-04	<.004	<.006	<.02	<.02	<.02	<.006	<.02	.30	<.02	<.02
PT-24/09E/13-1441	06-07-04	<.004	<.006	<.02	<.02	<.02	<.006	<.02	.09	<.02	<.02
PT-24/09E/13-1442	06-07-04	<.004	<.006	<.02	<.02	<.02	<.006	<.02	<.02	<.02	<.02
PT-24/09E/13-1443	06-03-04	<.004	--	<.02	<.02	<.02	<.006	<.02	.05	<.02	<.02
PT-24/09E/13-1444	06-03-04	<.004	--	<.02	<.02	<.02	<.006	<.02	<.02	<.02	<.02
PT-24/09E/13-1445	06-01-04	<.004	<.006	.02	<.02	<.02	<.006	<.02	<.02	<.02	<.02
PT-24/09E/13-1446	06-01-04	<.004	<.006	.02	<.02	<.02	<.006	<.02	<.02	<.02	<.02
PT-24/09E/13-1447	06-01-04	<.004	<.006	<.02	<.02	<.02	<.006	<.02	<.02	<.02	<.02
PT-24/09E/13-1448	06-08-04	<.004	<.006	<.02	<.02	<.02	<.006	<.02	<.02	<.02	<.02
PT-24/09E/13-1449	06-08-04	<.004	<.006	<.02	<.02	<.02	<.006	<.02	.03	<.02	<.02
PT-24/09E/13-1450	06-08-04	<.004	<.006	<.02	<.02	<.02	<.006	<.02	<.02	<.02	<.02
PT-24/09E/13-1451	06-08-04	<.004	<.006	<.02	<.02	<.02	<.006	<.02	<.02	<.02	<.02
PT-24/09E/13-1452	06-14-04	<.004	<.006	<.02	<.02	<.02	<.006	<.02	<.02	<.02	<.02
PT-24/09E/13-1453	06-14-04	<.004	<.006	<.02	<.02	<.02	<.006	<.02	<.02	<.02	<.02
FSS MP1	06-15-04	<.004	<.006	<.02	<.02	<.02	<.006	<.02	<.02	<.02	<.02
FSS MP2	06-15-04	<.004	<.006	<.02	<.02	<.02	<.006	<.02	.02	<.02	<.02

MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH-d6, surrog, Sch2003 wat flt percent recovry (99995)	Atrazine, water, fltrd, ug/L (39632)	Azinphos-methyl oxon, water, fltrd, ug/L (61635)	Azinphos-methyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Chlorpyrifos oxon, water, fltrd, ug/L (61636)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)
PORTAGE COUNTY											
PT-24/09E/14-1437	06-02-04	<.005	71.1	.007	<.02	<.050	<.010	<.041	<.06	<.005	<.006
PT-24/09E/14-1438	06-02-04	<.005	65.7	.025	<.02	<.050	<.010	<.041	<.06	<.005	<.006
PT-24/09E/14-1439	06-02-04	<.005	74.3	.009	<.02	<.050	<.010	<.041	<.06	<.005	<.006
PT-24/09E/13-1440	06-07-04	<.005	75.8	.009	<.02	<.050	<.010	<.041	<.06	<.005	<.006
PT-24/09E/13-1441	06-07-04	<.005	81.6	.011	<.12	<.050	<.010	<.041	<.06	<.005	<.006
PT-24/09E/13-1442	06-07-04	<.005	77.7	.009	<.02	<.050	<.010	<.041	<.06	<.005	<.006
PT-24/09E/13-1443	06-03-04	<.005	88.2	<.007	--	<.050	<.010	<.041	<.06	<.005	<.006
PT-24/09E/13-1444	06-03-04	<.005	92.1	<.007	--	<.050	<.010	<.041	<.06	<.005	<.006
PT-24/09E/13-1445	06-01-04	<.005	71.9	.012	<.02	<.050	<.010	<.041	<.06	<.005	<.006
PT-24/09E/13-1446	06-01-04	<.005	74.3	.012	<.02	<.050	<.010	<.041	<.06	<.005	<.006
PT-24/09E/13-1447	06-01-04	<.005	76.0	E.003	<.02	<.050	<.010	<.041	<.06	<.005	<.006
PT-24/09E/13-1448	06-08-04	<.005	80.1	.009	<.12	<.050	<.010	<.041	<.06	<.005	<.006
PT-24/09E/13-1449	06-08-04	<.005	76.1	.009	<.12	<.050	<.010	<.041	<.06	<.005	<.006
PT-24/09E/13-1450	06-08-04	<.005	81.0	.009	<.12	<.050	<.010	<.041	<.06	<.005	<.006
PT-24/09E/13-1451	06-08-04	<.005	92.0	<.007	<.12	<.050	<.010	<.041	<.06	<.005	<.006
PT-24/09E/13-1452	06-14-04	<.005	76.5	E.006	<.02	<.050	<.010	<.041	<.06	<.005	<.006
PT-24/09E/13-1453	06-14-04	<.005	74.1	E.006	<.02	<.050	<.010	<.041	<.06	<.005	<.006
FSS MP1	06-15-04	<.005	78.2	.009	<.02	<.050	<.010	<.041	<.06	<.005	<.006
FSS MP2	06-15-04	<.005	76.5	.009	<.02	<.050	<.010	<.041	<.06	<.005	<.006

MULTIPLE STATION ANALYSES—Continued

MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Cyfluthrin, water, fltrd, ug/L (61585)	Cypermethrin water, fltrd, ug/L (61586)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon oxon, water, fltrd, ug/L (61638)	Diazinon, water, fltrd, ug/L (39572)	Diazinon-d10 surrog, Sch2003 wat flt percent recovry (99994)	Dicrotophos, water fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)	Dimethenamid ESA, water, fltrd, ug/L (61951)
PORTAGE COUNTY											
PT-24/09E/14-1437	06-02-04	<.008	<.009	<.003	<.012	<.01	<.005	80.0	<.08	<.009	<.02
PT-24/09E/14-1438	06-02-04	<.008	<.009	<.003	<.012	<.01	<.005	74.0	<.08	<.009	<.02
PT-24/09E/14-1439	06-02-04	<.008	<.009	<.003	<.012	<.01	<.005	83.7	<.08	<.009	<.02
PT-24/09E/13-1440	06-07-04	<.008	<.009	<.003	<.012	<.01	<.005	81.3	<.08	<.009	<.02
PT-24/09E/13-1441	06-07-04	<.008	<.009	<.003	<.012	<.01	<.005	67.5	<.08	<.009	<.02
PT-24/09E/13-1442	06-07-04	<.008	<.009	<.003	<.012	<.01	<.005	81.4	<.08	<.009	<.02
PT-24/09E/13-1443	06-03-04	<.008	<.009	<.003	<.012	<.01	<.005	75.8	--	<.009	<.02
PT-24/09E/13-1444	06-03-04	<.008	<.009	<.003	<.012	<.01	<.005	80.0	--	<.009	<.02
PT-24/09E/13-1445	06-01-04	<.008	<.009	<.003	<.012	<.01	<.005	66.9	<.08	<.009	<.02
PT-24/09E/13-1446	06-01-04	<.008	<.009	<.003	<.012	<.01	<.005	82.8	<.08	<.009	<.02
PT-24/09E/13-1447	06-01-04	<.008	<.009	<.003	<.012	<.01	<.005	61.5	<.08	<.009	<.02
PT-24/09E/13-1448	06-08-04	<.008	<.009	<.003	<.012	<.01	<.005	65.6	<.08	<.009	<.02
PT-24/09E/13-1449	06-08-04	<.008	<.009	<.003	<.012	<.01	<.005	65.1	<.08	<.009	<.02
PT-24/09E/13-1450	06-08-04	<.008	<.009	<.003	<.012	<.01	<.005	69.4	<.08	<.009	<.02
PT-24/09E/13-1451	06-08-04	<.008	<.009	<.003	<.012	<.01	<.005	90.0	<.08	<.009	<.02
PT-24/09E/13-1452	06-14-04	<.008	<.009	<.003	<.012	<.01	<.005	71.2	<.08	<.009	<.02
PT-24/09E/13-1453	06-14-04	<.008	<.009	<.003	<.012	<.01	<.005	63.7	<.08	<.009	<.02
FSS MP1	06-15-04	<.008	<.009	<.003	<.012	<.01	<.005	79.5	<.08	<.009	<.02
FSS MP2	06-15-04	<.008	<.009	<.003	<.012	<.01	<.005	68.8	<.08	<.009	<.02

MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Dimethenamid OA, water, fltrd, ug/L (62482)	Dimethenamid water, fltrd, ug/L (61588)	Dimethoate, water, fltrd 0.7u GF ug/L (82662)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Fenamiphos sulfone water, fltrd, ug/L (61645)	Fenamiphos sulfoxide, water, fltrd, ug/L (61646)	Fenamiphos, water, fltrd, ug/L (61591)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)
PORTAGE COUNTY											
PT-24/09E/14-1437	06-02-04	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013
PT-24/09E/14-1438	06-02-04	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013
PT-24/09E/14-1439	06-02-04	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013
PT-24/09E/13-1440	06-07-04	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013
PT-24/09E/13-1441	06-07-04	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013
PT-24/09E/13-1442	06-07-04	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013
PT-24/09E/13-1443	06-03-04	<.02	<.02	<.006	<.03	<.004	<.008	--	<.03	<.029	<.013
PT-24/09E/13-1444	06-03-04	<.02	<.02	<.006	<.03	<.004	<.008	--	<.03	<.029	<.013
PT-24/09E/13-1445	06-01-04	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013
PT-24/09E/13-1446	06-01-04	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013
PT-24/09E/13-1447	06-01-04	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013
PT-24/09E/13-1448	06-08-04	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013
PT-24/09E/13-1449	06-08-04	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013
PT-24/09E/13-1450	06-08-04	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013
PT-24/09E/13-1451	06-08-04	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013
PT-24/09E/13-1452	06-14-04	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013
PT-24/09E/13-1453	06-14-04	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013
FSS MP1	06-15-04	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013
FSS MP2	06-15-04	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029	<.013

MULTIPLE STATION ANALYSES—Continued

MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Flufenacet ESA, water, fltrd, ug/L (61952)	Flufenacet OA, water, fltrd, ug/L (62483)	Flufenacet, water, fltrd, ug/L (62481)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	Hexazinone, water, fltrd, ug/L (04025)	Iprodione, water, fltrd, ug/L (61593)	Isofenphos, water, fltrd, ug/L (61594)
PORTAGE COUNTY											
PT-24/09E/14-1437	06-02-04	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003
PT-24/09E/14-1438	06-02-04	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003
PT-24/09E/14-1439	06-02-04	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003
PT-24/09E/13-1440	06-07-04	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003
PT-24/09E/13-1441	06-07-04	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003
PT-24/09E/13-1442	06-07-04	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003
PT-24/09E/13-1443	06-03-04	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003
PT-24/09E/13-1444	06-03-04	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003
PT-24/09E/13-1445	06-01-04	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003
PT-24/09E/13-1446	06-01-04	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003
PT-24/09E/13-1447	06-01-04	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003
PT-24/09E/13-1448	06-08-04	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003
PT-24/09E/13-1449	06-08-04	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003
PT-24/09E/13-1450	06-08-04	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003
PT-24/09E/13-1451	06-08-04	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003
PT-24/09E/13-1452	06-14-04	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003
PT-24/09E/13-1453	06-14-04	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003
FSS MP1	06-15-04	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003
FSS MP2	06-15-04	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.013	<1	<.003

MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Malaoxon, water, fltrd, ug/L (61652)	Malathion, water, fltrd, ug/L (39532)	Metalaxyl, water, fltrd, ug/L (61596)	Methialthion water, fltrd, ug/L (61598)	Methyl paraoxon, water, fltrd, ug/L (61664)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Metolachlor ESA, water, fltrd 0.7u GF ug/L (61043)	Metolachlor OA, water, fltrd 0.7u GF ug/L (61044)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)
PORTAGE COUNTY											
PT-24/09E/14-1437	06-02-04	<.008	<.027	<.005	<.006	<.03	<.015	.13	<.02	<.013	<.006
PT-24/09E/14-1438	06-02-04	<.008	<.027	<.005	<.006	<.03	<.015	.14	<.02	<.013	<.006
PT-24/09E/14-1439	06-02-04	<.008	<.027	<.005	<.006	<.03	<.015	.02	<.02	<.013	<.006
PT-24/09E/13-1440	06-07-04	<.008	<.027	<.005	<.006	<.03	<.015	.36	<.02	<.013	<.006
PT-24/09E/13-1441	06-07-04	<.008	<.027	<.005	<.006	<.03	<.015	.05	<.02	<.013	<.006
PT-24/09E/13-1442	06-07-04	<.008	<.027	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006
PT-24/09E/13-1443	06-03-04	<.008	<.027	<.005	<.006	--	<.015	<.02	<.02	<.013	<.006
PT-24/09E/13-1444	06-03-04	<.008	<.027	<.005	<.006	--	<.015	<.02	<.02	<.013	<.006
PT-24/09E/13-1445	06-01-04	<.008	<.027	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006
PT-24/09E/13-1446	06-01-04	<.008	<.027	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006
PT-24/09E/13-1447	06-01-04	<.008	<.027	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006
PT-24/09E/13-1448	06-08-04	<.008	<.027	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006
PT-24/09E/13-1449	06-08-04	<.008	<.027	<.005	<.006	<.03	<.015	.31	<.02	<.013	<.006
PT-24/09E/13-1450	06-08-04	<.008	<.027	<.005	<.006	<.03	<.015	.22	<.02	<.013	<.006
PT-24/09E/13-1451	06-08-04	<.008	<.027	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006
PT-24/09E/13-1452	06-14-04	<.008	<.027	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006
PT-24/09E/13-1453	06-14-04	<.008	<.027	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006
FSS MP1	06-15-04	<.008	<.027	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006
FSS MP2	06-15-04	<.008	<.027	<.005	<.006	<.03	<.015	.31	<.02	<.013	<.006

MULTIPLE STATION ANALYSES—Continued

MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Myclobutanil water, fltrd, ug/L (61599)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Propachlor ESA, water, fltrd 0.7u GF ug/L (62766)
PORTAGE COUNTY											
PT-24/09E/14-1437	06-02-04	<.008	<.022	<.10	<.011	<.06	<.008	<.01	<.005	<.004	<.05
PT-24/09E/14-1438	06-02-04	<.008	<.022	<.10	<.011	<.06	<.008	<.01	<.005	<.004	<.05
PT-24/09E/14-1439	06-02-04	<.008	<.022	<.10	<.011	<.06	<.008	<.01	<.005	<.004	<.05
PT-24/09E/13-1440	06-07-04	<.008	<.022	<.10	<.011	<.06	<.008	<.01	<.005	<.004	<.05
PT-24/09E/13-1441	06-07-04	<.008	<.022	<.10	<.011	--	<.008	<.01	<.005	<.004	<.05
PT-24/09E/13-1442	06-07-04	<.008	<.022	<.10	<.011	<.06	<.008	<.01	<.005	<.004	<.05
PT-24/09E/13-1443	06-03-04	<.008	<.022	<.10	<.011	--	<.008	<.01	<.005	<.004	<.05
PT-24/09E/13-1444	06-03-04	<.008	<.022	<.10	<.011	--	<.008	<.01	<.005	<.004	<.05
PT-24/09E/13-1445	06-01-04	<.008	<.022	<.10	<.011	<.06	<.008	<.01	<.005	<.004	<.05
PT-24/09E/13-1446	06-01-04	<.008	<.022	<.10	<.011	<.06	<.008	<.01	<.005	<.004	<.05
PT-24/09E/13-1447	06-01-04	<.008	<.022	<.10	<.011	--	<.008	<.01	<.005	<.004	<.05
PT-24/09E/13-1448	06-08-04	<.008	<.022	<.10	<.011	--	<.008	<.01	<.005	<.004	<.05
PT-24/09E/13-1449	06-08-04	<.008	<.022	<.10	<.011	--	<.008	<.01	<.005	<.004	<.05
PT-24/09E/13-1450	06-08-04	<.008	<.022	<.10	<.011	--	<.008	<.01	<.005	<.004	<.05
PT-24/09E/13-1451	06-08-04	<.008	<.022	<.10	<.011	--	<.008	<.01	<.005	<.004	<.05
PT-24/09E/13-1452	06-14-04	<.008	<.022	<.10	<.011	--	<.008	<.01	<.005	<.004	<.05
PT-24/09E/13-1453	06-14-04	<.008	<.022	<.10	<.011	--	<.008	<.01	<.005	<.004	<.05
FSS MP1	06-15-04	<.008	<.022	<.10	<.011	--	<.008	<.01	<.005	<.004	<.05
FSS MP2	06-15-04	<.008	<.022	<.10	<.011	--	<.008	<.01	<.005	<.004	<.05

MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Propachlor OA, water, fltrd 0.7u GF ug/L (62767)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbufos oxon sulfone water, fltrd, ug/L (61674)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Terbuthylazine, water, fltrd, ug/L (04022)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)	Dichlorvos, water fltrd, ug/L (38775)
PORTAGE COUNTY									
PT-24/09E/14-1437	06-02-04	<.02	<.005	<.02	<.07	<.02	<.01	<.009	<.01
PT-24/09E/14-1438	06-02-04	<.02	<.005	<.02	<.07	<.02	<.01	<.009	<.01
PT-24/09E/14-1439	06-02-04	<.02	<.005	<.02	<.07	<.02	<.01	<.009	<.01
PT-24/09E/13-1440	06-07-04	<.02	E.004	<.02	<.07	<.02	<.01	<.009	<.01
PT-24/09E/13-1441	06-07-04	<.02	.006	<.02	<.07	<.02	<.01	<.009	<.01
PT-24/09E/13-1442	06-07-04	<.02	<.005	<.02	<.07	<.02	<.01	<.009	<.01
PT-24/09E/13-1443	06-03-04	<.02	<.005	<.02	<.07	<.02	<.01	<.009	<.01
PT-24/09E/13-1444	06-03-04	<.02	<.005	<.02	<.07	<.02	<.01	<.009	<.01
PT-24/09E/13-1445	06-01-04	<.02	<.005	<.02	<.07	<.02	<.01	<.009	<.01
PT-24/09E/13-1446	06-01-04	<.02	<.005	<.02	<.07	<.02	<.01	<.009	<.01
PT-24/09E/13-1447	06-01-04	<.02	<.005	<.02	<.07	<.02	<.01	<.009	<.01
PT-24/09E/13-1448	06-08-04	<.02	<.005	<.02	<.07	<.02	<.01	<.009	<.01
PT-24/09E/13-1449	06-08-04	<.02	<.005	<.02	<.07	<.02	<.01	<.009	<.01
PT-24/09E/13-1450	06-08-04	<.02	<.005	<.02	<.07	<.02	<.01	<.009	<.01
PT-24/09E/13-1451	06-08-04	<.02	<.005	<.02	<.07	<.02	<.01	<.009	<.01
PT-24/09E/13-1452	06-14-04	<.02	<.005	<.02	<.07	<.02	<.01	<.009	<.01
PT-24/09E/13-1453	06-14-04	<.02	<.005	<.02	<.07	<.02	<.01	<.009	<.01
FSS MP1	06-15-04	<.02	<.005	<.02	<.07	<.02	<.01	<.009	<.01
FSS MP2	06-15-04	<.02	<.005	<.02	<.07	<.02	<.01	<.009	<.01

MULTIPLE STATION ANALYSES

Data for the following sites are for samples collected from shallow monitoring wells in the sand and gravel aquifer. Samples were collected adjacent to lakes as part of lake studies.

MULTIPLE STATION ANALYSES

Local identifier	Station name	Station number	Date	Time	Depth of well, feet below LSD (72008)
	WAUKESHA COUNTY				
NAGAWICKA LAKE WELL NO. 2A	NAGAWICKA LAKE WELL NO. 2A AT DELAFIELD, WI	430352088225001	10-02-03	1000	11.69
	NAGAWICKA LAKE WELL NO. 2A AT DELAFIELD, WI		10-29-03	0945	11.69
	NAGAWICKA LAKE WELL NO. 2A AT DELAFIELD, WI		11-13-03	1330	11.69
	NAGAWICKA LAKE WELL NO. 2A AT DELAFIELD, WI		12-18-03	0955	11.69
	NAGAWICKA LAKE WELL NO. 2A AT DELAFIELD, WI		03-04-04	0905	11.69
	NAGAWICKA LAKE WELL NO. 2A AT DELAFIELD, WI		04-26-04	1250	11.69
	NAGAWICKA LAKE WELL NO. 2A AT DELAFIELD, WI		05-28-04	1040	11.69
	NAGAWICKA LAKE WELL NO. 2A AT DELAFIELD, WI		06-01-04	1315	11.69
	NAGAWICKA LAKE WELL NO. 2A AT DELAFIELD, WI		07-08-04	0920	11.69
	NAGAWICKA LAKE WELL NO. 2A AT DELAFIELD, WI		08-05-04	0910	11.69
	NAGAWICKA LAKE WELL NO. 2A AT DELAFIELD, WI		09-08-04	1430	11.69
	NAGAWICKA LAKE WELL NO. 2A AT DELAFIELD, WI		09-21-04	1120	11.69
NAGAWICKA LAKE WELL NO. 1	NAGAWICKA LAKE WELL NO. 1 AT DELAFIELD, WI	430329088225600	10-02-03	0945	6.34
	NAGAWICKA LAKE WELL NO. 1 AT DELAFIELD, WI		10-29-03	0930	6.34
	NAGAWICKA LAKE WELL NO. 1 AT DELAFIELD, WI		11-13-03	1315	6.34
	NAGAWICKA LAKE WELL NO. 1 AT DELAFIELD, WI		12-18-03	0940	6.34
	NAGAWICKA LAKE WELL NO. 1 AT DELAFIELD, WI		03-04-04	0850	6.34
	NAGAWICKA LAKE WELL NO. 1 AT DELAFIELD, WI		04-26-04	1230	6.34
	NAGAWICKA LAKE WELL NO. 1 AT DELAFIELD, WI		05-28-04	1020	6.34
	NAGAWICKA LAKE WELL NO. 1 AT DELAFIELD, WI		06-01-04	1210	6.34
	NAGAWICKA LAKE WELL NO. 1 AT DELAFIELD, WI		07-08-04	0855	6.34
	NAGAWICKA LAKE WELL NO. 1 AT DELAFIELD, WI		08-05-04	1310	6.34
	NAGAWICKA LAKE WELL NO. 1 AT DELAFIELD, WI		09-08-04	1415	6.34
	NAGAWICKA LAKE WELL NO. 1 AT DELAFIELD, WI		09-21-04	1005	6.34
NAGAWICKA LAKE WELL NO. 2	NAGAWICKA LAKE WELL NO. 2 AT DELAFIELD, WI	430352088225000	10-02-03	0955	5.81
	NAGAWICKA LAKE WELL NO. 2 AT DELAFIELD, WI		10-29-03	0943	5.81
	NAGAWICKA LAKE WELL NO. 2 AT DELAFIELD, WI		11-13-03	1325	5.81
	NAGAWICKA LAKE WELL NO. 2 AT DELAFIELD, WI		12-18-03	0950	5.81
	NAGAWICKA LAKE WELL NO. 2 AT DELAFIELD, WI		03-04-04	0900	5.81
	NAGAWICKA LAKE WELL NO. 2 AT DELAFIELD, WI		04-26-04	1245	5.81
	NAGAWICKA LAKE WELL NO. 2 AT DELAFIELD, WI		05-28-04	1035	5.81
	NAGAWICKA LAKE WELL NO. 2 AT DELAFIELD, WI		06-01-04	1300	5.81
	NAGAWICKA LAKE WELL NO. 2 AT DELAFIELD, WI		07-08-04	0915	5.81
	NAGAWICKA LAKE WELL NO. 2 AT DELAFIELD, WI		08-05-04	0857	5.81
	NAGAWICKA LAKE WELL NO. 2 AT DELAFIELD, WI		09-08-04	1425	5.81
	NAGAWICKA LAKE WELL NO. 2 AT DELAFIELD, WI		09-21-04	1115	5.81
NAGAWICKA LAKE WELL NO. 3	NAGAWICKA LAKE WELL NO. 3 AT DELAFIELD, WI	430424088224300	10-02-03	1010	6.04
	NAGAWICKA LAKE WELL NO. 3 AT DELAFIELD, WI		10-29-03	0955	6.04
	NAGAWICKA LAKE WELL NO. 3 AT DELAFIELD, WI		11-13-03	1340	6.04
	NAGAWICKA LAKE WELL NO. 3 AT DELAFIELD, WI		12-18-03	1005	6.04
	NAGAWICKA LAKE WELL NO. 3 AT DELAFIELD, WI		03-04-04	0915	6.04
	NAGAWICKA LAKE WELL NO. 3 AT DELAFIELD, WI		04-26-04	1300	6.04
	NAGAWICKA LAKE WELL NO. 3 AT DELAFIELD, WI		05-26-04	1045	6.04
	NAGAWICKA LAKE WELL NO. 3 AT DELAFIELD, WI		06-01-04	1350	6.04
	NAGAWICKA LAKE WELL NO. 3 AT DELAFIELD, WI		07-08-04	0930	6.04
	NAGAWICKA LAKE WELL NO. 3 AT DELAFIELD, WI		08-05-04	1000	6.04
	NAGAWICKA LAKE WELL NO. 3 AT DELAFIELD, WI		09-08-04	1440	6.04
	NAGAWICKA LAKE WELL NO. 3 AT DELAFIELD, WI		09-21-04	1200	6.04
NAGAWICKA LAKE WELL NO. 5	NAGAWICKA LAKE WELL NO. 5 NEAR NASHOTAH, WI	430502088235400	10-02-03	1120	11.60
	NAGAWICKA LAKE WELL NO. 5 NEAR NASHOTAH, WI		10-29-03	1140	11.60
	NAGAWICKA LAKE WELL NO. 5 NEAR NASHOTAH, WI		11-13-03	1445	11.60
	NAGAWICKA LAKE WELL NO. 5 NEAR NASHOTAH, WI		11-19-03	1050	11.60
	NAGAWICKA LAKE WELL NO. 5 NEAR NASHOTAH, WI		12-11-03	1445	11.60
	NAGAWICKA LAKE WELL NO. 5 NEAR NASHOTAH, WI		12-18-03	1145	11.60
	NAGAWICKA LAKE WELL NO. 5 NEAR NASHOTAH, WI		03-04-04	1100	11.60
	NAGAWICKA LAKE WELL NO. 5 NEAR NASHOTAH, WI		04-26-04	1440	11.60
	NAGAWICKA LAKE WELL NO. 5 NEAR NASHOTAH, WI		05-28-04	1240	11.60
	NAGAWICKA LAKE WELL NO. 5 NEAR NASHOTAH, WI		06-01-04	1500	11.60
	NAGAWICKA LAKE WELL NO. 5 NEAR NASHOTAH, WI		06-22-04	1310	11.60
	NAGAWICKA LAKE WELL NO. 5 NEAR NASHOTAH, WI		07-08-04	1105	11.60

MULTIPLE STATION ANALYSES—Continued

MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Depth to water level, feet below LSD (72019)	Water level, depth below MP, feet (61055)	Sampling method, code (82398)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)
				WAUKESHA COUNTY						
NAGAWICKA LAKE WEL	10-02-03	1.22	3.45	--	--	--	--	--	--	--
	10-29-03	1.16	3.39	--	--	--	--	--	--	--
	11-13-03	1.15	3.38	--	--	--	--	--	--	--
	12-18-03	1.49	3.72	--	--	--	--	--	--	--
	03-04-04	1.55	3.78	--	--	--	--	--	--	--
	04-26-04	.99	3.22	--	--	--	--	--	--	--
	05-28-04	.39	2.72	--	--	--	--	--	--	--
	06-01-04	.62	2.85	4080	--	--	--	--	--	.019
	07-08-04	.63	2.96	--	--	--	--	--	--	--
	08-05-04	.72	2.95	4080	.4	8.1	440	14.6	.021	.025
	09-08-04	.82	3.15	--	--	--	--	--	--	--
	09-21-04	1.10	3.33	4080	.6	9.8	1,100	15.1	--	.026
NAGAWICKA LAKE WEL	10-02-03	.04	1.40	--	--	--	--	--	--	--
	10-29-03	-.03	1.33	--	--	--	--	--	--	--
	11-13-03	-.04	1.32	--	--	--	--	--	--	--
	12-18-03	.30	1.66	--	--	--	--	--	--	--
	03-04-04	.35	1.71	--	--	--	--	--	--	--
	04-26-04	-.19	1.17	--	--	--	--	--	--	--
	05-28-04	-.59	.77	--	--	--	--	--	--	--
	06-01-04	-.52	.84	4080	--	--	--	--	--	.006
	07-08-04	-.41	.95	--	--	--	--	--	--	--
	08-05-04	-.44	.92	4080	--	8.1	365	21.3	.002	.008
	09-08-04	-.24	1.12	--	--	--	--	--	--	--
	09-21-04	-.07	1.29	4080	--	--	--	--	--	<.005
NAGAWICKA LAKE WEL	10-02-03	1.32	3.17	--	--	--	--	--	--	--
	10-29-03	1.26	3.11	--	--	--	--	--	--	--
	11-13-03	1.25	3.10	--	--	--	--	--	--	--
	12-18-03	1.58	3.42	--	--	--	--	--	--	--
	03-04-04	1.63	3.48	--	--	--	--	--	--	--
	04-26-04	1.09	2.94	--	--	--	--	--	--	--
	05-28-04	.62	2.47	--	--	--	--	--	--	--
	06-01-04	.77	2.62	--	--	--	--	--	--	--
	07-08-04	.89	2.74	--	--	--	--	--	--	--
	08-05-04	.86	2.71	--	--	--	--	--	--	--
	09-08-04	1.01	2.86	--	--	--	--	--	--	--
	09-21-04	1.20	3.05	--	--	--	--	--	--	--
NAGAWICKA LAKE WEL	10-02-03	.53	2.21	--	--	--	--	--	--	--
	10-29-03	.49	2.17	--	--	--	--	--	--	--
	11-13-03	.50	2.18	--	--	--	--	--	--	--
	12-18-03	.79	2.47	--	--	--	--	--	--	--
	03-04-04	.80	2.48	--	--	--	--	--	--	--
	04-26-04	.28	1.96	--	--	--	--	--	--	--
	05-26-04	-.22	1.46	--	--	--	--	--	--	--
	06-01-04	-.08	1.60	4080	--	--	--	--	--	.028
	07-08-04	.13	1.81	--	--	--	--	--	--	--
	08-05-04	.12	1.80	4080	--	7.5	252	19.3	--	.072
	09-08-04	.33	2.01	--	--	--	--	--	--	--
	09-21-04	.52	2.20	4080	4.3	7.7	910	22.0	--	.038
NAGAWICKA LAKE WEL	10-02-03	.72	3.12	--	--	--	--	--	--	--
	10-29-03	.67	3.07	--	--	--	--	--	--	--
	11-13-03	.21	2.61	--	--	--	--	--	--	--
	11-19-03	.20	2.60	--	--	--	--	--	--	--
	12-11-03	.24	2.64	--	--	--	--	--	--	--
	12-18-03	.29	2.69	--	--	--	--	--	--	--
	03-04-04	.68	3.08	--	--	--	--	--	--	--
	04-26-04	-.03	2.37	--	--	--	--	--	--	--
	05-28-04	-1.20	1.20	--	--	--	--	--	--	--
	06-01-04	-1.12	1.28	--	--	--	--	--	--	--
	06-22-04	--	--	4080	--	--	--	--	--	.086
	07-08-04	-.48	1.92	--	--	--	--	--	--	--

MULTIPLE STATION ANALYSES—Continued

MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Station name	Station number	Date	Time	Depth of well, feet below LSD (72008)
	WAUKESHA COUNTY				
NAGAWICKA LAKE WELL NO. 5	NAGAWICKA LAKE WELL NO. 5 NEAR NASHOTAH, WI	430502088235400	08-05-04	1130	11.60
	NAGAWICKA LAKE WELL NO. 5 NEAR NASHOTAH, WI		09-08-04	1610	11.60
	NAGAWICKA LAKE WELL NO. 5 NEAR NASHOTAH, WI		09-21-04	1400	11.60
NAGAWICKA LAKE WELL NO. 4	NAGAWICKA LAKE WELL NO. 4 AT DELAFIELD, WI	430549088231600	10-02-03	1105	10.71
	NAGAWICKA LAKE WELL NO. 4 AT DELAFIELD, WI		10-29-03	1125	10.71
	NAGAWICKA LAKE WELL NO. 4 AT DELAFIELD, WI		11-13-03	1435	10.71
	NAGAWICKA LAKE WELL NO. 4 AT DELAFIELD, WI		03-04-04	1045	10.71
	NAGAWICKA LAKE WELL NO. 4 AT DELAFIELD, WI		04-26-04	1425	10.71
	NAGAWICKA LAKE WELL NO. 4 AT DELAFIELD, WI		05-28-04	1230	10.71
	NAGAWICKA LAKE WELL NO. 4 AT DELAFIELD, WI		06-01-04	1425	10.71
	NAGAWICKA LAKE WELL NO. 4 AT DELAFIELD, WI		07-08-04	1050	10.71
	NAGAWICKA LAKE WELL NO. 4 AT DELAFIELD, WI		08-05-04	1100	10.71
	NAGAWICKA LAKE WELL NO. 4 AT DELAFIELD, WI		09-08-04	1600	10.71
	NAGAWICKA LAKE WELL NO. 4 AT DELAFIELD, WI		09-21-04	1310	10.71
NAGAWICKA LAKE PIEZOMETER	NAGAWICKA LAKE PIEZOMETER NO. 6 AT DELAFIELD, WI	430353088235500	06-02-04	1545	6.51
	NAGAWICKA LAKE PIEZOMETER NO. 6 AT DELAFIELD, WI		07-08-04	0845	6.51
	NAGAWICKA LAKE PIEZOMETER NO. 6 AT DELAFIELD, WI		08-05-04	1345	6.51
	NAGAWICKA LAKE PIEZOMETER NO. 6 AT DELAFIELD, WI		09-08-04	1625	6.51
	NAGAWICKA LAKE PIEZOMETER NO. 6 AT DELAFIELD, WI		09-21-04	0915	6.51

MULTIPLE STATION ANALYSES—Continued

MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Depth to water level, feet below LSD (72019)	Water level, depth below MP, feet (61055)	Sampling method, code (82398)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Phosphorus, water, fltrd, mg/L (00666)
				WAUKESHA COUNTY					
NAGAWICKA LAKE WEL	08-05-04	-.34	2.06	4080	.4	10.1	275	12.0	.088
	09-08-04	-.03	2.37	--	--	--	--	--	--
	09-21-04	.15	2.55	4080	.6	10.1	887	12.7	.091
NAGAWICKA LAKE WEL	10-02-03	-.12	2.87	--	--	--	--	--	--
	10-29-03	-.20	2.79	--	--	--	--	--	--
	11-13-03	-.06	2.93	--	--	--	--	--	--
	03-04-04	.22	3.21	--	--	--	--	--	--
	04-26-04	-.26	2.73	--	--	--	--	--	--
	05-28-04	-.42	2.57	--	--	--	--	--	--
	06-01-04	-.31	2.68	4080	--	--	--	--	.072
	07-08-04	-.25	2.74	--	--	--	--	--	--
	08-05-04	-.24	2.75	4080	--	8.1	165	17.2	.133
	09-08-04	-.10	2.89	--	--	--	--	--	--
	09-21-04	-.06	3.05	4080	5.8	7.8	502	25.3	.053
NAGAWICKA LAKE PIE	06-02-04	.60	3.05	4080	--	--	--	--	.010
	07-08-04	.95	3.40	--	--	--	--	--	--
	08-05-04	.90	3.35	4080	.8	9.0	410	17.1	.014
	09-08-04	1.16	3.61	--	--	--	--	--	--
	09-21-04	1.34	3.79	4080	3.1	7.1	935	18.1	.019

WISCONSIN DISTRICT PUBLICATIONS

The reports listed below are a partial list of reports prepared by the Wisconsin District in cooperation with other agencies since 1948. The list contains reports that are relevant and contribute significantly to understanding the hydrology of Wisconsin's water resources.

The reports published in a U.S. Geological Survey series are for sale by the U.S. Geological Survey, Box 25286, Federal Center, Denver, CO 80225. For more information and prices on USGS products, contact representatives at 1-888-ASK-USGS. For access to the new Publications Warehouse, go to http://pubs.usgs.gov, or link from the complete list of USGS publications and products at: http://www.usgs.gov/pubprod/.

Copies of reports published by the University of Wisconsin, Geological and Natural History Survey, can be obtained from their office at 3817 Mineral Point Road, Madison, Wisconsin 53705, (608) 263-7389.

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