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Water Resources Data
Minnesota
Water Year 2005

Water-Data Report MN-05-1

U.S. Department of the Interior
U.S. Geological Survey

Calendar for Water Year 2005

2004

October

S	M	T	W	T	F	S
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2005

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Water Resources Data
Minnesota
Water Year 2005

By G.B. Mitton, K.G. Guttormson, G.W. Stratton, and E.S. Wakeman

Water-Data Report MN-05-1

Prepared in cooperation with the U.S. Army Corps of Engineers, Minnesota Department of Natural Resources, Divisions of Waters; the Minnesota Department of Transportation; and with other State, municipal, and Federal agencies

U.S. Department of the Interior
U.S. Geological Survey

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Preface

This volume of the annual hydrologic report of Minnesota is one of a series of annual reports that documents hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each state, Puerto Rico, and the Trust 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. Hydrologic data for Minnesota, including four major basins: Great Lakes, Souris-Red Rainy River, Upper Mississippi River, and Missouri River, are contained in this volume.

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. The authors had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to U.S. Geological Survey policy and established guidelines.

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Water resources data for the 2005 water year for Minnesota consist of records of stage, discharge, and water quality of streams; stage of lakes and reservoirs; ground-water quality; and water quality in wells. This report contains discharge records for 116 stream-gaging stations; stage for 11 lakes and reservoirs; water quality for 12 stream-gaging stations; peak flow data for 87 high-flow partial-record stations, and water levels for 2 ground water observation wells. Additional water data were collected at various sites that are not part of the systematic data collection program, and are published as miscellaneous measurements. These data represent that part of the National Water Data System operated by the U.S. Geological Survey for cooperating State and Federal agencies in Minnesota.

14. SUBJECT TERMS
*Minnesota, *Hydrologic data, *Surface water, *Ground water, *Water quality, Flow rate, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediments, Water temperatures, Sampling sites, Water levels, Water analyses, Data collection

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CONTENTS

ILLUSTRATIONS

Note.--Data for partial-record stations and miscellaneous sites for both surface-water quantity and quality are published in separate sections of the data report. See references at the end of this list for page numbers for these sections.

[Letters after station name designates type of data: (d) discharge; (e) gage height, elevation, or contents; (c) chemical, radio-chemical, or pesticides; (b) biological or micro-biological; (p) physical (water temperature, sediment, or specific conductance)]

ST. LAWRENCE RIVER BASIN

HUDSON BAY BASIN

STREAMS TRIBUTARY TO LAKE WINNIPEG (head of Nelson River):

RED RIVER OF THE NORTH BASIN

GROUND-WATER WELLS, BY COUNTY, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

GROUND-WATER LEVELS

The following continuous-record surface-water discharge or stage-only stations (gaging stations) in Minnesota have been discontinued. Daily streamflow or stage 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. Discontinued project stations with less than 3 years of record may not be 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.

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only)].

Station name	Station number	Drainage area (mi^2)	Period of record
Pigeon River above mouth of Arrow River, MN (d)	04010000	256	1924-27
Loon Lake, northeast side, near Grand Portage, MN (e)	475807089483501	-	1998-2002
Cuffs Lake, east side, near Grand Portage, MN (e)	475647089443301	-	1998-2002
Poplar River at Lutsen, MN (d)	04012500	112	1911 (e), 1912-17, 1928-47, 1952-61
Cross River at Schroeder, MN (d)	04013000	91	1931-32
Baptism River near Beaver Bay, MN (d)	04014500	140	1928-93
Beaver Creek (Beaver Bay Run) at Beaver Bay, MN (d)	04015000	126	1911-14, 1928-31
South Branch Partridge River near Babbitt, MN (d)	04015455	18.5	1977-80
Partridge River above Colby Lake, at Hoyt Lakes, MN (d)	04015475	106	1979-88
Second Creek near Aurora, MN (d)	04015500	29	1955-80
Partridge River near Aurora, MN (d)	04016000	161	1942-82
St. Louis River near Aurora, MN (d)	04016500	293	1942-87
Embarrass River at Embarrass, MN (d)	04017000	88.3	1942-64
Embarrass River near McKinley, MN (d)	04018000	171	1953-62
St. Louis River at Forbes, MN (d)	04018750	713	1965-90
East Two Rivers near Iron Junction, MN (d)	04018900	40.0	1966-79
West Two Rivers near Iron Junction, MN (d)	04019000	65.3	1953-62, 1965-79
West Swan River near Silica, MN (d)	04019300	16.3	1963-79
East Swan River near Toivola, MN (d)	04019500	112	1953-62, 1964-71
Swan River near Toivola, MN (d)	04020000	254	1952-61
Whiteface River below (at) Meadowlands, MN (d)	04021000	453	1909-17
Cloquet River at Independence, MN (d)	04023000	750	1909-17
Elim Creek near Holyoke, MN (d)	04024090	1.06	1976-78
Skunk Creek below Elim Creek near Holyoke, MN (d)	04024093	8.83	1976-78
Deer Creek near Holyoke, MN (d)	04024098	7.70	1976-2002
Otter Tail River near Detroit Lakes, MN (d)	05030000	270	1937-71
Pelican River at Detroit Lakes, MN (d)	05033900	-	1968-71
Pelican River at Detroit Lk. out. nr. Detroit Lakes, MN (d)	05034100	-	1968-75
Long Lake outlet near Detroit Lakes, MN (d)	05035100	-	1968-71
West Branch Cty. Ditch No. 14 nr. Detroit Lakes, MN (d)	05035200	-	1968-71
East Branch County Ditch No. 14 nr. Detroit Lakes, MN (d)	05035300	-	1968-71
St. Clair Lake outlet near Detroit Lakes, MN (d)	05035500	-	1968-75
Pelican River at Muskrat Lk outlt nr Detroit Lakes, MN (d)	05035600	-	1968-75
Pelican River at Sallie Lk outlet nr Detroit Lakes, MN (d)	05037100	-	1968-75
Pelican River at Lake Melissa olt nr Detroit Lakes, MN (d)	05039100	-	1968-72
Pelican River near Detroit Lakes, MN (d)	05040000	123	1942-53
Pelican River near Fergus Falls, MN (d)	05040500	482	1909-12, 1942-80
Otter Tail River near Breckenridge, MN (d)	05046500	2,040	1931-32, 1939-46
Mustinka River (head of Bois de Sioux River) nr Norcross, MN (d)	05047000	-	1940-47
Mustinka Ditch above West Branch Mustinka River (Twelve Mile Creek) near Charlesville, MN (d)	05047500	-	1943-55
Mustinka Ditch below West Branch Mustinka River (Twelve Mile Creek) near Charlesville, MN (d)	05048000	-	1943-55
W. Branch Mustinka River (Twelve Mile Creek) below Mustinka Ditch near Charlesville, MN (d)	05048500	-	1943-55
Bois de Sioux River below Fairmont, ND (d)	05050500	1,540	1919-44
Rabbit River at Campbell, MN (d)	05051000	266	1942-52
Red River of the North below Fargo, ND (d)	05054020	-	1969-78
Whiskey Creek at Barnesville, MN (d)	05061200*	25.3	1964-66
Wild Rice River near Ada, MN (d)	05063000	1,100	1948-54
South Branch Wild Rice River near Borup, MN (d)	05063500	254	1944-49
Marsh River below Ada, MN (d)	05067000	-	1948-52
Sand Hill River at Beltrami, MN (d)	05068000	324	1943-58
Sand Hill Ditch at Beltrami, MN (d)	05068500	-	1943-58
Thief River near Gatske, MN (d)	05075500	-	1953-56
Red Lake River at Thief River Falls, MN (d)	05076500	3,450	1909-18, 1920-30
Clearwater River near Pinewood, MN (d)	05077000	132	1940-45

Station name	Station number	Drainage area (mi^2)	Period of record
Clearwater River near Leonard, MN (d)	05077500	153	1934-47
Red River of the North at Oslo, MN (d)	05083500	31,200	1936-37, 1941-43, 1945-60, 1973-76
Snake River at Warren, MN (d)	05085500	-	1945, 1953-56
Snake River above Alvarado, MN (d)	05085900	218	1993-96
Snake River at Alvarado, MN (d)	05086000	309	1945, 1953-56
Middle River near Strandquist, MN (d)	05087000	-	1953-56
Tamarac River near Strandquist, MN (d)	05090500	-	1953-56
Tamarac River near Stephen, MN (d)	05091500	320	1945
Two Rivers (Middle Fork Two Rivers) nr Hallock, MN (d)	05092500	131	1931-38
South Branch (South Fork) Two Rivers near Pelan, MN (d)	05093000	281	1928-38, 1953-56
South Branch Two Rivers (Two Rivers) at Hallock, MN (d)	05094500	-	1940-47
Two Rivers (South Branch Two Rivers) at Hallock, MN (d)	05095000	-625	1911-14, 1929-30, 1938-39, 1941-43
Two Rivers below Hallock, MN (d)	05095500	644	1945-55
North Branch (North Fk) Two Rivers nr Lancaster, MN (d)	05096000	32	1929-38, 1941-55
State Ditch 85 near Lancaster, MN (d)	05096500	95	1929-38, 1942-55
North Branch Two Rivers at Lancaster, MN (d)	05097000	209	1941-42, 1953-56
North Branch Two Rivers near Northcote, MN (d)	05097500	386	1941-42, 1945-51
Two Rivers below North Branch near Hallock, MN (d)	05098000	1,060	1941-43
Roseau River (at) near Malung, MN (d)	05103000	252	1928-46
South Fork (W. Branch) Roseau River nr Malung, MN (d)	05104000	312	1911-14, 1928-46
Roseau River at Roseau, MN (d)	05105000	-	1940-47
Roseau River near Roseau, MN (d)	05105500	-	1930-60
Pine Creek near Pine Creek, MN (d)	05107000	74.6	1928-53
Roseau River at Roseau Lake, MN (e)	05106500	-	1939-91
Roseau River near Badger, MN (d)	05108000	-	1928-69
Roseau River near Duxby, MN (d)	05108500	-	1929-51, 1952-56
Badger Creek near Badger, MN (d)	05109000	2.2	1929-30, 1931-38
Roseau River near Haug, MN (d)	05109500	-	1932-66
Roseau River at otlt of State Ditch 69 nr Oak Point, MN (d)	05110000	-	1939-42
Roseau R. at head of State Ditch 51 nr Oak Point, MN (d)	05110500	-	1933-42
Roseau River at Oak Point, MN (d)	05111000	-	1933-39, 1941-60
Roseau River at International Boundary, nr Caribou, MN (d)	05112500	1,590	1933-69
Shagawa Lake tributary at Ely, MN (d)	05127219	1.84	1971-78
Burgo Creek near Ely, MN (d)	05127220	3.04	1967-78
Shagawa River near Ely, MN (d)	05127230	99	1967-78
Vermilion Lake near Soudan, MN (e)	05128200	-	1913-15, 1941-42, 1946-87
Pike River near Biwabik, MN (d)	05128340	-	1977-79
Pike River near Embarrass, MN (d)	05128500	115	1953-64, 1976-79
Rainy River at International Falls, MN (d)	05129500	14,900	1905-60
Sturgeon River (Lake) at Side Lake, MN (d)	05130000	-	1938-47
Dark River near Chisholm, MN (d)	05131000	50.6	1942-61, 1965-79
Deer Lake outlet (Deer Lake) near Effie, MN (d)	05131800	-	1937-39, 1940-46 1982-93
Rapid River near Baudette, MN (d)	05134200	543	1956-85
Warroad River near Warroad, MN (d)	05139500	162	1946-80
Bulldog Run near Warroad, MN (d)	05140000	14.2	1946-51, 1966-77
East Branch Warroad River nr Warroad, MN (d)	05140500	102	1946-54, 1966-77
Mississippi River near Bemidji, MN (d)	05200510	610	1987-2002
Williams lake near Akeley, MN (e) (data stored under station number 465724094402601)	05202000	0.88	1988-96.
Mississippi River near Deer River, MN (d)	05210000	3,190	1945-50
Prairie River near Grand Rapids, MN (d)	05213000	485	1909 (e), 1925-49
O'Brien Creek near Pengilly, MN (d)	05216800	-	1963-68
Initial tailings basin outflow near Keewatin, MN (d)	05216820	2.5	1982-85
Swan River near Calumet, MN (d)	05216850	114	1964-90
Swan River near Warba, MN (d)	05217000	254	1954-69
Mississippi River above Sandy River near Libby, MN (d)	05218000	4,560	1895-1915, 1925-29
Mississippi River below Sandy River near Libby, MN (d)	05220500	5,060	1930-90
Pelican Brook (Long Lake) near Pequot Lakes, MN (d)	05232000	-	1938-42, 1943-47
Rabbit River near Crosby, MN (d)	05241500	8.38	1945-63

Station name	Station number	Drainage area (mi^2)	Period of record
Little Sand Lake outlet (Sand Lake outlet) nr Dorset, MN (d	05242700	74	1930-41
Straight River at County Highway 125 near Osage, MN (d)	05243721	-	1986-91
Straight River at Cty. Hwy. 115 near Park Rapids, MN (d)	05243723	-	1986-89
Crow Wing River at Motley, MN (d)	05244500	2,140	1909 (e), 1913-17 1930-31
Diversion from Long Prairie River near Osakis, MN (d)	05244980	-	1939-47
Long Prairie River near Osakis, MN (d)	05245000	-	1949-54
Long Prairie near Motley	05245500	973	1909-17, 1930-31
Crow Wing River at Pillager, MN (d)	05246000		1909-13, 1925-50
Mississippi River near Ft. Ripley, MN (d)	05261000	11,010	1987-2000
Platte (Platt) River at Pillager, MN (d)	05268000*	338	1929-36
Mississippi River near Sauk Rapids, MN (d)	05269000	12,400	1903-06
Mississippi River at Sartell, MN (d)	05270000	12,450	1929, 1943-47(e)
Clearwater River at Clearwater, MN (d)	05273500	-	1937, 1940-42
St. Francis River at Santiago, MN (d)	05274700	-	1965-70, 1980-81
St. Francis River near Zimmerman, MN (d)	05274750	-	1980-84
St. Francis River near Big Lake, MN (d)	05274900	-	1965-70
Mississippi River at Elk River, MN (d)	05275500	14,500	1915-56
North Fork Crow River near Regal, MN (d)	05276000	215	1943-54
North Fork Crow River above Paynesville, MN (d)	05276005	232	1996-98
Middle Fork Crow River at New London, MN (e)	05277000	-	1939-42, 1943-47
Middle Fork Crow River (Calhoun Lk Diversion) nr Spicer, MN (e)	05277500	-	1939, 1940-46
Middle Fork Crow River near Spicer, MN (d)	05278000	179	1949-87
South Fork Crow River at Cosmos, MN (d)	05278500	221	1945-64
Buffalo Creek near Glencoe, MN (d)	05278930*	374	1972-80
South Fork Crow River near Mayer, MN (d)	05279000	1,170	1934-79
South Fork Crow River near Rockford, MN (d)	05279500	1,250	1909-12
Mississippi River at Anoka, MN (d)	05283500	17,100	1897, 1905-13
Rum River at Onamia, MN (d)	05284500	414	1910-12
Rum River at Spencer Brook, MN (d)	05284750	-	1960-64
Rum River at Cambridge, MN (d)	05285000	1,160	1909-14
Rum River near Anoka, MN (d)	05286500	1,430	1905-06, 1909
Minnetonka Lake (head of Minnehaha Creek) near Wayzata (at Excelsior), MN (d)	05289000	-	1938-64
Minnehaha Creek at Minnetonka Mills, MN (d)	05289500	130	1953-64
Little Minnesota River near Peever, SD (d)	05290000	438	1939-81, 90-2002
Big Stone Lake near Big Stone City, SD (formerly Big Stone Lake at Ortonville, MN (e)	05291500	-	1937-93
Minnesota River near Odessa, MN (d)	05292500	1,340	1909-12, 1944-63
North Fork Yellow Bank River near Odessa (d)	05292704	208	1991-2003
Pomme de Terre River near Morris, MN (d)	05293500	-	1937-39, 1940-47
Pomme de Terre River at Appleton, MN (d)	05294000	864	1931-99
Canby Creek at Canby, MN (d)	05299500	-	1938-39, 1940-46
Chippewa River at diversion dam near Hancock, MN (d)	05303000	-	1930-39, 1940-46
Chippewa River at Benson, MN (d)	05303500	1,270	1949-51
Shakopee Creek near Benson, MN (d)	05304000	352	1949-54
Chippewa River near Watson, MN (d)	05305000	2,050	1910-17, 1931-36
South Branch Yellow Medicine River at Minneota, MN (d)	05311400	111	1960-81, 1983-87
Spring Creek near Hazel Run, MN (d)	05312500	101	1945-48
Chetomba Creek near Maynard, MN (d)	05314000	200	1949-51
Hawk Creek near Maynard, MN (d)	05314500*	474	1949-54
Prairie Ravine near Marshall, MN (d)	05315200	5.63	1959-64
Redwood River near Green Valley, MN (d)	05315500	436	1947-57
Minnesota River at New Ulm, MN (d)	05316770	9,536	1968-76
Dry Creek near Jeffers, MN (d)	05316900	3.13	1982-85
Minnesota River at Judson, MN (d)	05317500	11,200	1938-50
East Branch (East Fork) Blue Earth River near Bricelyn, MN (d)	05318000	132	1951-70
South Fork Watonwan River at diversion dam near St. James, MN (d)	05319000	-	1939, 1940-46
Blue Earth River at Mankato, MN (d)	05321000	3,550	1938-39, 1940-42
Sand Creek at diversion dam near Jordan, MN (d)	05330400	-	1938-39, 1940-46
Purgatory Creek at Eden Prairie, MN (d)	05330800	-	1975-80
Nine Mile Creek at Bloomington, MN (d)	05330900	-	1963-73
Glaisby Brook near Kettle River, MN (d)	05336200*	24.2	1959-70
Kettle River near Sandstone, MN (d)	05336500	825	1908-16
Grindstone River at Hinckley, MN (d)	05337000	-	1940-47
Knife River near Mora, MN (d)	05337400	102	1974-2002

Station name	Station number	Drainage area (mi^2)	Period of record
Snake River at Mora, MN (d)	05337500	422	1909-13
St. Croix River near Rush City, MN (d)	05339500	5,120	1923-61
Sunrise River near Stacy, MN (d)	05340000	167	1949-65
Sunrise River near Lindstrom, MN (d)	05340050	231	1965-85
Vermillion River at Hastings, MN (d)	05346000	195	1942-47, 90
South Fork Zumbro River near Rochester, MN (d)	05373000	304	1952-81
Zumbro River (South Branch) near Zumbro Falls, MN (d)	05373500	821	1911-17
Zumbro River at Zumbro Falls, MN (d)	05374000*	-	1909-17, 1929-80
Zumbro River at Theilman, MN (d)	05374500	1,320	1938-56
Zumbro River at Kellogg, MN (d)	05374900	1,400	1975-90
North Fork Whitewater River near Elba, MN (d)	05376000	101	1939-41, 1967-93
Middle Fork Whitewater River near St. Charles, MN (d)	05376100	-	1988-92
South Fork Whitewater River near Altura, MN (d)	05376500	76.8	1939-71
Whitewater River near Beaver, MN (d)	05376800	271	1975-85, 1991-99
Whitewater River at Beaver, MN (d)	05377500	288	1936-38, 1939-56
Stockton Valley Creek at Stockton, MN (d)	05378230	-	1982-85
Garvin Brook near Minnesota City, MN (d)	05378235	-	1982-91
Straight Valley Creek near Rollingstone, MN (d)	05378300	5.16	1970-85
Gilmore Creek at Winona, MN (d)	05379000	8.95	1939-63
Mississippi River at LaCrosse, WI (d)	05383500	-	1929-55
North Branch Root River tributary near Stewartville, MN (d)	05383600	0.73	1959-64
Root River near Lanesboro, MN (d)	05384000*	615	1910, 11-17, 1940-85, 87-90
Rush Creek near Rushford, MN (d)	05384500*	129	1942-79
Root River near Houston, MN (d)	05385000*	1,250	1909-17, 1929-83, 1991-2000
South Fork Root River near Houston, MN (d)	05385500*	275	1953-83
Root River below South Fork near Houston, MN (d)	05386000	1,560	1938-61
Turtle Creek near Austin, MN (d)	05456500	144	1947-51
Heron Lake outlet nr Heron Lake, MN (d)	05475000	-	1930-43
Rock River at Luverne, MN (d)	06483000*	419	1911-14, 1996-97
Little Sioux River near Lakefield, MN (d)	06603000	17.1	1948-63
Jackson County Ditch No. 11 near Lakefield, MN (d)	06603500	7.69	1948-61

Station name	Station number	Drainage area (mi^2)	Type of record	Period of record
Baptism River near Beaver Bay, MN	04014500	140	C., Bio., Sed., Temp., D.O., pH., S.C.	1968-93
Partridge River abv Colby Lake at Hoyt Lakes, MN	04015475	106	Temp., S.C.	1976-85
St. Louis River at Forbes, MN	04018750	713	Sed.	1968-70
St. Louis River at Scanlon, MN	04024000	3430	C., Bio., Sed., Temp., D.O., pH, S.C.	1958-66, 68-94
Elim Creek near Holyoke, MN	04024090	1.06	Sed.	1976-79
Skunk Creek below Elim Creek near Holyoke, MN	04024093	8.83	C., Sed., Temp., D.O., pH, S.C.	1976-79
Deer Creek near Holyoke, MN	04024098	7.77	C., Bio., Temp., D.O., pH, S.C.	1977-79
			Sed.	1977-81
Pelican River near Fergus Falls, MN	05040500	482	Sed.	1968-69
Otter Tail River below Orwell Dam, near Fergus Falls, MN	05046000	1740	C., Sed., Temp., D.O., pH, S.C.	1961-63, 65-66, 85-86, 93-95
Bois de Sioux River near Doran, MN	05051300	1880	C., Sed., Temp., D.O., pH, S.C.	1993-95
Buffalo River near Hawley, MN	05061000	325	Sed.	1977-78
South Branch Buffalo River at Sabin, MN	05061500	454	Sed.	1977-78
Buffalo River near Dilworth, MN	05062000	1040	Sed.	1971-81
Wild Rice River at Twin Valley, MN	05062500	934	C., Sed., Temp., D.O., pH, S.C.	1966, 1973-79, 92-98, 2000-01
Wild Rice River at Hendrum, MN	05064000	1,560	C., Temp., D.O., pH, S.C.	1962-63, 67-68, 80-85, 91, 97-2001
Marsh River near Shelly, MN	05067500	220	C., Temp., D.O., pH, S.C.	1975, 79, 2000-01
Sand Hill River at Climax, MN	05069000	420	C., Temp., D.O., pH, S.C.	1966, 75, 79, 2000-01
Red Lake River near Red Lake, MN	05074500	1,950	C., Temp., D.O., pH, S.C.	1964-66, 2000-01
Thief River near Thief River Falls, MN	05076000	985	C., Temp., D.O., pH, S.C.	1963-66, 75, 79, 2000-01
Clearwater River at Plummer, MN	05078000	555	C., Temp., D.O., pH, S.C.	1963, 79, 2000-01
Lost River at Oklee, MN	05078230	254	C., Temp., D.O., pH, S.C.	1966, 1979, 2000-01
Clearwater River at Red Lake Falls, MN	05078500	1370	C., Sed., Temp., D.O., pH, S.C.	1964-66, 79, 92, 95
Red Lake River at Crookston, MN	05079000	5,270	C., Sed., Temp., D.O., pH, S.C.	1962-68, 72-76, 78-95, 97, 2000-01
Red Lake River at Fisher, MN	05080000	5,680	C., Sed., Temp., D.O., pH, S.C.	2000-01
Snake River above Alvarado, MN (d)	05085900	218	C., Temp., D.O., pH, S.C.	1994-96
Middle River at Argyle, MN	05087500	255	C., Sed., Temp., D.O., pH, S.C.	1968, 75, 79, 93, 2000-01
South Branch Two Rivers at Lake Bronson, MN	05094000	422	C., Sed., Temp., D.O., pH, S.C.	2000-01
Roseau River below Roseau, MN	05105300		C., Bio., Sed., Temp., D.O., pH, S.C.	1973-83
Roseau River below State Ditch 51, near Caribou, MN	05112000	1560	C., Bio., Sed., Temp., D.O., pH, S.C	1972-95, 2001
Kawishiwi River near Ely, MN	05124480	253	C., Bio., Sed., Temp., D.O., pH, S.C	1966-96
Little Fork River at Littlefork, MN	05131500	1730	C., Bio., Sed., Temp., D.O., pH, S.C.	1967, 69, 71, 73-86
Big Fork River at Big Falls, MN	05132000	1460	C., Bio., Sed., Temp., D.O., pH, S.C.	1968, 71-77
Rainy River at Manitou Rapids, MN	05133500	19,400	C., Bio., Sed., Temp., D.O., pH, S.C.	1968-70, 78-94
Crow Wing River at Nimrod, MN	05244000	1,010	Sed.	1968-70
Mississippi River near Royalton, MN	05267000	11,600	C., Bio., Sed., Temp., D.O., pH, S.C.	1963-66, 1975-98
Sauk River near St. Cloud, MN	05270500	1,030	C., Bio., Temp., D.O., pH, S.C.	2001
Elk River near Big Lake, MN	05275000	615	Sed., Temp.	1976-81
North Fork Crow River above Paynesville, MN	05276005	232	C., Bio., Sed., Temp., D.O., S.C.	1996-98
Crow River at Rockford, MN	05280000	2520	Sed., Temp.	1975-81
			C., Sed., Temp., D.O., pH, S.C.	1997
Mississippi River near Anoka, MN	05288500	19,100	Sed.	1963-67, 75-98
			C., Temp., D.O., pH, S.C.	1996-98
Mississippi River at Fridley, MN	05288550		Temp., D.O., pH, S.C.	1975-86
Mississippi River at Ford Plant at St. Paul, MN	05288950	19,700	Temp., D.O., pH, S.C.	1974-78, 81-82
Whetstone River near Big Stone City, SD	05291000	389	Sed., Temp.	1974-88
Yellow Bank River near Odessa, MN	05293000	398	Sed., Temp.	1974-88
Chippewa River near Milan, MN	05304500	1870	Sed., Temp.	1972-81
Yellow Medicine River near Granite Falls, MN	05313500	653	Sed., Temp.	1971-75, 77-81
Redwood River near Marshall, MN	05315000	259	Sed., Temp.	1968-71
Redwood River near Redwood Falls, MN	05316500	629	Sed., Temp.	1968-70
Cottonwood River near New Ulm, MN	05317000	1,300	Sed.,	1968-76
Watonwan River near Garden City, MN	05319500	812	Sed.	1977-80
Blue Earth River near Rapidan, MN	05320000	2,410	C., Bio., Temp., D.O., pH, S.C.	1960-67, 69, 2000-01
Minnesota River near Jordan, MN	05330000	16,200	C., Bio., Temp., D.O., pH, S.C.	1952-63, 69, 72-98
Minnesota River at Burnsville, MN	05330908		Temp., D.O., pH, S.C.	1980-83
Minnesota River at Fort Snelling State Pk., St. Paul, MN	05330920	16,900	Temp., D.O., pH, S.C.	1973-83
Mississippi River at Industrial Molasses, St. Paul, MN	05331005		Temp., D.O., pH, S.C.	1976-85
Mississippi River at Fifth at Newport, MN	05331545		Temp., D.O., pH, S.C.	1979-90
Mississippi River at Grey Cloud Island near Cottage Grove, MN	05331560		Temp., D.O., pH, S.C.	1977-90
Mississippi River at Ninninger	05331570	37,000	C., Bio., Sed., Temp., D.O., pH, S.C.	1977-95
Mississippi River at Lock and Dam 2 at Hastings, MN	05331578		Temp., D.O., pH, S.C.	1975-90
Snake River near Pine City, MN	05338500	958	C., Bio., Temp., D.O., pH, S.C.	1963, 65, 67-68, 75-83, 85, 92-94, 98

DISCONTINUED SURFACE-WATER-QUALITY STATIONS--Continued

Station name	Station number	Drainage area (mi^2)	Type of record	Period of record
St. Croix River at Afton, MN	05341770		Temp., D.O., pH, S.C.	1977-83
Vermillion River near Empire, MN	05345000	110	Temp., D.O., pH, S.C.	1974-91
			C., Bio.	1990-91, 97, 98
Mississippi River at Lock and Dam 3 near Red Wing, MN	05344980	46,000	Temp., D.O., pH, S.C.	1976-83
Mississippi River at Red Wing, MN	05355250	46,800	C., Bio., Sed., Temp., D.O., pH, S.C.	1996-98
South Fork Zumbro River at Rochester, MN	05372995	303	C., Temp., D.O., pH, S.C.	2001
			Sed., Temp.	1981-82
Zumbro River at Zumbro Falls, MN	05374000	1,150	Sed.	1971, 73-75
Zumbro River at Kellogg, MN	05374900	1400	Sed., Temp.	1975-81
North Fork Whitewater River near Elba, MN	05376000	101	C., Bio., Sed., Temp, D.O., pH, S.C.	1967-93
Middle Fork Whitewater River near St. Charles, MN	05376100		Sed., Temp., S.C.	1988-92
Whitewater River near Beaver, MN	05376800	271	Sed., Temp.	1975-81
Mississippi River at Winona, MN	05378500	59,200	C., Bio., D.O., pH	1963-66, 76-88
			Sed.	1976-2000
Root River near Lanesboro, MN	05384000	615	Sed.	1968-71
Root River near Houston, MN	05385000	1270	Sed.,Temp.	1975-81
South Fork Root River near Houston, MN	05385500	275	Sed., Temp.	1975-81
Cedar River near Austin, MN	05457000	425	Sed., Temp., S.C.	1971, 73-75, 78-81
Des Moines River at Jackson, MN	05476000	1220	C., Bio., D.O., pH, S.C.	1968-69, 73-76, 78, 83, 89-90, 94-95, 98
			Sed., Temp	1968-81

INTRODUCTION

Water Resources Division of the U.S. Geological Survey (USGS), in cooperation with Federal, State, and local agencies, collects a large amount of data pertaining to the water resources of Minnesota each water 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 USGS, the data are published annually in this report series entitled, "Water-Resources Data—Minnesota."

Water-resources data for the 2005 water year (hereinafter 2005) for Minnesota consist of records of stage, discharge, and water quality of streams; and stage of lakes and reservoirs; and water quality of ground water. This volume contains discharge records for 116 stream-gaging stations; stage for 11 lakes and reservoirs; water quality for 12 stream-gaging stations; peak flow data for 87 high-flow partial-record stations; and ground-water levels for 3 ground-water observation wells. These data represent a part of the National Water Data System collected by the USGS and cooperating State and Federal agencies in Minnesota.

This series of annual reports for Minnesota began with the 1961 water year with a report that contained only data relating to the quantities of surface water. For the 1964 water year, a similar report was introduced that contained only data relating to water quality. Beginning with the 1975 water year, the report was changed to present, in one volume, data on quantities of surface water, quality of surface and ground water, and ground-water levels.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for Minnesota were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-Water Supply of the United States, Parts 4, 5 and 6A." For the 1961 through 1970 water years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States," and water levels for the 1935 through 1974 water years were published under the title "Ground-Water Levels in the United States." The above mentioned Water-Supply Papers can be consulted in the libraries of the principal cities of the United States and may be purchased from the U.S. Geological Survey Branch of Information Services, Denver Federal Center, Box 25286, Denver, Colorado 80225.

Publications similar to this report are published annually by the USGS 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 volume number. For example, this volume is identified as the "U.S. Geological Survey Water-Data Report MN-05-1." 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 Water Science Center at the address given on the back of the title page or by telephone (763) 783-3100.

COOPERATION

The USGS and agencies of the State of Minnesota have had cooperative agreements for the systematic collection of streamflow records since 1909, for ground-water levels since 1948, and for water-quality records since 1952. Organizations that assisted in collecting data through cooperative agreement with the USGS are:

— Minnesota Department of Natural Resources
— Minnesota Department of Transportation
— Minnesota Pollution Control Agency
— Minnesota Department of Health
— Metropolitan Council, Environmental Services
— Wisconsin Department of Natural Resources
— Grand Portage Reservation Tribal Council
— Elm Creek Watershed Management Commission
— Red River Watershed Management Board
— City of Rochester
— City of Grand Forks
— Bois Forte Reservation Tribal Council
— Prairie Island Indian Community
— City of Mankato
— Prairie Country Resource Conservation District
— High Island Creek Clean Water Partnership
— Brown Nicollet Cottonwood Clean Water Partnership
— Buffalo-Red River Watershed District
— Middle-Snake River Watershed District
— Sibley County
— South St. Louis County Soil and Water Conservation District
— Red Lake River Watershed District
— Vermillion River Joint Powers Organization
— Shingle Creek Watershed District

Assistance in the form of funds or services was given by the U.S. Army Corps of Engineers, U.S. Department of State, and the Federal Energy Regulatory Commission. Other organizations that supplied data are acknowledged in station descriptions.

SUMMARY OF HYDROLOGIC CONDITIONS

Precipitation

Minnesota had precipitation totals for the water year ranging from near normal to above normal (normal being the statistical median based on data from 1971-2000) during the 2005 water year (figs. 1 and 2). Annual totals in northeast Minnesota were approximately 3 inches below normal while in the west-central and southwest portions of the state, totals were from 4 to 6 inches above normal. Annual totals for the rest of the state were generally within 2 to 3 inches of normal. State aggregate totals for the water year were 2.2 inches or 108 percent of normal. Localized areas had annual precipitation totals that ranged from 6 inches below normal to 6 inches above normal. Precipitation totals, unless otherwise stated, are aggregates for the state, or for the nine climatic divisions. These divisions include the northwest, north-central, northeast, west-central, central, east-central, southwest, south-central, and southeast divisions.

Precipitation totals for the first quarter, October 1 to December 31, 2004, were below normal for the entire state except for the southwest and south-central parts of the state which were approximately 50 percent of normal. Departures from normal ranged from -2.2 inches in the south-central to 1.1 inches in the north-central parts of the state. Statewide, the average precipitation was within 5 percent or 0.2 inches of normal. While not affecting quarterly totals, a rain event on Oct. 28 produced amounts exceeding 2 inches

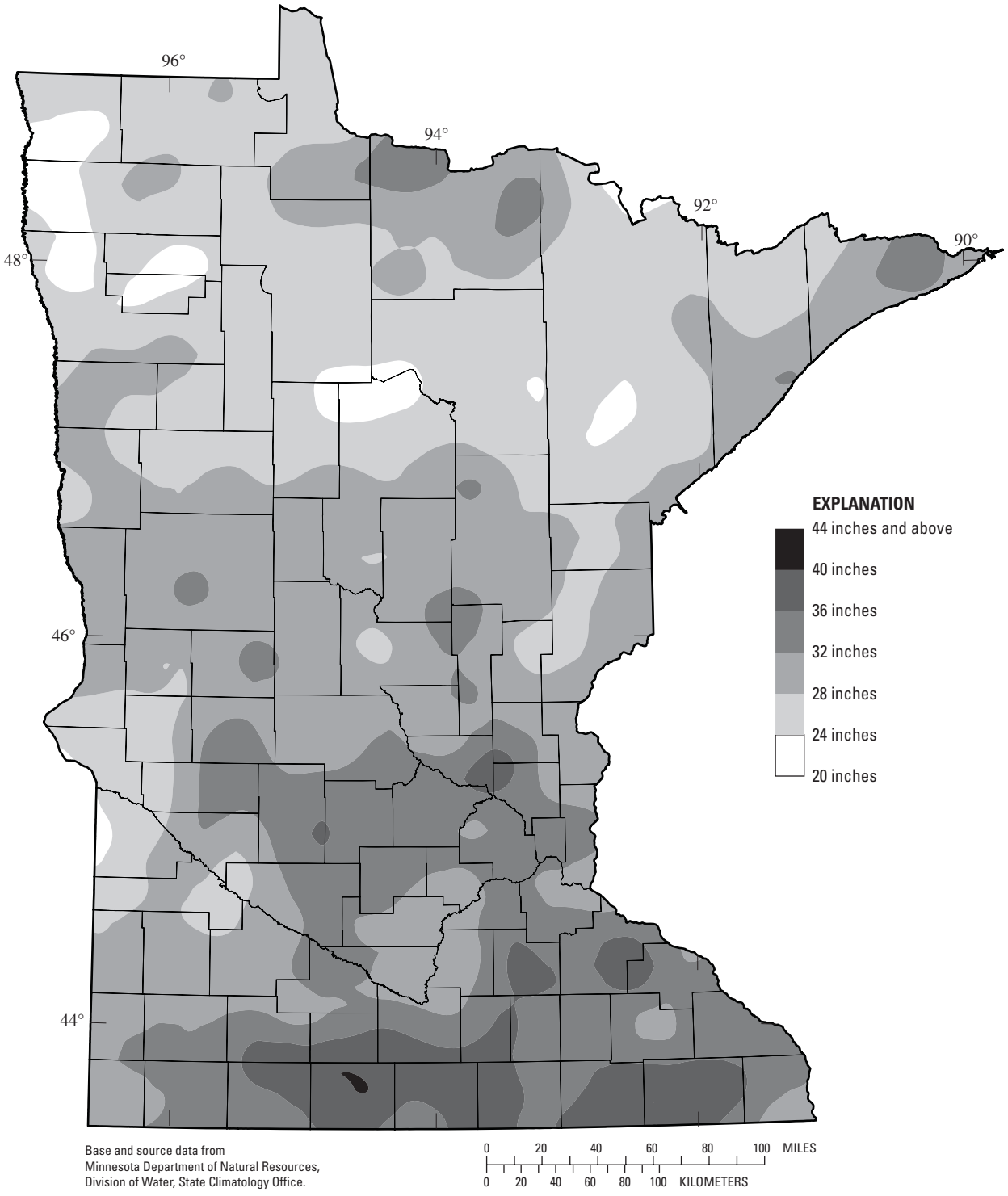


Figure 1. Precipitation, in inches, during 2005 water year, Minnesota.

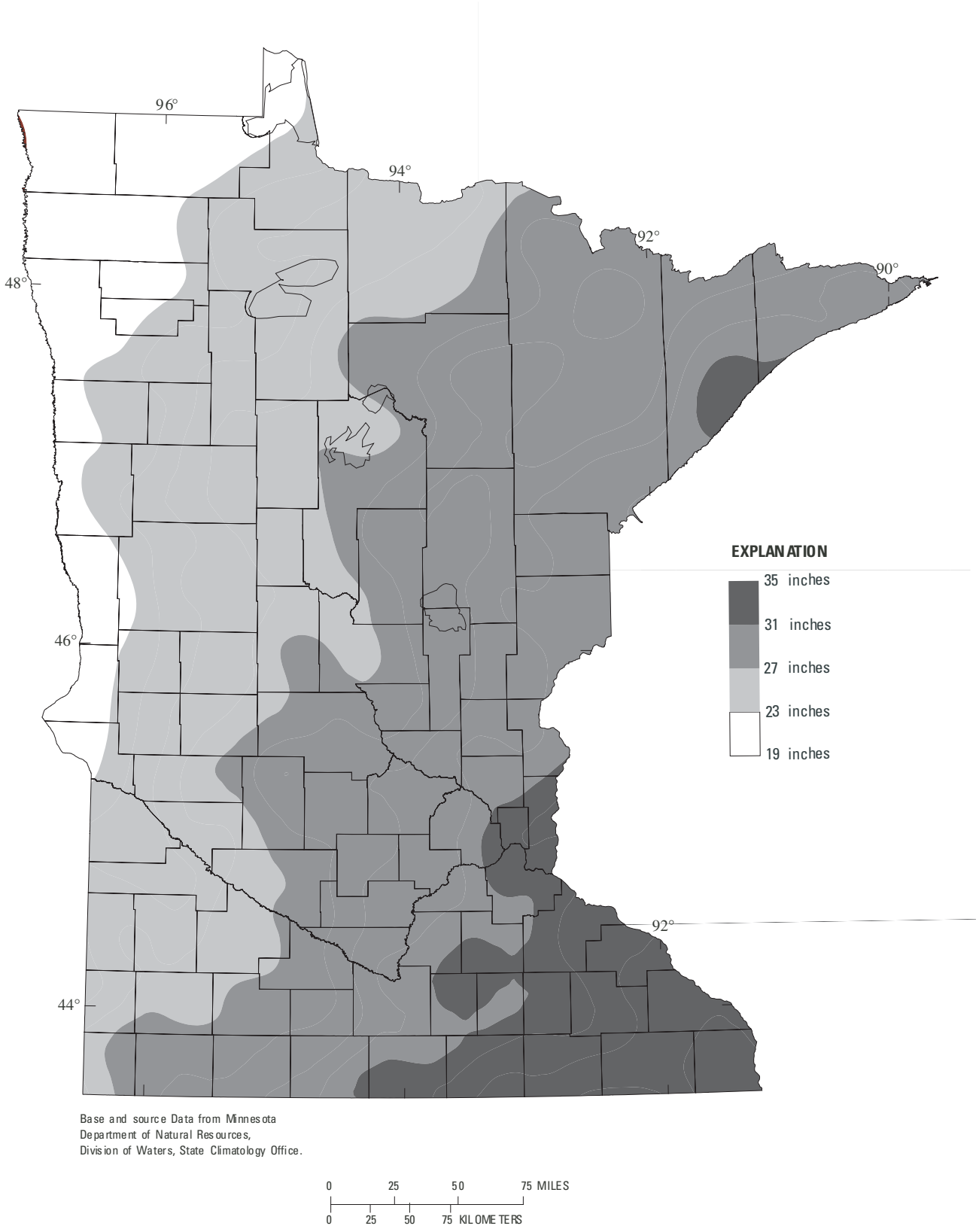


Figure 2. Average annual precipitation, in inches, for 30-year period, 1971-2000, in Minnesota.

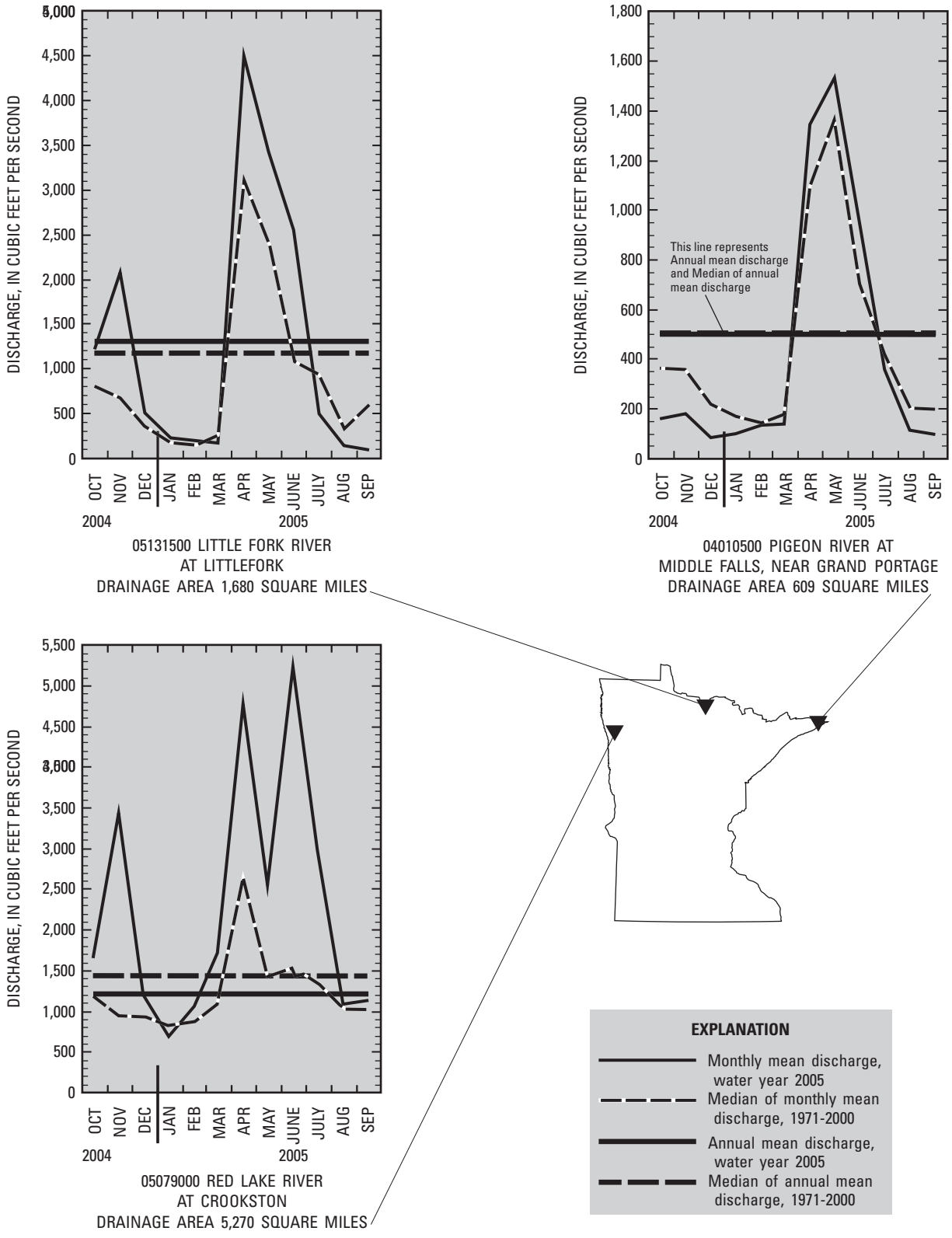
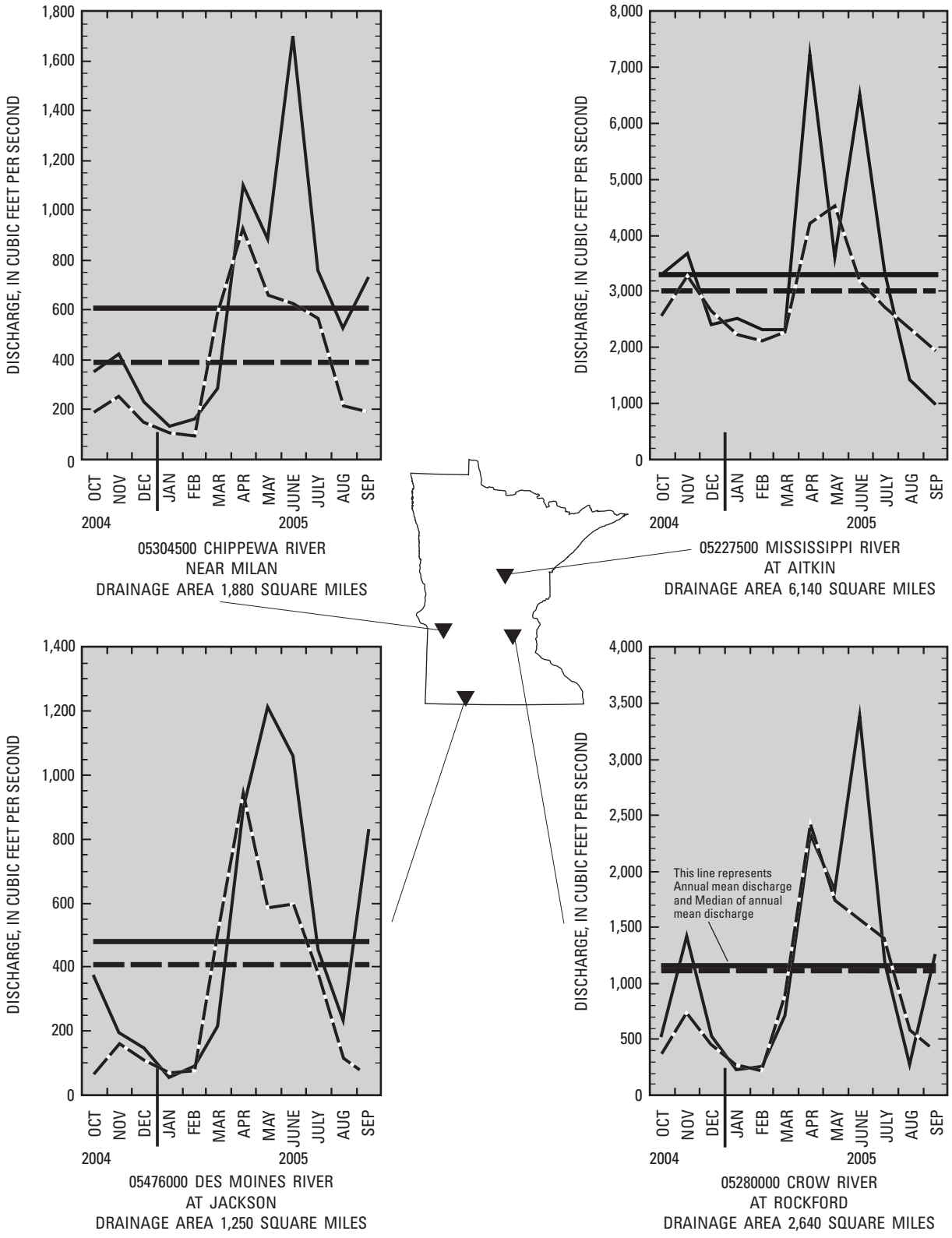


Figure 3. Comparison of mean discharge for the 2005 water year with the median



of mean discharges for 1971-2000 at seven long-term representative gaging stations.

within a narrow band in the central part of the state contributing to increased streamflow that resulted in significant runoff.

Precipitation for the second quarter, January 1 to March 31, 2005, was near normal for the entire state. The greatest deviations from normal, statistically, were in the northwest and west-central parts which were 70 to 75 percent below normal. The greatest deviation, in inches, was in the southeast which was 1.4 inches above normal. This was largely due to a storm on June 7 and 8 which produced rainfall totals over 4 inches in and around Goodhue County. Statewide, the average for this quarter was approximately normal.

The third quarter, April 1 to June 30, 2005, had deviations from normal ranging from -0.8 inches in the southeast to 3.6 inches in the west-central parts of the state. As a percentage of normal these were from 92 to 140 percent of normal. Statewide, the aggregate total was 2.4 inches above normal. All parts of the state were at or above normal except for the southeast.

For the fourth quarter, July 1 to September 30, 2005, precipitation totals ranged widely above or below normal for most of the nine climate divisions, The exception being the northwest which was at normal. The north-central, northeast and east-central parts of the state ranged from -1.3 to -5.9 inches below normal while the remaining 5 regions ranged from 1.7 to 5.4 inches above normal. The northeast had the greatest deviation from normal at -5.4 inches below normal. A storm on Aug. 17-18 produced almost 8 inches of rain near St. James in Watonwan County, while on Aug. 25-26, rainfall totals in excess of 8 inches were reported near New London in Kandiyohi County. In September the monthly precipitation totals ranged from 3 inches below normal in the far north central part of the state of 8 inches above normal near the St. Paul - Minneapolis metropolitan area. Despite these regional variations, the state aggregate total was near normal for the fourth quarter.

Precipitation data not derived from figures 1 and 2 were obtained through the World Wide Web from the Minnesota State Climatology Office at: http://climate.umn.edu/ or from the Midwestern Regional Climate Center at: http://mcc.sws.uiuc.edu/index.jsp.

Surface Water

Figure 3 shows monthly-mean and annual-mean discharges for water year 2005 compared to normal (median of monthly-mean discharges for the period 1971-2000) for 7 streamflow gaging stations: Pigeon River at Middle Falls, Red Lake River at Crookston, Little Fork River at Littlefork, Chippewa River near Milan, Mississippi River at Aitkin, Des Moines River at Jackson, and Crow River at Rockford. These stations are located in the following basins respectively— Lake Superior, Red River of the North, Lake of the Woods, and the upper Mississippi River.

After a storm event in late October 2004, the winter was unseasonably warm and dry for much of the state. Streamflows for most stream-gaging stations were well above normal going into winter but through the winter months had returned to or dropped below normal.

Annual-mean streamflows were at or above normal for all seven of the stations listed. For the first quarter, October to December 2004, all but one of the seven stations had monthly-mean streamflows above normal. The exception being Pigeon River at Middle Falls, which was below normal. Flows for the winter quarter, January to March, 2005, were near normal for all seven gaging stations. For the third quarter, April to June, monthly-mean streamflows were near normal for Pigeon River at Middle Falls, and above normal for the other six stations. For the last quarter, July to September 2005, streamflows were either near normal or approaching normal into September. However, storms in September in central and southwest Minnesota resulted in monthly-mean flows for September that were well above normal for three of the seven stations; Crow River at Rockford, Chippewa River near Milan, and Des Moines River at Jackson.

With respect to stream-gaging stations with 10 or more years of streamflow record, no new peaks of record were recorded at any sites. No stations had peaks with more than a 2-5-year recurrence interval. The more noteable storms that occurred in parts of the state resulted in higher than normal streamflows for that time of year, but were not significant in terms of peak flows for periods of record. What the storms did do was to keep streamflows from going into very low flows. With the exception of some short periods of severe cold weather, streamflows during the 2005 water year were never much below normal and were typically at or above normal.

Ground-Water Levels

This report includes levels from two ground-water wells, both screened in surficial-sand and gravel aquifers. The wells are measured approximately monthly by USGS personnel. The wells, located in Beltrami and Morrison Counties, are also equipped with continuous-water-level recorders .

Water levels for these two wells, located in northern Minnesota, in Beltrami and Itasca Counties generally showed rising water levels throughout the water year.

The both wells are equipped with telemetry so near real-time water levels could be observed on the World Wide Web at: http://water-data.usgs.gov/mn/nwis/current/?type=gw.

Downstream Order System and Station Number

Since October 1, 1950, the order of listing hydrologic-station records in USGS reports is in a 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 that enters between two main-stream sections is listed between them. A similar order is followed by listing stations on first rank, second rank, and other order ranks of tributaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indentation in a list of stations in front of the report. Each indentation represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These are in the same downstream order in this report. In assigning station numbers, 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 made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete eight-digit number for each station such as 05041000, which appears just to the left of the station name, includes the two-digit part number “05” plus the six-digit downstream order number "041000." 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 previously described between the stations of consecutive 8-digit numbers.

Numbering System for Wells and Miscellaneous Sites

The eight-digit downstream order station numbers are not assigned to wells and miscellaneous sites where only occasional water-quality samples or discharge measurements are taken.

The well and miscellaneous site numbering system of the USGS 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 six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells or other sites within a one-second grid. See figure 4. The numbering system used to define the location of data collection sites is based on the Federal system of land subdivision (township, range, and section). The first number of the site location indicates the township (the N after the township number is an abbreviation for north); the second, the range (the W after the range number is an abbreviation for west); and the third the section. Uppercase letters after the section number indicate location within the section; the first letter denotes the 160-acre tract, the second the 40-acre tract, and the third the 10-acre tract. The number of uppercase letters indicates accuracy of the location number. For example, if a point can be located within a 10-acre tract, three uppercase letters are shown in the location number. The number T142NR38W22DDC indicates the site is located in the SW 1/4 of the SE 1/4 of the SE 1/4, section 22, township 142 north, range 38 west.

RECORDS OF STAGE AND WATER DISCHARGE

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a continuous stage-recording device through which either instantaneous or mean-daily discharge may be computed for any time, or any period of time, during the period of record. Complete records of lake or reservoir content, similarly, are those for which stage or content may be computed or estimated with reasonable accuracy for any time, or period of time. They may be obtained using a continuous stage-recording device, but need not be. Because daily-mean discharges and end-of-day contents commonly are published for such stations, they are referred to as "daily stations."

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles such as "High-flow partial records," or "Low-flow partial records." Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately in this report. Location of all continuous-record, surface-water-quality, and high-flow partial-record stations for which data are given in this report are shown in figures 5, 6, and 7.

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://ny.cf.er.usgs.gov/hbn/.

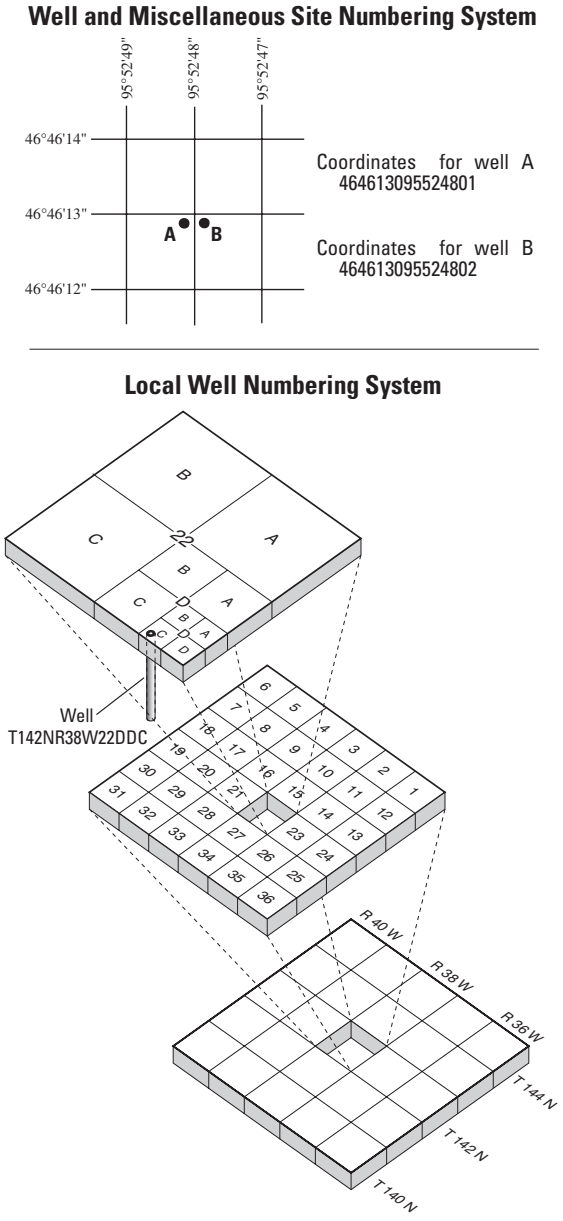


Figure 4. Example of system for numbering wells.

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 National Water-Quality Assessment (NAWQA) Program of the USGS 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 will be 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 decision making by water-resources managers 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 for collaboration among the agencies. Additional information about the NAWQA Program can be found at 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 data bases, 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 data obtained at a complete-record gaging station on a stream or canal consist of a continuous record of stage, individual measurements of discharge throughout a range of stages, and notations regarding factors that may affect the relation between stage and discharge. These data, together with supplemental information, such as weather records, are used to compute daily discharges. The data obtained at a complete-record gaging station on a lake or reservoir consist of a record of stage and of notations regarding factors that may affect the relation between stage and lake content. These data are used with stage-area and stage-capacity curves or tables to compute water-surface areas and lake storage.

Records of stage are obtained with recorders that encode stage values at selected time intervals and stored on a variety of media. Measurements of discharge are made with current and acoustic meters using methods adapted by the USGS as a result of experience accumulated since 1880. These methods are described in standard textbooks, in U.S. Geological Survey Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water-Resources Investigations (TWRI), book 3, chapter A6.

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves are then constructed. From these curves, rating tables indicating the approximate discharge for any stage within the range of the measurements are prepared. If it is necessary to define extremes of discharge outside the range of current-meter measurements, the curves are extended using: (1) logarithmic-plotting; (2) velocity-area studies; (3) results of indirect measurements of peak discharge, such as slope-area or contracted-opening measurements, and computations of flow-over-dams or weirs; or (4) step-backwater techniques.

Daily-mean discharges are computed by applying the daily-mean stages (gage heights) to the stage-discharge curves or tables. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily-mean discharge is determined by the shifting-control method, in which correction factors that are based on the individual discharge measurements and notes of the personnel making the measurements are applied to the gage heights before the discharges are determined from the curves or tables. This shifting-control method also is used if the stage-discharge relation is changed temporarily because of aquatic growth or debris on the control. For some stations, formation of ice in the winter may so obscure the stage-discharge relations so that daily-mean discharges must be estimated from other information such as temperature and precipitation records, notes of observations, and records for other stations in the same or nearby basins for comparable periods.

At some stream-gaging stations the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of either 1) the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge, or 2) the index-velocity method in which the 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. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the 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.

In computing records of lake or reservoir contents, it is necessary to have available from surveys, curves or tables defining the relation of stage and content. The application of stage to the stage-content curves or tables gives the contents from which daily, monthly, or yearly changes then are determined. If the stage-content relation changes because of deposition of sediment in a lake or reservoir, periodic resurveys may be necessary to redefine the relation. Even when this is done, the contents computed may become increasingly in error as time since the last survey increases. Discharge over lake or reservoir spillways are computed from stage-discharge relations much as other stream discharges are computed.

For some gaging stations there are periods when no gage-height record is obtained, or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. For such periods, the daily discharges are estimated from the recorded range in stage, previous or following record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated from operator's logs, previous or following record, inflow-outflow studies, and other information. Information explaining how estimated daily-discharge values are identified in station records is included in the sections, “Data Presentation” (REMARKS paragraph) and “Identifying Estimated Daily Discharge.”

Data Presentation

Streamflow data in this report are presented in a new format that is considerably different from the format in data reports prior to the 1991 water year. The major changes are that statistical characteristics of discharge now appear in tabular summaries following the water-year data table and less information is provided in the text or station manuscript above the table.

The records published for each continuous-record surface-water discharge station (gaging station) now consist of five parts: (1) the manuscript or station 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 to follow clarify information presented under the various headings of the station description.

LOCATION--Information on locations is obtained from the most accurate maps available. The location of the gage 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 indicates the period for which there are published records for the station or for an equivalent station. An equivalent station is one that was in operation at a time when the present station was not, and whose location was such that records from it can reasonably be considered equivalent with records from the present station.

REVISED RECORDS--Published records, because of new information, occasionally are found to be incorrect, and revisions are printed in later reports. Listed under this heading are all reports in which revisions have been published for the station and water years to which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" means that only the instantaneous minimum was revised; and “(P)" means that only peak discharges were revised. If the drainage area has been revised, the report in which the most recently revised figure was first published is given.

GAGE--The type of gage in current use, the datum of the current gage referred to National Geodetic Vertical Datum of 1929 (see glossary), and a condensed history of the types, locations, and datum of previous gages are given under this heading.

REMARKS--All periods of estimated daily-discharge record will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily-discharge table. If a remarks statement is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, to conditions that affect natural flow at the station and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and 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--Included here is the information concerning 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--If errors in published water-quality records are discovered after publication, appropriate updates are made in the U.S. Geological Survey’s distributed data system NWIS, and subsequently to its web-based national data system, NWISWeb [http://water.usgs.gov/nwis/nwis]. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required

data from NWIS or NWISWeb to ensure the most recent updates. Updates to NWISWeb are currently made on an annual basis.

Manuscript information for lake or reservoir stations differs from that for stream stations in the nature of the "Remarks" and to the inclusion of a skeleton stage-capacity table when daily contents are given.

Headings for AVERAGE DISCHARGE, EXTREMES FOR PERIOD OF RECORD, AND EXTREMES FOR CURRENT YEAR have been deleted and the information contained in these paragraphs, except for the listing of secondary instantaneous peak discharges in the EXTREMES FOR CURRENT YEAR paragraph, is now presented in the tabular summaries following the discharge table or in the REMARKS paragraph, as appropriate. No changes have been made to the data presentations of lake contents.

Peak Discharges Greater Than Base Discharge

Tables of peak discharges above base discharge are included for some stations where secondary instantaneous peak discharges 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 exceedance 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 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 also is usually 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). Figures for cubic feet per second per square mile and runoff in inches or in acre-feet may be omitted if there is extensive regulation or diversion 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 contents are given. These figures are identified by a symbol and corresponding footnote.

Statistics of Monthly-Mean Data

A tabular summary of the mean (line headed MEAN), maximum (line headed MAX), and minimum (line headed 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 figures. The designated period will be expressed as FOR WATER YEARS 20__-20__, 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. It will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be 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 20__-20__, will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be 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 this occurs, it will be noted in the REMARKS paragraph or in footnotes. Selected streamflow duration curve statistics and runoff data are also given. Runoff data may be omitted if there is extensive regulation or diversion of flow in the drainage basin.

The following summary statistics data, as appropriate, are provided with each continuous record of discharge. Comments to 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. At some stations the yearly-mean discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by symbol and corresponding footnotes.

ANNUAL MEAN--The arithmetic mean of the individual daily-mean discharges for the year noted or for the designated period. At some stations the yearly-mean discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

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.

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. In this case, the maximum peak flow is given in the table and the maximum flow may be reported in a footnote or REMARKS paragraph in the manuscript.

MAXIMUM PEAK STAGE--The maximum instantaneous peak stage 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 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 second 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) indicates 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 is exceeded by 10 percent of the flow for the designated period.

50 PERCENT EXCEEDS--The discharge that is exceeded by 50 percent of the flow for the designated period.

90 PERCENT EXCEEDS--The discharge that is exceeded by 90 percent of the flow 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 is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage 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 generally are 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.

Identifying Estimated Daily Discharge

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

Accuracy of the Field Data and Completed Results

The accuracy of streamflow records 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 measurements of stage, measurements of discharge, and interpretation of records.

The accuracy attributed to the records is indicated under REMARKS. "Excellent" means that about 95 percent of the daily discharges are within 5 percent of the true; "good," within 10 percent; and "fair," within 15 percent. Records that do not meet the criteria mentioned are rated "poor." Different accuracies may be attributed to different parts of a given record.

Daily-mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values less than 1 ft^3/s; to the nearest tenth between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures for more than 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 discharges listed for partial-record stations and miscellaneous sites.

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, figures 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 Records Available

Information of a more detailed nature than that published for most of the gaging stations, such as observations of water temperatures, discharge measurements, gage-height records, and rating tables, is on file in the Minnesota USGS Water Science Center. Also, most 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 USGS Water Science Centers .

The National Water-Data Exchange, Water Resources Division, U.S. Geological Survey, National Center, Reston, VA 22092, maintains an index of all discharge-measurement sites in the State as well as an index of records of discharge collected by other agencies but not published by the USGS. Information on records available at specific sites can be obtained upon request.

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.

RECORDS OF SURFACE-WATER QUALITY

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report may 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 **continuing 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 continuing or partial-record station, where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

A distinction needs to be made between "continuing records," as used in this report, and "continuous recordings," which refers to a continuous graph or a series of discrete values punched at short intervals on a paper tape. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, 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/*. Also, detailed information on collecting, treating, and shipping samples may be obtained from the USGS Minnesota USGS Water Science Center .

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.

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; pHunit, standard pH unit]

	Rating			
Measured physical property	**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%
Dissolved oxygen	≤ ±0.3 mg/L or ≤ ± 5%, whichever is greater	> ±0.3 - 0.5 mg/L or > ± 5 – 10%, whichever is greater	> ±0.5 - 0.8 mg/L or > ± 10 – 15%, whichever is greater	> ±0.8 mg/L or > ± 15%, whichever is greater
pH	≤ ±0.2 unit	> ±0.2 to 0.5 unit	> ±0.5 to 0.8 unit	> ±0.8 unit
Turbidity	≤ ±0.5 turbitity units or ≤ ± 5%, whichever is greater	> ±0.5 - 1.0 turbidity units or > ± 5 – 10%, whichever is greater	> ±1.0 - 1.5 turbidity units or > ± 10 – 15%, whichever is greater	> ±1.5 turbidity units or > ± 15 – 10%, whichever is greater

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.

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.

Onsite Measurements and Sample Collection

Water-quality data must be representative of the in situ quality of water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made onsite when the samples are taken. To assure that measurements made in the laboratory also represent the in situ water, carefully prescribed procedures need to 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 onsite measurements and for collecting, treating, and shipping samples are given in publications on"Techniques of Water-Resource Investigations," book 1, chap. D2; book 3, chap. C2; book 5 chaps. A1, A3, and A4; book 9, chap. 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 may be obtained from the USGS Minnesota USGS Water Science Center .

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 through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load. All samples obtained for the National Stream Quality Accounting Network (see definitions) are obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several verticals depends on flow conditions and other factors which must be evaluated by the collector.

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, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the USGS Minnesota USGS Water Science Center .

Water Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at 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 Minnesota USGS Water Science Center .

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 sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration are 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 loads 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 were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, 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) indicator bacteria and specific conductance 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 U.S. Geological Survey Techniques of Water Resources Investigations, book 5, chap. C1. Methods used by the USGS laboratories are given in U.S. Geological Survey Techniques of Water Resources Investigation, book 1, chap. D2; book 3, chap. C2; book 5, chaps. 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 continuous-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, 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, when appropriate, 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" under "Records of Stage and Water Discharge;" same comments apply.

DRAINAGE AREA--See "Data Presentation" under "Records of Stage and Water Discharge;" same comments apply.

PERIOD OF RECORD--This indicates the periods for which there are published water-quality records for the station. 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 recorder, 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. None are given for parameters measured weekly or less frequently, because the true maximums or minimums may not have been sampled. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS--If errors in published water-quality records are discovered after publication, appropriate updates are made to the USGS distributed data system, NWISWeb *(http://waterdata.usgs.gov/nwis)*. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of USGS water-quality data are encouraged to obtain all required data from the appropriate computer file to ensure the most recent updates.

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 report:

PRINTED OUTPUT	REMARK
e, E	Estimated value
>	Actual value is known to be greater than the value shown
<	Actual value is known to be less than the value shown
K	Results based on colony count outside the acceptance range (non-ideal colony count)
L	Biological organisms count less than 0.5 percent (organisms may be observed rather than counted)
D	Biological organism count equal to or greater than 15 percent (dominant)
M	Presence of material verified, but not quantified.
V	Analyte was detected in both the environmental sample and the associated blanks
&	Biological organism estimated as dominant.

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 a USGS Water Science Center 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.

Blank Samples

Blank samples are collected and analyzed to ensure that environmental samples have not been contaminated by 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. There are many types of blank samples possible, each designed to segregate a different part of the overall data-collection process. The types of blank samples collected by this USGS Water Science Center 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 whose 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. There are many types of replicate samples 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 SAMPLE--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 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.

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 Onsite 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 onsite 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 8*;* 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 affect 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 onsite 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 Water Science Center (see address shown on back of title page in this report).

Laboratory Measurements

Analysis for sulfide and measurement of alkalinity, pH, water temperature, specific conductance, and dissolved oxygen are performed onsite. 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; book 3, chapter C2; 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 World Wide Web. 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 USGS Water Science Center (See address that is shown on the back of the title page of this report.)

RECORDS OF GROUND-WATER QUALITY

Records of ground-water quality in this report differ from other types of records in that for most sampling sites they consist of only one set of measurements for the water year. The quality of ground water ordinarily changes only slowly; therefore, for most general purposes one annual sampling, or only a few samples taken at infrequent intervals during the year, is sufficient. Frequent measurement of the same constituents is not necessary unless one is concerned with a particular problem, such as monitoring for trends in nitrate concentration. In the special cases where the quality of ground water may change more rapidly, more frequent measurements are made to identify the nature of the changes.

Data Collection and Computation

The records of ground-water quality in this report were obtained mostly as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some counties, but none are presented for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality statewide. Such a view can be attained only by considering records for this year in context with similar records obtained for these and other counties in earlier years.

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey Techniques of Water-Resources Investigation manuals. The values reported in this report represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. All samples were obtained by trained personnel. The wells sampled were pumped long enough to assure 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.

Data Presentation

The records of ground-water quality are published in the section entitled QUALITY OF GROUND WATER. Data for quality of ground water are listed alphabetically, by county, and are identified by well number. The prime identification number for wells sampled is the 15-digit number derived from the latitude-longitude locations. No descriptive statements are given for ground-water-quality records; however, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of the ground water. The REMARK codes listed for surface-water-quality records also are applicable to ground-water-quality records.

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 on the inside of the back cover. 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 the quantity of water required to cover 1 acre to a depth of 1 foot and is 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 standarized laboratory conditions. The growth potetial is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

Algae are mostly aquatic single-celled, colonial, or multicelled plants containing chlorophyll and lacking roots, stems, and leaves.

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 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, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equal to 43,560 cubic feet, 325,851 gallons, or 1,233 cubic meters.

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.

Inch (IN., in.) 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 uniformly distributed on it.

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.

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, rod like, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, while 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.

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 warm-blooded 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 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestine or feces of warm-blooded animals. They are often 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.

Fecal streptococcal bacteria are bacteria found in the intestine of warm-blooded animals. Their presence in water is considered to verify fecal pollution. 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.

Escherichia coli (E. coli) are bacteria present in the intestine and feces of warm-blooded 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. Their concentrations are expressed as number of colonies per 100 mL of sample.

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 flow in a channel sustained by ground-water discharge in the absence of direct runoff.

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

Bottom material: See "Bed material."

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 (mm^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 (mm^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.

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).

Cells volume (biovolume) determination is one of several common methods used to estimate biomass of algae in aquatic systems. Cell members of algae are frequently used 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 on 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 formula used to compute biovolume are as follows:

sphere $4/3\ \pi^3$ cone $1/3\ \pi^3 h$ cylinder $\pi^3 h$.

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 over all species.

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))

Chlorophyll refers to the green pigments of plants. Chlorophyll *a* and *b* are the two most common green pigments in plants.

Clostridium perfringens *(C. perfringens)* is a spore-forming bacterium that is common in the feces of human and other warmblooded 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.

Colloid is any substance with particles in such a fine state of subdivision dispersed in a medium (for example, water) that they do not settle out; but not in so fine a state of subdivision that they can be said to be truly dissolved.

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 boundaries. 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 that meets either of the following conditions: Stage or streamflow are recorded at some interval on a continuous basis. The recording interval is usually 15 minutes, but may be less or more frequent. Water-quality, sediment, or other hydrologic measurements are recorded at least daily.

Control designates a feature in the channel downstream from a gaging station that physically influences the water-surface elevation and thereby determines the stage-discharge relation at the station. 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, 449 gallons per minute, or 0.02832 cubic meters per second.The daily mean discharges report in the daily value tables numerically are equal to the daily volumes in cfs-days, and the totals also represent volumes in cfs-days.

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, 1.9837 acre-feet, 646,317 gallons, or 2,447 cubic meters. The daily mean discharges reported in the daily value data tables numerically equal to the daily volumes in cfs-days, and the totals 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 is a summary of streamflow, sediment, or water-quality values computed from data collected with sufficient frequency to obtain reliable estimates of daily mean values.

Daily record station is a site for which daily records of streamflow, sediment, or water-quality values are computed.

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) coordinates. (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 (mm^3/mL). The abundance of diatoms in periphyton samples is given in cells per square centimeter (cells/cm^2) or biovolume per square centimeter (mm^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 volume of water (or more broadly, volume of fluid including solid- and dissolved-phase material), that passes a given point in a given period of time.

Annual 7-day minimum is the lowest mean discharge for 7 consecutive days in a 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.)

Instantaneous discharge is the discharge at a particular instant of time.

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

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 agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Dissolved oxygen (DO) content of water in equilibrium with air 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, with small temperature changes having the more significant offset. Photosynthesis and respiration may cause diurnal variations in dissolved-oxygen concentration in water from some streams.

Dissolved-solids concentration of water 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 that analytical determination of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. In the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.4917 to reflect the change. 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 site on a stream is that area, measured in a horizontal plane, that has a common outlet at the site for its surface runoff. Figures of drainage area 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 is occupied by 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.

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.

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 the elevation of the zero point of the reference gage from which gage height is determined as compared to sea level (see "Datum"). This elevation is established by a system of levels from known benchmarks, by approximation from topographic maps, or by geographical positioning system.

Gage height (G.H.) is the water-surface elevation referenced to the gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with 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 semi-volatile 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 (mm^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 (mm^3/cm^2). (See also "Phytoplankton" and "Periphyton")

Ground-water level is the elevation of the water table or another potentiometric surface at a particular location.

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.etric surface at a particular location.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally 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 benchmark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a benchmark station may be used to separate effects of natural from human-induced changes in other basins that have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped benchmark basin.

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 U.S. Geological Survey. 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.

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, l 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 web site: http://www.co-ops.nos.noaa.gov/tideglos.html

Macrophytes are the macroscopic plants in the aquatic environment. The most common macrophytes are the rooted vascular plants that are usually 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.

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 mg/L 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, or miscellaneous station, is a site where streamflow, sediment, and/or water-quality data 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.

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.

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.

Nephelometric turbidity unit (NTU) is the measurement for reporting turbidity that is based on use of a standard suspension of Formazin. Turbidity measured in NTU uses nephelometric methods that depend on passing specific light of a specific wavelength through the sample.

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 of 1988) is the vertical control datum established in 1991 by the minimum-constraint adjustment of the Canadian-Mexican-U.S. leveling observations. It held fixed the height of the primary tidal bench mark, referenced to the new International Great Lakes Datum of 1985 local mean sea level height value, at Father Point/Rimouski, Quebec, Canada. See NOAA web site: http://www.ngs.noaa.gov/faq.shtml#WhatVD29VD88

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 sediments. May be reported as dissolved organic carbon (DOC), suspended organic carbon (SOC), 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 is any living entity.

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.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

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 U.S. Geological Survey 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 utilizes 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, or volume.

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. While 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 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, in part, influenced by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms are also influenced, 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. Phy-

toplankton 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 (PCB's) 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 an element 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")

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion 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 non-exceedance 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 non-exceedances of the $7Q_{10}$ occur less than 10 years after the previous non-exceedance, half occur less than 7 years after, and about one-eighth occur more than 20 years after the previous non-exceedance. 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 mile is the distance of a point on a river measured in miles from the river's mouth along the low-water channel.

River mileage is the linear distance along the meandering path of a stream channel determined in accordance with Bulletin No. 14 (October 1968) of the Water Resources Council.

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")

Runoff in inches (IN., in.) is the depth, in inches, to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

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 is transported by, suspended in, or deposited from water. It originates mostly from disintegrated rocks; it also 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 influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

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 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L). The entire sample is used for the analysis.

Mean concentration of suspended sediment is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Suspended-sediment discharge (tons/day) is the quantity of sediment moving in suspension, reported as dry weight, 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.

Suspended-sediment load is a term that refers to material in suspension. 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.

Seven-day 10-year low flow ($7Q_{10}$) is the minimum flow averaged over 7 consecutive days that is expected to occur on average, once in any 10-year period. The $7Q_{10}$ has a 10-percent chance of occurring in any given year (See also "Annual 7-day minimum" and "Recurrence interval").

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. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

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.

Solute is any substance that is dissolved in water.

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 MILL/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 waters, to evaluate mixing of different waters, 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 or impoundment is that area encompassed by the boundary of the lake or impoundment as shown on USGS topographic maps, or on other available maps or photographs. The computed surface areas reflect the water levels of the lakes or impoundments at the times when the information for the maps or photographs was obtained.

Surficial bed material is the top 0.1 to 0.2 ft 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 (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is associated with the 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 suspended-sediment sample that is retained on a 0.45-micrometer membrane filter 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 the 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 sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative suspended-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 analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Suspended sediment is the sediment maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid. (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.

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 that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Tons per acre-foot is the dry mass of dissolved solids in 1 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 the rate representing a mass of 1 ton of a constituent in streamflow passing a cross section in 1 day. It is equivalent to 2,000 pounds per day, or 0.9072 metric tons per day.

Total is the total amount of a given constituent in a representative suspended-sediment 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 suspended-sediment mixture and that the analytical method determined all of the constituent in the sample.)

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 total 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 that is in solution after a representative suspended-sediment 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, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to 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 bed-load 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 level is the water-surface elevation or stage of the free surface of a body of water above or below any datum (see "Gage height"), or the surface of water standing in a well, usually indicative of the position of the water table or other potentiometric surface.

Water table is the surface of a ground-water body at which the water is at atmospheric pressure.

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

Water year in U.S. Geological Survey 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, 2003, is called the "2003 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.

Well is an excavation (pit, hole, tunnel), generally cylindrical in form and often walled in, drilled, dug, driven, bored, or jetted into the ground to such a depth as to penetrate water-yielding geologic material and allow the water to flow or to be pumped to the surface.

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 abbreviation 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")

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Surface-Water Stations

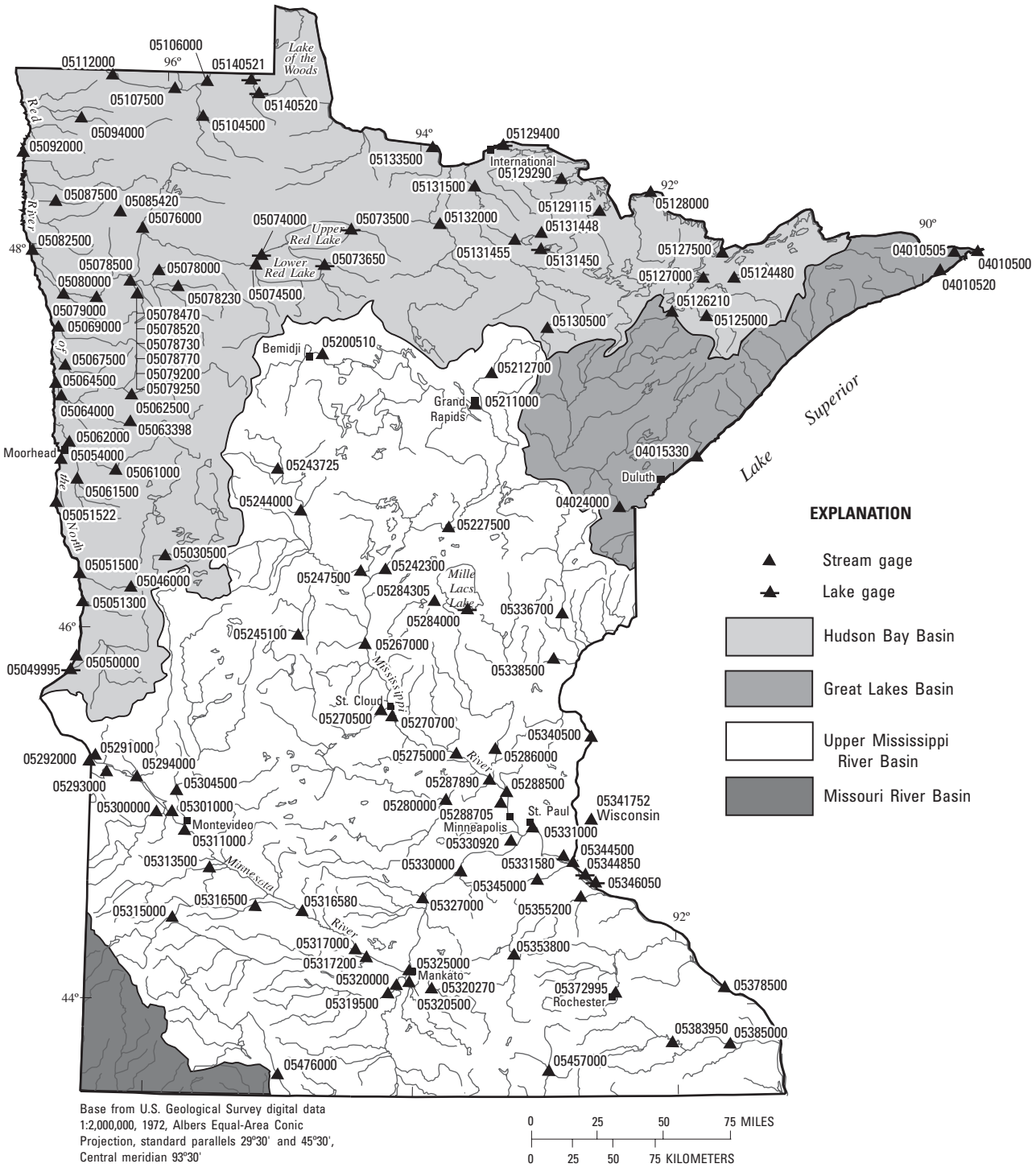


Figure 5. Location of lake and stream-gaging stations.

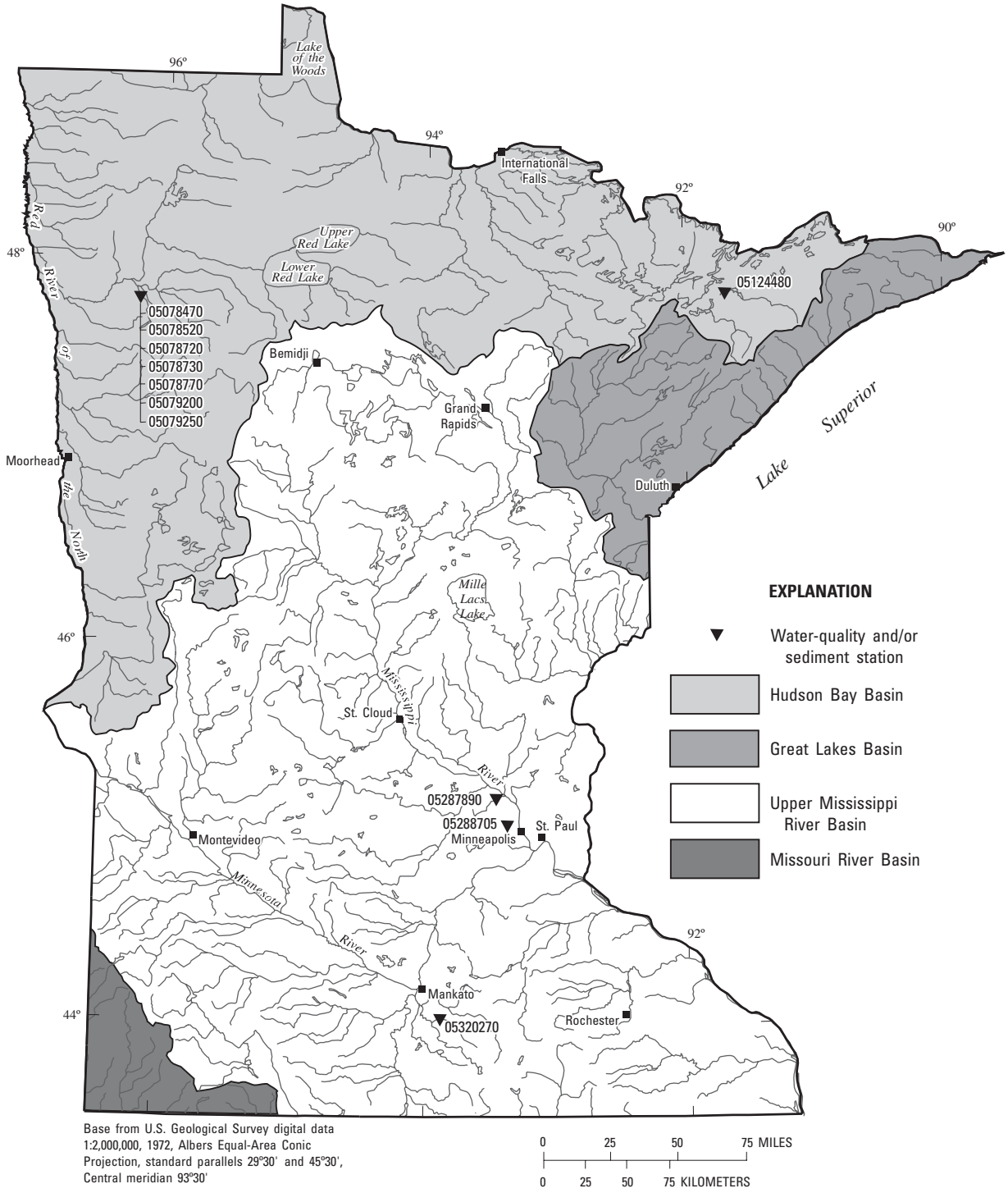


Figure 6. Location of surface-water quality stations.

04010500 PIGEON RIVER AT MIDDLE FALLS, NEAR GRAND PORTAGE, MN

LOCATION.--Lat 48°00'44", long 89°36'58", in SW¼NE¼ sec. 24, T.64 N., R.6 E., Cook County, Hydrologic Unit 04010101, on the Grand Portage Indian Reservation, on right bank 400 ft upstream from Middle Falls, 2.5 mi upstream from Grand Portage Port of Entry, 3.5 mi upstream from mouth, and 4.7 mi northeast of city of Grand Portage.

DRAINAGE AREA.--609 mi^2.

PERIOD OF RECORD.--June to October 1921, April to November 1922, March 1923 to current year. Published as "at International Bridge" April 1924 to September 1940; as "below International Bridge" October 1940 to September 1965. Monthly discharge only for some periods, published in WSP 1307.

REVISED RECORDS.--WSP 744:1927-28. WSP 804: 1934(M). WSP 974: Drainage area. WSP 1337:1924(M), 1925, 1926-28(M), 1931(M), 1938(M), 1941(M), 1945-46(M), 1947, 1948(M), 1950(M).

GAGE.--Water-stage recorder. Datum of gage is 787.58 ft above sea level (NGVD of 1929). Prior to Sept. 30, 1940, nonrecording gage at International Bridge, 5.8 mi upstream at datum 102.24 ft higher. Oct. 1, 1940 to Dec. 31, 1975, at present site at datum 2.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr 8	1300	Ice Jam	*8.98	May 10	1400	*3,770	8.84
Apr 10	2300	2,710	7.85				

Minimum discharge, 53 ft^3/s, Oct. 14, gage height, 2.20 ft.

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	78	444	e90	e92	e121	e140	e420	620	1,070	1,060	153	96
2	79	386	e79	e95	e123	e139	e480	592	1,000	832	149	92
3	78	334	e72	e93	e124	e139	e677	563	942	620	146	87
4	80	300	e73	e92	e126	e139	e799	524	898	565	142	84
5	83	269	e75	e91	e129	e138	e1,020	490	1,590	556	136	84
6	80	253	e75	e92	e130	e138	e1,230	819	1,730	537	131	80
7	77	235	e81	e94	e133	e138	e1,470	1,140	1,410	489	131	75
8	71	214	e86	e95	e136	e137	e1,680	1,830	1,350	449	126	71
9	65	202	e87	e96	e136	e136	2,410	2,540	1,240	422	121	68
10	61	190	e88	e95	e138	e136	2,600	3,520	1,130	400	115	66
11	60	e180	e88	e94	e138	e135	2,480	3,340	1,080	380	108	65
12	67	e171	e86	e93	e140	e135	2,150	2,730	1,040	360	107	66
13	59	e160	e84	e91	e140	e135	1,930	2,240	971	345	103	80
14	54	e150	e84	e91	e140	e135	1,810	2,220	1,030	328	97	84
15	54	e140	e85	e88	e140	e135	1,680	2,080	1,270	308	93	82
16	56	e131	e86	e90	e140	e135	1,680	1,870	1,160	294	90	82
17	61	124	e85	e91	e138	e135	1,670	1,640	1,010	279	92	80
18	63	120	e85	e94	e138	e134	1,650	1,460	907	279	130	78
19	70	e121	e85	e96	e137	e132	1,740	1,370	822	268	116	99
20	72	e124	e84	e99	e137	e131	1,570	1,360	770	261	112	146
21	65	e123	e83	e102	e138	e130	1,360	1,290	721	246	110	173
22	59	e122	e83	e104	e138	e130	1,190	1,280	666	231	104	166
23	534	e119	e82	e106	e138	e129	1,050	1,350	620	216	100	144
24	485	e116	e83	e108	e138	e128	954	1,360	583	202	97	125
25	411	e118	e84	e110	e138	e129	892	1,280	540	190	90	117
26	330	e116	e85	e112	e138	e131	819	1,470	506	184	95	109
27	278	e112	e86	e113	e140	e134	784	1,510	479	180	107	101
28	241	e110	e86	e115	e140	e137	746	1,380	451	173	102	96
29	228	e102	e87	e116	---	e145	695	1,270	438	164	102	90
30	460	e100	e90	e118	---	e170	654	1,210	1,060	166	100	86
31	505	---	e91	e120	---	e240	---	1,150	---	163	99	---
TOTAL	4,964	5,386	2,598	3,086	3,792	4,325	40,290	47,498	28,484	11,147	3,504	2,872
MEAN	160	180	83.8	99.5	135	140	1,343	1,532	949	360	113	95.7
MAX	534	444	91	120	140	240	2,600	3,520	1,730	1,060	153	173
MIN	54	100	72	88	121	128	420	490	438	163	90	65
AC-FT	9,850	10,680	5,150	6,120	7,520	8,580	79,920	94,210	56,500	22,110	6,950	5,700
CFSM	0.26	0.29	0.14	0.16	0.22	0.23	2.21	2.52	1.56	0.59	0.19	0.16
IN.	0.30	0.33	0.16	0.19	0.23	0.26	2.46	2.90	1.74	0.68	0.21	0.18

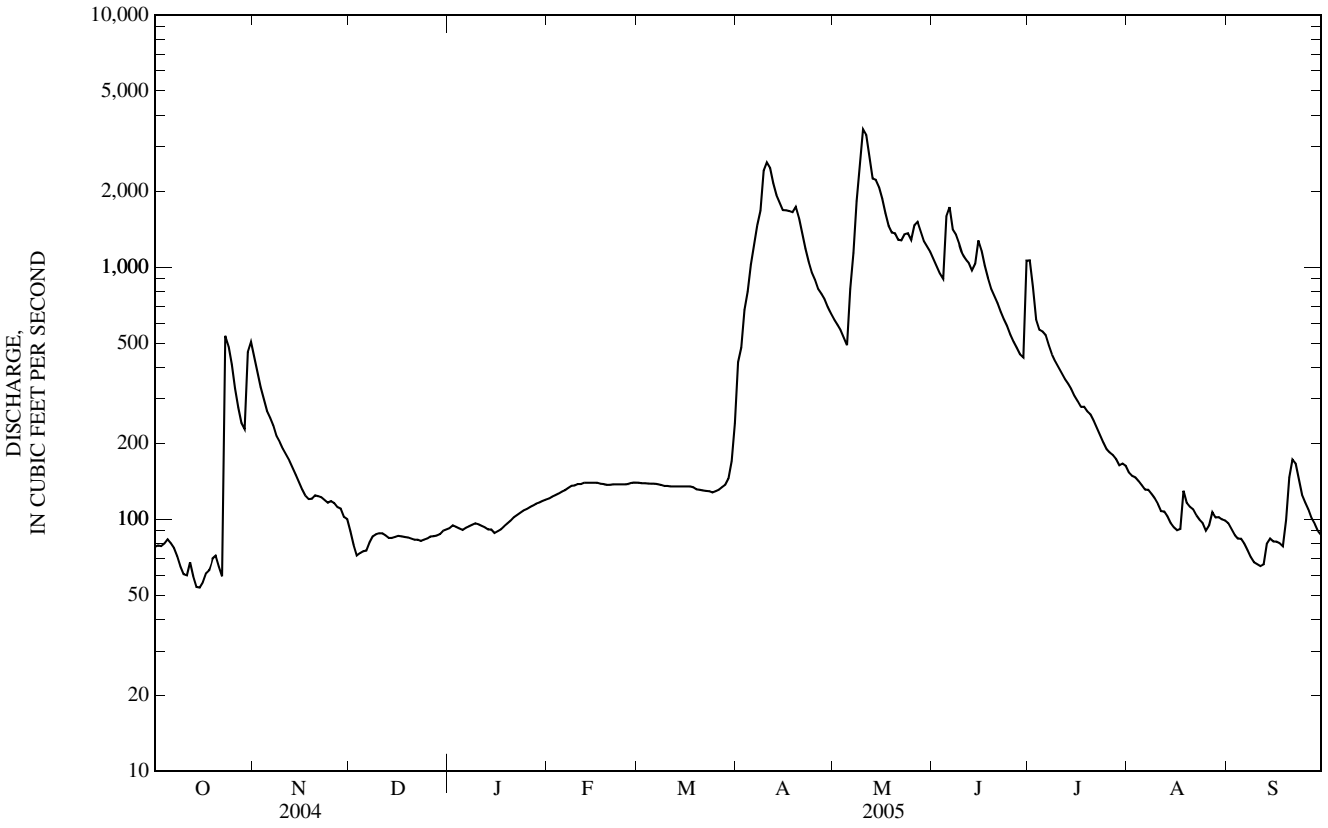
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2005, BY WATER YEAR (WY)

MEAN	352	349	205	150	125	174	1,207	1,586	837	416	238	280
MAX	2,095	1,461	720	431	300	1,169	2,724	4,016	2,801	1,127	1,029	2,985
(WY)	(1978)	(1971)	(1978)	(1975)	(1969)	(1945)	(2001)	(1950)	(1947)	(1968)	(1950)	(1977)
MIN	17.4	11.4	2.85	2.18	8.02	60.0	290	138	125	78.0	46.5	40.2
(WY)	(1977)	(1977)	(1977)	(1977)	(1977)	(1941)	(1977)	(1977)	(1977)	(1958)	(1998)	(1976)

04010500 PIGEON RIVER AT MIDDLE FALLS, NEAR GRAND PORTAGE, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1921 - 2005	
ANNUAL TOTAL	167,652		157,946			
ANNUAL MEAN	458		433		496	
HIGHEST ANNUAL MEAN					840	1971
LOWEST ANNUAL MEAN					158	1958
HIGHEST DAILY MEAN	3,510	Apr 19	3,520	May 10	10,700	May 5, 1934
LOWEST DAILY MEAN	54	Oct 14	54	Oct 14,15	a1.0	Jan15-21,1977
ANNUAL SEVEN-DAY MINIMUM	59	Oct 10	59	Oct 10	1.0	Jan 15, 1977
MAXIMUM PEAK FLOW			b3,770	May 10	c11,000	May 5, 1934
MAXIMUM PEAK STAGE			d8.98	Apr 8	f12.37	Sep 24, 1977
INSTANTANEOUS LOW FLOW			53	Oct 14	a1.0	Jan 15, 1977
ANNUAL RUNOFF (AC-FT)	332,500		313,300		359,000	
ANNUAL RUNOFF (CFSM)	0.752		0.711		0.814	
ANNUAL RUNOFF (INCHES)	10.24		9.65		11.06	
10 PERCENT EXCEEDS	1,280		1,350		1,270	
50 PERCENT EXCEEDS	170		137		220	
90 PERCENT EXCEEDS	83		81		84	

a Minimum observed.
b Gage height 8.89 ft.
c Gage height 7.60 ft, site and datum then in use.
d Backwater from ice.
e Estimated.
f At present site and datum, discharge 10,500 ft^3/s.



04010505 MAUD CREEK NEAR GRAND PORTAGE, MN

LOCATION.--Lat 47°58'29", long 89°44'16", in NW¼NW¼ sec. 6, T.63 N., R.6 E., Cook County, Hydrologic Unit 04010101, at Mt. Maud Dam, on Grand Portage Indian Band property, and 2.6 miles southwest of Grand Portage.

PERIOD OF RECORD.--June 2004 to September 2005 (no winter records), discontinued.

GAGE.--Water-stage recorder. Elevation of gage is 1,330 ft above sea level (from topographic map).

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow regulated by Mt. Maud Dam upstream of 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	---	---	---	---	---	---	---	---	---	0.31	0.06	0.11
2	---	---	---	---	---	---	---	---	---	0.27	0.06	0.10
3	---	---	---	---	---	---	---	---	8.9	0.26	0.06	0.11
4	---	---	---	---	---	---	---	---	7.6	0.45	0.06	0.12
5	---	---	---	---	---	---	---	---	6.4	0.57	0.05	0.11
6	---	---	---	---	---	---	---	---	5.1	0.56	0.05	0.09
7	---	---	---	---	---	---	---	---	5.3	0.60	0.06	0.07
8	---	---	---	---	---	---	---	---	6.3	0.55	0.06	0.07
9	---	---	---	---	---	---	---	---	5.3	0.44	0.06	0.07
10	---	---	---	---	---	---	---	---	4.5	0.36	0.05	0.06
11	---	---	---	---	---	---	---	---	3.6	0.47	0.05	0.05
12	---	---	---	---	---	---	---	---	3.3	0.44	0.05	0.06
13	---	---	---	---	---	---	---	---	2.8	0.40	0.05	0.07
14	---	---	---	---	---	---	---	---	2.5	0.34	0.05	0.07
15	---	---	---	---	---	---	---	---	2.1	0.29	0.05	0.09
16	---	---	---	---	---	---	---	---	1.9	0.29	0.06	0.18
17	---	---	---	---	---	---	---	---	1.6	0.23	0.06	1.5
18	---	---	---	---	---	---	---	---	1.3	0.19	0.07	2.3
19	---	---	---	---	---	---	---	---	1.0	0.21	0.07	1.8
20	---	---	---	---	---	---	---	---	0.87	0.24	0.07	1.3
21	---	---	---	---	---	---	---	---	0.65	0.18	0.07	1.1
22	---	---	---	---	---	---	---	---	0.61	0.13	0.07	0.88
23	---	---	---	---	---	---	---	---	0.50	0.10	0.07	0.66
24	---	---	---	---	---	---	---	---	0.50	0.10	0.07	0.55
25	---	---	---	---	---	---	---	---	0.53	0.09	0.07	0.42
26	---	---	---	---	---	---	---	---	0.54	0.07	0.07	0.33
27	---	---	---	---	---	---	---	---	0.47	0.07	0.08	0.23
28	---	---	---	---	---	---	---	---	0.43	0.07	0.09	0.18
29	---	---	---	---	---	---	---	---	0.49	0.07	0.09	0.14
30	---	---	---	---	---	---	---	---	0.39	0.06	0.10	0.10
31	---	---	---	---	---	---	---	---	---	0.06	0.11	---
TOTAL	---	---	---	---	---	---	---	---	---	8.47	2.04	12.92
MEAN	---	---	---	---	---	---	---	---	---	0.27	0.07	0.43
MAX	---	---	---	---	---	---	---	---	---	0.60	0.11	2.3
MIN	---	---	---	---	---	---	---	---	---	0.06	0.05	0.05
AC-FT	---	---	---	---	---	---	---	---	---	17	4.0	26

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

MEAN	---	---	---	---	---	---	---	---	---	0.27	0.07	0.43
MAX	---	---	---	---	---	---	---	---	---	0.27	0.07	0.43
(WY)	---	---	---	---	---	---	---	---	---	(2004)	(2004)	(2004)
MIN	---	---	---	---	---	---	---	---	---	0.27	0.07	0.43
(WY)	---	---	---	---	---	---	---	---	---	(2004)	(2004)	(2004)

04010505 MAUD CREEK NEAR GRAND PORTAGE, MN—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	0.15	4.2	0.46	---	---	---	2.0	2.1	2.8	2.0	0.06	0.03
2	0.16	3.7	0.43	---	---	---	2.3	2.0	2.7	2.3	0.08	0.03
3	0.12	2.9	0.41	---	---	---	2.7	1.8	2.2	2.2	0.05	0.03
4	0.08	2.5	0.42	---	---	---	3.5	1.5	1.8	2.3	0.06	0.02
5	0.07	1.9	0.34	---	---	---	4.9	1.3	2.4	4.9	0.06	0.02
6	0.06	1.7	0.45	---	---	---	7.0	2.0	2.7	1.4	0.08	0.03
7	0.05	1.4	0.55	---	---	---	8.5	2.4	3.4	0.32	0.10	0.02
8	0.05	1.1	0.42	---	---	---	10	3.4	3.5	0.28	0.06	0.02
9	0.05	0.95	0.42	---	---	---	11	5.7	3.0	0.34	0.08	0.02
10	0.05	0.87	0.42	---	---	---	12	8.7	2.9	0.35	0.07	0.02
11	0.05	0.78	0.43	---	---	---	13	10	2.7	0.34	0.06	0.02
12	0.05	0.71	0.75	---	---	---	13	8.7	2.5	0.23	0.07	0.02
13	0.05	0.64	0.50	---	---	---	13	7.9	2.3	0.20	0.06	0.02
14	0.06	0.60	0.47	---	---	---	13	8.3	1.6	0.14	0.06	0.02
15	0.05	6.5	0.46	---	---	---	13	8.4	3.5	0.12	0.08	0.02
16	0.07	12	0.47	---	---	---	13	7.4	3.8	0.11	0.09	0.02
17	0.07	7.2	0.44	---	---	---	13	6.7	2.9	0.15	0.09	0.02
18	0.06	3.2	0.43	---	---	---	13	6.0	2.3	0.14	0.10	0.02
19	0.05	1.4	0.40	---	---	---	14	e5.5	2.4	0.14	0.06	0.03
20	0.05	1.7	---	---	---	---	13	5.0	3.7	0.14	0.04	0.02
21	0.04	1.8	---	---	---	---	12	4.7	2.4	0.13	0.05	0.02
22	0.08	1.7	---	---	---	---	9.5	4.1	0.74	0.14	0.05	0.03
23	11	1.5	---	---	---	---	7.6	3.7	0.90	0.09	0.05	0.03
24	16	1.0	---	---	---	0.11	6.2	3.6	0.96	0.07	0.03	0.03
25	10	0.78	---	---	---	0.11	4.9	3.4	0.75	0.12	0.02	0.03
26	6.9	0.71	---	---	---	0.12	4.3	3.4	0.31	0.09	0.03	0.03
27	4.8	0.81	---	---	---	0.13	3.8	3.5	0.47	0.07	0.03	0.03
28	3.4	0.67	---	---	---	0.18	3.5	3.5	0.38	0.08	0.03	0.03
29	2.8	0.55	---	---	---	0.31	2.9	3.5	0.23	0.05	0.03	0.03
30	4.0	0.50	---	---	---	0.67	2.5	3.4	0.80	0.04	0.03	0.03
31	4.5	---	---	---	---	1.5	---	3.1	---	0.04	0.03	---
TOTAL	64.92	65.97	---	---	---	---	252.1	144.7	63.04	19.02	1.79	0.74
MEAN	2.09	2.20	---	---	---	---	8.40	4.67	2.10	0.61	0.06	0.02
MAX	16	12	---	---	---	---	14	10	3.8	4.9	0.10	0.03
MIN	0.04	0.50	---	---	---	---	2.0	1.3	0.23	0.04	0.02	0.02
AC-FT	129	131	---	---	---	---	500	287	125	38	3.6	1.5

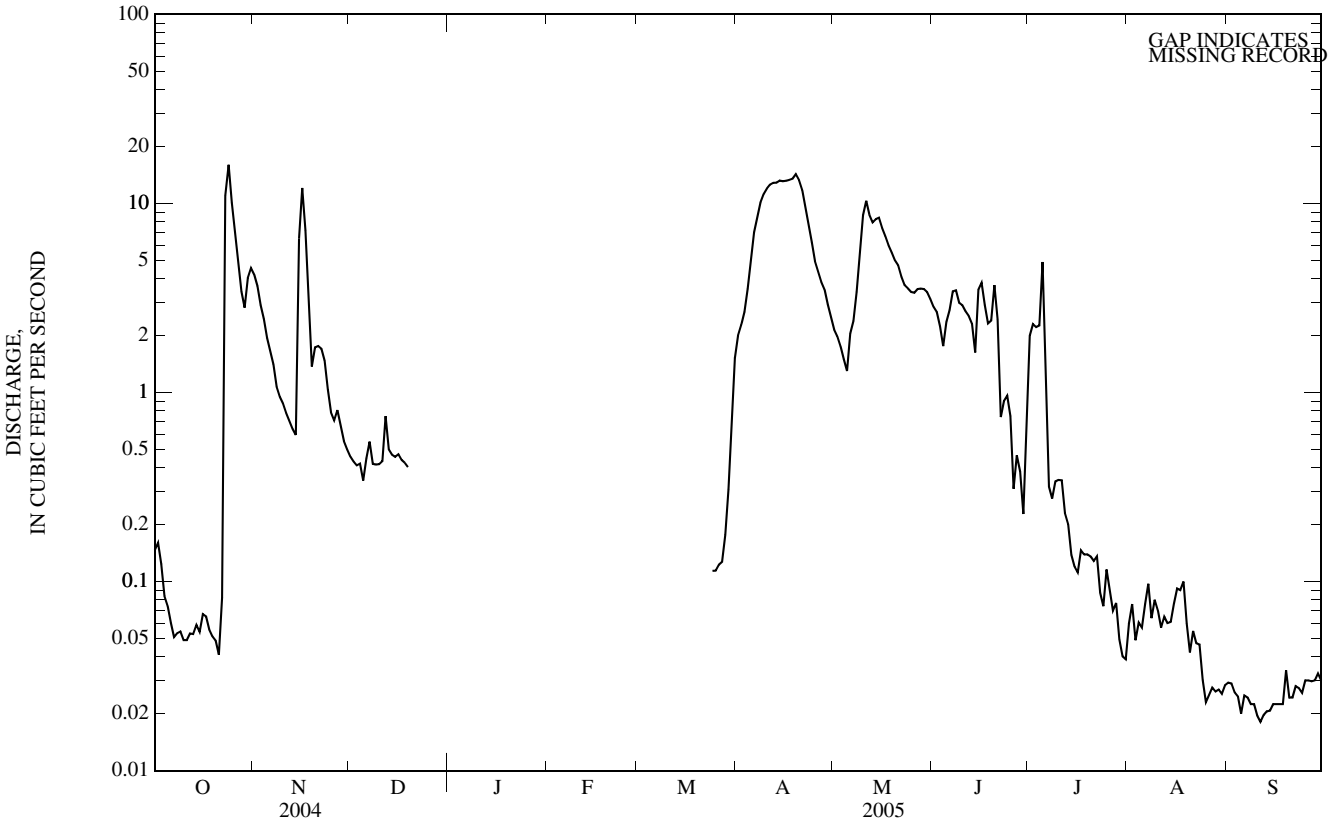
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2005, BY WATER YEAR (WY)

MEAN	2.09	2.20	---	---	---	---	8.40	4.67	2.10	0.44	0.06	0.23
MAX	2.09	2.20	---	---	---	---	8.40	4.67	2.10	0.61	0.07	0.43
(WY)	(2005)	(2005)	---	---	---	---	(2005)	(2005)	(2005)	(2005)	(2004)	(2004)
MIN	2.09	2.20	---	---	---	---	8.40	4.67	2.10	0.27	0.06	0.02
(WY)	(2005)	(2005)	---	---	---	---	(2005)	(2005)	(2005)	(2004)	(2005)	(2005)

04010505 MAUD CREEK NEAR GRAND PORTAGE, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2004 - 2005	
HIGHEST DAILY MEAN	16	Oct 24	16	Oct 24	16	Oct 24, 2004
LOWEST DAILY MEAN	0.04	Oct 21	a0.02	Aug 25	a0.02	Aug 25, 2005
ANNUAL SEVEN-DAY MINIMUM	0.05	Oct 7	0.02	Sep 7	0.02	Sep 7, 2005
MAXIMUM PEAK FLOW			19	Oct 23	19	Oct 23, 2004
MAXIMUM PEAK STAGE			24.62	Oct 23	24.62	Oct 23, 2004
INSTANTANEOUS LOW FLOW			0.01	Aug 26	0.01	Aug 26, 2005

a Many days in September.
e Estimated.



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04010520 HOLLOW ROCK CREEK NEAR RED ROCK, MN

LOCATION.--Lat 47°55'07", long 89°44'46", in SW¼SE¼ sec. 24, T.63 N., R.5 E., Cook County, Hydrologic Unit 04010101, on Grand Portage Indian Band property, on left bank, 800 ft upstream from U.S. Highway 61, 0.4 miles west of Red Rock, and 4.4 mi southwest of Grand Portage.

PERIOD OF RECORD.--May 2003 to September 2005 (no winter records), discontinued.

GAGE.--Water-stage recorder. Elevation of gage is 670 ft above sea level (from topographic map).

REMARKS.--Records good.

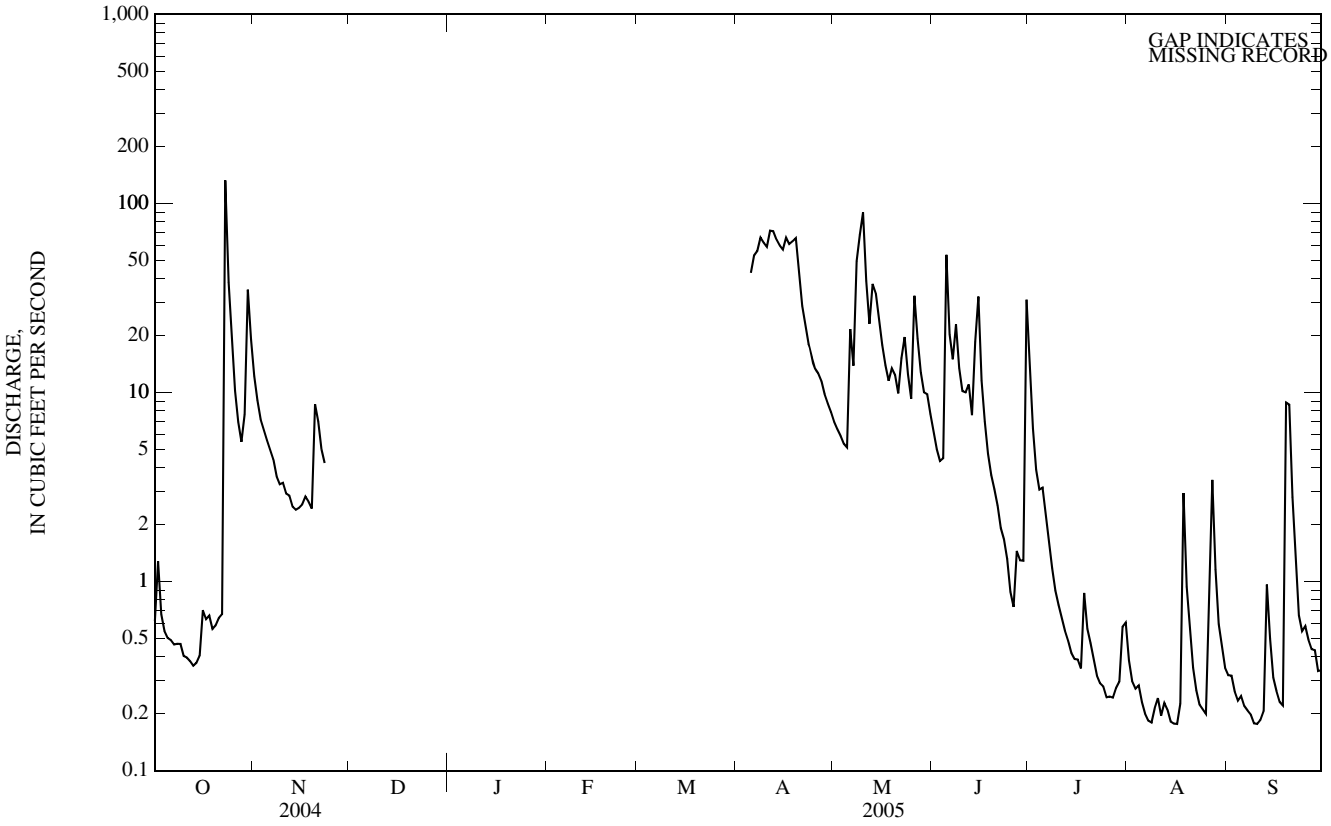
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.62	12	---	---	---	---	---	e7.0	6.3	15	0.38	0.32
2	1.3	9.1	---	---	---	---	---	e6.4	5.0	6.4	0.30	0.32
3	0.67	7.2	---	---	---	---	---	5.9	4.3	3.9	0.27	0.26
4	0.55	6.3	---	---	---	---	---	5.4	4.5	3.1	0.28	0.23
5	0.50	5.6	---	---	---	---	43	5.1	54	3.1	0.23	0.25
6	0.49	5.0	---	---	---	---	53	22	20	2.2	0.20	0.22
7	0.47	4.4	---	---	---	---	56	14	15	1.6	0.18	0.21
8	0.47	3.6	---	---	---	---	66	49	23	1.2	0.18	0.20
9	0.47	3.3	---	---	---	---	62	68	13	0.90	0.21	0.18
10	0.40	3.3	---	---	---	---	59	90	10	0.75	0.24	0.18
11	0.40	2.9	---	---	---	---	72	39	10	0.65	0.20	0.19
12	0.38	2.8	---	---	---	---	71	23	11	0.55	0.23	0.21
13	0.36	2.5	---	---	---	---	65	37	7.6	0.49	0.21	0.96
14	0.37	2.4	---	---	---	---	60	33	19	0.42	0.18	0.50
15	0.41	2.5	---	---	---	---	57	25	32	0.39	0.18	0.31
16	0.71	2.6	---	---	---	---	66	18	12	0.39	0.18	0.26
17	0.63	2.8	---	---	---	---	61	14	7.0	0.35	0.23	0.23
18	0.66	2.6	---	---	---	---	63	12	4.7	0.87	2.9	0.22
19	0.56	2.4	---	---	---	---	66	13	3.7	0.56	0.94	8.9
20	0.59	8.7	---	---	---	---	44	12	3.1	0.47	0.56	8.6
21	0.64	7.0	---	---	---	---	29	9.9	2.5	0.39	0.35	2.8
22	0.67	5.0	---	---	---	---	23	15	1.9	0.32	0.27	1.3
23	132	4.2	---	---	---	---	18	20	1.7	0.29	0.22	0.66
24	38	---	---	---	---	---	15	12	1.3	0.28	0.21	0.55
25	21	---	---	---	---	---	13	9.3	0.88	0.24	0.20	0.58
26	10	---	---	---	---	---	13	32	0.74	0.25	1.1	0.49
27	7.0	---	---	---	---	---	12	19	1.5	0.24	3.4	0.44
28	5.5	---	---	---	---	---	9.8	13	1.3	0.27	1.2	0.43
29	7.7	---	---	---	---	---	8.8	10	1.3	0.30	0.60	0.34
30	35	---	---	---	---	---	7.9	9.8	31	0.58	0.45	0.34
31	19	---	---	---	---	---	---	7.7	---	0.61	0.35	---
TOTAL	287.52	---	---	---	---	---	---	656.5	309.32	47.06	16.63	30.68
MEAN	9.27	---	---	---	---	---	---	21.2	10.3	1.52	0.54	1.02
MAX	132	---	---	---	---	---	---	90	54	15	3.4	8.9
MIN	0.36	---	---	---	---	---	---	5.1	0.74	0.24	0.18	0.18
AC-FT	570	---	---	---	---	---	---	1,300	614	93	33	61
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2005, BY WATER YEAR (WY)												
MEAN	5.28	---	---	---	---	---	---	17.8	8.66	1.24	0.42	1.45
MAX	9.27	---	---	---	---	---	---	21.2	12.4	1.52	0.54	3.01
(WY)	(2005)	---	---	---	---	---	---	(2005)	(2004)	(2005)	(2005)	(2004)
MIN	1.29	---	---	---	---	---	---	14.4	3.22	0.97	0.28	0.31
(WY)	(2004)	---	---	---	---	---	---	(2004)	(2003)	(2004)	(2004)	(2003)

04010520 HOLLOW ROCK CREEK NEAR RED ROCK, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2003 - 2005	
HIGHEST DAILY MEAN	139	May 31	132	Oct 23	139	May 31, 2004
LOWEST DAILY MEAN	0.17	Aug 6	a0.18	Aug 7	0.01	Aug 19, 2003
ANNUAL SEVEN-DAY MINIMUM	0.19	Aug 2	0.20	Sep 6	0.03	Aug 13, 2003
MAXIMUM PEAK FLOW			385	Oct 23	385	Oct 23, 2004
MAXIMUM PEAK STAGE			6.43	Oct 23	6.43	Oct 23, 2004
INSTANTANEOUS LOW FLOW			0.17	Aug 15	0.01	Aug 18, 2003

a Also occurred Aug. 8, 14-16, Sept. 9, 10.
e Estimated.



04015330 KNIFE RIVER NEAR TWO HARBORS, MN

LOCATION.--Lat 46°56'49", long 91°47'32", in SW¼NW¼ sec. 31, T.52 N., R.11 W., Lake County, Hydrologic Unit 04010102, on right bank 600 ft downstream from bridge on U.S. Highway 61, 0.5 mi upstream from bridge on County Highway 102, in town of Knife River, 0.8 mi upstream from Lake Superior, and 7.8 mi southwest of Two Harbors.

DRAINAGE AREA.--83.6 mi^2.

PERIOD OF RECORD.--July 1974 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 640 ft above sea level (from topographic map).

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated intermittently by fish ladder operation just upstream of gage.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar 31	1030	(ice jam)	*9.08	Jun 14	0730	*1,760	6.25

No peak greater than base discharge.

Minimum discharge, 0.76 ft^3/s, Sept. 9, gage height, 1.99 ft.

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	92	154	e31	e13	e14	e14	1,140	70	80	157	6.9	3.8
2	158	117	e27	e14	e14	e13	857	63	65	84	6.6	3.7
3	90	95	e26	e14	e15	e12	814	57	52	54	6.4	3.6
4	61	79	e24	e14	e15	e13	840	52	67	42	7.2	3.5
5	49	67	e24	e14	e16	e13	904	49	378	31	7.5	3.5
6	43	61	e23	e14	e18	e14	1,030	78	320	27	6.1	3.8
7	31	54	e22	e14	e20	e14	772	79	171	24	5.1	3.7
8	25	47	e22	e15	e22	e15	651	77	156	21	4.5	3.5
9	21	42	e21	e15	e23	e15	554	85	168	20	4.8	3.4
10	19	40	e21	e15	e23	e16	461	119	248	19	5.4	10
11	17	35	e20	e15	e22	e16	434	135	296	16	5.7	12
12	16	30	e20	e15	e22	e16	355	117	288	15	5.0	11
13	15	33	e19	e15	e22	e15	254	95	158	14	4.5	49
14	20	35	e18	e15	e22	e14	189	104	1,200	12	4.1	36
15	25	29	e17	e14	e23	e13	150	102	964	11	3.9	19
16	21	27	e16	e14	e21	e13	128	82	354	15	3.8	13
17	19	28	e14	e14	e20	e13	113	67	176	28	3.7	9.5
18	17	30	e12	e14	e19	e13	98	63	109	22	4.6	7.8
19	17	29	e10	e14	e17	e13	174	446	79	18	7.2	11
20	22	44	e8.0	e14	e16	e13	305	313	73	14	7.1	47
21	25	50	e9.0	e15	e15	e13	194	190	96	12	5.8	28
22	25	41	e12	e15	e16	e13	151	150	67	9.9	5.0	18
23	709	36	e12	e15	e15	e16	131	139	51	8.6	4.0	13
24	520	38	e12	e15	e15	e18	104	104	41	8.8	3.8	12
25	275	e37	e11	e15	e14	e25	95	88	32	8.4	3.8	15
26	163	e35	e11	e15	e14	e34	135	426	27	8.6	4.3	19
27	116	e34	e11	e14	e13	e51	130	299	25	9.7	5.4	19
28	92	e33	e11	e14	e14	e221	110	267	30	9.2	5.9	16
29	148	e33	e12	e14	---	e510	93	169	28	9.2	4.8	13
30	397	e32	e12	e14	---	e845	79	145	224	8.0	4.2	11
31	226	---	e13	e14	---	e1,150	---	106	---	7.2	4.0	---
TOTAL	3,474	1,445	521.0	446	500	3,174	11,445	4,336	6,023	743.6	161.1	421.8
MEAN	112	48.2	16.8	14.4	17.9	102	382	140	201	24.0	5.20	14.1
MAX	709	154	31	15	23	1,150	1,140	446	1,200	157	7.5	49
MIN	15	27	8.0	13	13	12	79	49	25	7.2	3.7	3.4
AC-FT	6,890	2,870	1,030	885	992	6,300	22,700	8,600	11,950	1,470	320	837
CFSM	1.34	0.58	0.20	0.17	0.21	1.22	4.56	1.67	2.40	0.29	0.06	0.17
IN.	1.55	0.64	0.23	0.20	0.22	1.41	5.09	1.93	2.68	0.33	0.07	0.19

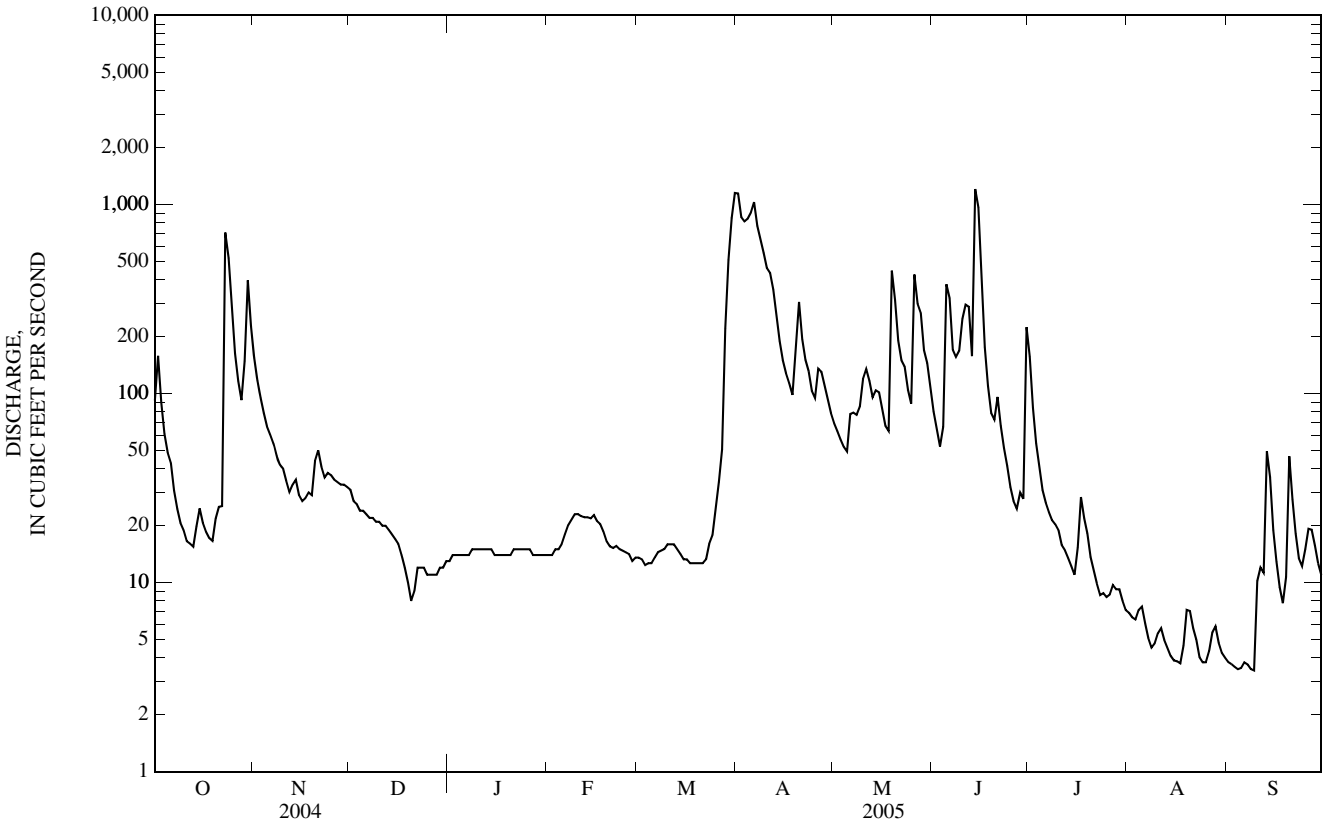
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2005, BY WATER YEAR (WY)

MEAN	88.0	78.1	23.2	10.9	12.8	60.3	375	155	91.6	84.4	34.1	74.5
MAX	267	238	75.1	31.4	79.2	204	889	427	240	402	163	314
(WY)	(1996)	(1999)	(1999)	(1975)	(1998)	(1998)	(2001)	(1979)	(1984)	(1999)	(1988)	(1977)
MIN	3.06	1.58	0.00	0.00	0.00	6.30	73.6	16.0	13.0	4.87	2.95	1.43
(WY)	(1977)	(1977)	(1977)	(1977)	(1977)	(2002)	(1977)	(1976)	(1995)	(1988)	(1976)	(1976)

04015330 KNIFE RIVER NEAR TWO HARBORS, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1974 - 2005	
ANNUAL TOTAL	24,996.6		32,690.5			
ANNUAL MEAN	68.3		89.6		90.9	
HIGHEST ANNUAL MEAN					164	1999
LOWEST ANNUAL MEAN					44.2	1977
HIGHEST DAILY MEAN	1,450	May 31	1,200	Jun 14	4,840	Jul 5, 1999
LOWEST DAILY MEAN	3.0	Jan 17	3.4	Sep 9	a0.00	Dec 2, 1976
ANNUAL SEVEN-DAY MINIMUM	3.1	Jan 13	3.6	Sep 3	0.00	Dec 2, 1976
MAXIMUM PEAK FLOW			b1,760	Jun 14	9,100	Jul 5, 1999
MAXIMUM PEAK STAGE			c9.08	Mar 31	12.14	Jul 5, 1999
INSTANTANEOUS LOW FLOW			0.76	Sep 9	a0.00	Dec 2, 1976
ANNUAL RUNOFF (AC-FT)	49,580		64,840		65,880	
ANNUAL RUNOFF (CFSM)	0.817		1.07		1.09	
ANNUAL RUNOFF (INCHES)	11.12		14.55		14.78	
10 PERCENT EXCEEDS	172		222		220	
50 PERCENT EXCEEDS	19		21		22	
90 PERCENT EXCEEDS	3.3		7.0		4.9	

a Many days in 1977 and 2003.
b Gage height, 6.25 ft.
c Backwater from ice.
e Estimated.



04021520 STONEY BROOK AT PINE DRIVE NEAR BROOKSTON, MN

LOCATION.--Lat 46°46'54", long 92°38'12", in SW¼,SW¼, sec. 28, T.50 N., R.18 W., St. Louis County, Hydrologic Unit 04010201, on right bank 200 ft downstream from bridge at County Road 851 (Pine Drive) and 6.8 mi southwest of Brookston.

PERIOD OF RECORD.--May 2005 to current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 1,280 ft above sea level (from topographic map).

REMARKS.--Records good. Flow regulated by a series of lakes used for wild rice production upstream of 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	---	---	---	---	---	---	---	---	122	118	7.7	1.2
2	---	---	---	---	---	---	---	---	104	98	6.9	1.0
3	---	---	---	---	---	---	---	---	91	86	6.4	1.1
4	---	---	---	---	---	---	---	---	85	77	6.6	1.4
5	---	---	---	---	---	---	---	---	101	70	6.5	1.0
6	---	---	---	---	---	---	---	---	118	66	6.1	2.1
7	---	---	---	---	---	---	---	---	111	56	5.4	2.1
8	---	---	---	---	---	---	---	---	122	49	4.9	1.7
9	---	---	---	---	---	---	---	---	134	45	4.8	1.2
10	---	---	---	---	---	---	---	---	122	41	5.0	1.3
11	---	---	---	---	---	---	---	---	123	36	5.1	1.8
12	---	---	---	---	---	---	---	---	136	32	5.1	2.3
13	---	---	---	---	---	---	---	---	123	26	5.4	6.5
14	---	---	---	---	---	---	---	---	137	26	5.2	7.2
15	---	---	---	---	---	---	---	---	168	26	5.4	6.4
16	---	---	---	---	---	---	---	---	150	25	5.1	7.5
17	---	---	---	---	---	---	---	---	125	21	4.8	6.8
18	---	---	---	---	---	---	---	---	112	18	4.4	7.6
19	---	---	---	---	---	---	---	---	98	12	4.4	9.1
20	---	---	---	---	---	---	---	---	94	9.5	3.7	11
21	---	---	---	---	---	---	---	---	117	6.3	2.7	11
22	---	---	---	---	---	---	---	---	110	5.6	2.1	11
23	---	---	---	---	---	---	---	---	96	5.3	2.2	11
24	---	---	---	---	---	---	---	---	81	5.4	2.2	8.0
25	---	---	---	---	---	---	---	---	68	6.2	2.4	9.8
26	---	---	---	---	---	---	---	199	58	7.8	3.1	13
27	---	---	---	---	---	---	---	e200	50	7.9	2.0	13
28	---	---	---	---	---	---	---	200	45	9.7	5.4	14
29	---	---	---	---	---	---	---	187	40	13	6.8	6.9
30	---	---	---	---	---	---	---	169	99	10	5.0	3.4
31	---	---	---	---	---	---	---	144	---	8.6	2.8	---
TOTAL	---	---	---	---	---	---	---	---	3,140	1,023.3	145.6	181.4
MEAN	---	---	---	---	---	---	---	---	105	33.0	4.70	6.05
MAX	---	---	---	---	---	---	---	---	168	118	7.7	14
MIN	---	---	---	---	---	---	---	---	40	5.3	2.0	1.0
AC-FT	---	---	---	---	---	---	---	---	6,230	2,030	289	360

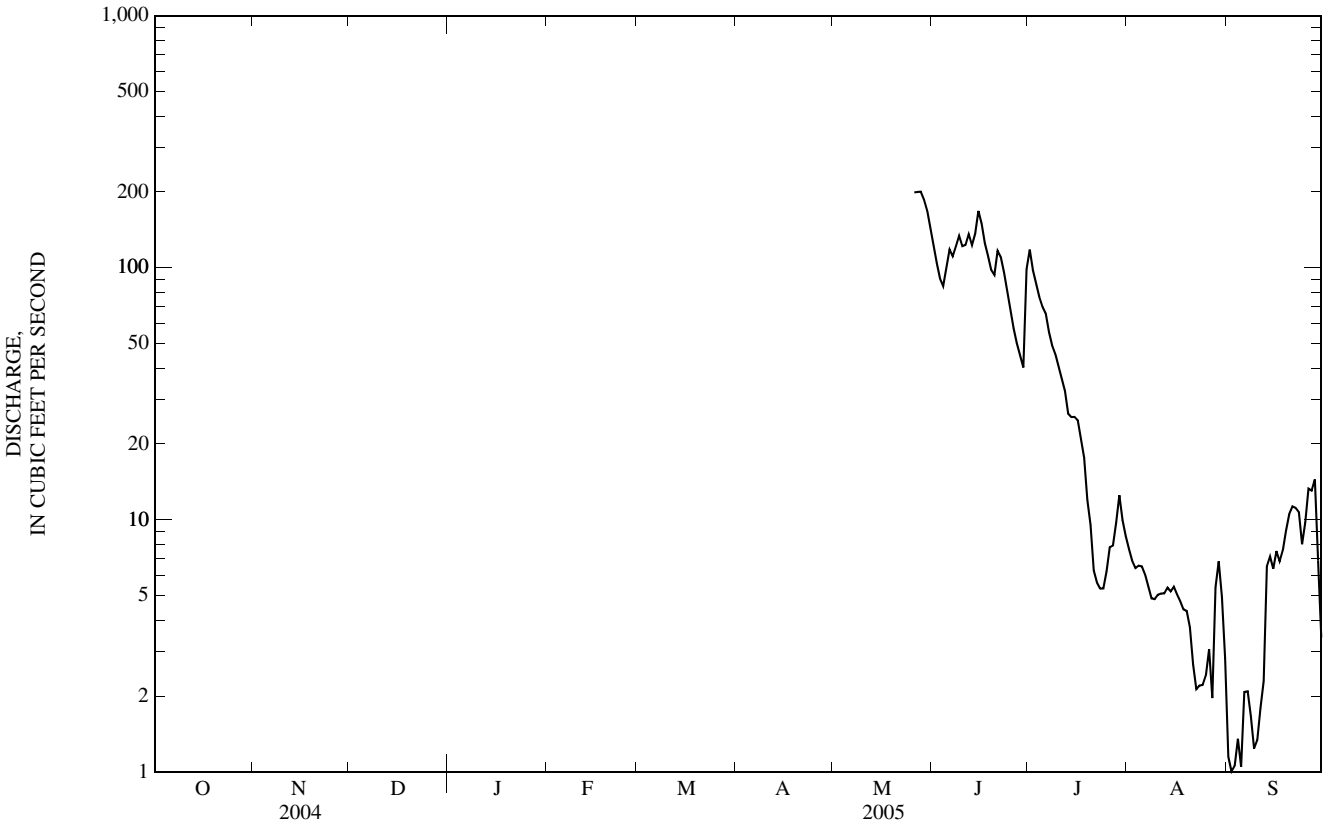
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2005 - 2005, BY WATER YEAR (WY)

MEAN	---	---	---	---	---	---	---	---	105	33.0	4.70	6.05
MAX	---	---	---	---	---	---	---	---	105	33.0	4.70	6.05
(WY)	---	---	---	---	---	---	---	---	(2005)	(2005)	(2005)	(2005)
MIN	---	---	---	---	---	---	---	---	105	33.0	4.70	6.05
(WY)	---	---	---	---	---	---	---	---	(2005)	(2005)	(2005)	(2005)

04021520 STONEY BROOK AT PINE DRIVE NEAR BROOKSTON, MN—Continued

SUMMARY STATISTICS	FOR 2005 WATER YEAR	
HIGHEST DAILY MEAN	200	May 27, 28
LOWEST DAILY MEAN	1.0	Sep 2,5
MAXIMUM PEAK FLOW	209	May 28
MAXIMUM PEAK STAGE	5.08	May 28
INSTANTANEOUS LOW FLOW	0.61	Sep 2

e Estimated.



04024000 ST. LOUIS RIVER AT SCANLON, MN

LOCATION.--Lat 46°42'12", long 92°25'07", in NW$^1/_4$ sec. 30, T.49 N., R.16 W., Carlton County, Hydrologic Unit 04010201, on right bank 80 ft downstream from bridge on U.S. Highway 61 at Scanlon, 0.6 mi downstream from Minnesota Power Co. power plant, 3 mi upstream from Thomson Reservoir, and 3.2 mi upstream from Midway River.

DRAINAGE AREA.--3,430 mi^2 (approximately).

PERIOD OF RECORD.--January 1908 to current year. Monthly discharge only for some periods published in WSP 1307. Published as "near Thomson" 1908-50.

REVISED RECORDS.--WSP 1337: 1911-12.

GAGE.--Water-stage recorder. Datum of gage is 1,101.23 ft above sea level (NGVD of 1929). Oct. 5, 1909 to Sept. 5, 1914, nonrecording gage 3 mi downstream and 50 ft below power plant at datum about 420 ft lower. Sept. 6, 1914 to Aug. 4, 1953, power plant record at Thomson hydroelectric plant.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Diurnal fluctuation caused by power plant upstream. Flow regulated by Whiteface Reservoir and Boulder, Island, Rice and Fish Lakes, combined capacity, 332,160 acre-ft; the water-discharge table shows the monthly change in contents (+).

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	1,660	2,650	1,230	e1,030	e1,070	e1,090	8,390	2,530	5,770	2,990	568	292
2	1,890	2,560	1,210	e1,030	e1,060	e1,080	9,840	2,400	5,100	2,820	520	280
3	2,180	2,480	1,100	e1,010	e1,060	e1,070	10,700	2,360	4,490	2,520	611	317
4	2,140	2,470	1,300	e1,000	e1,070	e1,080	12,400	2,210	4,040	2,210	699	248
5	1,900	2,320	1,300	e1,010	e1,080	e1,110	14,200	2,070	4,100	2,060	629	247
6	1,830	2,290	1,240	e1,030	e1,100	e1,110	14,300	2,060	4,810	1,940	483	344
7	1,590	2,240	1,400	e1,040	e1,110	e1,110	12,700	1,960	5,210	1,820	562	353
8	1,640	2,090	1,410	e1,030	e1,110	e1,110	11,000	2,020	5,450	1,710	580	256
9	1,460	1,950	1,370	e1,040	e1,110	e1,120	10,100	2,090	6,590	2,010	657	235
10	1,440	2,000	1,400	e1,060	e1,120	e1,100	9,340	2,160	6,710	2,080	486	231
11	1,320	1,910	1,310	e1,080	e1,130	e1,100	8,860	2,400	6,200	1,550	501	287
12	1,350	1,780	1,330	e1,080	e1,120	e1,090	8,770	2,670	6,390	1,400	538	336
13	1,270	1,730	e1,050	e1,060	e1,150	e1,090	8,370	2,880	6,080	1,230	530	443
14	1,230	1,620	e800	e1,050	e1,150	e1,090	7,770	3,040	5,880	995	432	469
15	1,290	1,510	e1,130	e1,040	e1,140	e1,090	7,080	3,190	6,920	1,050	498	345
16	1,300	1,590	1,370	e1,030	e1,120	e1,090	6,420	3,260	8,010	1,010	455	481
17	1,310	1,590	1,080	e1,030	e1,100	e1,090	5,860	3,140	7,500	1,150	462	417
18	1,240	1,580	1,020	e1,030	e1,060	e1,100	5,350	3,010	6,750	1,260	453	503
19	1,230	1,530	e992	e1,030	e1,050	e1,100	5,080	3,500	6,130	934	442	532
20	1,150	1,530	e923	e1,030	e1,060	e1,110	5,050	4,250	5,930	972	494	470
21	1,160	1,500	e952	e1,040	e1,060	e1,130	4,910	4,370	6,640	849	478	477
22	1,150	1,590	e974	e1,050	e1,080	1,320	4,510	4,180	6,160	742	435	484
23	1,330	1,560	e963	e1,060	e1,090	1,140	4,100	4,010	5,170	757	428	464
24	1,550	1,420	e950	e1,070	e1,100	1,160	3,720	4,090	4,350	656	422	469
25	1,780	1,200	e963	e1,090	e1,100	1,140	3,410	3,980	3,400	658	410	499
26	1,890	1,280	e981	e1,110	e1,110	1,190	3,190	5,800	2,740	683	361	566
27	1,970	1,390	e1,010	e1,110	e1,110	1,310	3,100	8,560	2,320	664	354	470
28	1,870	1,420	e1,020	e1,090	e1,100	1,360	2,990	8,530	2,150	688	311	502
29	1,870	1,500	e1,030	e1,080	---	1,650	2,880	7,950	1,970	606	296	455
30	2,200	1,280	e1,040	e1,080	---	2,500	2,710	7,280	2,650	595	293	434
31	2,560	---	e1,030	e1,080	---	5,020	---	6,620	---	613	300	---
TOTAL	49,750	53,560	34,878	32,600	30,720	40,850	217,100	118,570	155,610	41,222	14,688	11,906
MEAN	1,605	1,785	1,125	1,052	1,097	1,318	7,237	3,825	5,187	1,330	474	397
MAX	2,560	2,650	1,410	1,110	1,150	5,020	14,300	8,560	8,010	2,990	699	566
MIN	1,150	1,200	800	1,000	1,050	1,070	2,710	1,960	1,970	595	293	231
AC-FT	98,680	106,200	69,180	64,660	60,930	81,030	430,600	235,200	308,700	81,760	29,130	23,620
CFSM	0.47	0.52	0.33	0.31	0.32	0.38	2.11	1.12	1.51	0.39	0.14	0.12
IN.	0.54	0.58	0.38	0.35	0.33	0.44	2.35	1.29	1.69	0.45	0.16	0.13
+	189	-117	-449	-435	-484	-438	1,240	855	55.1	-220	-296	-77.9
MEAN ‡	1,794	1,668	676	617	613	880	8,477	4,680	5,242	1,110	178	319
CFSM ‡	.52	.49	.20	.18	.18	.26	2.47	1.36	1.53	.32	.05	.09
IN ‡	.60	.55	.23	.21	.19	.30	2.76	1.57	1.71	.37	.06	.10

CAL. YR. 2004 TOTAL‡ 759,063 MEAN ‡ 2,074 CFSM ‡ 0.60 IN ‡ 8.21
WTR. YR. 2005 TOTAL‡ 796,294 MEAN ‡ 2,182 CFSM ‡ 0.64 IN ‡ 8.64

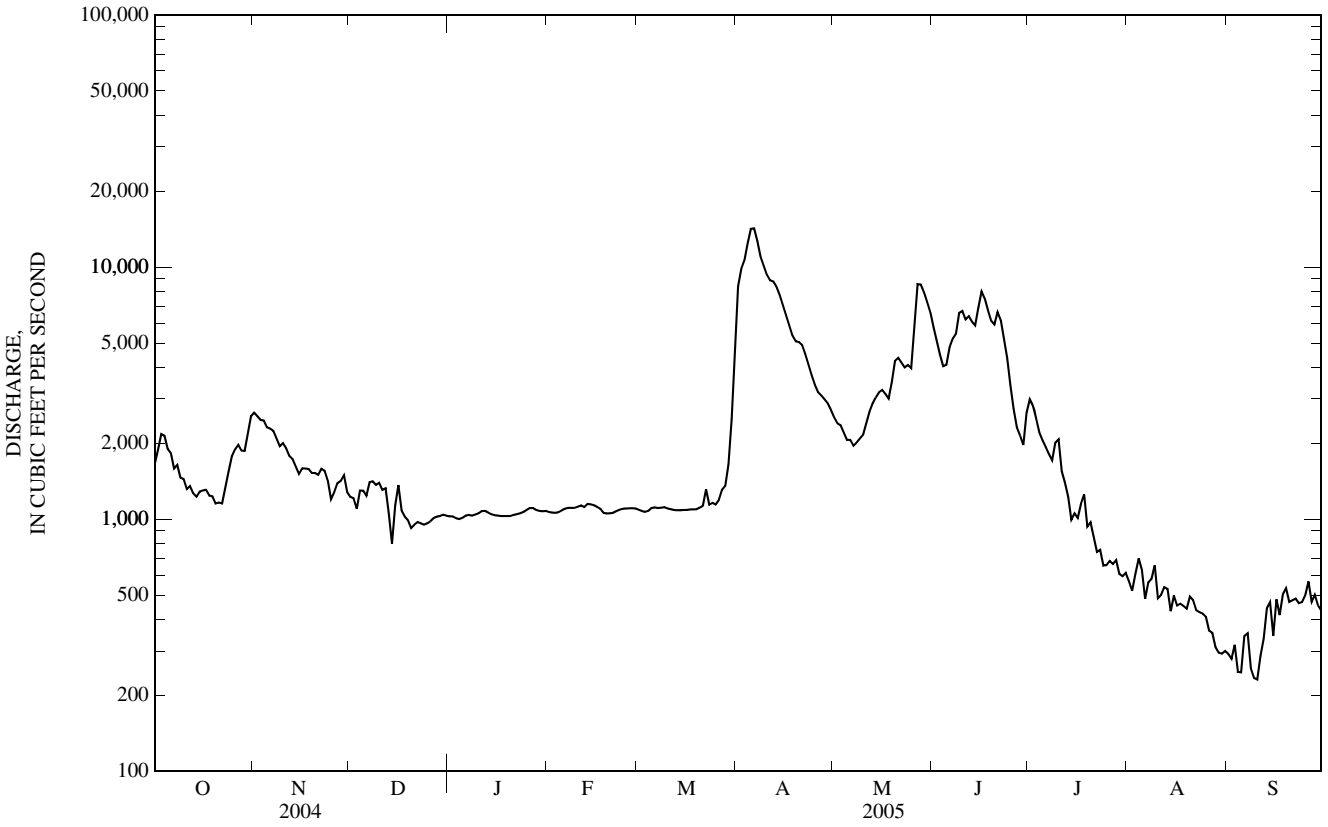
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1908 - 2005, BY WATER YEAR (WY)

MEAN	2,023	1,747	1,290	1,072	1,057	1,456	5,717	5,051	3,571	2,474	1,640	1,745
MAX	7,508	8,518	2,993	2,272	2,200	6,026	15,860	22,210	16,480	12,630	9,197	7,594
(WY)	(1974)	(1972)	(1972)	(1966)	(1966)	(1945)	(2001)	(1950)	(1908)	(1999)	(1953)	(1928)
MIN	407	473	282	265	249	301	667	593	458	199	377	397
(WY)	(1935)	(1935)	(1911)	(1911)	(1924)	(1924)	(1977)	(1977)	(1988)	(1988)	(1977)	(2005)

04024000 ST. LOUIS RIVER AT SCANLON, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1908 - 2005	
ANNUAL TOTAL	740,633		801,454			
ANNUAL MEAN	2,024		2,196		2,392	
HIGHEST ANNUAL MEAN					4,276	1972
LOWEST ANNUAL MEAN					945	1924
HIGHEST DAILY MEAN	11,900	Jun 1	14,300	Apr 6	37,900	May 9, 1950
LOWEST DAILY MEAN	409	Aug 4	231	Sep 10	88	Aug 24, 1977
ANNUAL SEVEN-DAY MINIMUM	468	Aug 3	273	Sep 4	134	Jul 26, 1988
MAXIMUM PEAK FLOW			17,200	Apr 5	37,900	May 9, 1950
MAXIMUM PEAK STAGE			9.76	Apr 5	15.80	May 9, 1950
ANNUAL RUNOFF (AC-FT)	1,469,000		1,590,000		1,733,000	
ANNUAL RUNOFF (CFSM)	0.590		0.640		0.697	
ANNUAL RUNOFF (INCHES)	8.03		8.69		9.48	
10 PERCENT EXCEEDS	4,980		5,820		5,260	
50 PERCENT EXCEEDS	1,180		1,160		1,390	
90 PERCENT EXCEEDS	586		470		653	

+ Change in contents, equivalent in cubic feet per second, in Whiteface Reservoir, and Boulder, Island, Rice and Fish Lakes; records furnished by Minnesota Power Co.
++Adjusted for change in reservoir contents.
e Estimated.



05030500 OTTER TAIL RIVER NEAR ELIZABETH, MN

LOCATION.--Lat 46°22'10", long 96°01'02", in SW¼SE¼ sec. 31, T.134 N., R.42 W.,Otter Tail County, Hydrologic Unit 09020103, on right bank at County Highway 10, 2.5 miles below Taplin Gorge Dam, 5.0 miles above the Diversion Dam, 5.7 miles east of Elizabeth and 6.6 miles northeast of Fergus Falls.

DRAINAGE AREA.--1,230 mi^2 (approximately).

PERIOD OF RECORD.--May 1904 to September 1917, monthly discharge only, published as "at German Church near Fergus Falls" in WSP 1308. July 1992 to current year.

REVISED RECORD.--WDR MN-03-1: Minimum discharge, 2000 and 2001 water years.

GAGE.--Water-stage recorder. Elevation of gage is 1,250 ft above sea level (from topographic map). Nonrecording gage at same site November 1913 to September 1917 at elevation 1,265 ft (from topographic map).

REMARKS.--Records good except those for estimated daily discharge, which are poor. Flow regulated by power plant upstream.

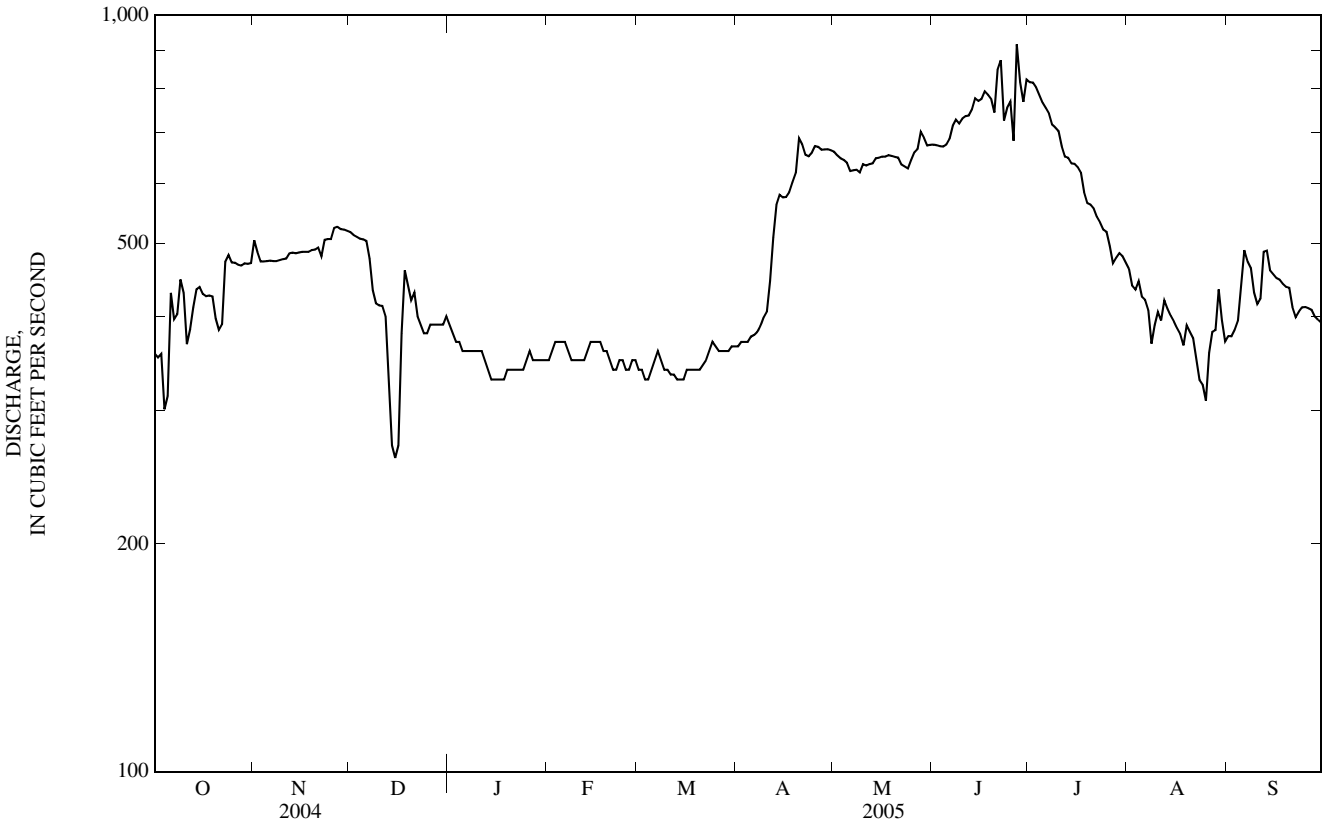
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	357	504	517	e390	e350	e340	e365	660	675	816	462	377
2	353	486	512	e380	e360	e340	e370	653	673	815	439	376
3	357	473	510	e370	e370	e330	e370	647	672	803	434	384
4	302	473	507	e370	e370	e330	e370	644	671	785	445	394
5	314	473	506	e360	e370	e340	376	638	675	767	425	438
6	430	474	503	e360	e370	e350	378	623	687	755	421	489
7	397	473	477	e360	e360	e360	382	624	715	742	408	473
8	403	473	433	e360	e350	e350	388	625	728	717	368	464
9	447	475	416	e360	e350	e340	399	620	719	711	390	430
10	430	476	414	e360	e350	e340	406	635	730	703	406	415
11	368	477	413	e360	e350	e335	446	633	736	671	395	422
12	384	485	e400	e350	e350	e335	509	636	737	650	420	487
13	411	486	e330	e340	e360	e330	562	637	751	648	409	489
14	434	485	e270	e330	e370	e330	579	647	777	637	401	460
15	437	486	e260	e330	e370	e330	575	648	771	636	394	455
16	428	487	e270	e330	e370	e340	575	650	775	630	386	449
17	425	487	e380	e330	e370	e340	584	651	793	619	379	447
18	426	487	e460	e330	e360	e340	601	653	785	584	366	442
19	425	489	e440	e340	e360	e340	619	652	775	564	389	438
20	397	490	e420	e340	e350	e340	688	650	744	562	382	436
21	384	493	e430	e340	e340	e345	675	649	847	555	374	411
22	391	480	e400	e340	e340	e350	654	635	872	541	350	399
23	472	505	e390	e340	e350	e360	651	631	726	532	330	406
24	482	506	e380	e340	e350	e370	658	628	755	521	325	411
25	471	506	e380	e350	e340	e365	672	644	769	517	309	411
26	471	524	e390	e360	e340	e360	670	659	682	496	358	410
27	468	526	e390	e350	e350	e360	664	666	916	470	382	408
28	467	522	e390	e350	e350	e360	665	702	816	478	384	400
29	470	521	e390	e350	---	e360	665	689	768	485	434	396
30	469	519	e390	e350	---	e365	663	673	823	481	395	392
31	470	---	e400	e350	---	e365	---	674	---	471	371	---
TOTAL	12,940	14,741	12,768	10,870	9,970	10,740	16,179	20,076	22,563	19,362	12,131	12,809
MEAN	417	491	412	351	356	346	539	648	752	625	391	427
MAX	482	526	517	390	370	370	688	702	916	816	462	489
MIN	302	473	260	330	340	330	365	620	671	470	309	376
AC-FT	25,670	29,240	25,330	21,560	19,780	21,300	32,090	39,820	44,750	38,400	24,060	25,410
CFSM	0.34	0.40	0.33	0.29	0.29	0.28	0.44	0.53	0.61	0.51	0.32	0.35
IN.	0.39	0.45	0.39	0.33	0.30	0.32	0.49	0.61	0.68	0.59	0.37	0.39
MEAN	293	318	321	306	318	358	508	666	633	564	409	333
MAX	740	571	529	479	523	477	725	1,056	1,003	770	759	817
(WY)	(1994)	(1994)	(1999)	(1999)	(1999)	(1999)	(1999)	(2001)	(2001)	(1998)	(1993)	(1993)
MIN	66.6	63.4	69.2	61.9	81.3	159	251	286	429	341	218	97.8
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2002)	(2004)	(1996)	(2003)

05030500 OTTER TAIL RIVER NEAR ELIZABETH, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1992 - 2005	
ANNUAL TOTAL	105,669		175,149			
ANNUAL MEAN	289		480		421	
HIGHEST ANNUAL MEAN					593	1999
LOWEST ANNUAL MEAN					195	2004
HIGHEST DAILY MEAN	526	Nov 27	a916	Jun 27	a1,110	May 23, 2001
LOWEST DAILY MEAN	48	Jan 30	b260	Dec 15	48	Jan 30, 2004
ANNUAL SEVEN-DAY MINIMUM	50	Jan 29	332	Dec 11	50	Jan 29, 2004
MAXIMUM PEAK FLOW			a976	Jun 27	a1,170	May 23, 2001
MAXIMUM PEAK STAGE			a8.63	Jun 27	a9.37	May 23, 2001
INSTANTANEOUS LOW FLOW			c158	Aug 25	c8.8	Mar 25, 2004
ANNUAL RUNOFF (AC-FT)	209,600		347,400		305,300	
ANNUAL RUNOFF (CFSM)	0.235		0.390		0.343	
ANNUAL RUNOFF (INCHES)	3.20		5.30		4.65	
10 PERCENT EXCEEDS	478		687		717	
50 PERCENT EXCEEDS	286		430		387	
90 PERCENT EXCEEDS	67		340		182	

a Due in part to regulation.
b Estimated daily discharge, backwater from ice.
c Result of regulation.
e Estimated.



05046000 OTTER TAIL RIVER BELOW ORWELL DAM, NEAR FERGUS FALLS, MN

LOCATION.--Lat 46°12'35", long 96°11'05", in NE$^1/_4$ sec. 34, T.132 N., R.44 W., Otter Tail County, Hydrologic Unit 09020103, on left bank 0.7 mi downstream from Orwell Dam on County Highway 15, 6.1 mi downstream from Dayton Hollow Dam, 8 mi southwest of Fergus Falls, and 11.1 mi downstream from Pelican River.

DRAINAGE AREA.--1,740 mi^2.

PERIOD OF RECORD.--October 1930 to current year. Prior to October 1952, published as "Otter Tail River below Pelican River, near Fergus Falls". Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 785: 1934(M). WSP 1208: 1947(M). WSP 1308: 1931(M).

GAGE.--Water-stage recorder. Datum of gage is 1,029.65 ft above sea level ((NGVD of 1912, levels by U.S. Army Corps of Engineers). Oct. 11, 1930 to Nov. 17, 1933, at same site at datum 2.00 ft higher; Nov. 18, 1933 to Mar. 21, 1953, at site 6.1 mi upstream at datum 40.30 ft higher.

REMARKS.--Records good. Flow regulated at Orwell Lake (station 05045950) beginning Mar. 21, 1953, and by power plant upstream.

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	574	833	794	862	670	674	684	953	1,030	1,190	627	729
2	573	826	760	861	670	740	667	903	1,030	1,190	627	723
3	575	868	766	856	664	732	675	867	1,070	1,190	632	716
4	614	885	771	854	664	725	641	867	1,100	1,200	633	708
5	651	909	773	848	664	719	618	872	1,100	1,190	633	709
6	646	907	773	844	664	717	627	876	1,100	1,190	631	714
7	597	905	775	752	669	715	634	878	1,100	1,180	627	763
8	568	854	823	669	670	715	685	876	1,110	1,170	584	833
9	573	830	850	664	670	716	729	927	1,120	1,160	559	853
10	575	833	849	664	670	747	734	1,000	1,130	1,150	561	842
11	579	833	843	670	670	780	739	1,020	1,140	1,140	562	701
12	615	833	840	710	668	773	839	939	1,150	1,130	562	368
13	658	833	837	751	664	761	946	942	1,150	1,080	563	608
14	657	833	740	733	664	751	976	944	1,160	992	565	835
15	631	784	556	685	664	742	980	941	1,170	906	568	834
16	585	756	456	682	664	727	982	944	1,180	870	568	784
17	585	812	391	683	664	713	981	959	1,190	867	568	759
18	631	844	372	627	664	704	982	959	1,190	854	568	755
19	713	843	380	585	664	696	980	958	1,190	779	569	754
20	744	844	428	586	664	690	973	957	1,190	724	573	753
21	691	843	553	642	662	722	966	954	1,200	722	578	750
22	660	839	621	e670	610	738	969	953	1,200	721	626	787
23	668	841	621	670	568	730	968	908	1,200	721	658	817
24	678	839	621	678	570	727	964	878	1,200	721	657	808
25	791	837	621	682	573	727	964	883	1,190	723	656	693
26	930	833	621	681	573	727	964	965	1,190	817	656	410
27	971	833	714	679	579	728	962	1,020	1,180	825	662	397
28	999	833	837	676	579	737	959	1,020	1,170	742	663	354
29	991	833	864	674	---	755	959	1,020	1,180	660	711	356
30	992	833	861	670	---	780	955	1,020	1,190	627	744	650
31	985	---	867	670	---	746	---	1,020	---	627	734	---
TOTAL	21,700	25,229	21,578	21,978	18,039	22,654	25,702	29,223	34,500	29,058	19,125	20,763
MEAN	700	841	696	709	644	731	857	943	1,150	937	617	692
MAX	999	909	867	862	670	780	982	1,020	1,200	1,200	744	853
MIN	568	756	372	585	568	674	618	867	1,030	627	559	354
AC-FT	43,040	50,040	42,800	43,590	35,780	44,930	50,980	57,960	68,430	57,640	37,930	41,180
CFSM	0.40	0.48	0.40	0.41	0.37	0.42	0.49	0.54	0.66	0.54	0.35	0.40
IN.	0.46	0.54	0.46	0.47	0.39	0.48	0.55	0.62	0.74	0.62	0.41	0.44

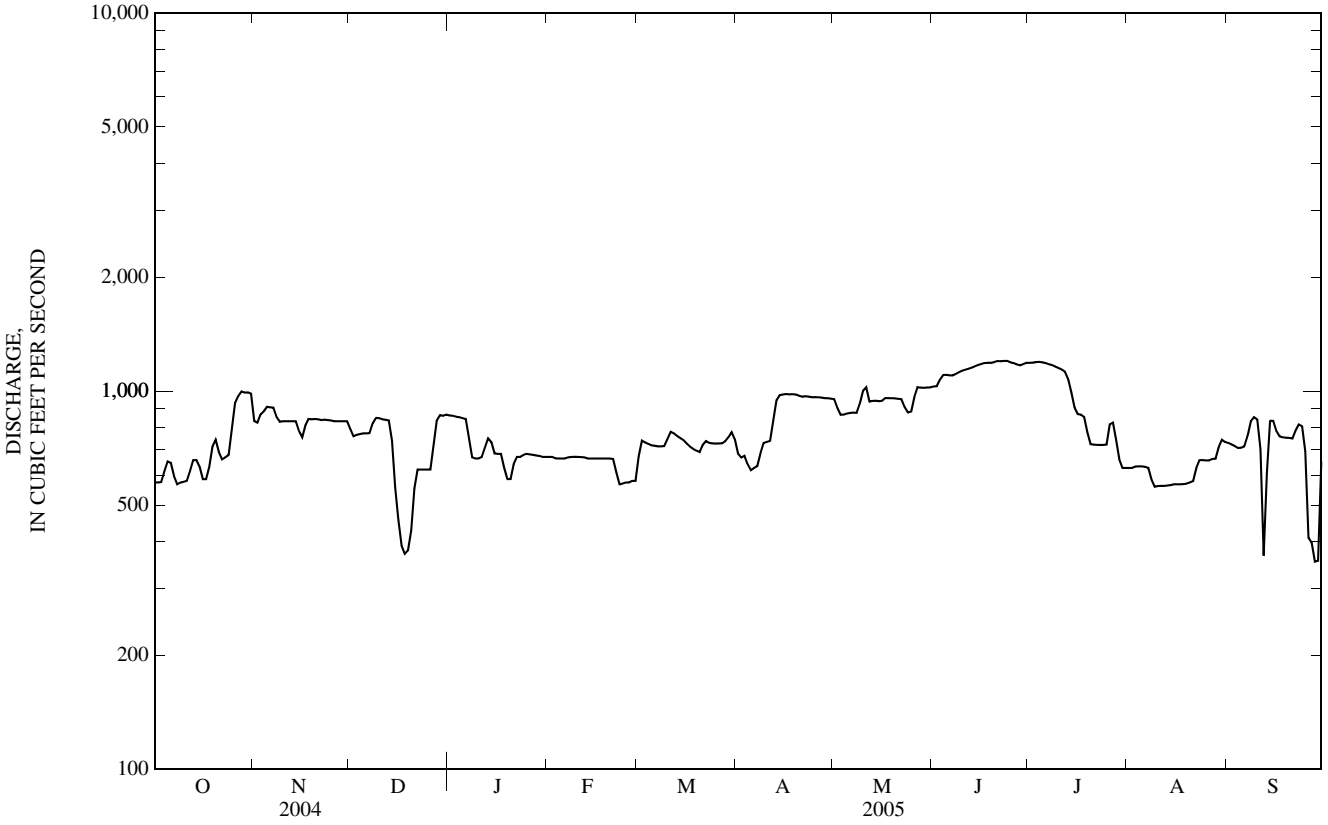
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2005, BY WATER YEAR (WY)

MEAN	262	275	265	259	262	347	511	615	605	464	314	266
MAX	973	841	740	737	742	785	1,199	1,427	1,442	1,246	1,080	1,026
(WY)	(1994)	(2005)	(1999)	(1999)	(1999)	(1999)	(1997)	(1986)	(2001)	(1953)	(1985)	(1993)
MIN	9.15	8.42	8.10	15.1	10.8	23.5	39.5	14.1	14.2	12.8	11.5	7.99
(WY)	(1977)	(1977)	(1977)	(1937)	(1935)	(1937)	(1934)	(1977)	(1934)	(1936)	(1934)	(1934)

05046000 OTTER TAIL RIVER BELOW ORWELL DAM, NEAR FERGUS FALLS, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1931 - 2005	
ANNUAL TOTAL	175,548		289,549			
ANNUAL MEAN	480		793		371	
HIGHEST ANNUAL MEAN					846	1999
LOWEST ANNUAL MEAN					20.4	1934
HIGHEST DAILY MEAN	999	Oct 28	a1,200	Jun21-24July4	1,670	Jun 20, 1953
LOWEST DAILY MEAN	99	Feb 5	a354	Sep 28	a1.6	Feb 7, 1937
ANNUAL SEVEN-DAY MINIMUM	101	Jan 21	448	Dec 15	5.9	Sep 15, 1934
MAXIMUM PEAK FLOW			a1,220	Jun 20	2,040	May 29, 2001
MAXIMUM PEAK STAGE			a4.24	Jun 20	5.60	Jun 17, 1953
INSTANTANEOUS LOW FLOW			b184	Sep 29	b0.70	Aug 5, 1970
ANNUAL RUNOFF (AC-FT)	348,200		574,300		268,500	
ANNUAL RUNOFF (CFSM)	0.276		0.456		0.213	
ANNUAL RUNOFF (INCHES)	3.75		6.19		2.89	
10 PERCENT EXCEEDS	833		1,100		798	
50 PERCENT EXCEEDS	448		751		306	
90 PERCENT EXCEEDS	150		579		40	

a Due in part to regulation.
b Due to regulation.
e Estimated



05049995 MUD LAKE ABOVE WHITE ROCK DAM NEAR WHITE ROCK, SD

LOCATION.--Lat 45°51'41", long 96°34'20", in NW¼NW¼ sec. 34, T.128 N., R.47 W., Roberts County, Hydrologic Unit 09020101, on Sisseton Indian Reservation, on left bank, 10 ft west of White Rock Dam, 4 mi south of White Rock and 5 mi northwest of Wheaton, MN.

DRAINAGE AREA.--

PERIOD OF RECORD.--October 2000 to current year. Gage height record prior to October 2000 can be obtained from Corp of Engineers.

GAGE.--Water-stage recorder. Datum of gage is 960.00 ft, adjustment of 1912 (levels by U.S. Army Corps of Engineers).

REMARKS.--Records fair. Lake regulated by Lake Traverse-Boise de Sioux Flood Control and Water Conservation project.

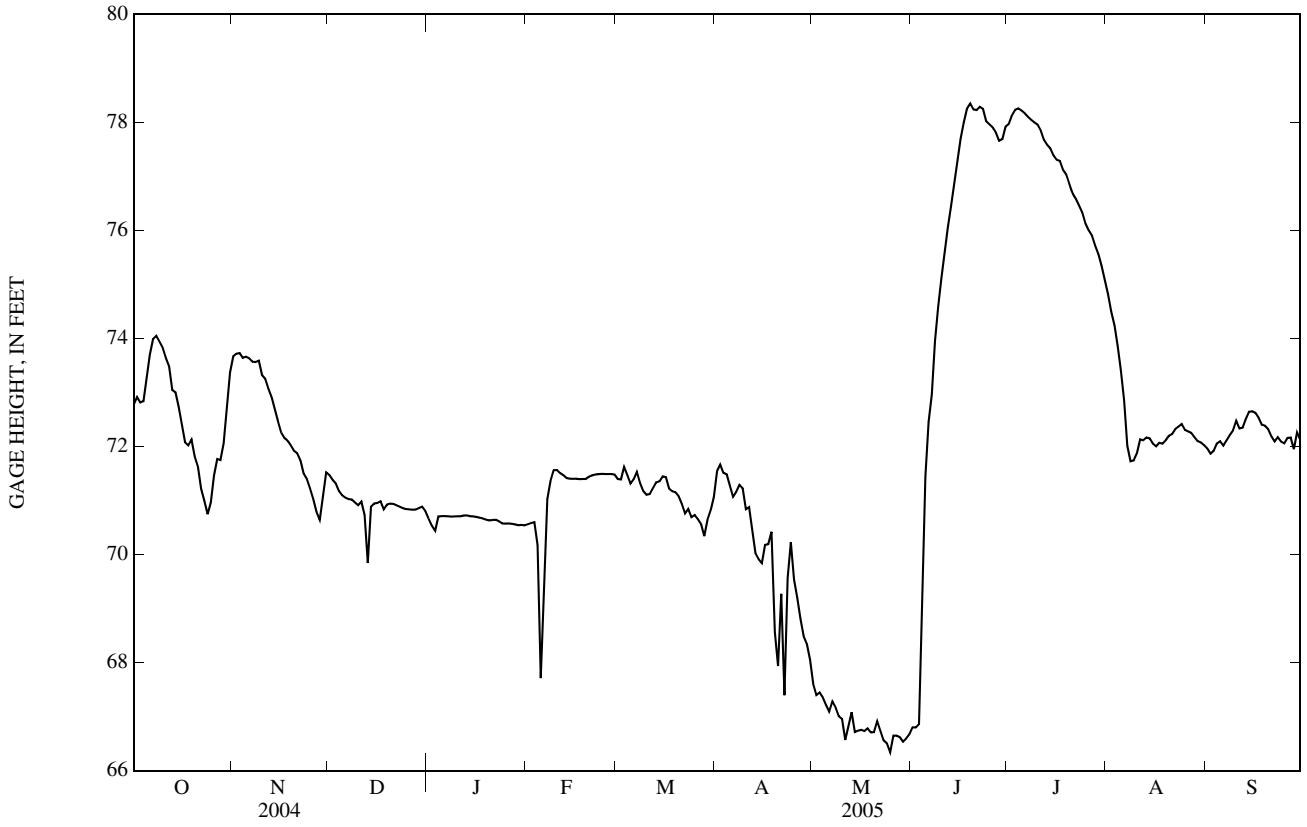
EXTREMES FOR PERIOD OF RECORD.---Maximum gage-height, 80.90 ft, Apr. 29, 2001; maximum daily, 80.76 ft, Apr. 19, 2001; minimum gage-height recorded, 65.14 ft, many days, several years (due in part to regulation), stage was observed lower than the detection limits of gage but precise stage readings were not determined; minimum daily recorded, 65.22 ft, June 14, 2002.

EXTREMES FOR CURRENT YEAR.--Maximum gage-height, 78.39 ft, June 19; maximum daily, 78.35 ft, June 19; minimum gage-height, 65.95 ft, May 25; minimum daily, 66.34 ft, May 25.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72.78	73.67	71.47	70.67	70.56	71.40	71.54	67.61	66.80	77.97	74.83	71.96
2	72.92	73.72	71.38	70.54	70.58	71.39	71.67	67.40	66.80	78.13	74.50	71.87
3	72.82	73.73	71.32	70.44	70.60	71.62	71.51	67.44	66.86	78.23	74.24	71.92
4	72.84	73.64	71.18	70.70	70.18	71.48	71.49	67.36	69.24	78.26	73.86	72.06
5	73.27	73.66	71.10	70.71	67.71	71.31	71.27	67.22	71.45	78.22	73.40	72.10
6	73.71	73.63	71.05	70.71	69.56	71.39	71.07	67.09	72.45	78.17	72.86	72.02
7	73.99	73.57	71.03	70.71	71.03	71.53	71.16	67.28	72.96	78.11	72.01	72.12
8	74.05	73.57	71.02	70.70	71.36	71.33	71.29	67.17	73.95	78.05	71.73	72.21
9	73.94	73.59	70.96	70.71	71.56	71.18	71.23	67.01	74.59	78.00	71.74	72.30
10	73.83	73.33	70.91	70.71	71.56	71.11	70.84	66.96	75.12	77.96	71.88	72.48
11	73.65	73.26	70.98	70.71	71.51	71.12	70.88	66.57	75.57	77.85	72.13	72.34
12	73.49	73.07	70.73	70.72	71.47	71.23	70.45	66.82	76.05	77.68	72.11	72.35
13	73.05	72.92	69.85	70.73	71.42	71.33	70.02	67.08	76.44	77.58	72.17	72.51
14	73.00	72.69	70.89	70.71	71.40	71.36	69.91	66.72	76.90	77.52	72.15	72.64
15	72.73	72.47	70.95	70.70	71.40	71.45	69.84	66.74	77.31	77.39	72.05	72.65
16	72.41	72.26	70.96	70.69	71.41	71.44	70.18	66.75	77.70	77.31	72.00	72.62
17	72.08	72.16	70.99	70.68	71.40	71.22	70.19	66.73	78.00	77.28	72.07	72.53
18	72.02	72.11	70.84	70.66	71.40	71.17	70.42	66.78	78.26	77.12	72.05	72.40
19	72.13	72.02	70.93	70.64	71.40	71.15	68.57	66.71	78.35	77.03	72.12	72.39
20	71.82	71.92	70.94	70.63	71.44	71.08	67.94	66.71	78.24	76.85	72.20	72.32
21	71.63	71.88	70.94	70.64	71.46	70.94	69.27	66.92	78.23	76.68	72.23	72.19
22	71.22	71.74	70.91	70.64	71.48	70.76	67.39	66.74	78.29	76.58	72.32	72.09
23	71.00	71.50	70.88	70.62	71.49	70.84	69.56	66.56	78.25	76.46	72.37	72.17
24	70.75	71.40	70.86	70.58	71.49	70.69	70.23	66.50	78.02	76.33	72.41	72.09
25	70.97	71.23	70.84	70.57	71.49	70.73	69.54	66.34	77.97	76.13	72.31	72.06
26	71.47	71.03	70.84	70.58	71.49	70.66	69.20	66.65	77.91	76.00	72.28	72.16
27	71.77	70.80	70.83	70.57	71.49	70.56	68.81	66.65	77.82	75.91	72.25	72.17
28	71.75	70.64	70.83	70.56	71.48	70.34	68.49	66.62	77.66	75.72	72.17	71.95
29	72.06	71.06	70.86	70.54	---	70.64	68.35	66.54	77.69	75.57	72.10	72.27
30	72.75	71.52	70.89	70.55	---	70.82	68.06	66.60	77.92	75.35	72.08	72.13
31	73.37	---	70.81	70.54	---	71.07	---	66.67	---	75.09	72.02	---
MEAN	72.56	72.46	70.93	70.64	71.10	71.11	70.01	66.87	75.43	77.11	72.47	72.24
MAX	74.05	73.73	71.47	70.73	71.56	71.62	71.67	67.61	78.35	78.26	74.83	72.65
MIN	70.75	70.64	69.85	70.44	67.71	70.34	67.39	66.34	66.80	75.09	71.73	71.87

05049995 MUD LAKE ABOVE WHITE ROCK DAM NEAR WHITE ROCK, SD—Continued



05050000 BOIS DE SIOUX RIVER NEAR WHITE ROCK, SD

LOCATION.--Lat 45°51'45", long 96°34'25", in SW¼SW¼ sec. 27, T.128 N., R.47 W., Roberts County, Hydrologic Unit 09020101, on Sisseton Indian Reservation, on left bank at Big Slough Outlet, 300 ft downstream from White Rock Dam, 4 mi south of White Rock and 5 mi northwest of Wheaton, MN.

DRAINAGE AREA.--1,160 mi^2 (approximately).

PERIOD OF RECORD.--October 1941 to current year.

GAGE.--Water-stage recorder. Datum of gage is 960.00 ft. above sea level, (adjustment of 1912, levels by U.S. Army Corps of Engineers). Prior to Jan. 14, 1943, nonrecording gage at same site at datum 0.11 ft lower. Jan. 15, 1943 to Sept. 30, 1963, water-stage recorder at same site at datum 0.11 ft lower.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Lake Traverse-Boise de Sioux Flood Control and Water Conservation project.

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	654	617	164	e62	e0.58	e140	216	309	191	730	1,090	88
2	667	609	193	e62	e0.64	e160	161	292	196	611	1,110	59
3	658	603	211	e7.0	e0.68	e160	159	293	225	333	1,130	11
4	652	604	229	e1.0	e20	e230	157	279	356	74	1,130	12
5	665	609	224	e1.0	e20	e260	159	262	462	710	1,130	18
6	681	607	222	e0.90	e18	e270	159	243	500	1,280	1,090	30
7	727	604	208	e0.90	e10	e300	155	261	673	1,270	998	73
8	789	601	198	e0.90	e10	e400	151	253	e350	1,270	799	97
9	806	551	200	e0.90	e12	e450	148	233	e180	1,260	693	97
10	798	512	185	e0.90	e24	e700	147	229	e190	1,250	535	95
11	795	500	177	e0.94	e40	e800	168	161	e170	1,120	422	93
12	786	494	e160	e0.94	e74	e800	267	197	e350	1,160	371	120
13	779	486	e130	e0.94	e110	e780	293	240	e320	1,160	286	163
14	748	478	e100	e0.37	e100	e780	278	209	e400	1,150	282	171
15	685	469	e110	e0.50	e80	e780	204	210	e315	1,150	277	160
16	647	460	e110	e0.52	e70	e980	148	208	e300	1,160	231	153
17	626	457	e110	e0.50	e65	1,040	145	194	e280	1,150	141	149
18	521	455	e110	e0.54	e60	1,020	145	201	e260	1,150	116	147
19	446	453	e90	e0.60	e62	1,010	184	188	751	1,150	175	133
20	439	455	e90	e0.56	e62	977	215	181	1,130	1,150	228	122
21	429	448	e95	e0.56	e60	937	246	213	894	1,160	218	121
22	420	442	e80	e0.54	e80	901	188	190	807	1,180	228	120
23	446	441	e75	e0.50	e86	808	252	149	1,160	1,200	241	55
24	450	429	e70	e0.54	e90	694	261	139	1,230	1,190	263	12
25	289	423	e70	e0.54	e90	660	254	117	1,230	1,180	281	13
26	205	419	e70	e0.56	e90	591	291	186	1,230	1,190	236	15
27	238	415	e70	e0.54	e90	538	342	177	1,150	1,160	156	15
28	390	405	e70	e0.54	e90	494	350	165	1,250	1,140	152	15
29	554	265	e66	e0.54	---	435	345	148	1,330	1,130	116	13
30	613	153	e62	e0.54	---	396	333	155	1,130	1,130	93	12
31	624	---	e62	e0.54	---	351	---	168	---	1,110	90	---
TOTAL	18,227	14,464	4,011	149.85	1,514.90	18,842	6,521	6,450	19,010	33,058	14,308	2,382
MEAN	588	482	129	4.83	54.1	608	217	208	634	1,066	462	79.4
MAX	806	617	229	62	110	1,040	350	309	1,330	1,280	1,130	171
MIN	205	153	62	0.37	0.58	140	145	117	170	74	90	11
AC-FT	36,150	28,690	7,960	297	3,000	37,370	12,930	12,790	37,710	65,570	28,380	4,720
CFSM	0.51	0.42	0.11	0.00	0.05	0.52	0.19	0.18	0.55	0.92	0.40	0.07
IN.	0.58	0.46	0.13	0.00	0.05	0.60	0.21	0.21	0.61	1.06	0.46	0.08

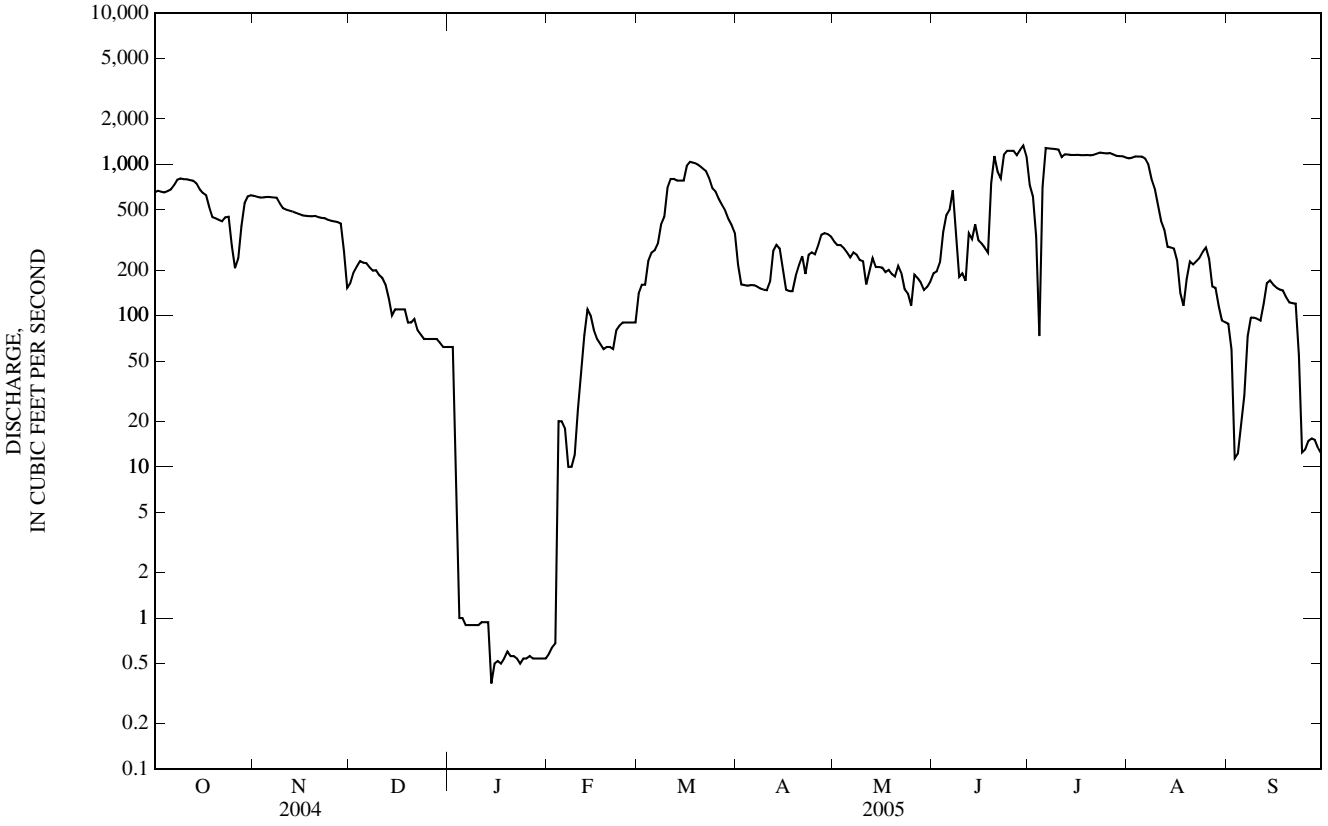
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2005, BY WATER YEAR (WY)

MEAN	36.5	23.1	11.9	3.35	8.04	80.8	321	307	257	194	76.9	38.1
MAX	588	482	207	42.4	148	628	3,814	1,445	1,103	1,066	1,182	1,062
(WY)	(2005)	(2005)	(1999)	(1997)	(1997)	(1996)	(1997)	(1997)	(1986)	(2005)	(1993)	(1993)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.01	0.00	0.00	0.00
(WY)	(1942)	(1942)	(1942)	(1942)	(1942)	(1942)	(1942)	(1977)	(1977)	(1961)	(1970)	(1960)

05050000 BOIS DE SIOUX RIVER NEAR WHITE ROCK, SD—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1942 - 2005	
ANNUAL TOTAL	61,209.89		138,937.75			
ANNUAL MEAN	167		381		a113	
HIGHEST ANNUAL MEAN					536	1997
LOWEST ANNUAL MEAN					0.38	1977
HIGHEST DAILY MEAN	806	Oct 9	1,330	Jun 29	7,710	Apr 16, 1997
LOWEST DAILY MEAN	0.00	Jan 1	0.37	Jan 14	b0.00	Oct 1, 1941
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.51	Jan 14	0.00	Oct 1, 1941
MAXIMUM PEAK FLOW			c1,660	Jun 30	d8,750	Apr 20, 1997
MAXIMUM PEAK STAGE			10.67	Jun 30	16.90	Apr 20, 1997
INSTANTANEOUS LOW FLOW			f0.37	Jan 14	b0.00	Oct 1, 1941
ANNUAL RUNOFF (AC-FT)	121,400		275,600		82,210	
ANNUAL RUNOFF (CFSM)	0.144		0.328		0.098	
ANNUAL RUNOFF (INCHES)	1.96		4.46		1.33	
10 PERCENT EXCEEDS	517		1,120		375	
50 PERCENT EXCEEDS	56		230		3.7	
90 PERCENT EXCEEDS	0.00		12		0.00	

a Median of annual mean discharges is 66 ft^3/s.
b Many days, several years; result of regulation.
c Due in part to regulation.
d Estimated, from observed readings made under non-ideal conditions. Some evidence that peak occurred Apr. 16 at 7,930 ft^3/s.
e Estimated.
f Estimated daily-mean discharge, backwater from ice.



05051300 BOIS DE SIOUX RIVER NEAR DORAN, MN

LOCATION.--Lat 46°09'08", long 96°34'44", in NE¼ NE¼ sec. 21, T.131 N., R.47 W., Wilken County, MN, Hydrologic Unit 09020101, on right bank, 10 ft downstream from bridge on County Highway 6, 3 miles downstream from Rabbit River, 4.3 mi southwest of Doran.

DRAINAGE AREA.--1,880 mi^2 (approximately).

PERIOD OF RECORD.--October 12, 1989 to current year.

GAGE.--Water-stage recorder. Datum of gage is 943.90 ft above sea level (NGVD of 1929, elevation data obtained from Wilkin County Highway Engineers).

REMARKS.--Records good to fair except those for estimated daily discharges, which are poor. Flow regulated by Lake Traverse-Bois de Sioux Flood Control and Water Conservation project near White Rock, S.D.

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	897	1,420	e250	e66	e1.1	e160	e540	407	241	4,230	1,150	91
2	1,040	1,110	e265	e65	e1.1	e180	377	367	249	4,050	1,140	90
3	1,250	963	e265	e50	e1.1	e210	288	356	400	3,310	1,630	74
4	1,200	886	e270	e26	e1.9	e260	260	346	929	1,990	1,930	31
5	1,040	840	e260	e16	e3.2	e280	239	323	1,310	1,050	1,640	25
6	965	803	e240	e9.0	e5.4	e315	227	290	1,220	1,380	1,360	34
7	935	778	e235	e5.0	e8.8	e410	217	270	2,280	1,490	1,190	45
8	962	759	e225	e3.1	e15	e600	204	285	4,040	1,470	1,050	83
9	994	734	e220	e1.7	e24	e890	191	286	4,360	1,440	1,030	103
10	989	648	e210	e1.6	e40	e1,000	183	267	4,310	1,410	1,080	101
11	972	629	e200	e1.6	e60	e1,100	209	257	4,050	1,330	768	95
12	956	617	e185	e1.6	e88	e1,100	502	213	3,890	1,250	633	97
13	931	603	e155	e1.6	e120	e1,050	1,240	227	3,570	1,260	459	147
14	920	591	e120	e1.0	e110	e1,050	1,200	270	3,920	1,240	377	200
15	865	580	e120	e1.1	e94	e1,050	778	279	4,030	1,230	349	199
16	800	568	e120	e1.1	e78	e1,200	489	274	3,660	1,220	325	180
17	768	555	e120	e1.1	e70	e1,300	400	270	2,770	1,210	240	171
18	729	549	e120	e1.1	e66	e1,350	297	251	1,670	1,200	185	158
19	598	548	e105	e1.2	e66	e1,300	257	258	1,070	1,200	391	155
20	536	547	e97	e1.2	e66	e1,250	298	253	1,570	1,190	610	134
21	515	546	e100	e1.1	e70	e1,300	324	244	2,190	1,180	490	125
22	501	538	e92	e1.1	e84	e1,350	329	255	1,710	1,180	349	122
23	705	525	e80	e1.1	e90	e1,400	278	242	1,450	1,200	319	123
24	1,640	516	e74	e1.1	e93	e1,480	331	193	1,430	1,210	295	63
25	1,970	504	e74	e1.1	e95	e1,550	334	184	1,410	1,240	315	26
26	1,400	496	e74	e1.1	e95	e1,650	326	244	1,370	1,430	315	25
27	874	492	e74	e1.1	e96	e1,680	389	349	1,320	1,520	220	22
28	641	487	e74	e1.1	e100	e1,700	444	387	1,300	1,400	160	19
29	1,060	e480	e70	e1.1	---	e1,650	452	313	1,810	1,270	153	19
30	1,710	e250	e66	e1.1	---	e1,100	435	253	3,860	1,220	112	18
31	1,790	---	e66	e1.1	---	e740	---	239	---	1,180	95	---
TOTAL	31,153	19,562	4,626	268.1	1,642.6	31,655	12,038	8,652	67,389	48,180	20,360	2,775
MEAN	1,005	652	149	8.65	58.7	1,021	401	279	2,246	1,554	657	92.5
MAX	1,970	1,420	270	66	120	1,700	1,240	407	4,360	4,230	1,930	200
MIN	501	250	66	1.0	1.1	160	183	184	241	1,050	95	18
AC-FT	61,790	38,800	9,180	532	3,260	62,790	23,880	17,160	133,700	95,570	40,380	5,500
CFSM	0.53	0.35	0.08	0.00	0.03	0.54	0.21	0.15	1.19	0.83	0.35	0.05
IN.	0.62	0.39	0.09	0.01	0.03	0.63	0.24	0.17	1.33	0.95	0.40	0.05

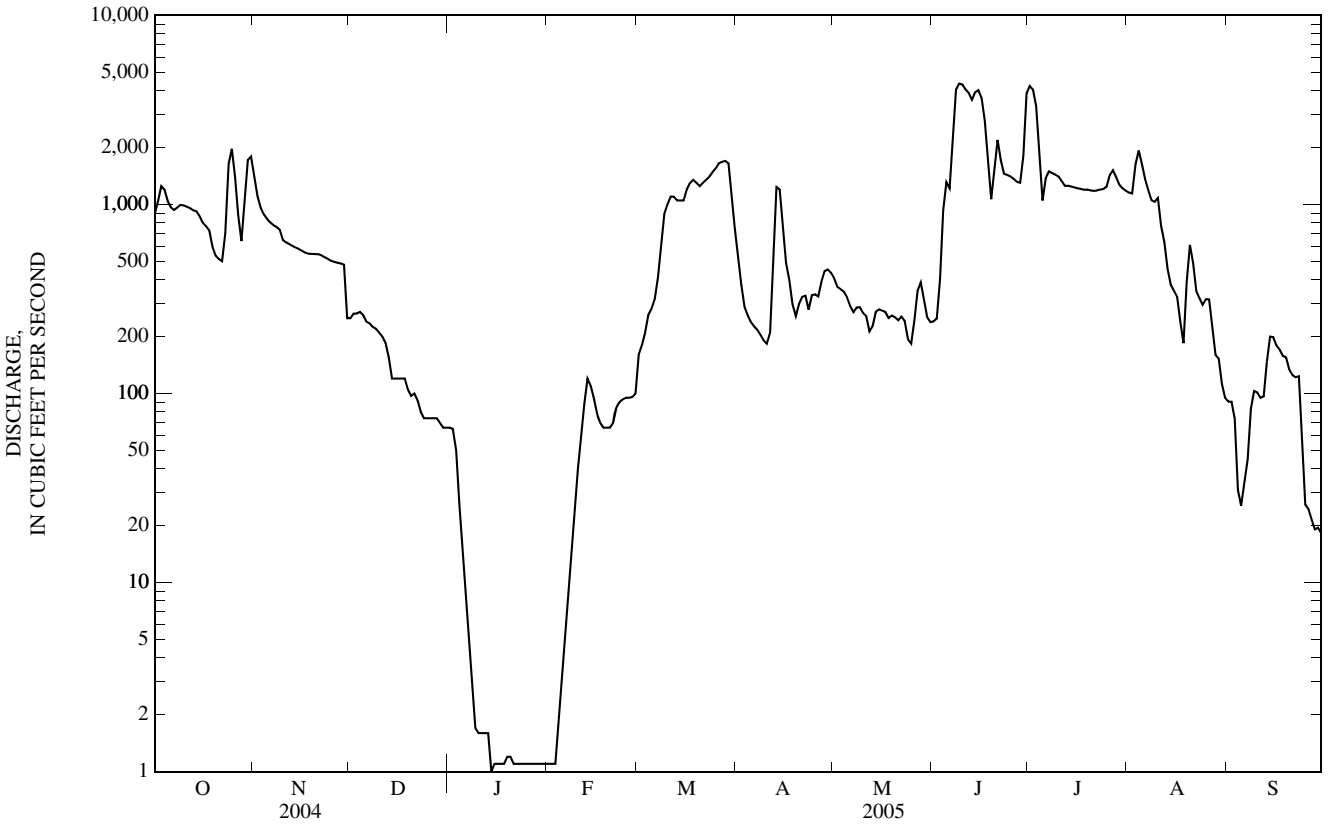
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2005, BY WATER YEAR (WY)

MEAN	136	81.3	36.7	6.24	27.9	452	1,113	615	552	539	210	171
MAX	1,005	652	222	43.9	155	1,757	5,936	1,893	2,246	1,554	1,486	1,244
(WY)	(2005)	(2005)	(1999)	(1997)	(1998)	(1995)	(1997)	(1997)	(2005)	(2005)	(1993)	(1993)
MIN	0.00	0.59	0.15	0.00	0.00	25.5	12.6	11.8	12.6	4.37	0.00	0.00
(WY)	(2004)	(2004)	(2004)	(2004)	(1990)	(1990)	(1990)	(1990)	(1990)	(1990)	(1990)	(1990)

05051300 BOIS DE SIOUX RIVER NEAR DORAN, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1990 - 2005	
ANNUAL TOTAL	105,785.20		248,300.7			
ANNUAL MEAN	289		680		329	
HIGHEST ANNUAL MEAN					786	2001
LOWEST ANNUAL MEAN					8.77	1990
HIGHEST DAILY MEAN	2,380	Sep 25	4,360	Jun 9	11,500	Apr 16, 1997
LOWEST DAILY MEAN	0.00	Jan 1	1.0	Jan 14	a0.00	Jan 7, 1990
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	1.1	Jan 21	0.00	Jan 7, 1990
MAXIMUM PEAK FLOW			b4,380	Jun 9	12,300	Apr 16, 1997
MAXIMUM PEAK STAGE			21.46	Jun 9	24.42	Apr 16, 1997
INSTANTANEOUS LOW FLOW			c1.0	Jan 14	a0.00	Jan 7, 1990
ANNUAL RUNOFF (AC-FT)	209,800		492,500		238,300	
ANNUAL RUNOFF (CFSM)	0.154		0.362		0.175	
ANNUAL RUNOFF (INCHES)	2.09		4.91		2.38	
10 PERCENT EXCEEDS	910		1,470		1,140	
50 PERCENT EXCEEDS	66		331		16	
90 PERCENT EXCEEDS	0.00		19		0.18	

a Many days, several years; due in part to regulation.
b Due in part to regulation.
c Estimated daily-mean discharge, backwater from ice; due in part to regulation.
e Estimated.



05051500 RED RIVER OF THE NORTH AT WAHPETON, ND

LOCATION.--Lat 46°15'58", long 96°35'54", in NE$^1/_4$ sec.8, T.132 N., R.47 W., Richland County, Hydrologic Unit 09020104, on left bank in Wahpeton, 800 ft downstream from confluence of Bois de Sioux and Otter Tail Rivers, and at mile 548.6.

DRAINAGE AREA.--4,010 mi^2, approximately.

PERIOD OF RECORD.--May to October 1942, March 1943 to current year. Gage-height records collected in this vicinity since 1917 are contained in reports of the National Weather Service.

GAGE.--Water-stage recorder and concrete and wooden dam. Datum of gage is 942.97 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 6, 1943, National Weather Service nonrecording gage 800 ft upstream, converted to present datum. Aug. 6, 1943, to Oct. 27, 1950, nonrecording gage at present site and datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by; Orwell Reservoir, flood storage capacity, 13,300 acre-ft at elevation 1,070 ft above mean sea level, adjustment of 1912; Mud Lake, flood storage capacity, 78,600 acre-ft at elevation 981 ft above mean sea level, adjustment of 1912; Lake Traverse, flood storage capacity, 75,100 acre-ft at elevation 981 ft above mean sea level, adjustment of 1912; and numerous other controlled lakes and ponds and several powerplants. Since June 2005, Otter Tail River flows are partially diverted around Breckenridge at stages above approximately 11.4 ft. The diverted flows are measured at streamflow station Otter Tail River Diversion at Breckenridge, MN (station 05046475). Figures of discharge given here include flow through the diversion.

EXTREMES OUTSIDE PERIOD OF RECORD.--A stage of 17.0 ft, discharge, 10,500 ft^3/s, occurred in the spring of 1897.

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	1,510	2,670	e1,020	e710	e615	e600	1,590	1,350	1,270	5,710	1,840	856
2	1,540	2,240	e980	e700	e625	e645	1,240	1,320	1,280	5,380	1,820	855
3	1,760	1,890	e980	e690	e635	e725	1,090	1,280	1,490	4,940	2,390	865
4	1,810	1,820	e990	e680	e635	e770	1,060	1,240	1,980	4,020	3,120	816
5	1,710	1,770	e970	e665	e635	e795	1,010	1,210	2,390	2,800	2,810	784
6	1,630	1,730	e960	e655	e630	e880	962	1,190	2,550	2,550	2,340	805
7	1,580	1,700	e975	e650	e620	e950	949	1,170	3,520	2,730	2,020	814
8	1,550	1,670	e980	e650	e620	e985	940	1,190	5,330	2,700	1,820	859
9	1,550	1,620	e985	e650	e625	e1,040	948	1,200	5,970	2,630	1,750	944
10	1,550	1,510	e990	e645	e635	e1,070	971	1,250	5,750	2,570	1,840	972
11	1,540	1,460	e990	e630	e645	e1,060	1,020	1,280	5,510	2,520	1,510	962
12	1,530	1,450	e935	e630	e650	e1,060	1,210	1,250	5,660	2,390	1,270	889
13	1,530	1,430	e740	e620	e650	e1,070	2,010	1,240	5,680	2,360	1,120	625
14	1,570	1,410	e600	e600	e650	e1,100	2,340	1,260	6,040	2,330	1,000	784
15	1,540	1,400	e500	e585	e650	e1,120	1,940	1,260	6,210	2,240	966	989
16	1,450	1,360	e540	e580	e650	e1,120	1,550	1,250	5,580	2,150	943	993
17	1,370	1,310	e640	e580	e645	e1,130	1,410	1,240	4,640	2,090	883	973
18	1,330	1,330	e680	e575	e640	e1,160	1,320	1,220	3,610	2,060	874	927
19	1,260	1,370	e610	e555	e640	e1,220	1,250	1,220	2,810	2,050	1,270	912
20	1,250	1,370	e555	e545	e640	e1,250	1,260	1,210	2,840	1,980	1,630	894
21	1,270	1,360	e545	e540	e640	1,270	1,280	1,200	3,720	1,910	1,380	875
22	1,240	1,360	e525	e540	e640	1,270	1,290	1,200	3,550	1,900	1,100	867
23	1,380	1,340	e520	e550	e620	1,350	1,250	1,180	3,010	1,920	1,030	890
24	2,230	1,340	e530	e560	e605	1,530	1,280	1,120	2,810	1,940	1,020	902
25	2,800	1,330	e600	e560	e605	1,700	1,290	1,110	2,720	2,010	1,030	848
26	2,520	1,320	e670	e565	e605	1,900	1,280	1,170	2,630	2,210	1,030	767
27	2,030	1,320	e710	e570	e610	2,160	1,320	1,340	2,560	2,450	989	501
28	1,700	1,290	e730	e570	e605	2,270	1,380	1,400	2,480	2,440	915	439
29	1,900	e1,230	e730	e580	---	2,320	1,380	1,340	2,890	2,190	880	393
30	2,570	e1,120	e725	e590	---	2,420	1,370	1,280	4,910	1,990	874	378
31	2,880	---	e720	e600	---	2,110	---	1,260	---	1,900	869	---
TOTAL	53,080	45,520	23,625	18,820	17,665	40,050	39,190	38,430	111,390	81,060	44,333	24,378
MEAN	1,712	1,517	762	607	631	1,292	1,306	1,240	3,713	2,615	1,430	813
MAX	2,880	2,670	1,020	710	650	2,420	2,340	1,400	6,210	5,710	3,120	993
MIN	1,240	1,120	500	540	605	600	940	1,110	1,270	1,900	869	378
AC-FT	105,300	90,290	46,860	37,330	35,040	79,440	77,730	76,230	220,900	160,800	87,930	48,350

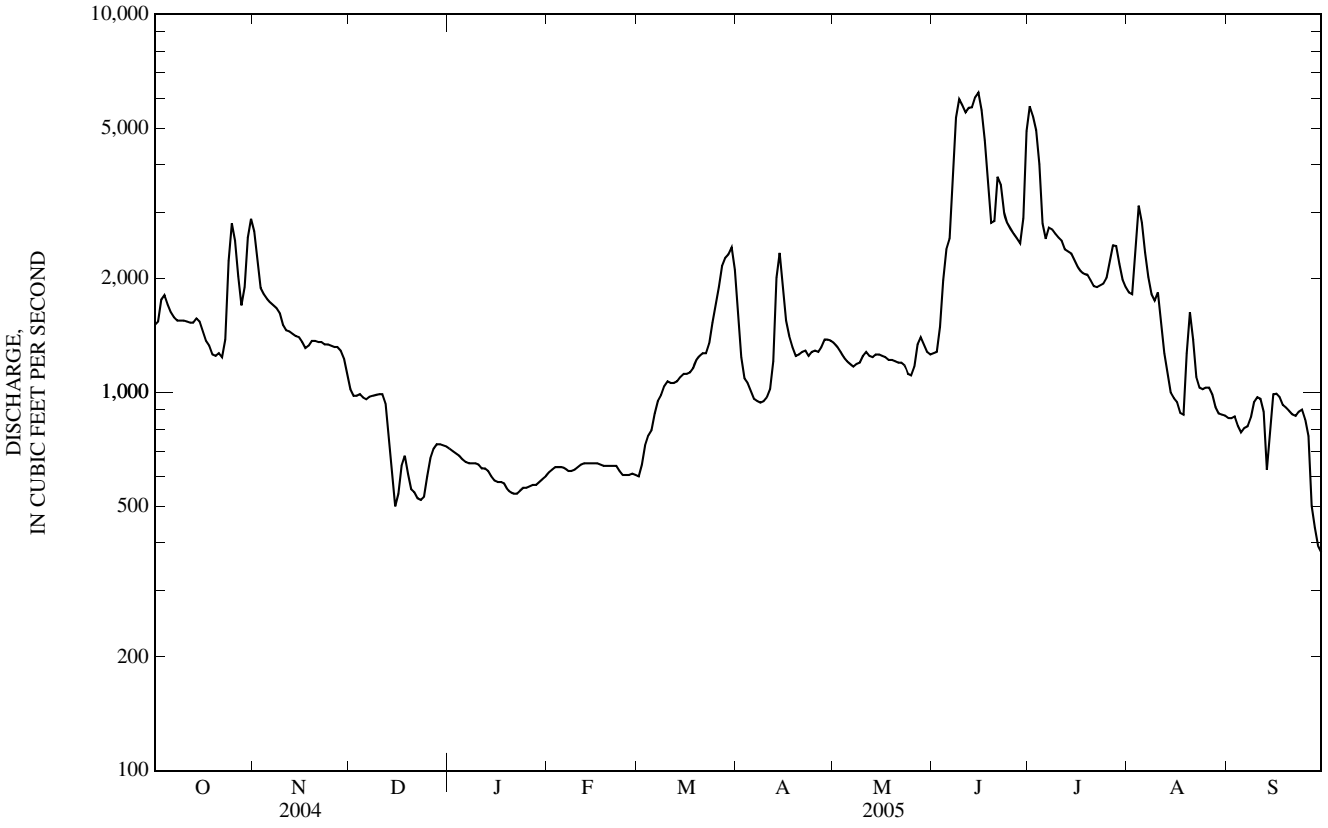
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2005, BY WATER YEAR (WY)

MEAN	366	344	311	294	316	716	1,439	1,140	1,138	876	468	373
MAX	1,712	1,517	967	678	868	2,629	8,717	3,344	3,713	2,787	2,496	2,148
(WY)	(2005)	(2005)	(1999)	(1986)	(1998)	(1995)	(1997)	(1997)	(2005)	(1993)	(1993)	(1993)
MIN	5.72	7.40	6.60	8.81	18.0	84.3	138	22.5	90.0	65.6	53.5	2.18
(WY)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1976)

05051500 RED RIVER OF THE NORTH AT WAHPETON, ND—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1942 - 2005	
ANNUAL TOTAL	284,489		537,541			
ANNUAL MEAN	777		1,473		646	
HIGHEST ANNUAL MEAN					1,600	1997
LOWEST ANNUAL MEAN					54.0	1977
HIGHEST DAILY MEAN	3,140	Sep 25	a6,210	Jun 15	12,700	Apr 15, 1997
LOWEST DAILY MEAN	92	Jan 30	378	Sep 30	1.7	Aug 28, 1976
ANNUAL SEVEN-DAY MINIMUM	92	Jan 30	550	Jan 19	1.7	Aug 28, 1976
MAXIMUM PEAK FLOW			b5,410	Jun 15	12,800	Apr 15, 1997
MAXIMUM PEAK STAGE			13.10	Jun 15	c19.42	Apr 6, 1997
ANNUAL RUNOFF (AC-FT)	564,300		1,066,000		468,300	
10 PERCENT EXCEEDS	1,580		2,570		1,480	
50 PERCENT EXCEEDS	552		1,240		400	
90 PERCENT EXCEEDS	144		608		110	

a Combined daily flows from Red River of the North and Otter Tail River Diversion Channel.
b Red River of the North only.
c Backwater from ice; from floodmark.
e Estimated.



05051522 RED RIVER OF THE NORTH AT HICKSON, ND

LOCATION.--Lat 46°39'35", long 96°47'44", in SW$^1/_4$ sec.19, T.137 N., R.48 W., Clay County, MN, Hydrologic Unit 09020104, on right bank 60 ft downstream from bridge on township road and 1 mi southeast of Hickson.

DRAINAGE AREA.--4,300 mi^2, approximately.

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 877.06 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Orwell Reservoir, flood storage capacity, 13,300 acre-ft at elevation 1,070 ft above mean sea level, adjustment of 1912; Mud Lake, flood storage capacity, 78,600 acre-ft at elevation 981 ft above mean sea level, adjustment of 1912; Lake Traverse, flood storage capacity, 75,100 acre-ft at elevation 981 ft above mean sea level, adjustment of 1912; and numerous other controlled lakes and ponds and several powerplants.

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	1,920	3,030	e1,270	e745	e725	e650	3,090	1,400	1,370	4,330	1,960	987
2	1,730	3,060	e1,190	e730	e735	e635	2,580	1,380	1,350	5,060	1,880	931
3	1,660	2,850	e1,180	e725	e740	e635	1,720	1,350	1,360	5,480	1,830	939
4	1,810	2,450	e1,160	e720	e740	e655	1,260	1,310	1,610	5,650	2,030	996
5	1,910	2,160	e1,150	e705	e740	e695	1,150	1,260	2,110	5,150	2,690	982
6	1,870	2,050	e1,140	e695	e720	e770	1,100	1,220	2,520	4,280	3,010	923
7	1,800	1,970	e1,140	e690	e670	e945	1,030	1,200	2,740	3,690	2,850	924
8	1,740	1,920	e1,140	e685	e645	e995	994	1,190	3,280	3,500	2,490	949
9	1,680	1,880	e1,140	e680	e645	e1,030	974	1,190	4,290	3,530	2,220	948
10	1,660	1,840	e1,150	e675	e660	e1,110	966	1,230	4,980	3,390	2,040	1,000
11	1,670	1,730	e1,130	e670	e670	e1,110	1,000	1,410	5,400	3,260	2,030	1,040
12	1,670	1,620	e950	e670	e680	e1,110	1,050	1,490	5,740	3,160	1,880	1,040
13	1,650	1,570	e690	e670	e680	e1,100	1,240	1,420	5,940	3,040	1,490	1,000
14	1,630	1,540	e470	e665	e680	e1,100	1,940	1,370	e6,300	2,930	1,250	807
15	e1,670	1,520	e435	e650	e680	e1,100	2,420	1,380	e6,720	2,830	1,090	744
16	1,670	1,520	e470	e640	e680	e1,100	2,330	1,400	7,050	2,700	1,010	971
17	1,590	1,510	e560	e635	e680	e1,100	1,930	1,380	6,920	2,530	991	1,040
18	1,490	1,450	e730	e635	e675	e1,110	1,620	1,360	6,360	2,340	973	1,040
19	1,450	1,440	e680	e635	e675	e1,120	1,450	1,320	5,620	2,200	974	1,000
20	1,390	1,470	e615	e635	e675	e1,130	1,340	1,300	4,750	2,120	1,310	968
21	1,340	1,480	e540	e635	e675	e1,150	1,310	1,300	3,820	2,070	2,000	938
22	1,360	1,470	e505	e615	e675	e1,250	1,320	1,260	3,630	2,020	2,070	912
23	1,380	1,460	e510	e610	e670	e1,420	1,330	1,240	3,850	1,990	1,670	894
24	1,470	1,440	e525	e615	e670	e1,640	1,300	1,220	3,920	1,980	1,220	903
25	2,070	1,430	e570	e620	e670	e1,900	1,300	1,180	3,760	1,990	1,160	939
26	2,640	1,420	e620	e635	e670	e2,150	1,320	1,150	3,480	2,010	1,700	907
27	2,830	1,410	e680	e640	e660	e2,610	1,310	1,230	3,340	2,070	2,660	858
28	2,610	1,400	e730	e640	e655	e2,940	1,340	1,390	3,210	2,200	2,690	676
29	2,180	1,370	e760	e655	---	e3,370	1,390	1,510	3,130	2,310	2,010	526
30	2,240	e1,330	e760	e670	---	e3,590	1,410	1,500	3,380	2,200	1,350	473
31	2,750	---	e760	e700	---	e3,620	---	1,430	---	2,050	1,080	---
TOTAL	56,530	52,790	25,350	20,590	19,140	44,840	44,514	40,970	121,930	94,060	55,608	27,255
MEAN	1,824	1,760	818	664	684	1,446	1,484	1,322	4,064	3,034	1,794	908
MAX	2,830	3,060	1,270	745	740	3,620	3,090	1,510	7,050	5,650	3,010	1,040
MIN	1,340	1,330	435	610	645	635	966	1,150	1,350	1,980	973	473
AC-FT	112,100	104,700	50,280	40,840	37,960	88,940	88,290	81,260	241,800	186,600	110,300	54,060

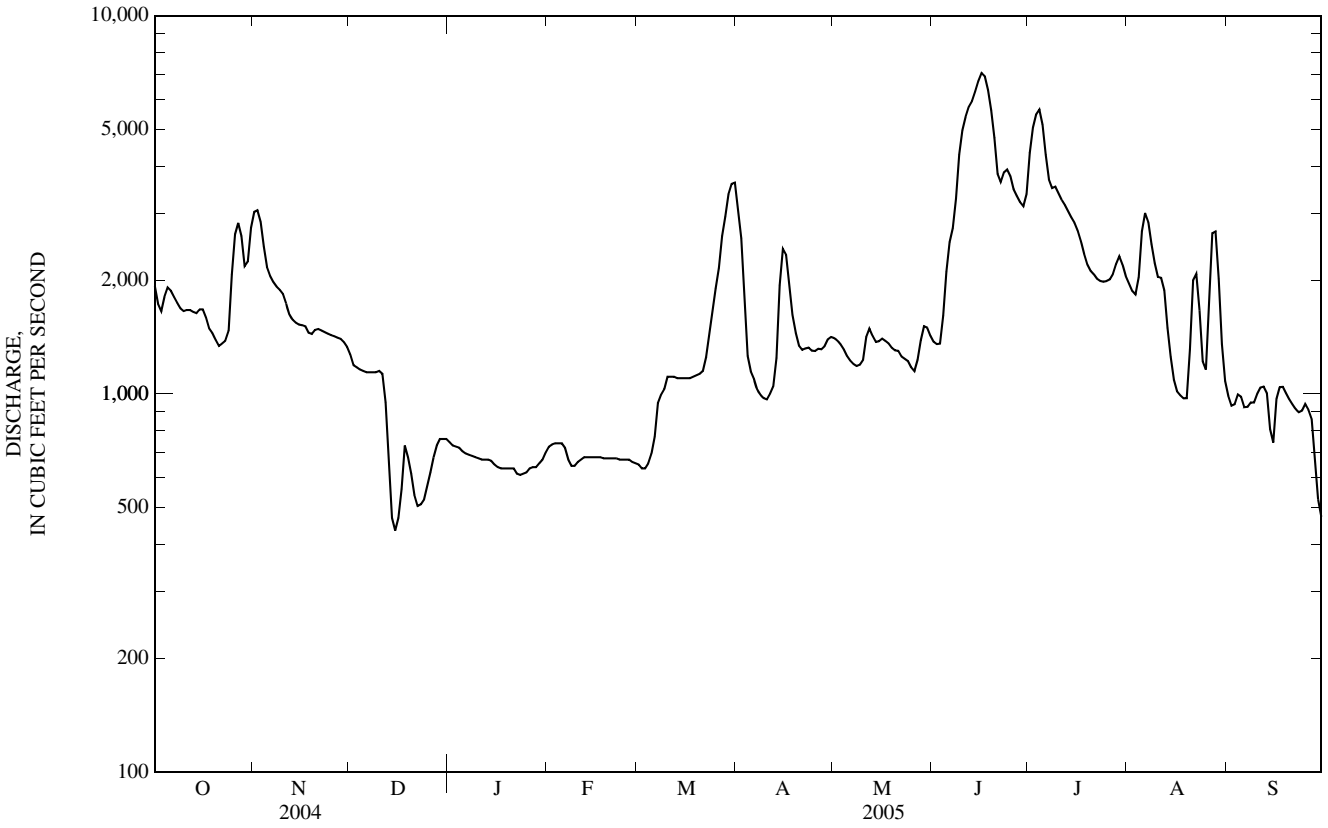
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2005, BY WATER YEAR (WY)

MEAN	463	411	363	339	398	995	2,089	1,337	1,256	1,077	609	496
MAX	1,824	1,760	932	747	1,058	2,687	9,864	3,925	4,064	3,034	2,674	2,135
(WY)	(2005)	(2005)	(1999)	(1986)	(1998)	(1995)	(1997)	(1997)	(2005)	(2005)	(1993)	(1993)
MIN	2.02	0.00	0.00	4.95	14.0	75.9	165	22.0	86.4	73.4	35.6	12.6
(WY)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1976)

05051522 RED RIVER OF THE NORTH AT HICKSON, ND—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1975 - 2005	
ANNUAL TOTAL	313,763		603,577			
ANNUAL MEAN	857		1,654		820	
HIGHEST ANNUAL MEAN					1,772	2001
LOWEST ANNUAL MEAN					53.1	1977
HIGHEST DAILY MEAN	3,130	Sep 27	7,050	Jun 16	13,100	Apr 15, 1997
LOWEST DAILY MEAN	96	Jan 30	435	Dec 15	0.00	Oct 26, 1976
ANNUAL SEVEN-DAY MINIMUM	96	Jan 30	555	Dec 20	0.00	Oct 26, 1976
MAXIMUM PEAK FLOW			a7,090	Jun 16	13,300	Apr 14, 1997
MAXIMUM PEAK STAGE			28.48	Jun 17	37.60	Apr 16, 1997
ANNUAL RUNOFF (AC-FT)	622,300		1,197,000		593,900	
10 PERCENT EXCEEDS	1,800		3,180		1,880	
50 PERCENT EXCEEDS	606		1,320		480	
90 PERCENT EXCEEDS	145		660		105	

a Gage height, 28.29 ft.
e Estimated.



05054000 RED RIVER OF THE NORTH AT FARGO, ND

LOCATION.--Lat 46°51'40", long 96°47'00", in NW¼NE¼ sec.18, T.139 N., R.48 W., Cass County, Hydrologic Unit 09020104, at waterplant on 4th Street South in Fargo, 25 mi upstream from mouth of Sheyenne River, and at mile 453.

DRAINAGE AREA.--6,800 mi^2, approximately.

PERIOD OF RECORD.--June 1901 to current year. Published as "at Moorhead, MN.", 1901. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 1308: 1902-4, 1906-7, 1910-14, 1916, 1918, 1924. WSP 1388: 1905-6, 1917-20(M), 1935(M), 1938-39(M), 1943.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 861.8 ft above National Geodetic Vertical Datum of 1929. Oct. 1, 1960, to Sept. 30, 1962, water-stage recorder at present site at datum 5.6 ft higher. See WSP 1728 or 1913 for history of changes prior to Oct. 1, 1960.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by; Orwell Reservoir, flood storage capacity, 13,300 acre-ft at elevation 1,070 ft above mean sea level, adjustment of 1912; Mud Lake, flood storage capacity, 78,600 acre-ft at elevation 981 ft above mean sea level, adjustment of 1912; Lake Traverse, flood storage capacity, 75,100 acre-ft at elevation 981 ft above mean sea level, adjustment of 1912; and numerous other controlled lakes and ponds and several powerplants. Figures of daily discharge do not include diversions to cities of Fargo and Moorhead, MN, from the Sheyenne River.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 7, 1897, reached a stage of 39.1 ft present datum, discharge, 25,000 ft^3/s at site 1.5 mi downstream.

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	1,990	3,680	e1,340	e850	e740	e705	e3,990	1,440	1,490	5,280	2,650	1,670
2	1,790	3,400	e1,280	e845	e760	e705	e3,720	1,430	1,430	6,360	2,470	1,550
3	1,670	3,130	e1,240	e835	e770	e715	2,620	1,400	1,440	7,170	2,370	1,520
4	1,680	2,840	e1,220	e820	e770	e745	1,960	1,360	1,700	7,670	2,380	1,610
5	1,800	2,480	e1,210	e800	e765	e840	1,650	1,300	2,460	7,930	2,910	1,980
6	1,830	2,210	e1,200	e785	e750	e1,000	1,470	1,250	2,670	7,940	3,440	2,110
7	1,780	2,110	e1,200	e770	e710	e1,090	1,290	1,230	2,830	7,590	3,510	1,820
8	1,720	2,030	e1,200	e760	e670	e1,140	1,160	1,240	3,330	6,940	3,220	1,700
9	1,680	1,990	e1,200	e750	e670	e1,180	1,090	1,250	4,100	6,300	2,900	1,610
10	1,670	1,960	e1,210	e740	e680	e1,230	1,060	1,240	5,220	5,830	2,690	1,570
11	1,690	1,890	e1,220	e740	e705	e1,290	1,110	1,320	6,180	5,500	2,690	1,570
12	1,690	1,790	e1,220	e740	e720	e1,300	1,140	1,530	7,300	5,310	2,680	1,540
13	1,680	1,720	e990	e730	e730	e1,290	1,220	1,540	7,800	5,190	2,380	1,480
14	1,660	1,690	e650	e720	e735	e1,250	1,650	1,490	8,360	5,050	2,020	1,330
15	1,680	1,670	e490	e720	e735	e1,240	2,330	1,430	8,980	4,870	1,710	1,130
16	1,690	1,650	e455	e710	e720	e1,250	2,560	1,440	9,390	4,670	1,500	1,240
17	1,660	1,650	e510	e710	e720	e1,250	2,270	1,460	9,670	4,340	1,490	1,440
18	1,600	1,610	e630	e720	e710	e1,250	1,890	1,460	9,730	3,930	1,730	1,480
19	1,550	1,570	e770	e720	e705	e1,270	1,670	1,430	9,250	3,570	1,490	1,470
20	1,510	1,580	e670	e720	e705	e1,290	1,520	1,430	8,460	3,340	1,800	1,470
21	1,440	1,600	e600	e710	e705	e1,320	1,430	1,470	7,400	3,170	2,740	1,470
22	1,430	1,600	e550	e680	e710	e1,400	1,410	1,460	6,670	3,020	3,190	1,370
23	1,490	1,590	e545	e670	e710	e1,540	1,420	1,430	6,180	2,900	3,050	1,260
24	1,470	1,570	e580	e670	e715	e1,700	1,400	1,370	5,910	2,810	2,450	1,170
25	1,700	1,560	e640	e675	e710	e1,860	1,370	1,330	5,650	2,770	2,320	1,130
26	2,180	1,540	e700	e680	e710	e2,120	1,380	1,260	5,060	2,740	3,290	1,090
27	2,560	1,530	e780	e680	e710	e2,600	1,380	1,250	4,590	2,790	3,880	1,060
28	2,550	1,530	e820	e685	e710	e2,960	1,360	1,370	4,380	2,940	3,800	945
29	2,230	1,520	e835	e700	---	e3,300	1,400	1,550	4,440	3,090	3,080	774
30	3,170	e1,400	e860	e715	---	e3,600	1,430	1,610	4,600	3,060	2,370	678
31	3,770	---	e850	e730	---	e3,810	---	1,560	---	2,870	1,890	---
TOTAL	58,010	58,090	27,665	22,780	20,150	48,240	51,350	43,330	166,670	146,940	80,090	42,237
MEAN	1,871	1,936	892	735	720	1,556	1,712	1,398	5,556	4,740	2,584	1,408
MAX	3,770	3,680	1,340	850	770	3,810	3,990	1,610	9,730	7,940	3,880	2,110
MIN	1,430	1,400	455	670	670	705	1,060	1,230	1,430	2,740	1,490	678
AC-FT	115,100	115,200	54,870	45,180	39,970	95,680	101,900	85,950	330,600	291,500	158,900	83,780
+	1,270	1,140	1,230	1,270	1,140	1,250	1,160	1,300	1,280	1,610	1,010	840
*	116,370	116,340	56,100	46,450	41,110	96,930	103,060	87,250	331,880	293,110	159,910	84,620

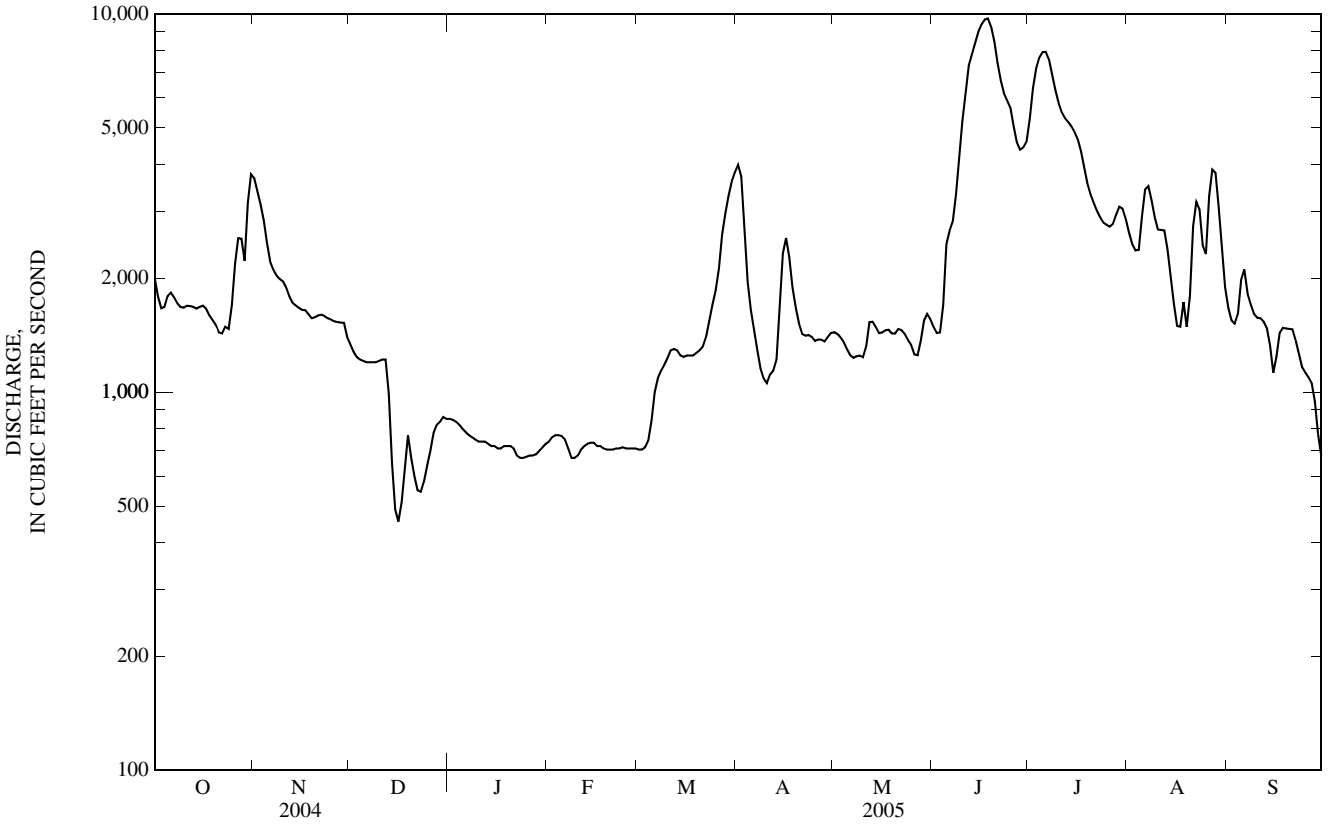
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1901 - 2005, BY WATER YEAR (WY)

MEAN	348	311	259	234	245	794	1,985	1,165	1,154	984	470	363
MAX	1,871	1,936	1,261	740	1,353	4,722	17,920	5,365	5,556	5,692	3,293	2,280
(WY)	(2005)	(2005)	(1999)	(1986)	(1998)	(1995)	(1997)	(1997)	(2005)	(1962)	(1993)	(1993)
MIN	0.00	0.00	0.00	0.00	0.18	26.8	102	8.12	2.87	0.00	0.00	0.00
(WY)	(1935)	(1937)	(1938)	(1933)	(1933)	(1937)	(1934)	(1934)	(1936)	(1934)	(1932)	(1934)

05054000 RED RIVER OF THE NORTH AT FARGO, ND—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1901 - 2005	
ANNUAL TOTAL	376,444		765,552			
ANNUAL MEAN	1,029	*(1,053)	2,097	*(2,116)	694	
HIGHEST ANNUAL MEAN					2,619	1997
LOWEST ANNUAL MEAN					17.5	1934
HIGHEST DAILY MEAN	5,380	Jun 3	9,730	Jun 18	27,800	Apr 17, 1997
LOWEST DAILY MEAN	90	Jan 26	455	Dec 16	0.00	Jul 25, 1932
ANNUAL SEVEN-DAY MINIMUM	90	Jan 26	589	Dec 15	0.00	Jul 25, 1932
MAXIMUM PEAK FLOW			9,810	Jun 18	28,000	Apr 17, 1997
MAXIMUM PEAK STAGE			28.18	Jun 18	39.72	Apr 18, 1997
ANNUAL RUNOFF (AC-FT)	746,700	*(762,700	1,518,000	*(1,533,000)	502,900	
10 PERCENT EXCEEDS	2,080		4,400		1,560	
50 PERCENT EXCEEDS	724		1,490		340	
90 PERCENT EXCEEDS	130		710		44	

\+ Diversions, in acre-ft, to cities of Fargo and Moorhead.
* Adjusted for diversions to cities of Fargo and Moorhead.
e Estimated.



05061000 BUFFALO RIVER NEAR HAWLEY, MN

LOCATION.--Lat 46°51'00", long 96°19'45", in NW¼SE¼ sec. 14, T.139 N., R.45 W., Clay County, Hydrologic Unit 09020106, near left downstream end of bridge on farm lane, 2 mi southwest of Hawley.

DRAINAGE AREA.--325 mi^2.

PERIOD OF RECORD.--March 1945 to current year. Water year 1981 (annual maximum only); March 1982 to September 1985 (no winter records).

REVISED RECORDS.--WSP 1308: 1945-46(M), 1948(M).

GAGE.--Water-stage recorder. Datum of gage is 1,111.91 ft above sea level (NGVD of 1929). Prior to Jan. 29, 1953, nonrecording gage at bridge 1,800 ft upstream at datum 3.17 ft lower.

REMARKS.--Records good except those for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 11.3 ft, present datum, spring of 1921, from information by local resident.

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	176	461	e117	e56	e53	e48	639	123	195	276	82	89
2	172	470	e113	e55	e54	e45	578	113	186	274	79	81
3	162	465	e119	e53	e55	e45	524	110	215	271	79	80
4	153	457	e104	e51	e57	44	450	104	217	290	75	79
5	144	427	e99	e50	e58	46	389	98	240	257	70	80
6	138	388	e95	e50	e57	e50	346	94	349	231	65	89
7	131	351	e92	e50	e55	e68	313	95	387	205	63	99
8	125	320	e96	e49	e54	e57	285	107	403	188	61	87
9	120	302	e98	e49	e53	e56	262	113	431	174	65	81
10	122	283	e90	e49	e54	e62	241	117	437	165	70	79
11	117	269	e86	e48	e54	e56	242	122	419	157	87	76
12	111	248	e82	e48	e56	e51	295	115	446	151	84	73
13	110	229	e80	e48	e54	e49	354	116	461	144	78	79
14	110	212	e76	e47	e52	e49	360	127	475	135	73	75
15	103	204	e75	e46	e51	e49	332	128	501	130	70	71
16	103	199	e73	e45	e51	e49	301	127	467	127	65	68
17	104	192	e72	e45	e50	e50	272	120	423	119	101	63
18	103	187	e70	e45	e50	e50	248	117	384	116	115	59
19	102	181	e67	e46	e50	e51	229	117	341	107	132	66
20	101	177	e65	e46	e49	53	215	115	315	101	113	64
21	100	172	e62	e46	e49	57	203	113	293	101	100	60
22	100	168	e60	e46	e50	68	205	113	263	96	93	57
23	139	165	e59	e47	e53	94	197	114	236	93	91	54
24	256	143	e57	e47	e56	124	167	112	206	91	89	54
25	322	e150	e56	e48	e56	136	157	126	192	93	98	55
26	340	e140	e57	e48	e55	179	166	200	180	94	120	55
27	345	e140	e57	e49	e58	240	154	252	171	97	109	53
28	344	e130	e57	e50	e54	339	146	247	162	93	100	51
29	332	e126	e57	e50	---	460	134	245	160	91	96	51
30	354	e122	e57	e51	---	544	125	239	230	87	95	49
31	418	---	e57	e52	---	622	---	220	---	84	94	---
TOTAL	5,557	7,478	2,405	1,510	1,498	3,891	8,529	4,259	9,385	4,638	2,712	2,077
MEAN	179	249	77.6	48.7	53.5	126	284	137	313	150	87.5	69.2
MAX	418	470	119	56	58	622	639	252	501	290	132	99
MIN	100	122	56	45	49	44	125	94	160	84	61	49
AC-FT	11,020	14,830	4,770	3,000	2,970	7,720	16,920	8,450	18,620	9,200	5,380	4,120
CFSM	0.55	0.77	0.24	0.15	0.16	0.39	0.87	0.42	0.96	0.46	0.27	0.21
IN.	0.64	0.86	0.28	0.17	0.17	0.45	0.98	0.49	1.07	0.53	0.31	0.24

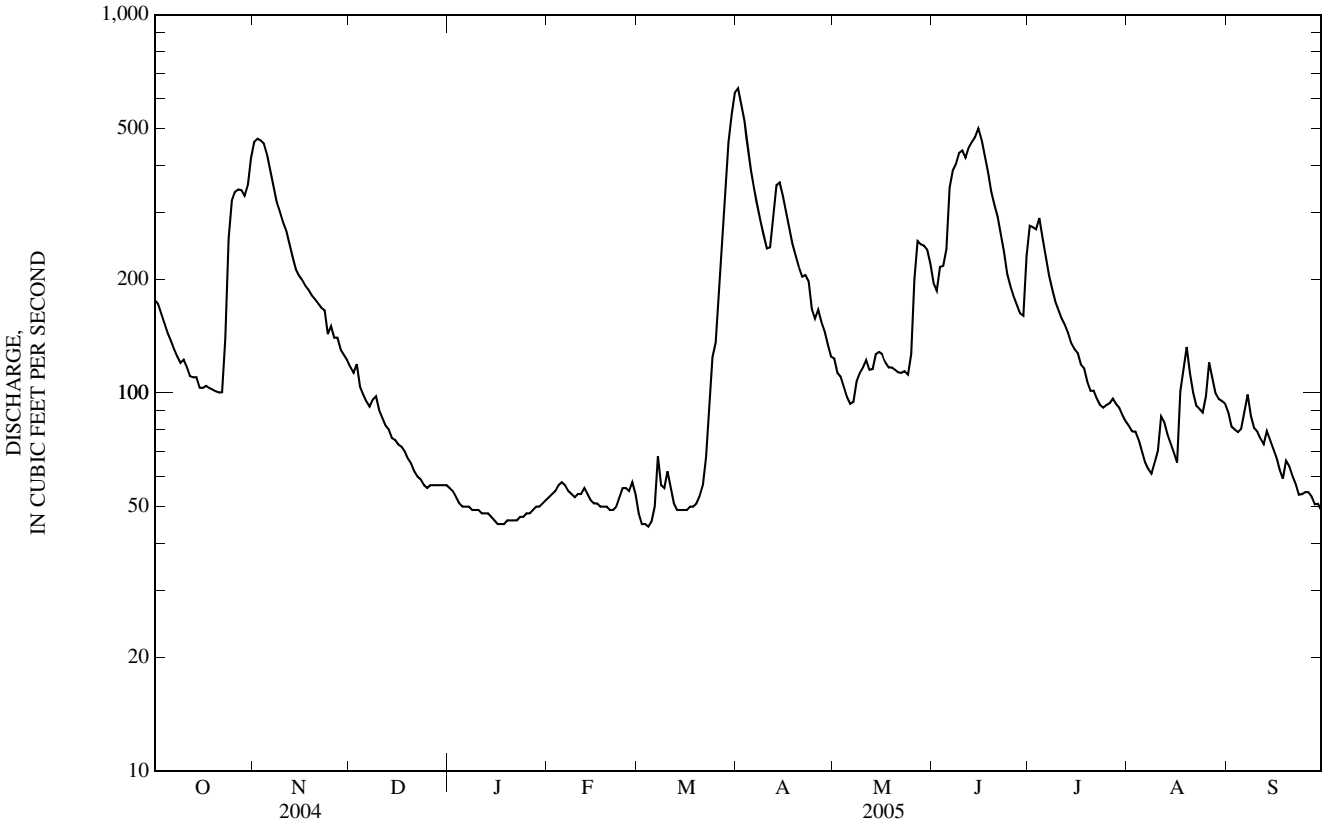
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2005, BY WATER YEAR (WY)

MEAN	47.1	49.2	31.8	25.1	28.0	94.5	269	140	122	114	53.2	44.5
MAX	179	298	127	70.2	170	434	1,036	383	589	784	472	192
(WY)	(2005)	(2001)	(1999)	(2001)	(1998)	(1966)	(1997)	(1998)	(2000)	(1993)	(1955)	(1999)
MIN	11.6	12.2	10.6	9.94	9.88	15.0	33.3	21.5	12.7	10.1	5.87	8.52
(WY)	(1979)	(1977)	(1977)	(1962)	(1949)	(1969)	(1981)	(1977)	(1977)	(1976)	(1976)	(1976)

05061000 BUFFALO RIVER NEAR HAWLEY, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1945 - 2005	
ANNUAL TOTAL	42,906		53,939			
ANNUAL MEAN	117		148		85.6	
HIGHEST ANNUAL MEAN					188	1998
LOWEST ANNUAL MEAN					16.7	1977
HIGHEST DAILY MEAN	790	Mar 27	639	Apr 1	a2,360	Apr 6, 1997
LOWEST DAILY MEAN	21	Sep 3	44	Mar 4	3.2	Aug 25, 1976
ANNUAL SEVEN-DAY MINIMUM	24	Aug 28	46	Jan 15	4.3	Aug 22, 1976
MAXIMUM PEAK FLOW			658	Mar 31	a2,360	Apr 6, 1997
MAXIMUM PEAK STAGE			7.63	Mar 31	10.86	Jun 22, 2000
INSTANTANEOUS LOW FLOW			40	Mar 4	2.8	Aug 26, 1977
ANNUAL RUNOFF (AC-FT)	85,100		107,000		61,990	
ANNUAL RUNOFF (CFSM)	0.361		0.455		0.263	
ANNUAL RUNOFF (INCHES)	4.91		6.17		3.58	
10 PERCENT EXCEEDS	274		340		196	
50 PERCENT EXCEEDS	74		101		36	
90 PERCENT EXCEEDS	27		50		14	

a Estimated daily discharge, backwater from ice.
e Estimated.



05061500 SOUTH BRANCH BUFFALO RIVER AT SABIN, MN

LOCATION--Lat 46°46'20", long 96°37'40", in SW¼ SW¼ sec. 9, T.138 N., R.47 W., Clay County, Hydrologic Unit 09020106, on left bank, on downstream side of County Road 67 bridge, 0.3 mi downstream from Stony Creek and 1 mi east of Sabin.

DRAINAGE AREA.--454 mi^2.

PERIOD OF RECORD.--March 1945 to current year. Water year 1981, annual maximum only; March 1982 to September 1985, no winter records.

REVISED RECORDS.--WSP 1308: 1949(M). WRIR 97-4249: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 902.39 ft above sea level (NGVD of 1929, levels by Soil Conservation Service). Prior to April 17, 1948, nonrecording gage at site 1 mi downstream at different datum. Aug. 17, 1948 to Oct. 4, 1989, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor.

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	75	891	e42	e14	e15	e23	625	57	147	385	26	603
2	62	892	e40	e14	e15	e23	529	56	114	627	26	449
3	53	771	e39	e14	e16	e23	416	54	93	827	23	267
4	47	613	e38	e13	e16	e23	325	52	121	791	19	167
5	41	461	e37	e13	e16	e24	265	49	159	671	18	191
6	41	327	e36	e13	e16	e25	235	46	183	486	17	218
7	40	241	e34	e13	e17	e26	217	45	296	304	15	223
8	39	195	e33	e13	e17	e27	198	44	394	216	13	258
9	36	161	e32	e13	e17	e28	178	52	446	177	17	263
10	36	136	e30	e13	e16	e29	160	61	536	145	23	225
11	34	120	e29	e13	e17	e30	163	74	707	115	39	177
12	32	105	e27	e13	e18	e31	224	92	807	89	51	132
13	32	93	e26	e13	e18	e30	388	94	850	71	49	94
14	33	86	e24	e13	e19	e30	491	100	1,070	57	40	74
15	35	83	e23	e13	e20	e29	518	132	1,280	46	29	67
16	38	78	e22	e13	e20	e28	462	193	1,440	38	19	61
17	43	76	e21	e12	e20	e29	345	202	1,360	33	16	51
18	49	76	e20	e12	e20	e29	249	171	1,100	29	37	46
19	52	75	e20	e12	e20	e30	201	142	843	24	121	43
20	52	72	e19	e12	e20	e32	173	122	627	20	210	46
21	55	72	e18	e12	e21	e37	157	106	403	19	280	41
22	57	e70	e16	e13	e21	e43	135	88	235	16	338	38
23	69	e67	e16	e13	e22	e62	117	78	156	16	383	34
24	188	e58	e15	e13	e22	e90	103	68	113	15	349	33
25	386	e63	e15	e13	e23	e140	89	60	84	17	252	32
26	487	e59	e15	e14	e23	e190	80	64	67	21	323	38
27	550	e54	e15	e14	e23	e350	73	145	88	26	455	49
28	544	e49	e15	e14	e23	658	67	232	196	29	670	54
29	470	e46	e15	e14	---	763	63	238	186	29	918	54
30	570	e44	e14	e14	---	804	59	209	216	27	891	46
31	746	---	e14	e15	---	708	---	181	---	28	750	---
TOTAL	4,992	6,134	760	408	531	4,394	7,305	3,307	14,317	5,394	6,417	4,074
MEAN	161	204	24.5	13.2	19.0	142	244	107	477	174	207	136
MAX	746	892	42	15	23	804	625	238	1,440	827	918	603
MIN	32	44	14	12	15	23	59	44	67	15	13	32
AC-FT	9,900	12,170	1,510	809	1,050	8,720	14,490	6,560	28,400	10,700	12,730	8,080
CFSM	0.35	0.45	0.05	0.03	0.04	0.31	0.54	0.23	1.05	0.38	0.46	0.30
IN.	0.41	0.50	0.06	0.03	0.04	0.36	0.60	0.27	1.17	0.44	0.53	0.33

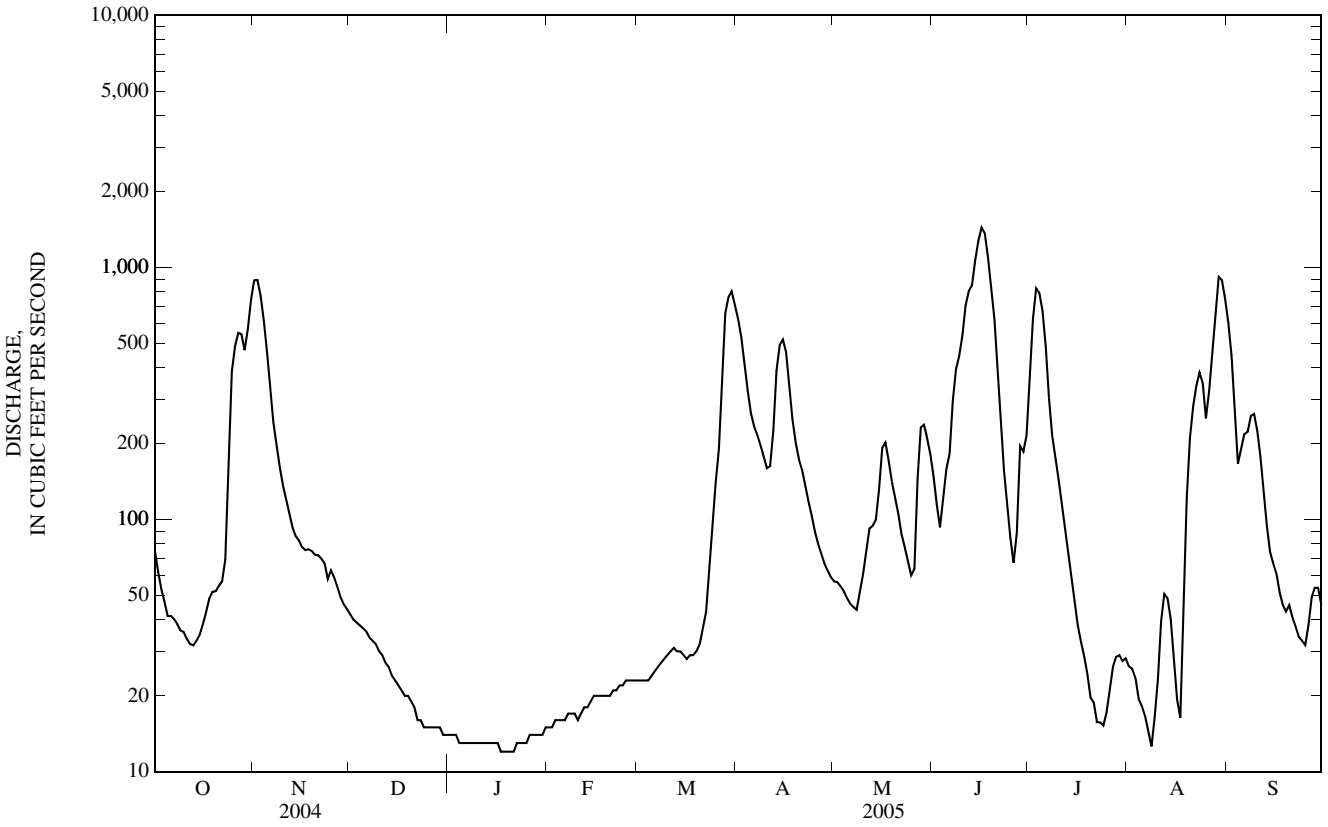
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2005, BY WATER YEAR (WY)

MEAN	22.1	24.9	8.53	3.21	7.12	111	283	95.2	110	87.5	15.8	23.3
MAX	161	204	66.8	18.5	205	581	1,683	580	1,068	1,112	207	266
(WY)	(2005)	(2005)	(1999)	(2001)	(1998)	(1966)	(1997)	(1962)	(1962)	(1975)	(2005)	(2004)
MIN	0.02	2.05	0.01	0.00	0.00	0.00	27.9	8.28	1.30	0.00	0.00	0.00
(WY)	(1977)	(1977)	(1961)	(1946)	(1946)	(1951)	(1973)	(1980)	(1976)	(1988)	(1976)	(1976)

05061500 SOUTH BRANCH BUFFALO RIVER AT SABIN, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1945 - 2005	
ANNUAL TOTAL	42,438.7		58,033			
ANNUAL MEAN	116		159		a66.9	
HIGHEST ANNUAL MEAN					198	1962
LOWEST ANNUAL MEAN					12.2	1977
HIGHEST DAILY MEAN	1,110	Jun 2	1,440	Jun 16	8,200	Jul 1, 1975
LOWEST DAILY MEAN	6.7	Jan 29	12	Jan 17-21, Aug 8	c0.00	Dec 13, 1945
ANNUAL SEVEN-DAY MINIMUM	6.7	Feb 8	12	Jan 15	0.00	Dec 13, 1945
MAXIMUM PEAK FLOW			1,470	Jun 16	8,500	Jul 2, 1975
MAXIMUM PEAK STAGE			13.60	Jun 16	19.90	Jul 2, 1975
INSTANTANEOUS LOW FLOW			b12	Jan 17, Aug 8	c0.00	Dec 13, 1945
ANNUAL RUNOFF (AC-FT)	84,180		115,100		48,460	
ANNUAL RUNOFF (CFSM)	0.255		0.350		0.147	
ANNUAL RUNOFF (INCHES)	3.48		4.76		2.00	
10 PERCENT EXCEEDS	346		489		125	
50 PERCENT EXCEEDS	43		52		9.3	
90 PERCENT EXCEEDS	7.7		15		0.10	

a Median of annual mean discharges is 54 ft^3/s.
b Estimated daily discharge, Jan. 17-21 (backwater from ice).
c Many days, several years.
e Estimated.



05062000 BUFFALO RIVER NEAR DILWORTH, MN

LOCATION--Lat 46°57'40", long 96°39'40", in SW¼ SE¼ sec. 6, T.140 N., R.47 W., Clay County, Hydrologic Unit 09020106, on left bank, at County Road 94 bridge, 4.5 mi southeast of Kragnes, 6.5 mi northeast of Dilworth, and 9 mi downstream from South Branch.

DRAINAGE AREA.--975 mi^2.

PERIOD OF RECORD.--March 1931 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 1308: 1931(M).

GAGE.--Water-stage recorder. Datum of gage is 878.31 ft above sea level (NGVD of 1929, levels by U.S. Army Corps of Engineers). Prior to April 5, 1937, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor.

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	304	1,770	e280	e67	e67	e82	1,810	253	485	571	119	970
2	279	1,720	e270	e66	e68	e83	1,600	241	435	688	115	862
3	261	1,690	e260	e65	e69	e84	1,430	228	389	916	111	695
4	240	1,640	e250	e63	e70	e84	1,260	213	382	1,090	109	500
5	222	1,530	e240	e62	e71	e85	1,070	202	398	1,180	100	352
6	207	1,350	e230	e61	e72	e86	876	184	449	1,150	91	331
7	193	1,120	e230	e61	e73	e89	733	168	545	1,010	84	355
8	184	871	e230	e60	e73	e93	648	164	687	761	78	357
9	174	697	e225	e60	e74	e97	590	170	824	546	75	365
10	165	597	e215	e59	e74	e100	540	278	887	440	76	372
11	160	533	e190	e59	e74	e102	507	310	947	384	77	350
12	161	486	e175	e59	e75	e103	543	283	1,200	344	96	308
13	153	448	e150	e59	e76	e104	709	287	1,350	310	124	270
14	146	411	e140	e58	e77	e104	e865	312	1,470	280	135	238
15	146	383	e120	e58	e78	e104	893	367	1,590	254	128	209
16	143	366	e110	e58	e78	e103	885	380	1,710	231	112	183
17	141	354	e100	e58	e79	e102	894	394	1,850	214	105	166
18	142	343	e94	e59	e79	e101	824	401	1,950	189	232	149
19	148	334	e87	e59	e79	e103	680	375	1,920	174	265	132
20	153	329	e81	e59	e79	e105	573	340	1,770	160	385	123
21	154	320	e76	e59	e79	e115	508	315	1,550	142	397	124
22	156	313	e74	e60	e79	e150	465	297	1,220	132	399	119
23	166	307	e72	e60	e79	e210	434	276	823	131	424	111
24	243	283	e71	e60	e79	e290	409	260	555	121	457	103
25	400	302	e70	e60	e80	e340	372	248	432	118	464	98
26	615	e310	e70	e61	e80	e400	337	248	371	119	601	96
27	750	e305	e69	e61	e81	e520	323	289	339	122	742	95
28	835	e300	e69	e62	e81	e700	307	390	319	130	690	100
29	890	e295	e69	e63	---	e900	289	502	378	137	727	108
30	1,210	e285	e69	e64	---	e1,300	272	538	514	131	880	113
31	1,660	---	e69	e66	---	1,690	---	522	---	126	980	---
TOTAL	10,801	19,992	4,455	1,886	2,123	8,529	21,646	9,435	27,739	12,301	9,378	8,354
MEAN	348	666	144	60.8	75.8	275	722	304	925	397	303	278
MAX	1,660	1,770	280	67	81	1,690	1,810	538	1,950	1,180	980	970
MIN	141	283	69	58	67	82	272	164	319	118	75	95
AC-FT	21,420	39,650	8,840	3,740	4,210	16,920	42,930	18,710	55,020	24,400	18,600	16,570
CFSM	0.36	0.68	0.15	0.06	0.08	0.28	0.74	0.31	0.95	0.41	0.31	0.29
IN.	0.41	0.76	0.17	0.07	0.08	0.33	0.83	0.36	1.06	0.47	0.36	0.32

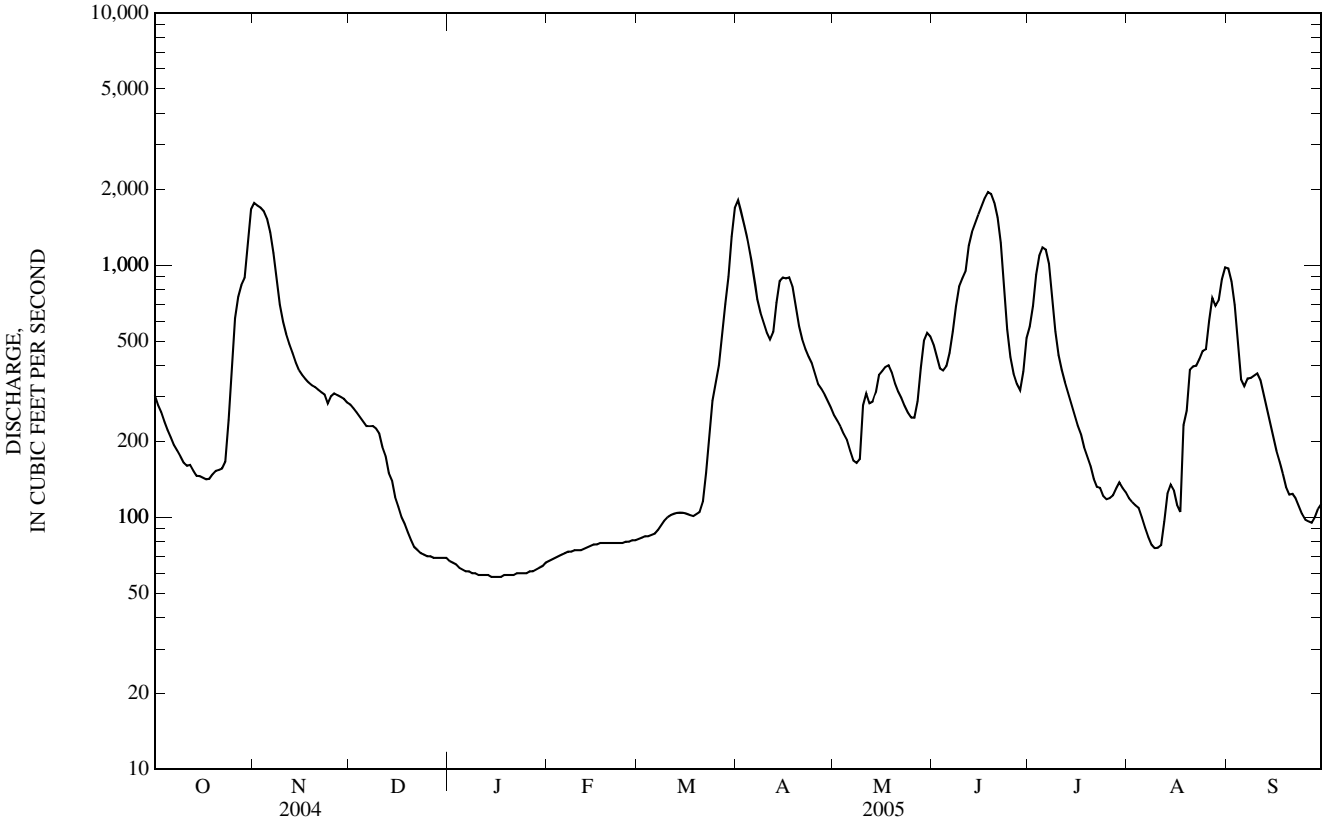
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2005, BY WATER YEAR (WY)

MEAN	67.3	73.5	40.4	25.5	28.9	202	601	254	242	217	77.0	71.2
MAX	348	666	240	99.0	285	1,308	3,412	1,144	2,138	2,814	910	517
(WY)	(2005)	(2005)	(1999)	(2001)	(1998)	(1966)	(1997)	(1998)	(1962)	(1975)	(1993)	(1944)
MIN	5.48	8.74	4.75	0.87	0.76	2.26	33.5	27.2	15.1	2.23	0.00	0.79
(WY)	(1940)	(1937)	(1938)	(1940)	(1940)	(1940)	(1931)	(1931)	(1934)	(1936)	(1936)	(1936)

05062000 BUFFALO RIVER NEAR DILWORTH, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1931 - 2005	
ANNUAL TOTAL	103,855		136,639			
ANNUAL MEAN	284		374		160	
HIGHEST ANNUAL MEAN					477	1998
LOWEST ANNUAL MEAN					25.6	1934
HIGHEST DAILY MEAN	1,770	Nov 1	1,950	Jun 18	13,500	Jul 2, 1975
LOWEST DAILY MEAN	34	Jan 29	58	Jan 14-17	a0.00	Jul 22, 1936
ANNUAL SEVEN-DAY MINIMUM	34	Jan 27	58	Jan 11	0.00	Jul 28, 1936
MAXIMUM PEAK FLOW			1,960	Jun 18	13,600	Jul 2, 1975
MAXIMUM PEAK STAGE			16.24	Jun 18	27.10	Jul 2, 1975
INSTANTANEOUS LOW FLOW			b58	Jan 14	a0.00	Jul 22, 1936
ANNUAL RUNOFF (AC-FT)	206,000		271,000		115,800	
ANNUAL RUNOFF (CFSM)	0.291		0.384		0.164	
ANNUAL RUNOFF (INCHES)	3.96		5.21		2.23	
10 PERCENT EXCEEDS	807		896		350	
50 PERCENT EXCEEDS	166		231		44	
90 PERCENT EXCEEDS	38		69		10	

a Occurred many days in 1936.
b Estimated daily discharge, backwater from ice.
e Estimated.



05062500 WILD RICE RIVER AT TWIN VALLEY, MN

LOCATION.--Lat 47°16'00", long 96°14'40", in NW¼NE¼ sec. 27, T.144 N., R.44W., Norman County, Hydrologic Unit 09020108, on left bank, 100 ft upstream from County Highway 29 bridge, 0.8 mi northeast of Twin Valley, and 2 mi upstream from small tributary.

DRAINAGE AREA.--934 mi^2.

PERIOD OF RECORD.--June 1909 to September 1917, July 1930 to September 1983, October 1989 to current year. Monthly discharge only for some periods, published in WSP 1308. October 1983 to September 1989, annual maximums only.

REVISED RECORDS.--WSP 955: 1941. WSP 1308: 1915(M), 1917(M).

GAGE.--Water-stage recorder. Datum of gage is 1,008.16 ft above sea level (NGVD of 1929, U.S. Army Corps of Engineers bench mark). June 1909 to September 1917, nonrecording gage at site 0.2 mi downstream at different datum. July 23, 1930 to Nov. 24, 1934, nonrecording gage at highway bridge 100 ft downstream from present site at present datum. Nov. 25, 1934 to Aug. 2, 1950, water-stage recorder 80 ft upstream from present site at present datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow slightly regulated by Rice Lake and many other small lakes above 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	250	3,080	487	e189	e150	e122	e2,100	512	1,120	493	111	45
2	237	e2,740	478	e187	e156	e123	1,950	485	1,030	513	106	44
3	223	e2,250	478	e185	e155	e126	1,690	463	1,020	497	101	43
4	204	e1,930	e470	e182	e156	e132	1,460	441	1,070	457	94	42
5	188	1,730	e460	e180	e146	e145	1,330	419	1,190	429	89	42
6	179	1,550	e448	e178	e136	e142	1,240	400	1,530	404	82	170
7	180	1,420	436	e177	e130	e136	1,160	385	1,520	380	79	126
8	171	1,320	e430	e176	e130	e137	1,100	375	1,550	361	69	92
9	160	1,200	422	e175	e135	e143	1,030	396	1,610	346	66	67
10	154	1,110	411	e173	e139	e143	979	1,240	1,530	330	64	359
11	147	1,030	405	e170	e141	e141	938	773	1,420	304	62	273
12	144	953	370	e165	e143	e137	923	652	1,690	286	61	146
13	139	883	249	e158	e141	e135	963	578	1,750	276	59	111
14	133	841	e255	e152	e138	e136	1,000	567	1,740	259	56	95
15	131	802	e250	e147	e135	e136	1,010	573	1,710	235	54	84
16	137	776	e245	e144	e132	e137	1,030	542	1,600	227	52	70
17	144	746	e250	e144	e130	e139	1,010	484	1,410	222	52	62
18	145	719	e240	e145	e129	e142	951	465	1,250	211	52	54
19	145	717	e235	e144	e128	e146	901	465	1,100	205	59	50
20	145	739	e232	e143	e126	e151	858	462	989	198	62	46
21	146	748	e210	e142	e124	e158	821	463	909	190	58	43
22	148	732	e205	e141	e123	e163	787	457	829	181	53	41
23	207	709	e200	e141	e122	e170	753	450	752	167	48	37
24	451	638	e197	e142	e122	e174	722	444	675	157	45	36
25	755	553	e195	e141	e122	e195	690	403	600	152	47	37
26	736	528	e192	e139	e122	e245	659	563	537	147	183	37
27	687	e515	e189	e139	e122	e350	630	1,060	509	139	131	35
28	652	e508	e189	e140	e122	e512	602	1,140	475	136	76	37
29	644	e500	e191	e141	---	e1,100	573	1,190	450	129	56	35
30	2,140	e495	e191	e143	---	e2,350	540	1,210	457	122	48	34
31	3,020	---	e190	e146	---	e2,290	---	1,190	---	115	44	---
TOTAL	12,942	32,462	9,400	4,869	3,755	10,456	30,400	19,247	34,022	8,268	2,219	2,393
MEAN	417	1,082	303	157	134	337	1,013	621	1,134	267	71.6	79.8
MAX	3,020	3,080	487	189	156	2,350	2,100	1,240	1,750	513	183	359
MIN	131	495	189	139	122	122	540	375	450	115	44	34
AC-FT	25,670	64,390	18,640	9,660	7,450	20,740	60,300	38,180	67,480	16,400	4,400	4,750
CFSM	0.45	1.16	0.32	0.17	0.14	0.36	1.08	0.66	1.21	0.29	0.08	0.09
IN.	0.52	1.29	0.37	0.19	0.15	0.42	1.21	0.77	1.36	0.33	0.09	0.10

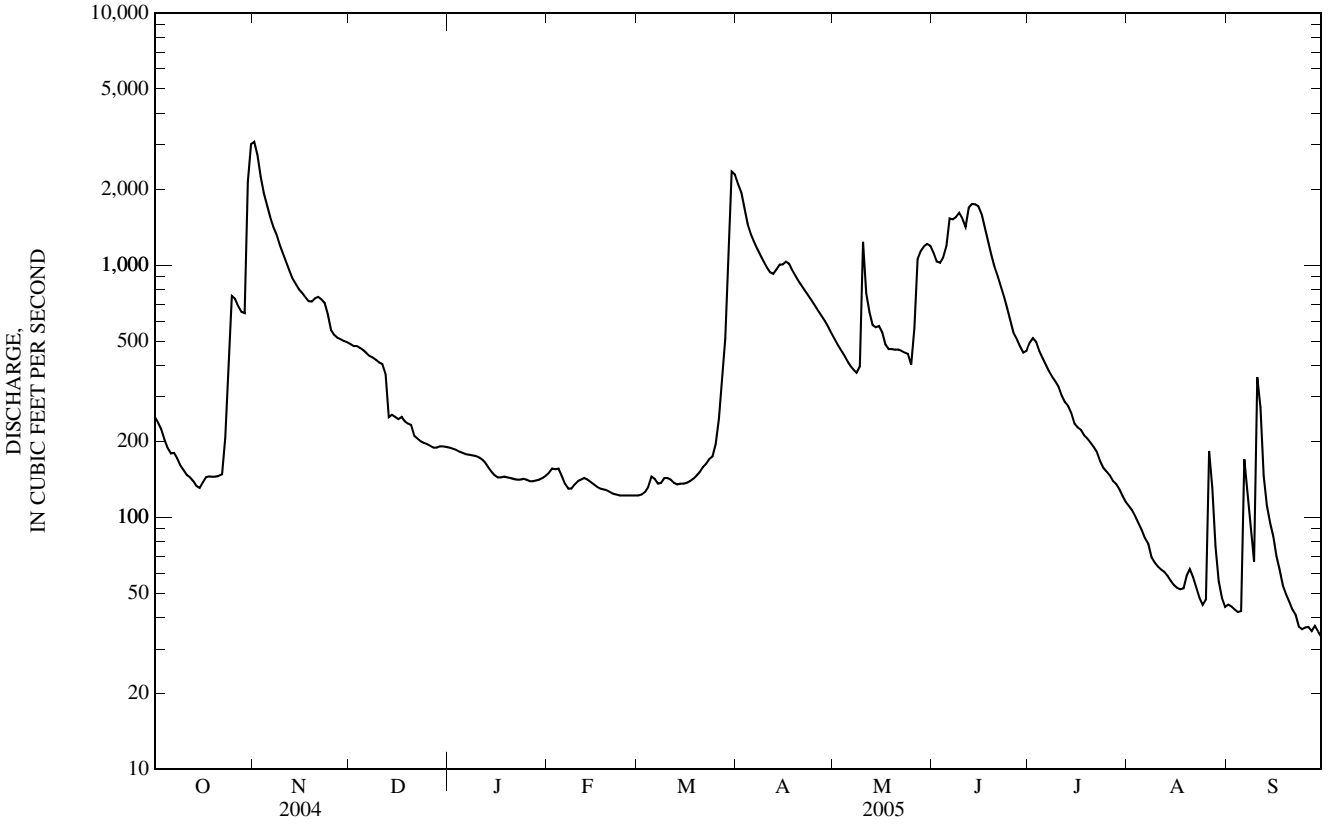
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 2005, BY WATER YEAR (WY)

MEAN	104	114	69.9	51.2	50.4	162	628	447	388	281	118	102
MAX	614	1,082	343	200	336	828	2,471	2,259	3,441	1,926	1,024	842
(WY)	(1974)	(2005)	(2001)	(2001)	(1998)	(1995)	(1997)	(1950)	(2002)	(1909)	(1993)	(1999)
MIN	6.10	9.31	6.00	4.00	4.00	12.8	73.8	30.9	26.4	8.04	3.02	2.96
(WY)	(1933)	(1933)	(1933)	(1933)	(1933)	(1940)	(1931)	(1977)	(1977)	(1934)	(1932)	(1936)

05062500 WILD RICE RIVER AT TWIN VALLEY, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1909 - 2005	
ANNUAL TOTAL	122,544		170,433			
ANNUAL MEAN	335		467		a207	
HIGHEST ANNUAL MEAN					656	2002
LOWEST ANNUAL MEAN					22.7	1977
HIGHEST DAILY MEAN	3,080	Nov 1	3,080	Nov 1	16,600	Jun 24, 2002
LOWEST DAILY MEAN	29	Aug 28	34	Sep 30	1.1	Aug 13, 1932
ANNUAL SEVEN-DAY MINIMUM	31	Aug 22	36	Sep 24	1.3	Aug 11, 1932
MAXIMUM PEAK FLOW			3,140	Nov 1	20,300	Jun 24, 2002
MAXIMUM PEAK STAGE			9.45	Nov 1	b17.96	Jun 24, 2002
INSTANTANEOUS LOW FLOW					0.50	Nov 4, 1939
ANNUAL RUNOFF (AC-FT)	243,100		338,100		149,900	
ANNUAL RUNOFF (CFSM)	0.358		0.500		0.222	
ANNUAL RUNOFF (INCHES)	4.88		6.79		3.01	
10 PERCENT EXCEEDS	737		1,190		520	
50 PERCENT EXCEEDS	189		204		78	
90 PERCENT EXCEEDS	56		62		17	

a Median of annual mean discharges is 180 ft^3/s.
b From floodmark. Gage-height 20.00 ft., July 22, 1909; site and datum then in use.
e Estimated.



05063398 SOUTH BRANCH WILD RICE RIVER AT CO. RD. 27 NR FELTON, MN

LOCATION.--Lat 47°06'48", long 96°23'09", in NE¼SE¼ sec. 16, T.142 N., R.45 W., Clay County, Hydrologic Unit 09020108, on left bank 30 ft downstream from County Road 27 bridge and 6.0 miles northeast of Felton.

PERIOD OF RECORD.--Aug. 16, 2004 to current year.

GAGE.--Water-stage recorder. Datum of gage is 954.03 ft (NGVD of 1929).

REMARKS.--Records fair except those for estimated daily discharges, which are poor.

COOPERATION.--Red River Watershed Management Board.

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

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
AUG 16	4.9	AUG 24	4.1	SEP 01	3.9	SEP 09	106	SEP 17	32	SEP 25	67
AUG 17	4.7	AUG 25	3.7	SEP 02	3.8	SEP 10	106	SEP 18	31	SEP 26	61
AUG 18	5.1	AUG 26	4.0	SEP 03	3.5	SEP 11	110	SEP 19	26	SEP 27	61
AUG 19	4.7	AUG 27	3.7	SEP 04	4.9	SEP 12	100	SEP 20	26	SEP 28	56
AUG 20	4.4	AUG 28	3.6	SEP 05	29	SEP 13	56	SEP 21	34	SEP 29	41
AUG 21	4.2	AUG 29	4.6	SEP 06	364	SEP 14	32	SEP 22	36	SEP 30	31
AUG 22	4.1	AUG 30	4.8	SEP 07	296	SEP 15	27	SEP 23	46		
AUG 23	3.9	AUG 31	4.6	SEP 08	142	SEP 16	27	SEP 24	68		

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	25	325	e22	e8.6	e6.5	e6.6	402	32	78	190	5.6	16
2	20	242	e21	e8.3	e6.6	e6.6	326	29	54	131	5.1	12
3	18	208	e20	e8.1	e6.6	e6.7	266	30	90	105	4.8	11
4	17	185	e20	e7.8	e6.6	e6.8	224	29	99	85	4.5	9.5
5	16	162	e19	e7.6	e6.5	e7.0	187	27	193	72	4.4	11
6	15	132	e19	e7.4	e6.4	e7.4	143	33	398	64	4.7	35
7	14	96	e19	e7.3	e6.3	e8.0	118	28	202	55	4.3	32
8	14	80	e18	e7.2	e6.2	e7.7	105	26	300	52	4.1	23
9	16	69	e18	e7.1	e6.2	e7.6	94	102	296	44	4.7	20
10	16	62	e17	e7.0	e6.3	e7.5	80	315	216	39	4.4	20
11	13	58	e17	e6.8	e6.5	e7.1	101	97	227	34	4.7	16
12	12	e51	e16	e6.7	e6.8	e7.0	204	67	629	31	4.6	14
13	13	e46	e16	e6.6	e6.8	e7.0	274	63	379	26	4.1	11
14	14	45	e16	e6.5	e6.7	e7.0	157	77	721	23	3.9	9.1
15	16	41	e15	e6.4	e6.6	e7.0	123	70	445	21	3.8	10
16	17	45	e15	e6.3	e6.4	e7.1	108	58	302	18	3.6	9.3
17	16	40	e15	e6.2	e6.4	e7.2	93	49	244	15	9.3	8.2
18	19	39	e14	e6.2	e6.4	e7.2	79	44	211	13	28	7.6
19	22	37	e14	e6.2	e6.4	e7.5	69	41	180	12	52	7.4
20	23	38	e13	e6.2	e6.4	e9.0	64	39	159	11	52	6.6
21	27	e37	e13	e6.1	e6.5	e13	57	37	116	9.6	32	5.6
22	22	e35	e12	e6.1	e6.5	e20	53	32	92	9.3	20	5.5
23	56	e33	e12	e6.1	e6.5	e35	51	29	79	12	15	5.1
24	175	e31	e11	e6.1	e6.5	e58	48	28	67	13	12	5.0
25	124	e29	e10	e6.2	e6.5	e100	45	29	61	11	13	5.3
26	100	e28	e10	e6.2	e6.6	e160	45	51	58	11	136	5.3
27	95	e26	e10	e6.2	e6.6	e260	44	74	62	8.7	70	5.2
28	99	e25	e9.8	e6.2	e6.6	e450	41	91	57	8.4	33	4.8
29	110	e24	e9.3	e6.2	---	e710	38	99	81	7.6	20	4.9
30	936	e23	e9.1	e6.3	---	e570	36	100	144	6.9	16	5.1
31	695	---	e8.8	e6.4	---	484	---	97	---	6.4	15	---
TOTAL	2,775	2,292	459.0	208.6	181.9	3,005.0	3,675	1,923	6,240	1,144.9	594.6	340.5
MEAN	89.5	76.4	14.8	6.73	6.50	96.9	122	62.0	208	36.9	19.2	11.3
MAX	936	325	22	8.6	6.8	710	402	315	721	190	136	35
MIN	12	23	8.8	6.1	6.2	6.6	36	26	54	6.4	3.6	4.8
AC-FT	5,500	4,550	910	414	361	5,960	7,290	3,810	12,380	2,270	1,180	675

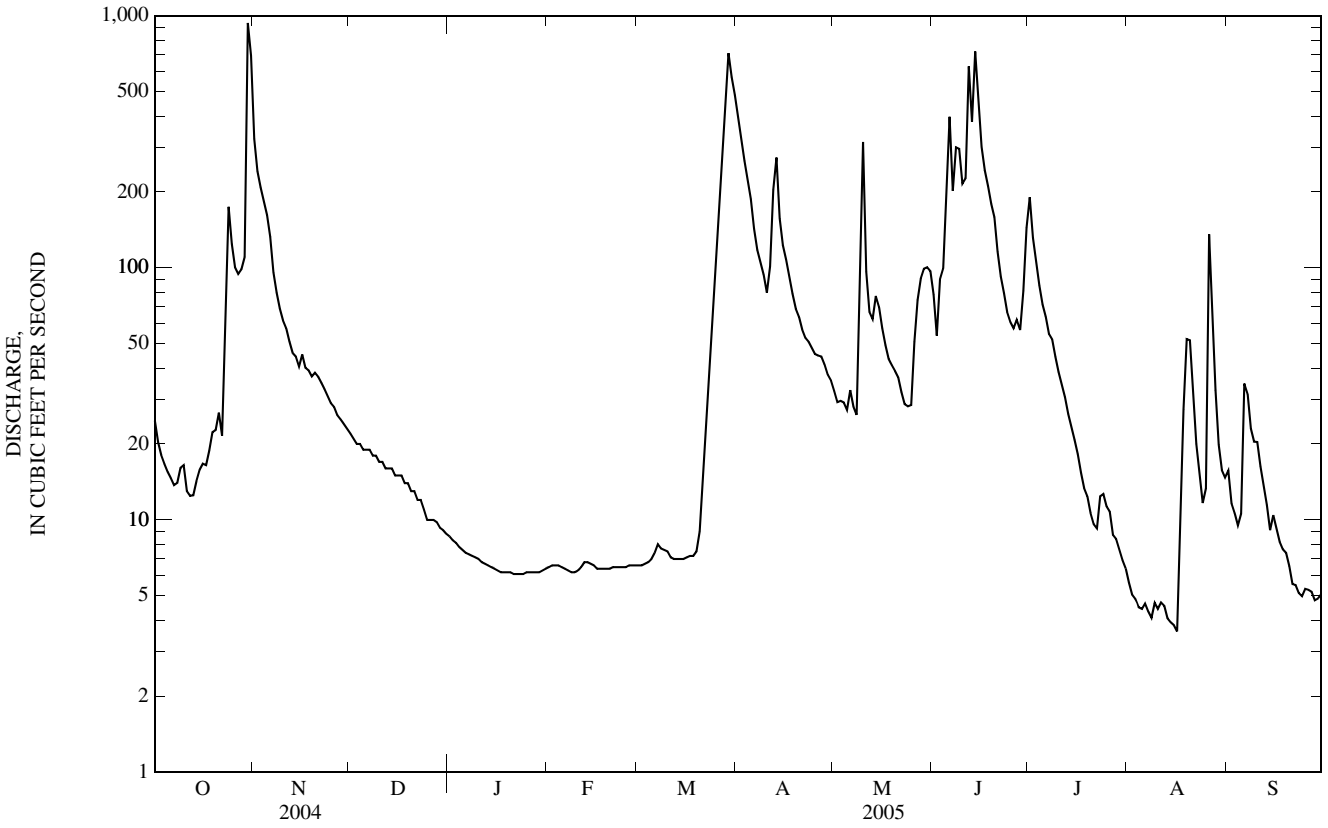
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2005, BY WATER YEAR (WY)

MEAN	89.5	76.4	14.8	6.73	6.50	96.9	122	62.0	208	36.9	19.2	39.5
MAX	89.5	76.4	14.8	6.73	6.50	96.9	122	62.0	208	36.9	19.2	67.6
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2004)
MIN	89.5	76.4	14.8	6.73	6.50	96.9	122	62.0	208	36.9	19.2	11.4
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)

05063398 SOUTH BRANCH WILD RICE RIVER AT CO. RD. 27 NR FELTON, MN—Continued

SUMMARY STATISTICS	FOR 2005 WATER YEAR		WATER YEARS 2004 - 2005	
ANNUAL TOTAL	22,839.5			
ANNUAL MEAN	62.6		62.6	
HIGHEST ANNUAL MEAN			62.6	2005
LOWEST ANNUAL MEAN			62.6	2005
HIGHEST DAILY MEAN	936	Oct 30	936	Oct 30, 2004
LOWEST DAILY MEAN	3.6	Aug 16	3.5	Sep 3, 2004
ANNUAL SEVEN-DAY MINIMUM	4.2	Aug 10	3.9	Aug 22, 2004
MAXIMUM PEAK FLOW	1,340	Oct 30	1,340	Oct 30, 2004
MAXIMUM PEAK STAGE	7.83	Oct 30	7.83	Oct 30, 2004
INSTANTANEOUS LOW FLOW	3.4	Aug 16	3.4	Aug 27, 2004
ANNUAL RUNOFF (AC-FT)	45,300		45,330	
10 PERCENT EXCEEDS	167		167	
50 PERCENT EXCEEDS	19		19	
90 PERCENT EXCEEDS	6.2		6.2	

e Estimated.



05064000 WILD RICE RIVER AT HENDRUM, MN

LOCATION.--Lat 47°16'05", long 96°47'50", in SE¼SE¼ sec. 19, T.144 N., R.48 W., Norman County, Hydrologic Unit 09020108, on right bank 30 ft downstream from County Highway 25 bridge, 0.5 mi east of Hendrum and 4 mi upstream from mouth.

DRAINAGE AREA.--1,560 mi^2.

PERIOD OF RECORD.--March 1944 to September 1984 and May 1985 to current year. Operated as a high-flow partial-record station October 1984 to April 1985.

REVISED RECORDS.--WSP 1728: 1958.

GAGE.--Water-stage recorder. Datum of gage is 836.75 ft above sea level (NGVD of 1929, levels by U.S. Army Corps of Engineers). Prior to July 18, 1989, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Large part of high flow diverted into Marsh River Basin at overflow section 3.5 mi east of Ada. Another diversion into the Marsh River basin formed in 1947, 1.5 mi southeast of Ada and diverted water at all stages 1947-51, after which it was closed except for a small regulated flow diverted for abatement of contamination from Ada sewage plant effluent. Amount of diversion not known.

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	330	4,110	e590	e220	e170	e148	4,310	532	1,280	e530	141	122
2	285	4,420	e580	e216	e174	e149	3,920	515	1,190	e530	137	109
3	258	4,450	e580	e212	e178	e150	3,650	485	1,070	e525	133	109
4	240	4,250	e570	e208	e176	e153	3,210	465	1,080	e515	126	103
5	218	3,820	e560	e204	e178	e158	2,650	439	1,170	e500	120	113
6	201	3,290	e550	e200	e172	e164	2,220	414	1,240	e485	115	994
7	188	2,700	e535	e196	e164	e160	1,870	399	1,710	e485	111	1,410
8	181	2,180	e530	e193	e152	e159	1,580	394	1,680	504	106	1,020
9	178	1,760	e520	e190	e154	e160	1,400	394	1,680	518	104	665
10	168	1,500	e510	e187	e156	e164	1,280	536	1,770	489	101	554
11	163	1,340	e500	e184	e160	e162	1,210	1,370	1,640	436	99	1,060
12	156	1,230	e490	e181	e163	e158	1,320	1,110	1,840	400	99	875
13	149	1,150	e470	e178	e165	e156	1,730	849	2,540	388	95	496
14	145	1,070	e405	e173	e163	e154	2,090	768	3,080	405	91	329
15	145	1,020	e350	e167	e160	e154	1,900	780	3,490	455	88	245
16	143	970	e340	e160	e158	e155	1,670	769	3,480	424	86	195
17	145	927	e335	e158	e156	e157	1,630	703	3,150	374	89	158
18	153	879	e330	e158	e155	e160	1,450	619	2,720	325	681	129
19	160	836	e330	e157	e153	e163	1,220	567	2,260	283	709	107
20	163	825	e325	e156	e152	e166	1,120	548	1,820	252	561	92
21	162	824	e320	e153	e151	e171	1,040	546	1,460	226	358	86
22	167	830	e275	e154	e150	e177	984	531	1,290	206	241	82
23	176	829	e240	e153	e149	e184	920	515	1,100	195	175	75
24	240	718	e235	e154	e149	e191	848	500	e876	185	137	71
25	611	e650	e232	e155	e149	e220	789	486	e710	188	135	67
26	933	e630	e228	e154	e148	e270	741	451	e590	187	473	66
27	967	e615	e225	e153	e148	e360	692	577	e530	176	707	66
28	912	e610	e223	e155	e148	e540	651	1,030	e505	170	649	66
29	881	e600	e223	e158	---	e1,000	603	1,230	e510	166	404	65
30	1,600	e595	e224	e161	---	e3,120	558	1,300	e520	160	240	67
31	3,230	---	e224	e165	---	4,250	---	1,320	---	151	154	---
TOTAL	13,648	49,628	12,049	5,413	4,451	13,633	49,256	21,142	47,981	10,833	7,465	9,596
MEAN	440	1,654	389	175	159	440	1,642	682	1,599	349	241	320
MAX	3,230	4,450	590	220	178	4,250	4,310	1,370	3,490	530	709	1,410
MIN	143	595	223	153	148	148	558	394	505	151	86	65
AC-FT	27,070	98,440	23,900	10,740	8,830	27,040	97,700	41,940	95,170	21,490	14,810	19,030
CFSM	0.28	1.06	0.25	0.11	0.10	0.28	1.05	0.44	1.03	0.22	0.15	0.21
IN.	0.33	1.18	0.29	0.13	0.11	0.33	1.17	0.50	1.14	0.26	0.18	0.23

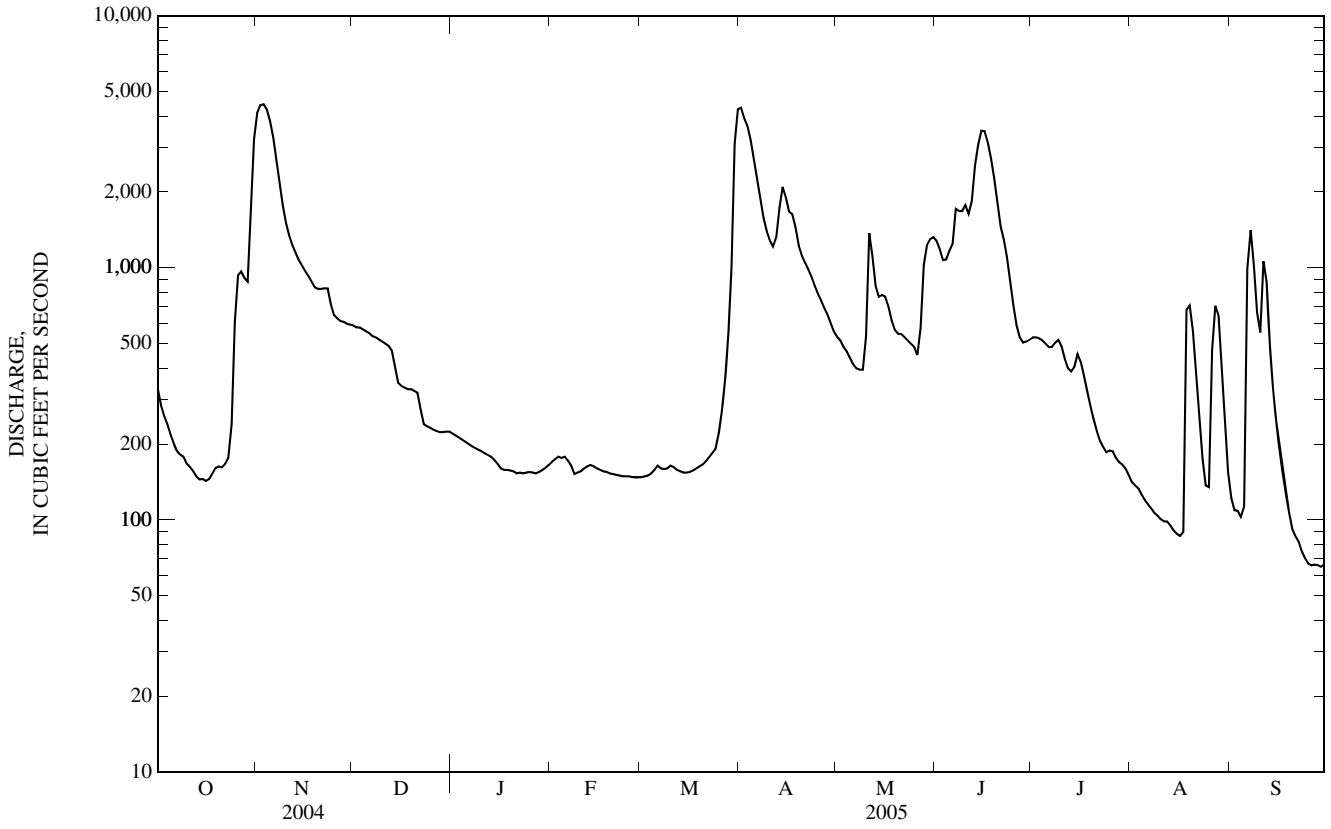
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2005, BY WATER YEAR (WY)

MEAN	150	177	93.0	65.2	71.8	345	1,224	663	581	452	171	150
MAX	744	1,654	390	245	767	1,485	5,115	2,137	4,228	3,323	1,833	1,329
(WY)	(1972)	(2005)	(2001)	(2001)	(1998)	(1966)	(1997)	(1998)	(2002)	(2002)	(1993)	(1999)
MIN	0.44	3.32	1.08	0.09	0.22	0.46	106	56.1	9.15	8.82	1.07	0.18
(WY)	(1949)	(1949)	(1977)	(1977)	(1977)	(1949)	(1981)	(1977)	(1952)	(1951)	(1977)	(1948)

05064000 WILD RICE RIVER AT HENDRUM, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1944 - 2005	
ANNUAL TOTAL	187,109		245,095			
ANNUAL MEAN	511		671		a340	
HIGHEST ANNUAL MEAN					936	2002
LOWEST ANNUAL MEAN					28.9	1977
HIGHEST DAILY MEAN	4,770	Mar 29	4,450	Nov 3	10,300	Apr 18, 1997
LOWEST DAILY MEAN	56	Aug 28	65	Sep 29	b0.00	Sep 13, 1948
ANNUAL SEVEN-DAY MINIMUM	58	Aug 24	67	Sep 24	0.00	Sep 27, 1948
MAXIMUM PEAK FLOW			c4,490	Nov 3	d10,600	Apr 18, 1997
MAXIMUM PEAK STAGE			f23.63	Jun 16	f33.85	Apr 18, 1997
ANNUAL RUNOFF (AC-FT)	371,100		486,100		246,200	
ANNUAL RUNOFF (CFSM)	0.328		0.430		0.218	
ANNUAL RUNOFF (INCHES)	4.46		5.84		2.96	
10 PERCENT EXCEEDS	1,160		1,650		793	
50 PERCENT EXCEEDS	226		335		107	
90 PERCENT EXCEEDS	70		139		18	

a Median of annual mean discharges is 300 ft^3/s.
b Many days, September to October 1948.
c Gage height, 21.95 ft.
d From measurement of discharge.
e Estimated.
f Backwater from Red River of the North.



05067500 MARSH RIVER NEAR SHELLY, MN

LOCATION.--Lat 47°24'45", long 96°45'50", in NE¼NW¼ sec. 3, T.145 N., R.48W., Norman County, Hydrologic Unit 09020107, on left bank, 10 ft downstream of County Road 129 bridge, 3.8 mi southeast of Shelly and 10 mi upstream from mouth.

DRAINAGE AREA.--220 mi^2.

PERIOD OF RECORD.--March 1944 to September 1983 and April 1985 to current year (no winter records since 1989). Monthly discharge only for March 1944, published in WSP 1308. Operated as a high-flow partial-record station October 1983 to March 1985.

GAGE.--Water-stage recorder. Datum of gage is 841.14 ft above sea level (NGVD of 1929, levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1965, nonrecording gage at datum 3.0 ft higher. Oct. 1, 1965 to May 17, 1989, nonrecording gage at present site and datum.

REMARKS.--Records good except those for discharges below 1.0 ft^3/s and those for estimated daily discharges, which are poor. Large part of high flow of Wild Rice River diverted into Marsh River Basin at overflow section 4.6 mi east of Ada. Another diversion from Wild Rice River Basin formed in 1947, 1.5 mi southeast of Ada and diverted water at all stages 1947- 51, after which it was closed except for a small regulated flow diverted for abatement of pollution from Ada sewage plant effluent.

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	0.84	1,310	---	---	---	e2.9	e975	15	39	20	0.56	23
2	0.65	977	---	---	---	e2.9	702	15	34	18	0.53	16
3	0.91	653	---	---	---	e3.0	628	14	27	15	0.51	13
4	0.66	448	---	---	---	e3.1	438	13	26	14	0.40	10
5	0.51	343	---	---	---	e3.2	301	13	28	14	0.23	10
6	0.47	283	---	---	---	e3.1	225	12	46	13	0.18	17
7	0.41	243	---	---	---	e3.0	167	12	80	9.9	0.12	175
8	0.27	201	---	---	---	e3.0	132	13	119	8.4	0.06	151
9	0.19	142	---	---	---	e3.2	106	14	130	7.0	0.01	125
10	0.12	90	---	---	---	e3.1	93	14	144	6.2	0.00	516
11	0.13	64	---	---	---	e3.0	81	14	147	5.1	0.12	751
12	0.26	45	---	---	---	e3.0	90	14	443	4.3	0.14	571
13	0.52	37	---	---	---	e2.9	181	14	741	3.6	0.06	353
14	0.78	35	---	---	---	e2.9	258	15	899	3.3	0.01	216
15	1.0	32	---	---	---	e2.9	204	18	1,160	3.1	0.00	114
16	1.2	30	---	---	---	e3.0	148	18	875	2.5	0.00	60
17	1.2	29	---	---	---	e3.0	108	18	499	2.1	0.22	32
18	1.6	29	---	---	---	e3.1	80	18	269	1.9	19	22
19	1.7	28	---	---	---	e3.2	59	18	152	1.8	26	18
20	1.3	27	---	---	---	e3.3	47	19	81	1.9	50	16
21	1.1	26	---	---	---	e3.2	36	19	41	1.8	38	14
22	0.83	25	---	---	---	e3.4	30	19	25	1.5	18	11
23	1.3	24	---	---	---	e4.0	27	19	17	1.1	11	10
24	3.2	23	---	---	---	e7.0	24	18	13	0.93	7.2	8.9
25	4.9	23	---	---	---	e21	23	18	11	1.0	6.9	7.5
26	4.9	24	---	---	---	e61	21	18	9.3	1.1	285	7.0
27	4.3	23	---	---	---	e254	19	18	8.7	1.0	493	6.5
28	4.3	22	---	---	---	492	17	19	8.8	0.84	335	5.6
29	5.6	20	---	---	---	705	16	20	11	0.68	196	5.0
30	438	21	---	---	---	1,070	15	25	17	0.64	109	4.7
31	1,310	---	---	---	---	e1,280	---	34	---	0.59	46	---
TOTAL	1,793.15	5,277	---	---	---	3,961.4	5,251	528	6,100.8	166.28	1,643.25	3,289.2
MEAN	57.8	176	---	---	---	128	175	17.0	203	5.36	53.0	110
MAX	1,310	1,310	---	---	---	1,280	975	34	1,160	20	493	751
MIN	0.12	20	---	---	---	2.9	15	12	8.7	0.59	0.00	4.7
AC-FT	3,560	10,470	---	---	---	7,860	10,420	1,050	12,100	330	3,260	6,520
CFSM	0.26	0.80	---	---	---	0.58	0.80	0.08	0.92	0.02	0.24	0.50
IN.	0.30	0.89	---	---	---	0.67	0.89	0.09	1.03	0.03	0.28	0.56

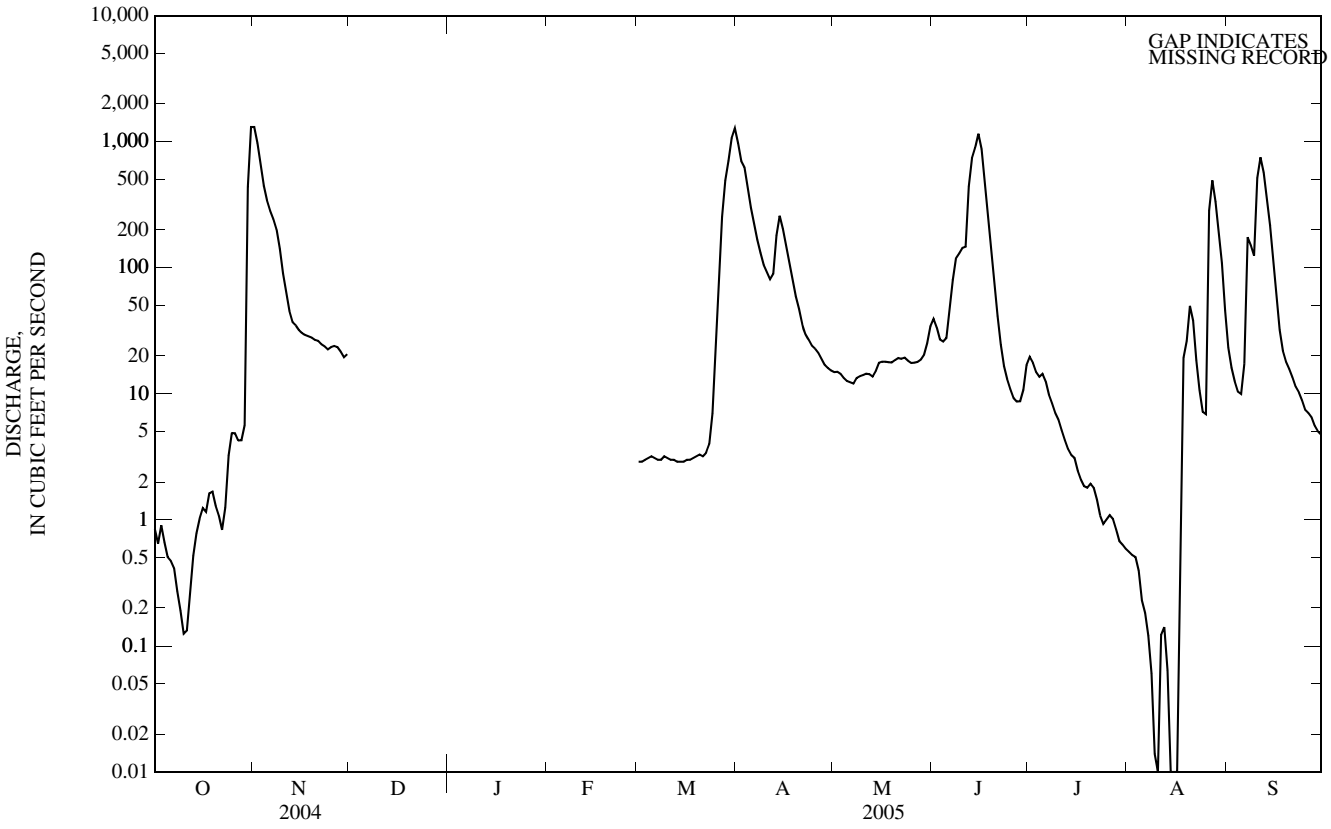
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2005, BY WATER YEAR (WY)

MEAN	13.6	14.6	5.60	3.79	3.29	80.0	290	120	113	77.3	18.6	13.8
MAX	130	176	77.1	64.5	62.1	437	1,537	2,617	1,644	820	363	144
(WY)	(1952)	(2005)	(1951)	(1951)	(1951)	(1945)	(1950)	(1950)	(2002)	(1950)	(1949)	(1944)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.87	0.00	0.00	0.00	0.00
(WY)	(1955)	(1956)	(1956)	(1946)	(1946)	(1964)	(1981)	(1980)	(1980)	(1961)	(1959)	(1954)

05067500 MARSH RIVER NEAR SHELLY, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1944 - 2005	
ANNUAL MEAN					63.3	
HIGHEST ANNUAL MEAN					a543	1950
LOWEST ANNUAL MEAN					1.24	1977
HIGHEST DAILY MEAN	1,690	Mar 29	1,310	Oct 31	5,290	Jun 27, 2002
LOWEST DAILY MEAN	b0.00	Jul 27	b0.00	Aug 10	c0.00	Sep 4, 1945
ANNUAL SEVEN-DAY MINIMUM	0.04	Mar 1	0.05	Aug 10	0.00	Sep 12, 1945
MAXIMUM PEAK FLOW	1,730	Mar 29	1,410	Oct 31	d5,530	Jun 26, 2002
MAXIMUM PEAK STAGE	15.98	Mar 29	14.64	Oct 31	f25.45	Apr 18, 1997
ANNUAL RUNOFF (AC-FT)			45,850		45,850	
ANNUAL RUNOFF (CFSM)			0.288		0.288	
ANNUAL RUNOFF (INCHES)			3.91		3.91	
10 PERCENT EXCEEDS			106		106	
50 PERCENT EXCEEDS			0.80		0.80	
90 PERCENT EXCEEDS			0.00		0.00	

a Based on complete years only, 1945-83, 86-89.
b Many days.
c Many days, most years.
d Gage-height, 24.35 ft.
e Estimated.
f From floodmark.



05069000 SAND HILL RIVER AT CLIMAX, MN

LOCATION.--Lat 47°36'43", long 96°48'52", in NE¼NE¼ sec. 30, T.148 N., R.48 W., Polk County, Hydrologic Unit 09020301, on left bank 25 ft upstream from bridge on U.S. Highway 75 in Climax and 3.7 mi upstream from mouth.

DRAINAGE AREA.--420 mi^2.

PERIOD OF RECORD.--March 1943 to September 1984, June 1985 to current year (winter records incomplete prior to 1947). Monthly discharge only for some periods, published in WSP 1308 and 1728. October 1984 to May 1985, operated as a high-flow partial-record station.

REVISED RECORDS.--WSP 1388: 1943(M), 1944, 1947(M). WSP 1728: 1951(M), 1960 (average discharge).

GAGE.--Water-stage recorder. Datum of gage is 820.10 ft above sea level (NGVD or 1929, levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1966, nonrecording gage at site 3.2 mi upstream at datum 12.78 ft higher. Oct. 1, 1966 to Sept 5, 1989, nonrecording gage at present site and datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor.

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	44	1,010	e93	e33	e31	e30	e1,900	102	133	171	40	82
2	41	854	e96	e31	e32	e31	2,010	99	132	157	39	76
3	38	799	e98	e30	e32	e31	1,550	98	131	148	38	75
4	35	736	e90	e29	e31	e32	1,190	112	134	146	37	70
5	34	653	e83	e29	e30	e33	901	94	203	138	36	89
6	32	594	e78	e29	e29	e32	703	87	258	133	32	269
7	36	546	e74	e29	e29	e31	585	82	252	129	30	196
8	31	488	e70	e29	e29	e32	500	81	320	127	29	127
9	29	434	e65	e29	e30	e33	440	83	326	123	26	163
10	28	390	e66	e29	e32	e33	394	85	252	111	26	223
11	26	349	e67	e30	e32	e32	362	88	338	102	27	144
12	26	314	e57	e29	e32	e32	358	86	1,220	114	32	106
13	25	286	e56	e28	e31	e31	425	93	1,060	119	31	106
14	25	264	e57	e28	e30	e31	435	108	1,210	91	28	103
15	25	246	e56	e28	e30	e31	393	123	1,320	81	26	85
16	27	230	e57	e28	e29	e32	356	129	913	74	25	78
17	30	216	e51	e29	e29	e33	330	127	577	67	67	68
18	28	204	e49	e30	e29	e33	310	113	535	63	124	58
19	29	191	e50	e29	e29	e34	288	98	462	60	378	51
20	30	182	e44	e29	e29	e35	263	87	353	57	533	46
21	32	172	e40	e29	e30	e38	234	87	322	54	276	45
22	34	161	e39	e29	e30	e44	213	92	284	48	155	41
23	37	149	e38	e29	e30	e54	190	90	235	46	99	37
24	53	e120	e37	e30	e30	e75	172	88	227	47	72	36
25	56	e116	e37	e29	e30	e83	158	94	225	48	65	36
26	57	e115	e37	e29	e30	e108	145	104	173	59	131	36
27	57	e114	e37	e29	e30	e117	131	110	156	55	161	34
28	63	e118	e37	e30	e30	e221	122	111	143	51	178	32
29	77	e117	e38	e30	---	e350	114	115	149	50	160	30
30	706	e102	e37	e31	---	e580	108	135	166	46	122	33
31	1,260	---	e35	e31	---	e1,020	---	144	---	41	98	---
TOTAL	3,051	10,270	1,769	911	845	3,332	15,280	3,145	12,209	2,756	3,121	2,575
MEAN	98.4	342	57.1	29.4	30.2	107	509	101	407	88.9	101	85.8
MAX	1,260	1,010	98	33	32	1,020	2,010	144	1,320	171	533	269
MIN	25	102	35	28	29	30	108	81	131	41	25	30
AC-FT	6,050	20,370	3,510	1,810	1,680	6,610	30,310	6,240	24,220	5,470	6,190	5,110
CFSM	0.23	0.82	0.14	0.07	0.07	0.26	1.21	0.24	0.97	0.21	0.24	0.20
IN.	0.27	0.91	0.16	0.08	0.07	0.30	1.35	0.28	1.08	0.24	0.28	0.23

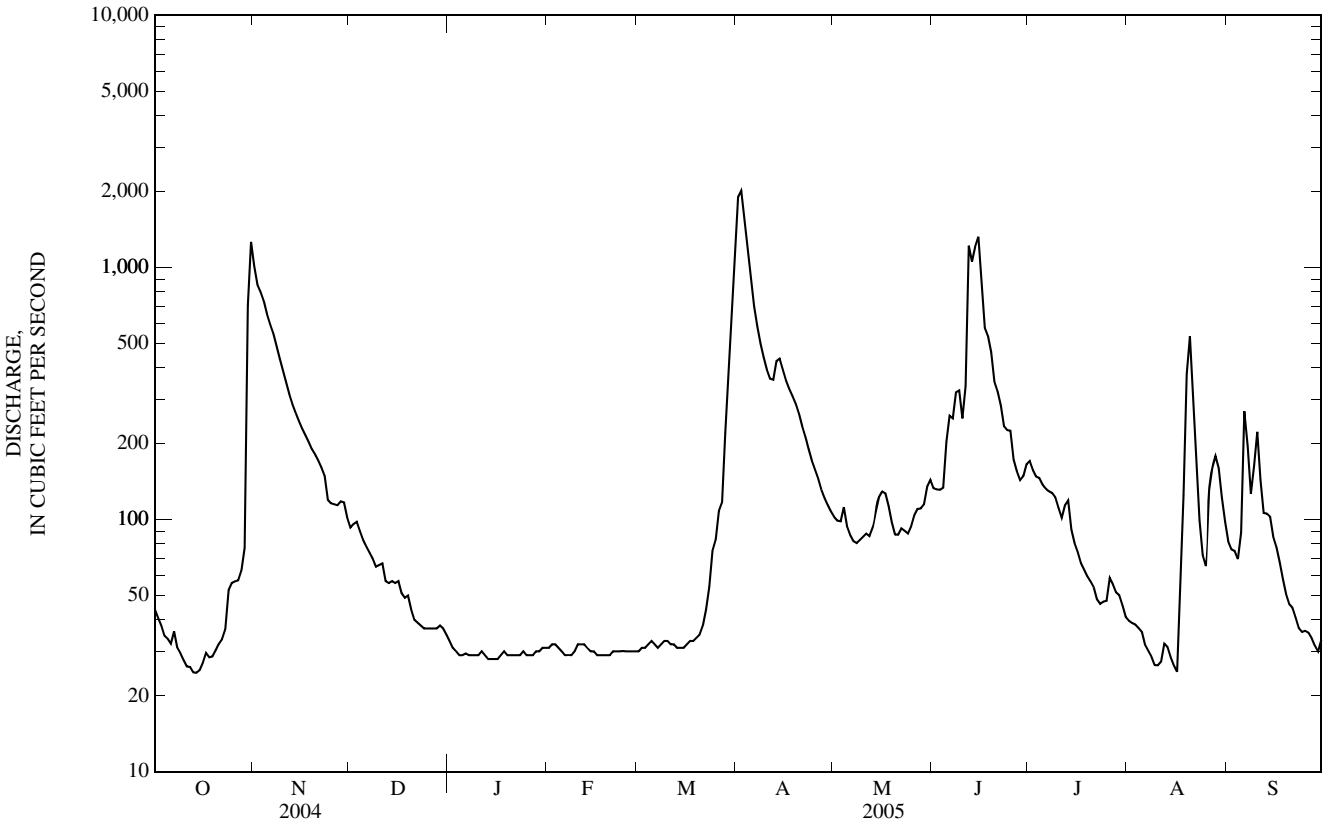
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2005, BY WATER YEAR (WY)

MEAN	39.8	40.5	21.0	15.2	17.8	97.3	380	134	117	92.7	41.9	37.1
MAX	223	342	58.0	36.8	183	610	1,568	1,156	689	703	426	374
(WY)	(1972)	(2005)	(1999)	(2001)	(1998)	(1999)	(1997)	(1950)	(2002)	(2002)	(1993)	(1999)
MIN	9.43	8.64	5.11	2.02	3.55	5.81	25.3	23.7	11.5	8.95	6.30	6.49
(WY)	(1977)	(1956)	(1964)	(1962)	(1962)	(1948)	(1981)	(1958)	(1980)	(1980)	(1961)	(1955)

05069000 SAND HILL RIVER AT CLIMAX, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1943 - 2005	
ANNUAL TOTAL	48,079.6		59,264			
ANNUAL MEAN	131		162		a86.6	
HIGHEST ANNUAL MEAN					249	1999
LOWEST ANNUAL MEAN					18.4	1977
HIGHEST DAILY MEAN	2,540	Apr 1	2,010	Apr 2	4,360	Apr 14, 1965
LOWEST DAILY MEAN	9.3	Jan 30	25	Oct 13-15, Aug 16	1.0	Jan 17, 1962
ANNUAL SEVEN-DAY MINIMUM	9.5	Jan 28	26	Oct 10	1.1	Jan 12, 1962
MAXIMUM PEAK FLOW			b2,140	Apr 2	c4,560	Apr 14, 1965
MAXIMUM PEAK STAGE			d16.51	Jun 18	d39.40	Apr 20, 1997
ANNUAL RUNOFF (AC-FT)	95,370		117,600		62,720	
ANNUAL RUNOFF (CFSM)	0.313		0.387		0.206	
ANNUAL RUNOFF (INCHES)	4.26		5.25		2.80	
10 PERCENT EXCEEDS	290		383		168	
50 PERCENT EXCEEDS	40		72		26	
90 PERCENT EXCEEDS	13		29		9.2	

a Median of annual mean discharges is 67 ft^3/s.
b Gage-height, 13.79 ft.
c Gage-height, 17.81 ft, site and datum then in use.
d Backwater from Red River of the North.
e Estimated.



05073500 UPPER RED LAKE AT WASKISH, MN

LOCATION.--Lat 48°10'32", long 94°30'51", in SW¼NE¼NE¼ sec. 8, T.154 N., R. 30 W., Beltrami County, Hydrologic Unit 09020302, on east side of Upper Red Lake, near mouth of Tamarac River, on Minnesota Department of Natural Resources property, 500 feet west of State Highway 72 bridge on north edge of Waskish.

PERIOD OF RECORD.-- October 1921 to September 1929, fragmentary gage height record in files of Minnesota Department of Natural Resources, April 1930 to September 1933, published as "Red Lake at Waskish", May 1940 to July 1946, October 1995 to current year.

GAGE.-- Water-stage recorder. Datum of gage is 1,100.00 ft above sea level, adjustment of 1912. October 1921 to September 1929, non-recording gage at datum 1,170.00 ft (no winter readings). April 1930 to September 1933, non-recording gage at datum 1,100.00 ft (some winter readings). May 1940 to July 1946, non-recording gage at datum 1,170.00 ft.

REMARKS.-- Records good. Water level subject to fluctuation caused by seiches, and the stage of the Tamarac River.

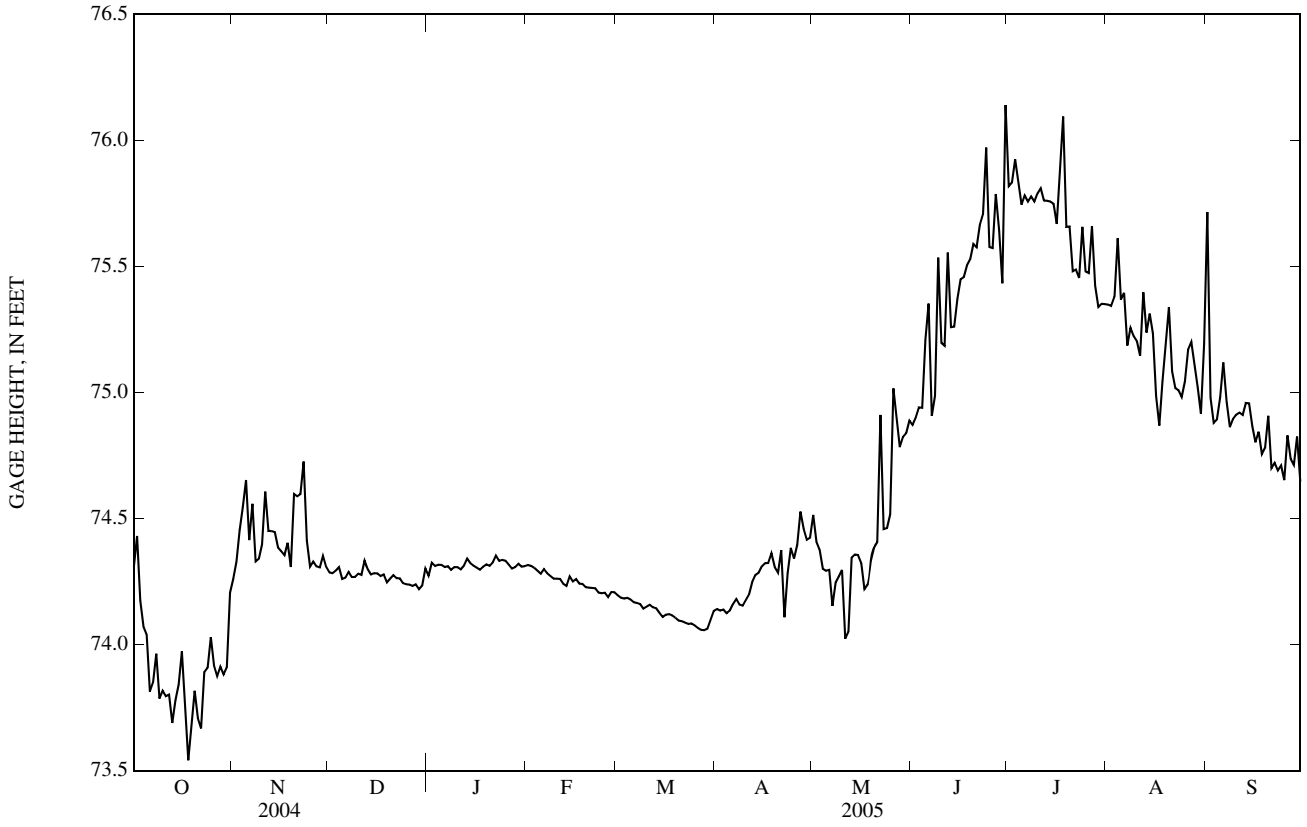
EXTREMES FOR PERIOD OF RECORD.-- Maximum gage height, 78.34 ft (present datum), June 28, 1943; minimum recorded, 72.10 ft, Oct. 17, 1932.

EXTREMES FOR CURRENT YEAR.-- Maximum gage height, 76.62 ft, June 30; maximum daily, 76.14 ft, June 30; minimum gage height, 73.10 ft, June 8; minimum recorded daily, 73.54 ft, Oct. 18.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74.31	74.26	74.29	74.27	74.32	74.20	74.14	74.51	74.87	75.82	75.35	75.72
2	74.43	74.33	74.28	74.33	74.31	74.19	74.13	74.41	74.90	75.83	75.34	74.98
3	74.17	74.45	74.29	74.31	74.30	74.18	74.14	74.38	74.94	75.92	75.38	74.88
4	74.07	74.55	74.31	74.32	74.29	74.19	74.12	74.30	74.94	75.84	75.61	74.89
5	74.04	74.65	74.26	74.32	74.28	74.18	74.14	74.29	75.21	75.74	75.37	74.98
6	73.81	74.41	74.27	74.31	74.30	74.17	74.16	74.30	75.35	75.78	75.40	75.12
7	73.85	74.56	74.29	74.31	74.28	74.17	74.18	74.15	74.91	75.76	75.19	74.96
8	73.96	74.33	74.27	74.30	74.27	74.16	74.16	74.25	74.99	75.78	75.26	74.86
9	73.79	74.34	74.27	74.31	74.26	74.14	74.15	74.27	75.53	75.76	75.22	74.89
10	73.82	74.40	74.28	74.31	74.26	74.15	74.18	74.30	75.20	75.79	75.20	74.91
11	73.79	74.61	74.28	74.30	74.26	74.16	74.20	74.02	75.19	75.81	75.15	74.92
12	73.80	74.45	74.33	74.31	74.24	74.15	74.25	74.05	75.55	75.76	75.40	74.91
13	73.69	74.45	74.30	74.34	74.23	74.14	74.28	74.35	75.26	75.76	75.24	74.96
14	73.78	74.45	74.28	74.32	74.27	74.13	74.29	74.36	75.26	75.76	75.31	74.96
15	73.84	74.39	74.28	74.31	74.25	74.11	74.31	74.36	75.37	75.75	75.23	74.87
16	73.97	74.37	74.28	74.31	74.26	74.12	74.32	74.32	75.45	75.67	74.99	74.80
17	73.74	74.35	74.27	74.30	74.24	74.12	74.32	74.22	75.46	75.90	74.87	74.84
18	73.54	74.40	74.28	74.31	74.24	74.12	74.36	74.24	75.50	76.09	75.05	74.76
19	73.67	74.31	74.25	74.32	74.23	74.11	74.31	74.33	75.53	75.66	75.19	74.78
20	73.82	74.60	74.26	74.31	74.23	74.10	74.29	74.38	75.59	75.66	75.34	74.91
21	73.71	74.59	74.28	74.33	74.22	74.09	74.37	74.41	75.58	75.48	75.08	74.70
22	73.67	74.60	74.26	74.35	74.22	74.09	74.11	74.91	75.66	75.49	75.02	74.72
23	73.89	74.73	74.26	74.33	74.21	74.08	74.28	74.46	75.71	75.45	75.01	74.69
24	73.91	74.41	74.24	74.34	74.20	74.08	74.38	74.46	75.97	75.66	74.98	74.71
25	74.03	74.31	74.24	74.33	74.21	74.08	74.34	74.52	75.58	75.48	75.04	74.65
26	73.92	74.33	74.24	74.32	74.19	74.07	74.40	75.02	75.57	75.47	75.17	74.83
27	73.87	74.31	74.23	74.30	74.21	74.06	74.53	74.89	75.79	75.66	75.20	74.74
28	73.91	74.31	74.24	74.31	74.21	74.06	74.46	74.78	75.64	75.42	75.11	74.71
29	73.88	74.35	74.22	74.32	---	74.06	74.42	74.82	75.43	75.34	75.02	74.83
30	73.91	74.31	74.23	74.31	---	74.10	74.42	74.84	76.14	75.35	74.92	74.65
31	74.21	---	74.30	74.31	---	74.13	---	74.89	---	75.35	75.19	---
MEAN	73.90	74.43	74.27	74.32	74.25	74.13	74.27	74.44	75.40	75.68	75.19	74.87
MAX	74.43	74.73	74.33	74.35	74.32	74.20	74.53	75.02	76.14	76.09	75.61	75.72
MIN	73.54	74.26	74.22	74.27	74.19	74.06	74.11	74.02	74.87	75.34	74.87	74.65

05073500 UPPER RED LAKE AT WASKISH, MN—Continued



05073650 LOWER RED LAKE AT BATTLE RIVER MOUTH NEAR SAUM, MN

LOCATION.-- Lat 47°57'35", long 94°44'31", in SE¼NE¼NE¼ sec. 28, T. 152 N., R. 32 W., Beltrami County, Hydrologic Unit 09020302, on east side of Lower Red Lake, 200 feet upstream of mouth of Battle River, 900 feet southwest of highway bridge, and 3.2 mi southwest of Saum.

PERIOD OF RECORD.--June 5, 1996 to current year.

REVISED RECORDS.--Prior to Oct. 1, 1997, maximum elevations, minimum elevations, and daily-mean gage heights revised +0.11 ft.

GAGE.--Water-stage recorder. Datum of gage is 1,100.00 ft above sea level, adjustment of 1912. Prior to Oct. 1, 1997 datum of gage 1099.89 ft.

REMARKS.--Records fair. Water level subject to the stage of the Battle River and ice pile up at the mouth; and by lake seiches.

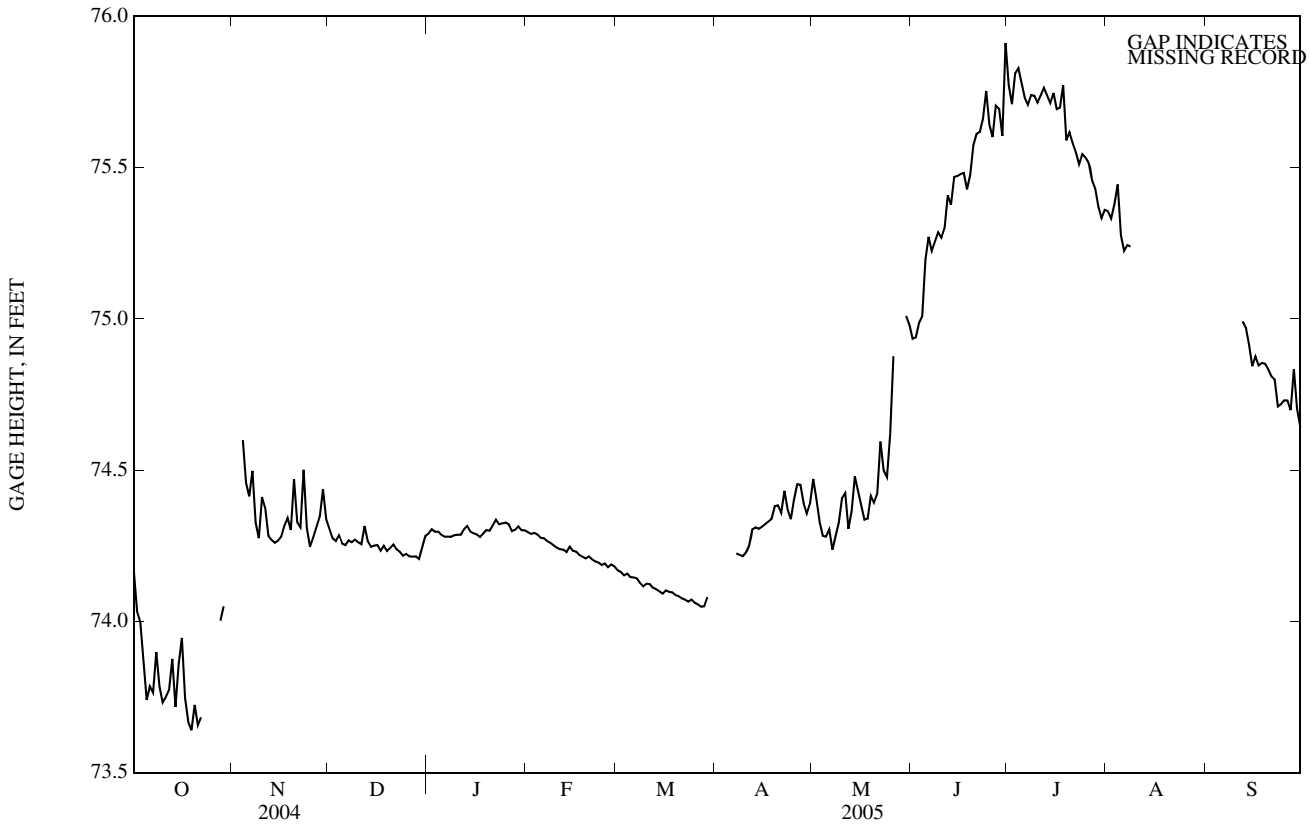
EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 76.75 ft, Aug. 9, 2001; maximum daily, 76.12 ft, June 19, Aug. 9, 2001; minimum gage height, 73.12 ft, Oct. 17, 27, Nov. 8, 2003; minimum daily, 73.13 ft, Oct. 27, Nov. 9, 2003.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 76.29 ft, June 23; maximum daily, 75.91 ft, June 30; minimum gage height, 73.56 ft, Oct. 19; minimum daily, 73.64 ft, Oct. 19.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74.17	---	74.31	74.29	74.30	74.17	---	74.47	74.93	75.77	75.36	---
2	74.03	---	74.27	74.30	74.29	74.16	---	74.40	74.94	75.71	75.33	---
3	74.00	---	74.27	74.30	74.29	74.15	---	74.33	74.99	75.81	75.38	---
4	73.87	74.60	74.28	74.30	74.29	74.16	---	74.28	75.01	75.83	75.44	---
5	73.74	74.46	74.26	74.29	74.28	74.15	---	74.28	75.19	75.78	75.28	---
6	73.79	74.41	74.25	74.28	74.27	74.15	---	74.30	75.27	75.73	75.22	---
7	73.77	74.50	74.27	74.28	74.27	74.14	74.22	74.24	75.22	75.71	75.24	---
8	73.90	74.33	74.26	74.28	74.26	74.13	74.22	74.28	75.26	75.74	75.24	---
9	73.78	74.28	74.27	74.28	74.25	74.12	74.22	74.33	75.29	75.74	---	---
10	73.73	74.41	74.26	74.29	74.24	74.12	74.23	74.41	75.27	75.72	---	---
11	73.75	74.37	74.26	74.29	74.24	74.12	74.25	74.42	75.30	75.74	---	---
12	73.77	74.28	74.31	74.30	74.24	74.11	74.30	74.31	75.41	75.76	---	74.99
13	73.88	74.27	74.26	74.32	74.23	74.11	74.31	74.36	75.38	75.74	---	74.97
14	73.72	74.26	74.25	74.30	74.25	74.10	74.31	74.48	75.47	75.71	---	74.91
15	73.86	74.27	74.25	74.29	74.23	74.09	74.31	74.43	75.47	75.75	---	74.84
16	73.95	74.28	74.25	74.29	74.23	74.10	74.32	74.38	75.48	75.69	---	74.88
17	73.75	74.32	74.23	74.28	74.22	74.10	74.33	74.34	75.48	75.70	---	74.85
18	73.67	74.34	74.25	74.29	74.21	74.10	74.34	74.34	75.43	75.77	---	74.85
19	73.64	74.30	74.23	74.30	74.21	74.09	74.38	74.42	75.48	75.59	---	74.85
20	73.72	74.47	74.24	74.30	74.21	74.08	74.38	74.39	75.57	75.62	---	74.83
21	73.66	74.33	74.25	74.32	74.20	74.08	74.36	74.42	75.61	75.58	---	74.81
22	73.68	74.31	74.24	74.34	74.20	74.07	74.43	74.59	75.62	75.55	---	74.80
23	---	74.50	74.23	74.32	74.19	74.07	74.37	74.50	75.66	75.51	---	74.71
24	---	74.31	74.22	74.32	74.19	74.07	74.34	74.48	75.75	75.54	---	74.72
25	---	74.25	74.22	74.33	74.19	74.06	74.40	74.62	75.64	75.53	---	74.73
26	---	74.28	74.21	74.32	74.18	74.06	74.45	74.88	75.60	75.51	---	74.73
27	---	74.31	74.21	74.30	74.19	74.05	74.45	---	75.70	75.46	---	74.70
28	74.00	74.35	74.22	74.30	74.18	74.05	74.39	---	75.69	75.43	---	74.83
29	74.05	74.44	74.21	74.31	---	74.08	74.36	---	75.60	75.37	---	74.70
30	---	74.34	74.25	74.30	---	---	74.39	75.01	75.91	75.33	---	74.64
31	---	---	74.28	74.30	---	---	---	74.98	---	75.36	---	---
MEAN	---	---	74.25	74.30	74.23	---	---	---	75.42	75.64	---	---
MAX	---	---	74.31	74.34	74.30	---	---	---	75.91	75.83	---	---
MIN	---	---	74.21	74.28	74.18	---	---	---	74.93	75.33	---	---

05073650 LOWER RED LAKE AT BATTLE RIVER MOUTH NEAR SAUM, MN—Continued



05074000 LOWER RED LAKE NEAR RED LAKE, MN

LOCATION.--Lat 47°57'27", long 95°16'34", in SW¼NW¼ sec. 28, T.152 N., R.36 W., Clearwater County, Hydrologic Unit 09020302, on Red Lake Indian Reservation, on left bank just upstream from dam at outlet of Lower Red Lake, and 13 mi northwest of city of Red Lake.

DRAINAGE AREA.--1,950 mi^2 (approximately).

PERIOD OF RECORD.--June 1930 to November 1932, May 1933 to September 1997, October 1999 to current year. Published as "Red Lake at Redby" prior to May 1933 and as "Red Lake near Red Lake" May 1933 to September 1940. Fragmentary gage-height record, October 1921 to September 1929, for "Red Lake at Redby" in files of Minnesota Department of Natural Resources. Gage height record, October 1997 to September 1999, in files of U.S. Army Corps of Engineers.

GAGE.--Water-stage recorder. Datum of gage is 1,100.00 ft above sea level, adjustment of 1912 (levels by U.S. Army Corps of Engineers). May 1933 to Sept. 6, 1934, nonrecording gage. Sept. 7, 1934 to Sept. 30, 1986, water-stage recorder at present site at datum 69.00 ft higher.

REMARKS.--Records good. Water level subject to fluctuation caused by seiches, and by drawdown from dam gate changes.

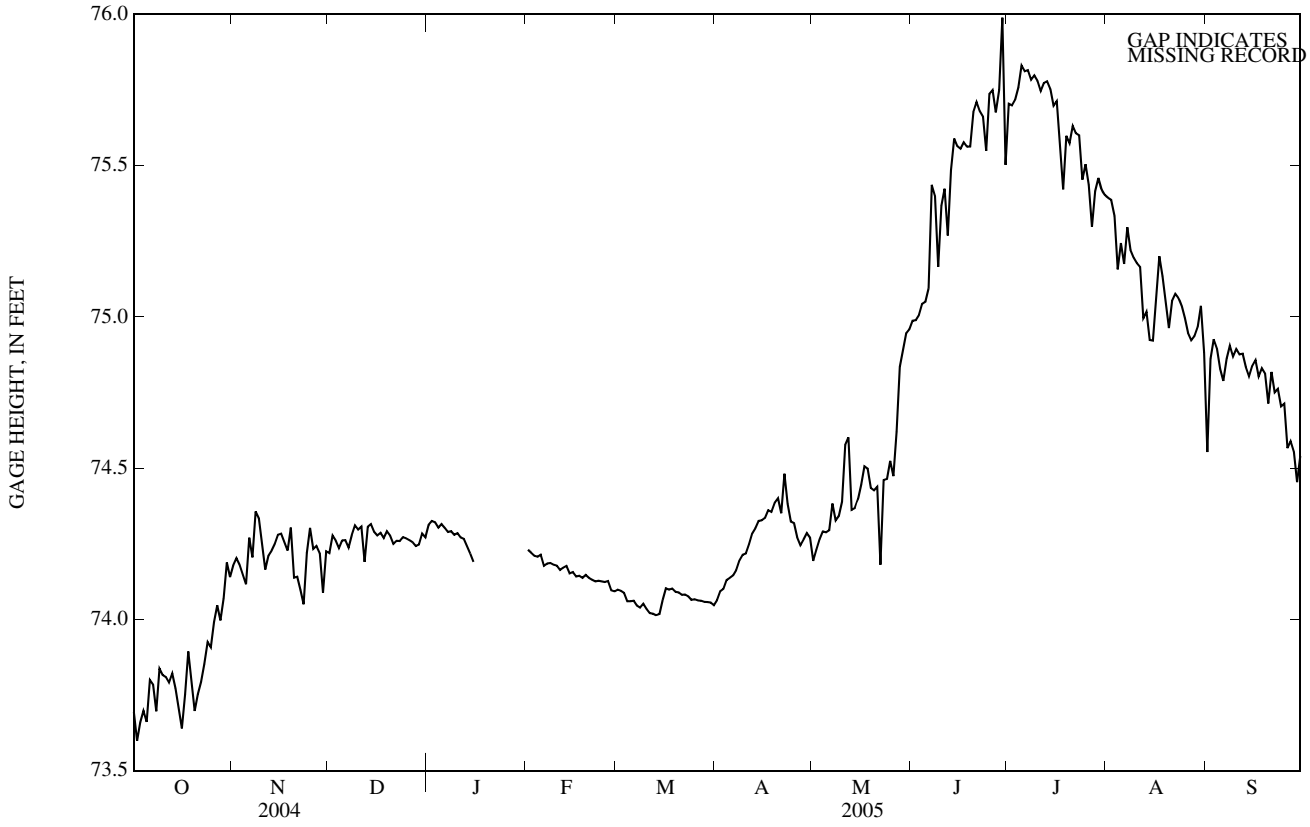
EXTREMES FOR PERIOD OF RECORD.--Maximum gage height recorded, 78.53 ft, June 25, 1950; minimum recorded, 69.80 ft, Nov. 20, 1936.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 76.36 ft, June 8; maximum daily, 75.99 ft, June 29; minimum gage height, 73.30 ft, Oct. 8; minimum daily, 73.60 ft, Oct. 2.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73.69	74.18	74.22	74.31	74.23	74.10	74.06	74.19	74.99	75.70	75.39	74.55
2	73.60	74.20	74.28	74.33	74.22	74.09	74.09	74.23	74.99	75.70	75.39	74.86
3	73.66	74.18	74.26	74.32	74.21	74.09	74.10	74.27	75.01	75.72	75.33	74.93
4	73.70	74.15	74.24	74.30	74.21	74.06	74.13	74.29	75.04	75.76	75.16	74.90
5	73.66	74.12	74.26	74.32	74.21	74.06	74.14	74.29	75.05	75.83	75.24	74.83
6	73.80	74.27	74.26	74.30	74.18	74.06	74.14	74.30	75.09	75.81	75.17	74.79
7	73.78	74.20	74.24	74.29	74.19	74.05	74.16	74.38	75.44	75.82	75.30	74.86
8	73.70	74.36	74.28	74.29	74.19	74.04	74.19	74.33	75.40	75.78	75.22	74.91
9	73.84	74.33	74.31	74.28	74.18	74.05	74.21	74.34	75.17	75.80	75.20	74.87
10	73.82	74.25	74.30	74.28	74.18	74.03	74.22	74.39	75.37	75.78	75.18	74.89
11	73.81	74.16	74.31	74.27	74.16	74.02	74.25	74.58	75.42	75.75	75.17	74.88
12	73.79	74.21	74.19	74.27	74.17	74.02	74.28	74.60	75.27	75.77	75.00	74.88
13	73.82	74.23	74.31	74.24	74.18	74.01	74.30	74.36	75.49	75.78	75.02	74.83
14	73.77	74.25	74.31	74.22	74.15	74.02	74.33	74.37	75.59	75.75	74.92	74.80
15	73.70	74.28	74.29	74.19	74.16	74.06	74.33	74.40	75.56	75.70	74.92	74.84
16	73.64	74.28	74.28	---	74.14	74.10	74.34	74.45	75.56	75.71	75.07	74.86
17	73.75	74.25	74.29	---	74.14	74.10	74.36	74.51	75.58	75.58	75.20	74.80
18	73.89	74.23	74.27	---	74.14	74.10	74.36	74.50	75.56	75.42	75.13	74.83
19	73.80	74.30	74.29	---	74.15	74.09	74.39	74.43	75.56	75.60	75.05	74.81
20	73.70	74.14	74.28	---	74.14	74.09	74.40	74.43	75.68	75.57	74.96	74.71
21	73.75	74.14	74.25	---	74.13	74.08	74.35	74.44	75.71	75.63	75.05	74.82
22	73.79	74.10	74.26	---	74.13	74.08	74.48	74.18	75.68	75.61	75.08	74.75
23	73.85	74.05	74.26	---	74.13	74.08	74.38	74.46	75.66	75.60	75.06	74.76
24	73.93	74.22	74.27	---	74.13	74.06	74.32	74.46	75.55	75.45	75.04	74.70
25	73.91	74.30	74.27	---	74.12	74.07	74.32	74.52	75.74	75.50	75.00	74.71
26	73.99	74.23	74.26	---	74.13	74.06	74.27	74.47	75.75	75.44	74.95	74.57
27	74.05	74.24	74.25	---	74.10	74.06	74.25	74.62	75.68	75.30	74.92	74.59
28	74.00	74.22	74.24	---	74.09	74.06	74.26	74.83	75.75	75.42	74.94	74.55
29	74.07	74.09	74.25	---	---	74.06	74.28	74.89	75.99	75.46	74.97	74.45
30	74.19	74.22	74.28	---	---	74.06	74.27	74.95	75.50	75.42	75.04	74.54
31	74.14	---	74.27	---	---	74.05	---	74.96	---	75.40	74.88	---
MEAN	73.83	74.21	74.27	---	74.16	74.06	74.27	74.47	75.46	75.63	75.10	74.77
MAX	74.19	74.36	74.31	---	74.23	74.10	74.48	74.96	75.99	75.83	75.39	74.93
MIN	73.60	74.05	74.19	---	74.09	74.01	74.06	74.18	74.99	75.30	74.88	74.45

05074000 LOWER RED LAKE NEAR RED LAKE, MN—Continued



05074500 RED LAKE RIVER NEAR RED LAKE, MN

LOCATION.--Lat 47°57'27", long 95°16'35", in SW$^1/_4$NW$^1/_4$ sec. 28, T.152 N., R.36 W., Clearwater County, Hydrologic Unit 09020302, on Red Lake Indian Reservation, on left bank 50 ft downstream from dam outlet at outlet of Lower Red Lake, and 13 mi northwest of city of Red Lake.

DRAINAGE AREA.--1,950 mi^2 (approximately).

PERIOD OF RECORD.--May 1933 to September 1994 (monthly discharge only for May 1933, published in WSP 1308), October 1999 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,100.00 ft above sea level, adjustment of 1912 (levels by U.S. Army Corps of Engineers). Prior to Sept. 7, 1934, nonrecording gage at site 50 ft upstream at datum 69.00 ft higher. Sept. 7, 1934 to Nov. 26, 1951, water-stage recorder at present site at datum 69.00 ft higher. Nov. 27,1951 to Sept. 30, 1986, water-stage recorder at present site at datum 67.00 ft higher.

REMARKS.--Records poor. Flow completely regulated by outlet dam on Lower Red Lake.

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	396	670	e910	e517	e971	e862	590	769	825	757	619	949
2	372	674	e920	e520	e980	e862	598	770	848	735	585	961
3	378	655	e915	e520	e982	862	610	769	870	679	613	991
4	378	650	e900	e515	e982	848	630	773	882	541	609	993
5	366	626	e890	e505	982	843	647	778	969	512	597	989
6	381	643	e872	e495	e980	840	673	770	873	499	587	1,010
7	376	635	e850	e490	e976	e840	687	783	678	482	592	994
8	373	641	e660	e480	e965	e843	701	779	608	557	633	991
9	374	701	e500	e475	e950	847	709	790	468	663	734	982
10	368	816	e490	e470	e940	851	717	818	451	674	757	981
11	365	801	e485	e468	e920	854	722	855	457	683	772	974
12	363	799	e475	e463	e900	e860	763	848	483	692	778	982
13	365	800	e500	e460	876	884	754	811	419	689	776	972
14	351	795	e495	e460	884	853	758	823	337	646	768	945
15	343	794	e490	e460	878	704	769	820	330	812	757	939
16	334	838	e490	e460	e878	495	769	822	320	849	771	927
17	334	942	e490	e460	e876	498	748	828	317	853	807	911
18	338	946	e490	e460	e874	499	740	838	309	842	822	906
19	332	963	e485	e460	e874	503	794	834	305	841	836	903
20	316	934	e485	e460	e874	506	871	838	322	842	827	878
21	317	908	e485	e463	e873	509	864	856	322	846	817	870
22	318	901	e480	e465	e870	510	898	849	463	831	811	881
23	335	895	e480	e465	e868	520	854	866	680	829	802	905
24	328	901	e480	e640	e863	527	828	878	693	831	841	902
25	324	924	e480	e990	e862	530	826	935	701	827	938	900
26	323	941	e480	e990	861	538	818	990	714	824	998	872
27	326	931	e480	e980	856	542	794	876	740	760	994	859
28	407	e920	e485	e980	861	540	784	552	743	667	987	856
29	566	e900	e488	e980	---	546	783	526	762	641	985	819
30	662	874	e493	e980	---	564	782	526	762	624	984	826
31	659	---	e505	e975	---	575	---	649	---	621	983	---
TOTAL	11,768	24,418	18,128	18,506	25,456	21,055	22,481	24,619	17,651	22,149	24,380	27,868
MEAN	380	814	585	597	909	679	749	794	588	714	786	929
MAX	662	963	920	990	982	884	898	990	969	853	998	1,010
MIN	316	626	475	460	856	495	590	526	305	482	585	819
AC-FT	23,340	48,430	35,960	36,710	50,490	41,760	44,590	48,830	35,010	43,930	48,360	55,280
CFSM	0.19	0.42	0.30	0.31	0.47	0.35	0.38	0.41	0.30	0.37	0.40	0.48
IN.	0.22	0.47	0.35	0.35	0.49	0.40	0.43	0.47	0.34	0.42	0.47	0.53

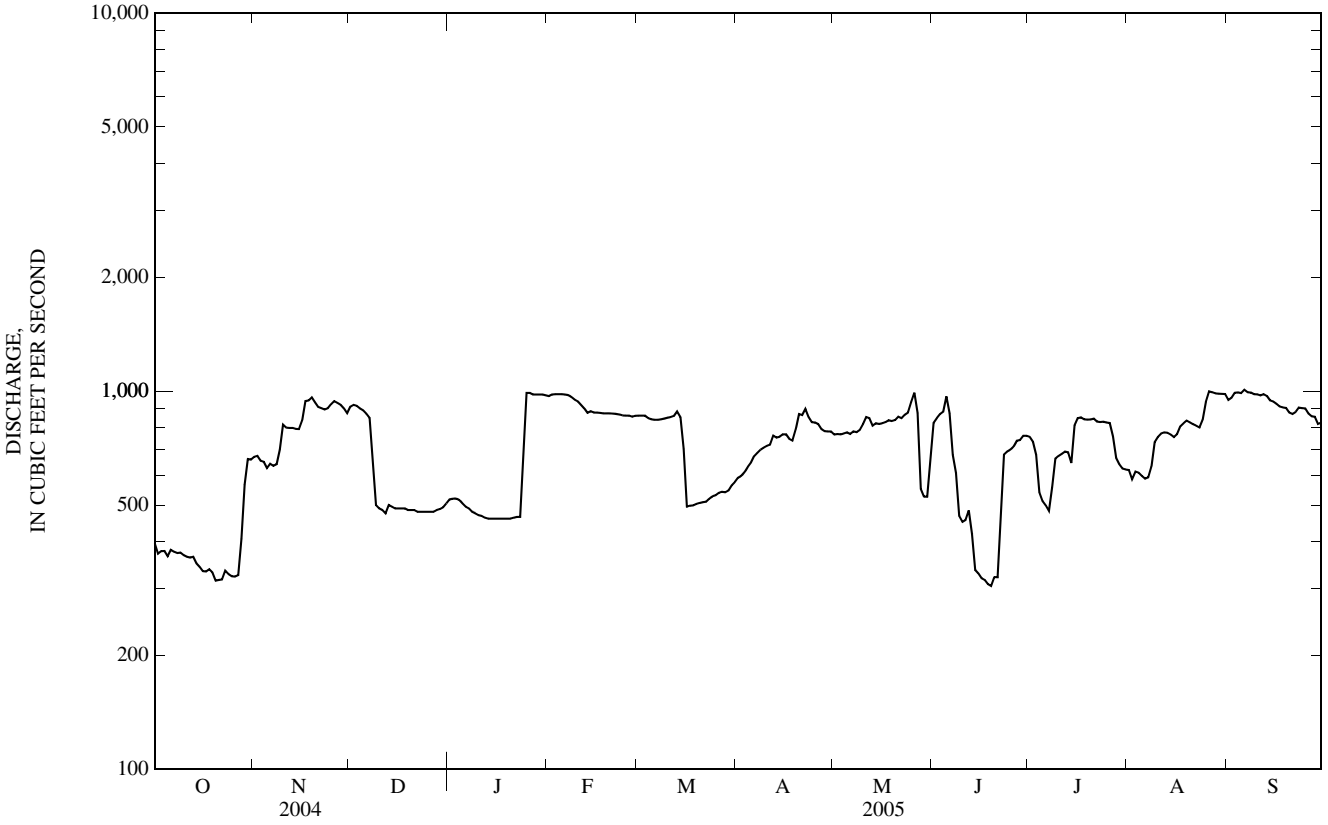
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 - 2005, BY WATER YEAR (WY)

MEAN	483	491	470	475	473	440	362	497	562	536	478	474
MAX	2,071	1,765	1,498	1,418	1,342	1,396	1,357	1,624	2,025	1,840	1,464	1,712
(WY)	(1951)	(2000)	(1951)	(1951)	(1951)	(1951)	(2000)	(1950)	(1950)	(1950)	(1975)	(1950)
MIN	5.10	3.57	0.95	0.35	0.40	0.60	4.00	0.60	2.15	4.63	2.73	1.61
(WY)	(1934)	(1934)	(1934)	(1934)	(1934)	(1936)	(1936)	(1933)	(1933)	(1934)	(1936)	(1934)

05074500 RED LAKE RIVER NEAR RED LAKE, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1933 - 2005	
ANNUAL TOTAL	85,500		258,479			
ANNUAL MEAN	234		708		482	
HIGHEST ANNUAL MEAN					1,292	1951
LOWEST ANNUAL MEAN					5.55	1936
HIGHEST DAILY MEAN	963	Nov 19	1,010	Sep 6	2,240	Oct 6, 1950
LOWEST DAILY MEAN	72	Jan 1	305	Jun 19	a0.00	Sep 19, 1933
ANNUAL SEVEN-DAY MINIMUM	74	Jan 1	318	Jun 15	0.00	Sep 1, 1934
MAXIMUM PEAK FLOW			b1,030	Sep 5	3,600	Jun 25, 1950
MAXIMUM PEAK STAGE			c73.20	Dec 2	78.19	Jun 25, 1950
ANNUAL RUNOFF (AC-FT)	169,600		512,700		349,000	
ANNUAL RUNOFF (CFSM)	0.120		0.363		0.247	
ANNUAL RUNOFF (INCHES)	1.63		4.93		3.36	
10 PERCENT EXCEEDS	645		954		1,020	
50 PERCENT EXCEEDS	133		769		416	
90 PERCENT EXCEEDS	78		414		44	

a Many days in 1933, 1934 and 1936.
b Gage height, 72.64 ft.
c Backwater from ice.
e Estimated.



05076000 THIEF RIVER NEAR THIEF RIVER FALLS, MN

LOCATION.--Lat 48°11'08", long 96°10'11", in NW¼SW¼ sec. 3, T.154 N., R.43 W., Marshall County, Hydrologic Unit 09020304, on right bank, 0.2 mi upstream from highway bridge, 5 mi north of Thief River Falls, 7 mi upstream from mouth, and 9 mi downstream from Mud Lake National Wildlife Refuge.

DRAINAGE AREA.--985 mi^2.

PERIOD OF RECORD.--July 1909 to September 1917, April 1920 to September 1921, October 1922 to September 1924, October 1928 to September 1981, March 1982 to current year. Monthly discharge only for some periods, annual maximums for water years 1919, 1922, 1925, 1926, published in WSP 1308. October 1981 to February 1982, operated as a high-flow partial-record station.

REVISED RECORDS.--WSP 925: Drainage area. WSP 1308: 1917(M), 1924(M), 1929(M), 1931-33(M), 1935(M), 1937(M).

GAGE.--Water-stage recorder and control of grouted boulders. Datum of gage is 1,112.33 ft above sea level (NGVD of 1929, levels by Minnesota Department of Transportation). Prior to May 4, 1939, nonrecording gages at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Some regulation by Thief and Mud Lakes.

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	889	1,760	e105	e95	e26	e22	e1,780	655	724	1,900	214	62
2	872	1,810	e99	e94	e26	e22	e2,200	619	686	1,860	187	60
3	845	1,730	e94	e93	e26	e22	e2,000	503	696	1,880	182	56
4	830	1,620	e97	e90	e26	e23	1,920	481	713	2,100	177	52
5	809	1,590	e100	e87	e26	e24	1,870	389	942	2,080	166	54
6	638	1,570	e98	e85	e26	e36	1,860	381	1,760	2,050	110	54
7	592	1,500	e97	e82	e25	e60	1,850	420	2,010	1,870	107	209
8	612	1,370	e96	e80	e24	e55	1,780	430	2,060	1,820	106	237
9	711	1,260	e96	e76	e24	e45	1,710	1,120	1,950	1,710	79	78
10	708	1,110	e96	e72	e24	e38	1,620	1,310	1,790	1,560	36	42
11	704	1,050	e96	e40	e25	e33	1,560	1,110	1,750	1,450	27	40
12	628	987	e96	e28	e26	e29	1,620	1,080	2,530	1,400	25	39
13	349	871	e97	e25	e27	e24	1,790	1,010	2,570	1,370	22	40
14	457	872	e97	e23	e27	e20	1,750	1,000	2,570	1,320	21	39
15	452	800	e98	e22	e27	e18	1,650	989	2,500	1,280	19	38
16	365	596	e100	e21	e26	15	1,550	960	2,330	1,230	17	36
17	368	473	e101	e20	e25	12	1,460	925	2,150	1,180	20	39
18	371	529	e102	e20	e25	10	1,360	822	1,950	1,080	30	34
19	399	533	e103	e20	e24	9.2	1,100	554	1,720	897	98	32
20	389	351	e104	e20	e24	8.6	892	597	1,690	1,180	198	30
21	312	282	e107	e21	e24	8.1	689	533	1,590	1,680	170	29
22	297	434	e106	e21	e23	7.9	512	588	1,520	1,600	119	28
23	275	836	e104	e21	e23	8.2	564	668	1,550	1,430	86	28
24	376	411	e102	e21	e23	10	558	652	1,520	1,270	66	29
25	579	e270	e100	e21	e23	e20	578	671	1,470	1,100	65	46
26	887	e205	e99	e22	e22	e48	675	750	1,400	963	81	52
27	1,200	e170	e98	e23	e22	e92	673	782	1,350	360	99	49
28	1,030	e130	e98	e24	e22	e210	664	838	1,320	260	94	27
29	1,050	e122	e98	e24	---	e400	662	855	1,320	253	77	28
30	1,560	e114	e97	e25	---	e770	657	834	1,740	240	71	27
31	1,780	---	e96	e26	---	e1,500	---	779	---	228	69	---
TOTAL	21,334	25,356	3,077	1,342	691	3,600.0	39,554	23,305	49,871	40,601	2,838	1,614
MEAN	688	845	99.3	43.3	24.7	116	1,318	752	1,662	1,310	91.5	53.8
MAX	1,780	1,810	107	95	27	1,500	2,200	1,310	2,570	2,100	214	237
MIN	275	114	94	20	22	7.9	512	381	686	228	17	27
AC-FT	42,320	50,290	6,100	2,660	1,370	7,140	78,460	46,230	98,920	80,530	5,630	3,200
CFSM	0.70	0.86	0.10	0.04	0.03	0.12	1.34	0.76	1.69	1.33	0.09	0.05
IN.	0.81	0.96	0.12	0.05	0.03	0.14	1.49	0.88	1.88	1.53	0.11	0.06

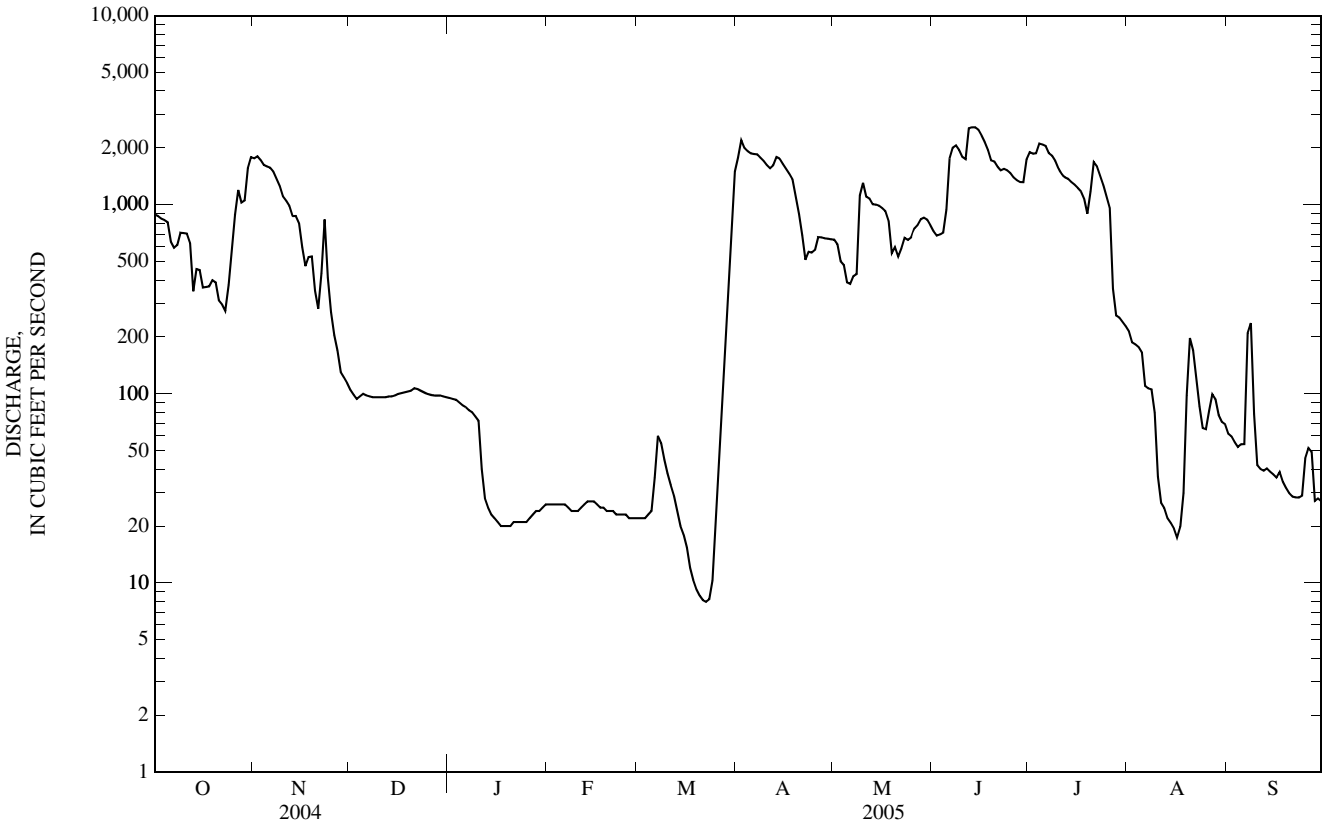
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 2005, BY WATER YEAR (WY)

MEAN	101	93.6	25.0	6.05	5.47	79.3	622	514	367	267	118	120
MAX	688	1,019	215	100	101	773	2,827	4,274	2,238	2,103	1,130	1,619
(WY)	(2005)	(2001)	(1999)	(1910)	(1998)	(1995)	(1966)	(1950)	(2002)	(1975)	(2001)	(1999)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	7.75	1.83	0.03	0.00	0.00	0.00
(WY)	(1911)	(1911)	(1911)	(1911)	(1911)	(1930)	(1981)	(1990)	(1980)	(1932)	(1932)	(1929)

05076000 THIEF RIVER NEAR THIEF RIVER FALLS, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1909 - 2005	
ANNUAL TOTAL	195,207.96		213,183.0			
ANNUAL MEAN	533		584		a193	
HIGHEST ANNUAL MEAN					791	1999
LOWEST ANNUAL MEAN					1.28	1939
HIGHEST DAILY MEAN	2,910	May 31	2,570	Jun 13, 14	5,580	May 13, 1950
LOWEST DAILY MEAN	0.22	Feb 18	7.9	Mar 22	b0.00	Oct 1, 1910
ANNUAL SEVEN-DAY MINIMUM	0.22	Feb 17	8.9	Mar 18	0.00	Oct 1, 1910
MAXIMUM PEAK FLOW			c2,610	Jun 12	5,610	May 13, 1950
MAXIMUM PEAK STAGE			d15.91	Apr 2	17.38	May 13, 1950
INSTANTANEOUS LOW FLOW			7.9	Mar 21	b0.00	Oct 1, 1910
ANNUAL RUNOFF (AC-FT)	387,200		422,800		139,800	
ANNUAL RUNOFF (CFSM)	0.541		0.593		0.196	
ANNUAL RUNOFF (INCHES)	7.37		8.05		2.66	
10 PERCENT EXCEEDS	1,550		1,720		606	
50 PERCENT EXCEEDS	288		214		11	
90 PERCENT EXCEEDS	0.35		23		0.00	

a Median of annual mean discharges is 150 ft^3/s.
b Many days, several years.
c Gage height, 12.75 ft.
d Backwater from ice.
e Estimated.



05078000 CLEARWATER RIVER AT PLUMMER, MN

LOCATION.--Lat 47°55'24", long 96°02'46", in SE¼SW¼ sec. 4, T.151 N., R.42 W., Red Lake County, Hydrologic Unit 09020305, on right bank 200 ft downstream from Soo Line Railroad bridge, 300 ft downstream from bridge on U.S. Highway 59, 0.9 mi northwest of railroad depot in Plummer, and 8 mi upstream from Hill River.

DRAINAGE AREA.--555 mi^2.

PERIOD OF RECORD.--April 1939 to September 1979, March 1982 to current year. Annual maximums only, October 1979 to February 1982.

GAGE.--Water-stage recorder. Datum of gage is 1,098.57 ft above sea level (NGVD of 1929, levels by U.S. Army Corps of Engineers). Prior to Nov. 10, 1939, nonrecording gage at site 100 ft upstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Since 1968, undetermined amounts of water diverted for the flooding of wild rice paddies upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 630 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 1	1800	1,160	7.61	May 30	1100	938	6.57
Apr 1	0430	(ice jam)	*9.78	Jun 9	0800	*1,690	8.87

Minimum discharge, 28 ft^3/s, Aug. 9, gage height, 2.50 ft.

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	95	1,130	e68	e50	e63	e59	e1,070	135	833	582	57	71
2	84	1,120	e65	e49	e65	e59	e1,030	140	686	602	55	73
3	111	1,040	e63	e49	e66	e58	982	129	544	516	76	75
4	123	935	e62	e49	e66	e58	840	116	513	456	86	88
5	92	768	e62	e49	e67	e59	873	106	551	387	88	85
6	71	592	e61	e49	e66	e60	771	94	809	338	73	112
7	57	499	e61	e49	e65	e61	643	106	1,070	292	54	127
8	45	450	e61	e49	e64	e61	516	112	1,510	251	47	117
9	51	417	e60	e49	e63	e60	452	128	1,680	231	39	108
10	60	390	e60	e48	e63	e59	408	158	1,640	206	49	104
11	44	366	e60	e48	e64	e58	389	190	1,500	184	37	107
12	53	335	e60	e48	e65	e58	446	190	1,560	179	36	103
13	45	305	e60	e48	e67	e58	563	179	1,560	177	41	91
14	50	288	e59	e48	e68	e58	503	177	1,580	158	43	90
15	50	276	e59	e48	e68	e59	442	238	1,590	135	44	86
16	44	254	e58	e48	e67	e60	407	270	1,410	126	38	80
17	45	233	e58	e48	e66	e60	368	252	1,210	128	41	66
18	42	219	e58	e48	e64	e61	336	237	1,030	121	55	59
19	39	217	e57	e49	e63	e62	315	213	837	105	82	56
20	42	228	e56	e50	e61	e63	266	198	646	103	117	51
21	44	228	e55	e51	e61	e64	222	197	528	104	109	46
22	39	215	e54	e52	e60	e65	209	209	466	114	86	44
23	71	201	e53	e53	e60	e67	230	250	400	115	77	42
24	158	e175	e52	e55	e60	e71	225	260	359	108	71	42
25	200	e148	e51	e56	e60	e80	202	249	301	100	73	43
26	196	e128	e51	e57	e59	e98	202	334	245	87	70	44
27	162	e109	e50	e58	e59	e130	186	670	233	101	123	43
28	142	e92	e50	e59	e59	e230	143	823	282	92	109	44
29	206	e80	e50	e60	---	e410	122	906	276	75	90	45
30	689	e73	e50	e61	---	e720	115	933	397	72	79	44
31	1,000	---	e50	e62	---	e980	---	903	---	66	74	---
TOTAL	4,150	11,511	1,774	1,597	1,779	4,106	13,476	9,102	26,246	6,311	2,119	2,186
MEAN	134	384	57.2	51.5	63.5	132	449	294	875	204	68.4	72.9
MAX	1,000	1,130	68	62	68	980	1,070	933	1,680	602	123	127
MIN	39	73	50	48	59	58	115	94	233	66	36	42
AC-FT	8,230	22,830	3,520	3,170	3,530	8,140	26,730	18,050	52,060	12,520	4,200	4,340
CFSM	0.24	0.69	0.10	0.09	0.11	0.24	0.81	0.53	1.58	0.37	0.12	0.13
IN.	0.28	0.77	0.12	0.11	0.12	0.28	0.90	0.61	1.76	0.42	0.14	0.15

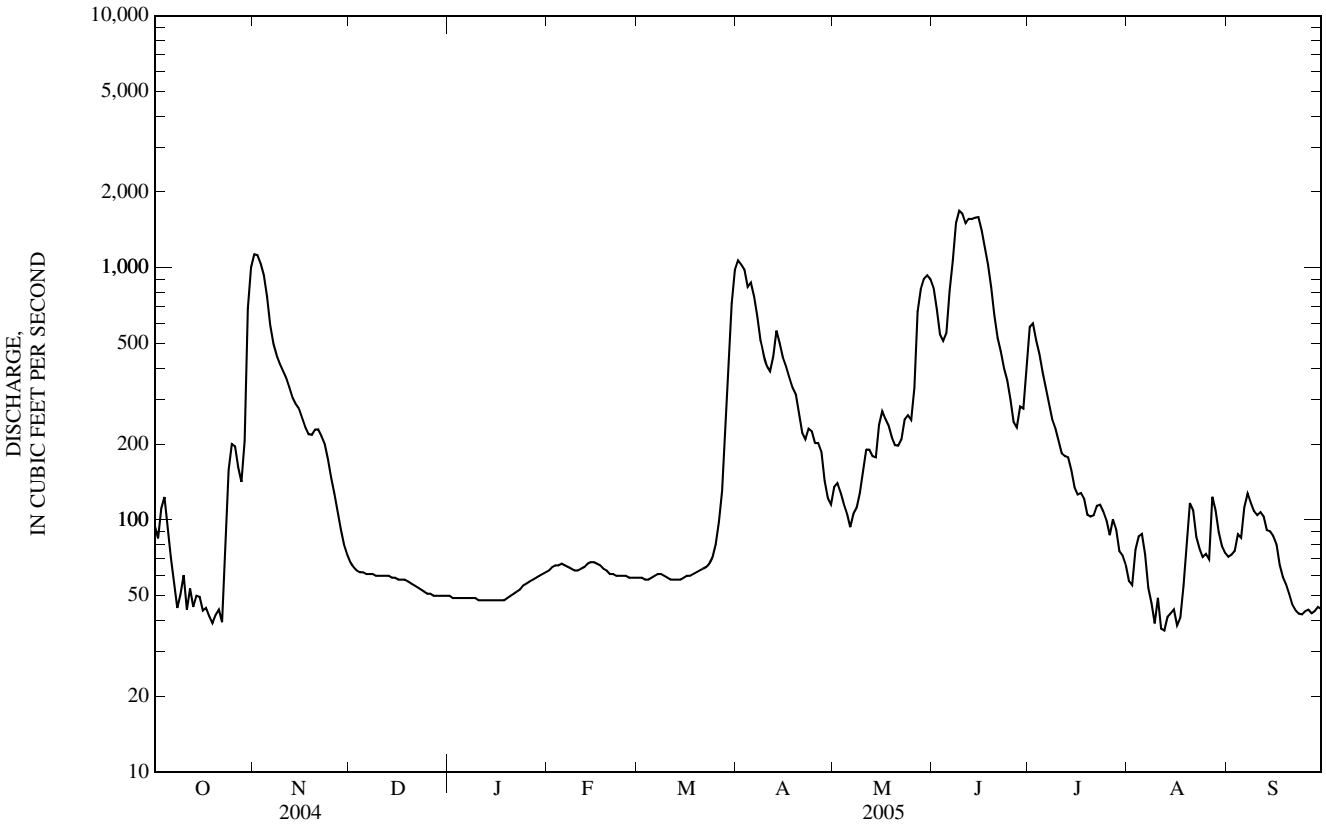
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2005, BY WATER YEAR (WY)

MEAN	115	103	67.3	54.4	52.4	119	526	357	272	229	126	113
MAX	483	617	211	125	184	445	1,472	1,974	1,140	1,072	507	666
(WY)	(1972)	(2001)	(2001)	(2001)	(1998)	(1995)	(1997)	(1950)	(1962)	(1997)	(1985)	(1973)
MIN	21.5	23.8	24.4	18.4	19.0	22.8	26.8	7.52	30.1	16.0	13.3	14.1
(WY)	(1941)	(1991)	(1990)	(1940)	(1940)	(1940)	(1977)	(1977)	(1991)	(1940)	(1940)	(1940)

05078000 CLEARWATER RIVER AT PLUMMER, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1939 - 2005	
ANNUAL TOTAL	54,197		84,357			
ANNUAL MEAN	148		231		a179	
HIGHEST ANNUAL MEAN					354	1950
LOWEST ANNUAL MEAN					57.0	1990
HIGHEST DAILY MEAN	1,130	Nov 1	1,680	Jun 9	3,840	Apr 25, 1979
LOWEST DAILY MEAN	39	Mar 12	36	Aug 12	2.6	May 16, 1977
ANNUAL SEVEN-DAY MINIMUM	42	Oct 16	40	Aug 11	2.9	May 10, 1977
MAXIMUM PEAK FLOW			b1,690	Jun 9	c3,940	Apr 25, 1979
MAXIMUM PEAK STAGE			d9.78	Apr 1	d12.74	Apr 16, 1997
INSTANTANEOUS LOW FLOW			28	Aug 9	2.5	May 16, 1977
ANNUAL RUNOFF (AC-FT)	107,500		167,300		129,500	
ANNUAL RUNOFF (CFSM)	0.267		0.416		0.322	
ANNUAL RUNOFF (INCHES)	3.63		5.65		4.37	
10 PERCENT EXCEEDS	350		656		413	
50 PERCENT EXCEEDS	83		86		79	
90 PERCENT EXCEEDS	49		48		34	

a Median of annual mean discharges is 180 ft^3/s.
b Gage-height, 8.87 ft.
c Gage-height, 12.31 ft.
d Backwater from ice.
e Estimated.



05078230 LOST RIVER AT OKLEE, MN

LOCATION.--Lat 47°50'35", long 95°51'30", in SE¼NE¼ sec. 2, T.150 N., R.41 W., Red Lake County, Hydrologic Unit 09020305, on left bank 30 ft upstream of bridge on State Highway 222 at northwest edge of Oklee, 12 mi upstream from mouth.

DRAINAGE AREA.--254 mi^2.

PERIOD OF RECORD.--April 1960 to September 1981, February 1982 to current year. Monthly and daily figures for April 1960 to June 1960, published in WSP 2113.

GAGE.--Water-stage recorder. Datum of gage is 1,126.94 ft above sea level, adjustment of 1912 (levels by U.S. Army Corps of Engineers). Prior to Sept. 9, 1960, reference points at same site at datum 8.00 ft higher. Sept. 9, 1960 to Sept. 30, 1964, nonrecording gage at same site at datum 8.00 ft higher. Oct. 1, 1964 to Sept. 30, 1981, and Feb. 24, 1982 to Sept. 6, 1989, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1897, 18.39 ft, present datum, Apr. 21, 1950, from floodmarks, discharge, 2,790 ft^3/s.

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	45	1,370	e44	e14	e16	e14	e950	65	214	303	3.9	3.6
2	42	1,040	e42	e14	e16	e14	e700	67	181	246	3.5	3.3
3	39	709	e39	e14	e16	e14	469	65	161	199	3.4	3.3
4	38	501	e38	e13	e16	e14	422	62	157	156	2.8	3.4
5	35	392	e37	e13	e17	e14	376	60	258	120	2.4	3.5
6	34	334	e35	e13	e17	e15	321	65	828	97	2.2	4.5
7	33	282	e34	e13	e16	e15	266	63	1,030	81	2.0	7.3
8	32	235	e33	e13	e16	e15	235	63	1,020	63	1.6	9.0
9	31	204	e33	e13	e16	e15	215	70	912	51	1.4	8.2
10	30	187	e32	e13	e16	e14	197	88	644	43	1.3	7.3
11	30	166	e32	e12	e16	e14	208	100	435	36	1.6	9.1
12	30	150	e31	e12	e16	e14	314	97	720	31	1.6	12
13	29	139	e31	e12	e17	e14	348	98	655	28	1.5	13
14	29	132	e30	e12	e17	e14	289	117	729	25	2.0	12
15	29	127	e29	e12	e17	e14	240	122	642	21	2.0	11
16	28	123	e29	e12	e16	e14	207	108	459	17	2.1	9.6
17	28	119	e28	e12	e16	e14	182	99	347	14	3.0	7.2
18	28	114	e27	e12	e16	e14	167	90	264	12	3.4	5.4
19	28	108	e26	e12	e15	e14	157	86	206	9.7	4.2	4.7
20	29	108	e25	e12	e15	e14	145	79	166	8.7	5.3	4.0
21	28	e105	e24	e13	e15	e14	136	77	139	7.7	4.6	3.8
22	29	e102	e23	e13	e15	e15	123	91	118	7.0	3.7	3.7
23	65	e87	e21	e13	e15	e17	106	103	103	6.6	3.5	3.7
24	189	e77	e19	e13	e15	e23	81	94	94	8.4	3.5	4.3
25	197	e70	e18	e13	e14	e45	77	89	85	8.0	3.8	5.2
26	176	e64	e17	e14	e14	e95	78	206	70	7.6	5.6	8.2
27	148	e59	e16	e14	e14	e200	77	336	87	7.1	14	16
28	133	e55	e16	e14	e14	e400	71	393	106	6.7	18	18
29	286	e51	e15	e15	---	e800	65	380	111	6.6	13	18
30	1,360	e48	e15	e15	---	e1,100	65	332	219	5.4	8.0	18
31	1,640	---	e14	e15	---	e1,050	---	268	---	4.5	5.0	---
TOTAL	4,898	7,258	853	405	439	4,043	7,287	4,033	11,160	1,637.0	133.9	240.3
MEAN	158	242	27.5	13.1	15.7	130	243	130	372	52.8	4.32	8.01
MAX	1,640	1,370	44	15	17	1,100	950	393	1,030	303	18	18
MIN	28	48	14	12	14	14	65	60	70	4.5	1.3	3.3
AC-FT	9,720	14,400	1,690	803	871	8,020	14,450	8,000	22,140	3,250	266	477
CFSM	0.62	0.95	0.11	0.05	0.06	0.51	0.96	0.51	1.46	0.21	0.02	0.03
IN.	0.72	1.06	0.12	0.06	0.06	0.59	1.07	0.59	1.63	0.24	0.02	0.04

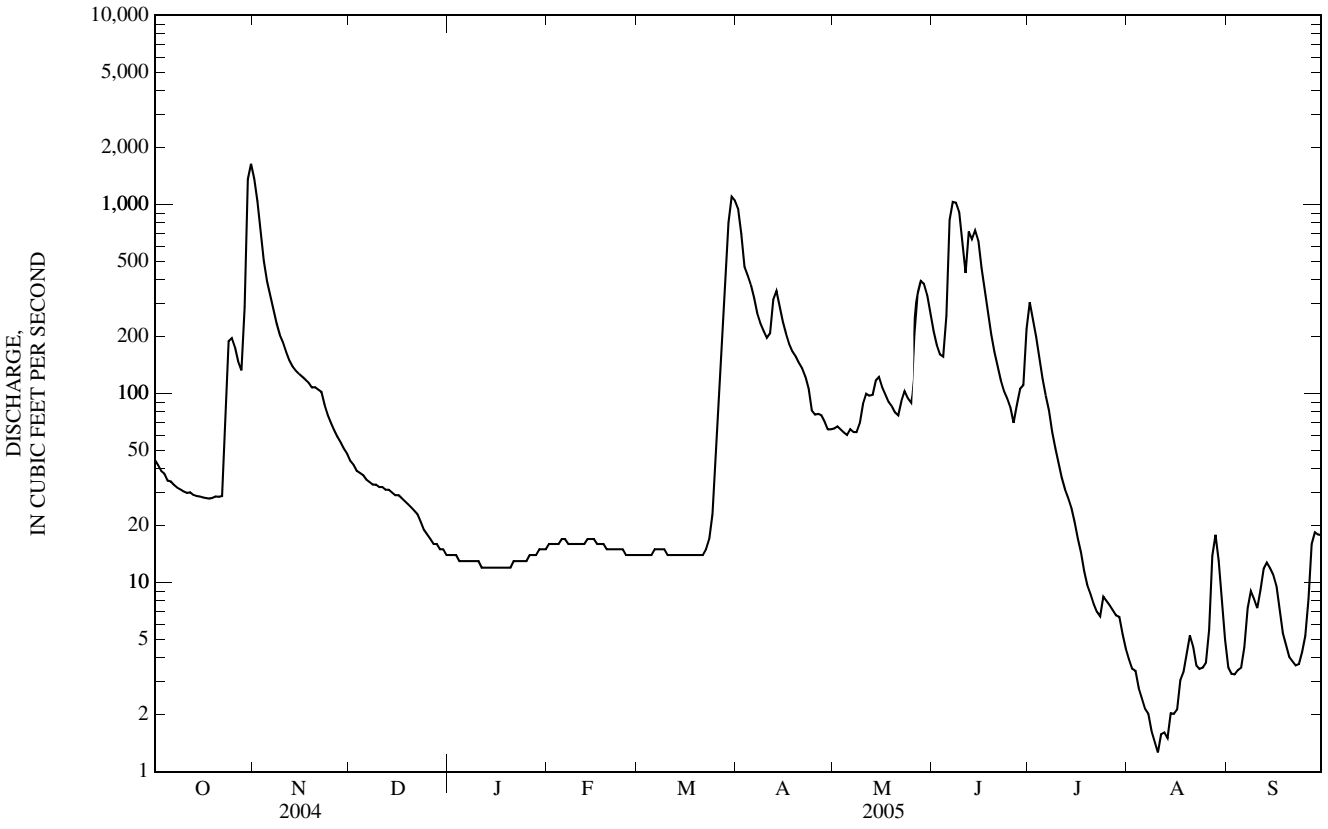
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2005, BY WATER YEAR (WY)

MEAN	49.8	40.3	16.2	10.0	10.7	76.9	295	138	102	82.2	37.9	40.3
MAX	470	242	56.6	26.7	76.3	264	904	622	657	442	351	330
(WY)	(1972)	(2005)	(1978)	(1998)	(1998)	(1999)	(1996)	(1962)	(1962)	(1962)	(1985)	(1973)
MIN	1.02	1.11	0.05	0.00	0.00	0.19	29.5	10.5	8.20	1.99	1.17	0.00
(WY)	(1991)	(1977)	(1977)	(1977)	(1977)	(1964)	(1991)	(1980)	(1980)	(1961)	(1961)	(1990)

05078230 LOST RIVER AT OKLEE, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1960 - 2005	
ANNUAL TOTAL	27,208.2		42,387.2			
ANNUAL MEAN	74.3		116		75.0	
HIGHEST ANNUAL MEAN					177	1962
LOWEST ANNUAL MEAN					18.2	1990
HIGHEST DAILY MEAN	1,640	Oct 31	1,640	Oct 31	3,040	Apr 11, 1969
LOWEST DAILY MEAN	5.0	Jan 21	1.3	Aug 10	a0.00	Feb 16, 1963
ANNUAL SEVEN-DAY MINIMUM	5.0	Jan 19	1.6	Aug 7	0.00	Feb 16, 1963
MAXIMUM PEAK FLOW			1,710	Oct 31	b3,210	Apr 11, 1969
MAXIMUM PEAK STAGE			13.53	Oct 31	c16.91	Apr 8, 1997
INSTANTANEOUS LOW FLOW			0.99	Aug 10	a0.00	Feb 16, 1963
ANNUAL RUNOFF (AC-FT)	53,970		84,080		54,300	
ANNUAL RUNOFF (CFSM)	0.293		0.457		0.295	
ANNUAL RUNOFF (INCHES)	3.98		6.21		4.01	
10 PERCENT EXCEEDS	169		307		167	
50 PERCENT EXCEEDS	30		28		20	
90 PERCENT EXCEEDS	6.1		4.7		2.8	

a Many days, several years.
b Gage-height, 14.91 ft, from floodmark.
c Backwater from ice.
e Estimated.



05078470 JUDICIAL DITCH 64 NEAR MENTOR, MN

LOCATION.--Lat 47°44'16", long 96°12'09", in SE$^1/_4$NE$^1/_4$ sec. 7, T.149 N., R.43 W., Polk County, Hydrologic Unit 09020303, at culvert on township road, 0.5 miles north of U.S. Highway 2, 4.2 miles northwest of Mentor.

DRAINAGE AREA.--9.6 mi^2.

PERIOD OF RECORD.--September 2002 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,120 ft above sea level (from topographic map).

REMARKS.--Records fair except those for estimated daily discharges, and discharges less than 1.0 ft^3/s, which are poor.

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	1.5	36	e1.2	e0.03	e0.01	e0.01	e24	3.3	5.2	8.1	0.04	0.10
2	1.2	29	e1.1	e0.03	e0.01	e0.01	23	3.0	4.6	6.5	0.04	0.08
3	1.1	25	e1.0	e0.03	e0.01	e0.01	20	2.6	5.6	6.4	0.08	0.07
4	0.84	22	e0.94	e0.02	e0.01	e0.01	21	2.3	6.4	5.8	0.05	0.06
5	0.75	20	e0.90	e0.02	e0.01	e0.01	21	2.1	12	4.7	0.03	0.17
6	0.68	18	e0.87	e0.02	e0.01	e0.01	17	1.9	28	3.7	0.03	0.97
7	0.58	16	e0.83	e0.02	e0.01	e0.01	15	1.7	21	2.8	0.03	3.1
8	0.54	14	e0.80	e0.02	e0.01	e0.01	14	2.1	27	2.2	0.03	0.88
9	0.45	13	e0.77	e0.02	e0.01	e0.01	13	5.1	23	1.7	0.03	0.87
10	0.41	12	e0.74	e0.02	e0.01	e0.01	12	5.9	16	1.3	0.03	2.8
11	0.39	11	e0.71	e0.02	e0.01	e0.01	17	5.2	19	1.1	0.12	2.3
12	0.36	10	e0.67	e0.02	e0.01	e0.01	25	4.1	47	1.1	0.07	1.0
13	0.33	9.5	e0.65	e0.02	e0.01	e0.01	25	3.9	33	0.95	0.04	0.83
14	0.33	9.1	e0.62	e0.02	e0.01	e0.01	19	5.5	41	0.67	0.03	0.65
15	0.43	8.7	e0.60	e0.02	e0.01	e0.01	15	5.3	32	0.49	0.03	0.89
16	0.58	8.4	e0.57	e0.01	e0.01	e0.01	13	4.6	23	0.39	0.03	0.70
17	0.66	8.1	e0.55	e0.01	e0.01	e0.01	13	3.8	18	0.33	0.18	0.61
18	0.65	7.5	e0.52	e0.01	e0.01	e0.01	12	3.2	14	0.32	0.22	0.42
19	0.77	7.0	e0.47	e0.01	e0.01	e0.01	11	2.9	12	0.27	0.62	0.38
20	0.97	6.8	e0.41	e0.01	e0.01	e0.01	10	2.6	11	0.20	1.0	0.31
21	0.96	5.9	e0.35	e0.01	e0.01	e0.01	9.5	4.2	9.6	0.13	0.72	0.28
22	0.98	5.3	e0.29	e0.01	e0.01	e0.07	8.9	7.1	8.5	0.09	0.36	0.25
23	3.2	4.7	e0.24	e0.01	e0.01	e0.50	8.0	5.7	7.8	0.07	0.20	0.22
24	5.2	4.0	e0.19	e0.01	e0.01	e0.35	7.4	5.0	7.6	0.06	0.15	0.22
25	5.7	2.8	e0.15	e0.01	e0.01	e0.28	7.0	6.7	6.7	0.07	0.30	0.21
26	5.1	2.3	e0.11	e0.01	e0.01	e0.90	6.7	8.4	5.9	0.10	0.72	0.19
27	4.4	1.9	e0.09	e0.01	e0.01	e3.0	6.0	8.3	5.2	0.62	0.53	0.18
28	4.9	e1.7	e0.07	e0.01	e0.01	e7.6	5.2	9.6	4.5	0.34	0.38	0.16
29	20	e1.5	e0.06	e0.01	---	e28	4.4	10	4.3	0.10	0.23	0.14
30	e91	e1.3	e0.05	e0.01	---	e30	3.8	8.6	6.6	0.06	0.16	0.14
31	57	---	e0.04	e0.01	---	e26	---	6.6	---	0.05	0.12	---
TOTAL	211.96	322.5	16.56	0.49	0.28	96.91	406.9	151.3	465.5	50.71	6.60	19.18
MEAN	6.84	10.8	0.53	0.02	0.01	3.13	13.6	4.88	15.5	1.64	0.21	0.64
MAX	91	36	1.2	0.03	0.01	30	25	10	47	8.1	1.0	3.1
MIN	0.33	1.3	0.04	0.01	0.01	0.01	3.8	1.7	4.3	0.05	0.03	0.06
AC-FT	420	640	33	1.0	0.6	192	807	300	923	101	13	38
CFSM	0.71	1.12	0.06	0.00	0.00	0.33	1.41	0.51	1.62	0.17	0.02	0.07
IN.	0.82	1.25	0.06	0.00	0.00	0.38	1.58	0.59	1.80	0.20	0.03	0.07

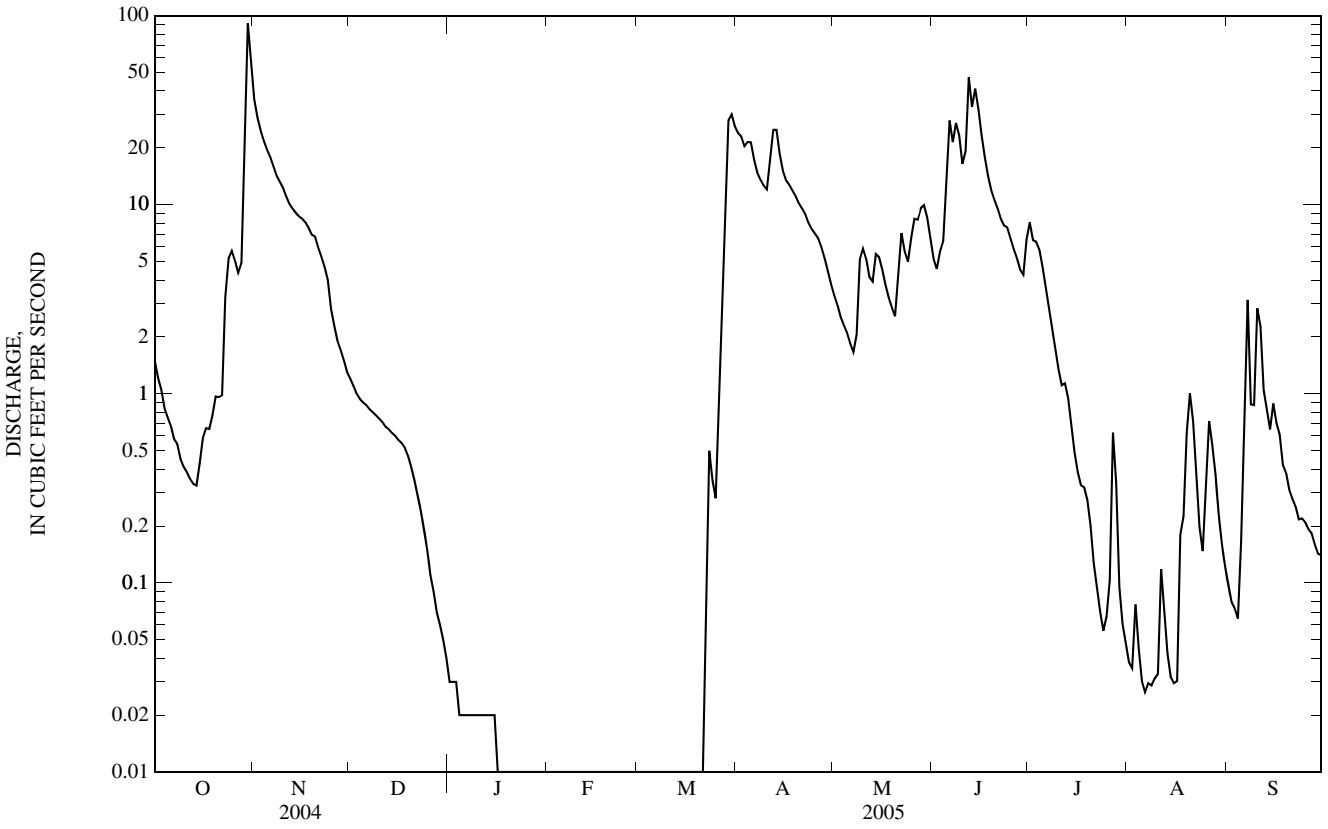
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2005, BY WATER YEAR (WY)

MEAN	2.74	4.01	0.25	0.02	0.00	2.91	6.28	6.84	9.23	1.53	0.29	1.09
MAX	6.84	10.8	0.53	0.04	0.01	3.57	13.6	7.98	15.5	2.20	0.64	2.62
(WY)	(2005)	(2005)	(2005)	(2003)	(2005)	(2004)	(2005)	(2003)	(2005)	(2003)	(2004)	(2004)
MIN	0.09	0.11	0.04	0.02	0.00	2.02	1.91	4.88	3.05	0.74	0.03	0.01
(WY)	(2004)	(2004)	(2004)	(2005)	(2003)	(2003)	(2003)	(2005)	(2004)	(2004)	(2003)	(2003)

05078470 JUDICIAL DITCH 64 NEAR MENTOR, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2002 - 2005	
ANNUAL TOTAL	1,213.38		1,748.89			
ANNUAL MEAN	3.32		4.79		2.93	
HIGHEST ANNUAL MEAN					4.79	2005
LOWEST ANNUAL MEAN					1.83	2004
HIGHEST DAILY MEAN	91	Oct 30	91	Oct 30	91	Oct 30, 2004
LOWEST DAILY MEAN	0.00	Jan 29	0.01	Jan16-Mar21	a0.00	Jan 23, 2003
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 29	0.01	Jan 16	0.00	Jan 23, 2003
MAXIMUM PEAK FLOW			b114	Oct 30	114	Oct 30, 2004
MAXIMUM PEAK STAGE			c4.84	Mar 26	4.84	Mar 26, 2005
INSTANTANEOUS LOW FLOW			d0.01	Jan 16	a0.00	Jan 23, 2003
ANNUAL RUNOFF (AC-FT)	2,410		3,470		2,120	
ANNUAL RUNOFF (CFSM)	0.345		0.499		0.305	
ANNUAL RUNOFF (INCHES)	4.70		6.78		4.15	
10 PERCENT EXCEEDS	9.8		15		8.8	
50 PERCENT EXCEEDS	0.68		0.68		0.41	
90 PERCENT EXCEEDS	0.01		0.01		0.01	

a Many days, several years.
b Gage-height, 4.26 ft, from highwater mark.
c Backwater from ice.
d Estimated, daily-minimum.
e Estimated.



05078500 CLEARWATER RIVER AT RED LAKE FALLS, MN

LOCATION.--Lat 47°53'15", long 96°16'25", in NW¼NE¼ sec. 22, T.151 N., R.44 W., Red Lake County, Hydrologic Unit 09020305, on left bank 900 ft downstream from U.S. highway 59 bridge in Red Lake Falls, 1.4 mi upstream from mouth, and 3 mi downstream from Badger Creek.

DRAINAGE AREA.--1,380 mi^2.

PERIOD OF RECORD.--June 1909 to September 1917, October 1934 to September 1981, March 1982 to current year. Monthly-mean discharge only for October, November, 1934, published in WSP 1308.

REVISED RECORDS.--WSP 355: 1911-12. WSP 1438: 1910-11, 1917(M). WDR MN-84-1:1983.

GAGE.--Water-stage recorder. Datum of gage is 948.94 ft above sea level (NGVD of 1929, levels by U.S. Army Corps of Engineers). Prior to Sept. 12, 1911, nonrecording gage at site 0.5 mi upstream, and Sept. 12, 1911 to Sept. 30, 1917, nonrecording gage at site 40 ft upstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor.

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	221	4,460	e240	e98	e114	e107	3,500	356	1,320	1,030	142	175
2	201	3,520	e218	e97	e115	e107	3,590	364	1,170	1,160	126	162
3	187	2,820	e190	e97	e117	e107	2,930	361	992	1,060	150	155
4	214	2,360	e167	e97	e118	e107	2,210	336	917	969	171	145
5	205	2,010	e152	e96	e120	e108	2,050	315	938	851	171	156
6	171	1,670	e140	e96	e119	e110	1,910	294	1,520	751	153	255
7	151	1,410	e133	e96	e117	e112	1,640	284	2,150	667	126	264
8	133	1,220	e132	e96	e114	e112	1,440	307	2,800	581	102	229
9	118	1,110	e131	e96	e113	e111	1,270	327	3,250	514	89	212
10	119	1,040	e130	e95	e112	e111	1,160	370	3,080	462	71	208
11	132	980	e128	e95	e114	e110	1,140	426	2,710	420	91	210
12	110	917	e127	e95	e116	e109	1,410	483	3,160	390	73	209
13	121	853	e126	e95	e117	e108	1,780	486	3,290	372	65	196
14	110	818	e125	e94	e118	e108	1,560	494	3,450	353	69	180
15	114	795	e124	e94	e117	e107	1,310	530	3,340	324	67	177
16	116	754	e121	e94	e114	e108	1,150	581	2,900	295	70	164
17	107	713	e119	e95	e112	e108	1,060	562	2,360	283	81	155
18	112	671	e118	e96	e111	e109	959	520	1,940	280	113	134
19	116	637	e116	e97	e110	e111	880	479	1,580	265	132	123
20	108	619	e113	e99	e109	e113	812	445	1,290	241	184	116
21	113	609	e109	e101	e109	e117	716	434	1,060	232	207	107
22	121	585	e106	e103	e108	e120	667	444	921	229	179	95
23	134	536	e104	e104	e108	e127	616	496	821	234	154	88
24	265	e400	e102	e105	e108	e140	612	536	727	227	140	86
25	556	e370	e101	e106	e107	e170	542	531	651	214	146	79
26	593	e345	e100	e107	e107	e340	502	526	567	202	153	78
27	543	e323	e99	e108	e107	e680	493	928	513	196	154	76
28	485	e305	e99	e110	e107	e1,300	455	1,280	549	208	227	76
29	600	e285	e98	e111	---	e2,400	402	1,480	624	186	218	87
30	3,040	e270	e98	e112	---	e3,000	364	1,520	701	164	201	91
31	4,900	---	e98	e113	---	3,570	---	1,450	---	153	185	---
TOTAL	14,216	33,405	3,964	3,098	3,158	14,147	39,130	17,945	51,291	13,513	4,210	4,488
MEAN	459	1,114	128	99.9	113	456	1,304	579	1,710	436	136	150
MAX	4,900	4,460	240	113	120	3,570	3,590	1,520	3,450	1,160	227	264
MIN	107	270	98	94	107	107	364	284	513	153	65	76
AC-FT	28,200	66,260	7,860	6,140	6,260	28,060	77,610	35,590	101,700	26,800	8,350	8,900
CFSM	0.33	0.81	0.09	0.07	0.08	0.33	0.95	0.42	1.24	0.32	0.10	0.11
IN.	0.38	0.90	0.11	0.08	0.09	0.38	1.05	0.48	1.38	0.36	0.11	0.12

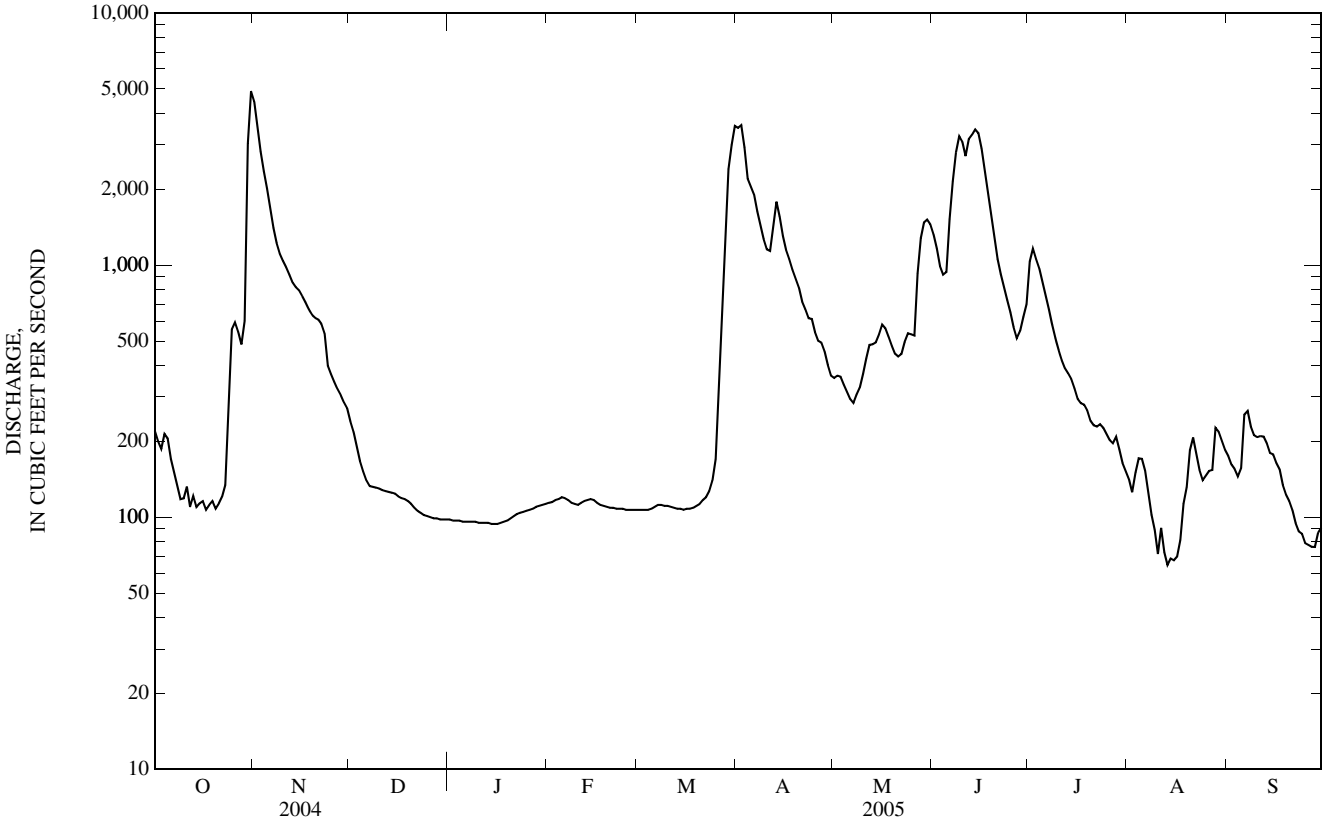
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 2005, BY WATER YEAR (WY)

MEAN	194	167	97.2	77.4	74.5	253	1,164	695	525	411	214	201
MAX	1,350	1,233	321	221	385	1,136	3,507	5,059	3,042	2,389	1,686	1,599
(WY)	(1972)	(1972)	(2001)	(1998)	(1998)	(1995)	(1997)	(1950)	(1962)	(1997)	(1985)	(1999)
MIN	10.0	19.0	21.4	21.4	19.1	13.6	61.0	32.2	26.5	8.34	1.49	2.92
(WY)	(1935)	(1935)	(1937)	(1940)	(1937)	(1937)	(1981)	(1977)	(1980)	(1936)	(1936)	(1936)

05078500 CLEARWATER RIVER AT RED LAKE FALLS, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1909 - 2005	
ANNUAL TOTAL	136,800		202,565			
ANNUAL MEAN	374		555		a337	
HIGHEST ANNUAL MEAN					855	1950
LOWEST ANNUAL MEAN					64.4	1939
HIGHEST DAILY MEAN	4,900	Oct 31	4,900	Oct 31	9,930	Apr 25, 1979
LOWEST DAILY MEAN	70	Feb 4	65	Aug 13	0.10	Sep 15, 1936
ANNUAL SEVEN-DAY MINIMUM	71	Jan 31	72	Aug 10	0.24	Sep 12, 1936
MAXIMUM PEAK FLOW			5,740	Mar 31	b10,300	Apr 25, 1979
MAXIMUM PEAK STAGE			c12.95	Mar 29	d15.85	Mar 6, 1983
INSTANTANEOUS LOW FLOW			60	Aug 13	f0.00	Sep 15, 1936
ANNUAL RUNOFF (AC-FT)	271,300		401,800		244,100	
ANNUAL RUNOFF (CFSM)	0.271		0.402		0.244	
ANNUAL RUNOFF (INCHES)	3.69		5.46		3.32	
10 PERCENT EXCEEDS	903		1,460		800	
50 PERCENT EXCEEDS	171		187		120	
90 PERCENT EXCEEDS	79		98		39	

a Median of annual mean discharges is 290 ft^3/s.
b Gage-height, 12.38 ft.
c Backwater from ice.
d From highwater mark, backwater from ice.
e Estimated.
f Also occurred Sep. 14, 1939, and Aug. 19-22, 1940.



05078520 CYR CREEK NEAR MARCOUX CORNERS, MN

LOCATION.--Lat 47°48'13", long 96°16'36", in NW¼NE¼ sec. 22, T.150 N., R.44 W., Red lake County, Hydrologic Unit 09020303, at culvert on County Highway 14, 0.5 miles west of State Highway 32, 3.0 miles north of Marcoux Corners.

DRAINAGE AREA.--11.4 mi^2.

PERIOD OF RECORD.--September 2002 to September 2005, discontinued.

GAGE.--Water-stage recorder. Datum of gage is 1,057.88 ft above sea level (NAVD 1988).

REMARKS.--Records good except those for estimated daily discharges, or discharges less than 1.0 ft^3/s, which are poor.

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	2.1	62	e0.65	e0.02	e0.00	e0.00	e21	1.6	2.3	3.8	0.00	0.03
2	1.6	40	e0.58	e0.02	e0.00	e0.00	e16	1.3	1.6	2.7	0.00	0.02
3	1.2	27	e0.53	e0.01	e0.00	e0.00	e13	1.1	1.3	1.6	0.00	0.02
4	0.78	20	e0.48	e0.01	e0.00	e0.00	12	1.3	1.4	0.92	0.00	0.02
5	0.81	14	e0.45	e0.01	e0.00	e0.00	10	0.88	15	0.55	0.00	0.78
6	0.68	11	e0.42	e0.01	e0.00	e0.00	8.2	0.77	57	0.24	0.00	19
7	0.56	8.6	e0.39	e0.01	e0.00	e0.00	6.7	0.78	38	0.11	0.00	14
8	0.52	7.0	e0.37	e0.00	e0.00	e0.00	6.1	0.90	41	0.10	0.00	5.9
9	0.32	5.9	e0.34	e0.00	e0.00	e0.00	5.8	2.0	40	0.07	0.00	3.9
10	0.22	5.4	e0.32	e0.00	e0.00	e0.00	5.3	3.1	21	0.05	0.00	4.3
11	0.21	4.5	e0.31	e0.00	e0.00	e0.00	12	2.9	19	0.03	0.00	3.9
12	0.19	3.7	e0.30	e0.00	e0.00	e0.00	31	2.1	79	0.03	0.00	2.4
13	0.15	3.3	e0.28	e0.00	e0.00	e0.00	40	1.9	59	0.03	0.00	1.6
14	0.15	3.2	e0.27	e0.00	e0.00	e0.00	22	2.2	77	0.02	0.00	1.2
15	0.27	3.1	e0.26	e0.00	e0.00	e0.00	13	3.1	61	0.01	0.00	1.2
16	0.45	3.3	e0.24	e0.00	e0.00	e0.00	9.8	2.5	35	0.00	0.00	0.79
17	0.40	3.3	e0.22	e0.00	e0.00	e0.00	7.4	2.0	19	0.00	0.01	0.72
18	0.32	3.1	e0.19	e0.00	e0.00	e0.00	6.2	1.7	9.7	0.00	0.01	0.54
19	0.79	2.8	e0.17	e0.00	e0.00	e0.00	5.4	1.3	5.6	0.00	0.82	0.47
20	0.57	3.0	e0.15	e0.00	e0.00	e0.00	4.6	1.2	3.8	0.00	4.2	0.40
21	0.67	2.8	e0.13	e0.00	e0.00	e0.04	3.8	1.5	2.4	0.00	1.2	0.28
22	0.72	2.8	e0.11	e0.00	e0.00	e0.15	3.5	2.3	1.4	0.00	0.17	0.22
23	4.8	2.5	e0.09	e0.00	e0.00	e0.50	3.0	2.3	1.0	0.00	0.04	0.19
24	12	1.9	e0.08	e0.00	e0.00	e0.34	2.7	1.9	0.62	0.01	0.02	0.22
25	11	1.4	e0.07	e0.00	e0.00	e0.24	2.6	1.7	0.25	0.01	0.39	0.19
26	9.3	e1.2	e0.06	e0.00	e0.00	e1.4	2.4	2.8	0.26	0.00	1.3	0.19
27	6.8	e1.1	e0.05	e0.00	e0.00	e6.0	2.1	3.7	0.32	0.00	1.7	0.15
28	6.7	e0.94	e0.04	e0.00	e0.00	e31	1.9	4.7	0.24	0.00	0.46	0.12
29	27	e0.84	e0.03	e0.00	---	e39	1.7	5.8	0.77	0.00	0.12	0.10
30	116	e0.74	e0.03	e0.00	---	e42	1.6	5.1	2.3	0.00	0.06	0.10
31	112	---	e0.02	e0.00	---	e31	---	3.5	---	0.00	0.04	---
TOTAL	319.28	250.42	7.63	0.09	0.00	151.67	280.8	69.93	596.26	10.28	10.54	62.95
MEAN	10.3	8.35	0.25	0.00	0.00	4.89	9.36	2.26	19.9	0.33	0.34	2.10
MAX	116	62	0.65	0.02	0.00	42	40	5.8	79	3.8	4.2	19
MIN	0.15	0.74	0.02	0.00	0.00	0.00	1.6	0.77	0.24	0.00	0.00	0.02
AC-FT	633	497	15	0.2	0.00	301	557	139	1,180	20	21	125
CFSM	0.90	0.73	0.02	0.00	0.00	0.43	0.82	0.20	1.74	0.03	0.03	0.18
IN.	1.04	0.82	0.02	0.00	0.00	0.49	0.92	0.23	1.95	0.03	0.03	0.21

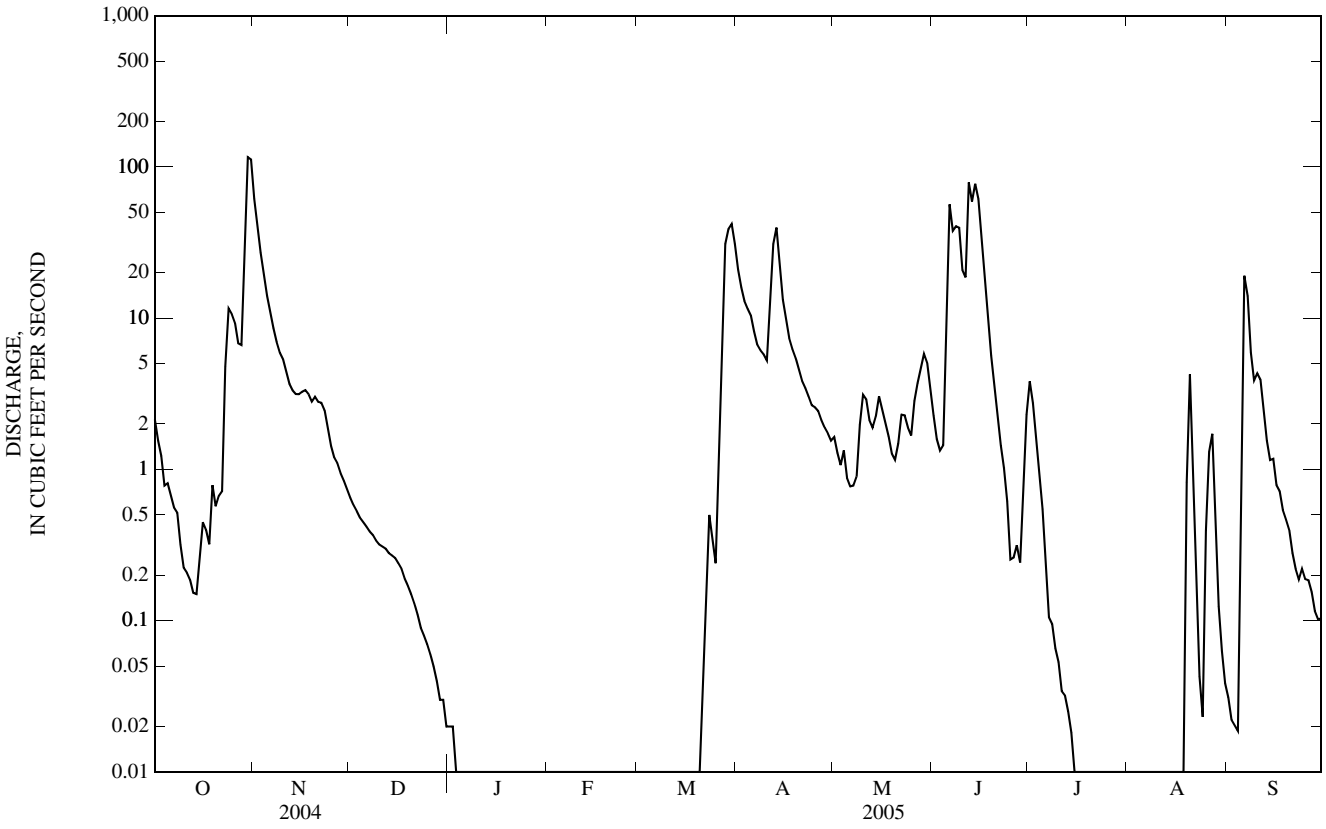
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2005, BY WATER YEAR (WY)

MEAN	3.57	2.89	0.10	0.01	0.00	4.58	4.37	5.15	9.51	0.96	2.24	4.10
MAX	10.3	8.35	0.25	0.03	0.00	6.40	9.36	9.94	19.9	2.19	6.39	10.2
(WY)	(2005)	(2005)	(2005)	(2003)	(2004)	(2004)	(2005)	(2004)	(2005)	(2004)	(2004)	(2004)
MIN	0.00	0.01	0.00	0.00	0.00	2.45	1.77	2.26	3.11	0.33	0.00	0.00
(WY)	(2004)	(2004)	(2004)	(2004)	(2003)	(2003)	(2004)	(2005)	(2004)	(2005)	(2003)	(2003)

05078520 CYR CREEK NEAR MARCOUX CORNERS, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2002 - 2005	
ANNUAL TOTAL	1,802.36		1,759.85			
ANNUAL MEAN	4.92		4.82		3.12	
HIGHEST ANNUAL MEAN					4.82	2005
LOWEST ANNUAL MEAN					1.20	2003
HIGHEST DAILY MEAN	116	Oct 30	116	Oct 30	116	Oct 30, 2004
LOWEST DAILY MEAN	0.00	Jan 1	a0.00	Jan 8	b0.00	Jan 23, 2003
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Jan 8	0.00	Jan 23, 2003
MAXIMUM PEAK FLOW			c139	Oct 30	c139	Oct 30, 2004
MAXIMUM PEAK STAGE			d5.43	Mar 23	d5.43	Mar 23, 2005
INSTANTANEOUS LOW FLOW			a0.00	Jan 8	b0.00	Jan 23, 2003
ANNUAL RUNOFF (AC-FT)	3,570		3,490		2,260	
ANNUAL RUNOFF (CFSM)	0.432		0.423		0.274	
ANNUAL RUNOFF (INCHES)	5.88		5.74		3.72	
10 PERCENT EXCEEDS	11		12		6.8	
50 PERCENT EXCEEDS	0.46		0.37		0.17	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a Many days.
b Many days, several years.
c Gage height, 4.70 ft.
d Backwater from ice, from highwater mark.
e Estimated.



05078720 CO DITCH 140 ABV BR-6 IMP NR TILDEN JCT, MN (SW8)

LOCATION.--Lat 47°40'02", long 96°20'19", in SE¼NW¼ sec. 1, T.148 N., R.45 W., Polk County, Hydrologic Unit 09020303, on right bank 200 feet upstream from culvert on Pembina Trail, 2.4 miles south of County Highway 45 and 3.4 miles southwest of Tilden Junction.

DRAINAGE AREA.--9.0 mi^2.

PERIOD OF RECORD.--October 2004 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,069.00 ft above sea level (from topographic map).

REMARKS.--Records fair except those for estimated daily discharges, and discharges less than 1.0 ft^3/s, which are poor.

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	e1.0	43	e0.93	e0.02	e0.00	e0.00	e41	2.9	2.5	6.3	0.02	0.66
2	e0.86	33	e0.85	e0.02	e0.00	e0.00	e29	2.7	2.2	4.3	0.02	0.54
3	e0.73	27	e0.78	e0.02	e0.00	e0.00	23	2.3	2.1	3.9	0.09	0.46
4	e0.63	22	e0.74	e0.02	e0.00	e0.00	19	2.1	2.0	3.6	0.03	0.37
5	e0.54	19	e0.72	e0.01	e0.00	e0.00	16	1.7	3.7	3.1	0.02	2.2
6	e0.48	16	e0.70	e0.01	e0.00	e0.00	15	1.5	7.9	2.6	0.01	13
7	0.50	14	e0.67	e0.01	e0.00	e0.00	13	1.3	7.5	2.2	0.01	3.8
8	e0.46	12	e0.65	e0.01	e0.00	e0.00	12	1.5	14	2.0	0.03	2.4
9	0.42	11	e0.64	e0.01	e0.00	e0.00	11	1.9	11	1.6	0.02	3.7
10	0.35	11	e0.63	e0.01	e0.00	e0.00	10	2.0	8.1	1.3	e0.01	6.8
11	0.31	9.6	e0.61	e0.01	e0.00	e0.00	15	1.7	14	1.2	e0.00	4.2
12	0.35	8.8	e0.59	e0.01	e0.00	e0.00	22	1.4	38	1.2	e0.00	3.2
13	0.35	8.6	e0.57	e0.01	e0.00	e0.00	25	1.7	25	1.0	e0.00	e2.5
14	0.30	8.3	e0.54	e0.00	e0.00	e0.00	18	2.2	38	0.90	e0.00	2.1
15	0.49	8.1	e0.51	e0.00	e0.00	e0.00	14	2.1	28	0.72	e0.00	2.1
16	0.61	8.0	e0.46	e0.00	e0.00	e0.00	12	1.9	20	0.64	e0.10	1.7
17	0.53	7.7	e0.39	e0.00	e0.00	e0.00	11	1.7	15	0.59	e1.6	2.0
18	0.40	7.3	e0.33	e0.00	e0.00	e0.00	9.4	1.7	12	0.54	1.5	2.1
19	0.46	6.8	e0.28	e0.00	e0.00	e0.00	8.5	1.6	9.2	0.44	5.0	1.7
20	0.55	e6.0	e0.24	e0.00	e0.00	e0.00	7.8	1.5	7.2	0.34	2.3	1.6
21	0.57	e5.0	e0.20	e0.00	e0.00	e0.01	6.9	2.1	7.8	0.26	0.67	1.3
22	0.55	e4.2	e0.16	e0.00	e0.00	e0.10	6.0	2.8	6.8	0.20	0.65	1.0
23	2.5	e3.4	e0.12	e0.00	e0.00	e1.0	5.2	2.2	5.1	0.17	0.60	0.63
24	3.2	e2.7	e0.09	e0.00	e0.00	e0.76	4.6	3.9	4.3	0.13	0.55	0.55
25	3.2	e2.3	e0.07	e0.00	e0.00	e0.50	4.3	2.3	4.0	0.13	1.2	0.49
26	2.3	e1.9	e0.06	e0.00	e0.00	e1.0	4.2	2.9	3.5	0.11	1.7	0.33
27	1.9	e1.6	e0.05	e0.00	e0.00	e5.0	3.6	3.1	3.3	0.10	1.4	0.34
28	3.0	e1.4	e0.04	e0.00	e0.00	e40	3.4	4.0	3.0	0.09	1.1	0.40
29	27	e1.2	e0.03	e0.00	---	e54	3.2	4.6	4.1	0.06	1.00	0.28
30	164	e1.0	e0.03	e0.00	---	e58	3.0	3.9	6.5	0.04	0.72	0.22
31	72	---	e0.02	e0.00	---	e53	---	3.2	---	0.03	0.70	---
TOTAL	290.54	311.9	12.70	0.17	0.00	213.37	376.1	72.4	315.8	39.79	21.05	62.67
MEAN	9.37	10.4	0.41	0.01	0.00	6.88	12.5	2.34	10.5	1.28	0.68	2.09
MAX	164	43	0.93	0.02	0.00	58	41	4.6	38	6.3	5.0	13
MIN	0.30	1.0	0.02	0.00	0.00	0.00	3.0	1.3	2.0	0.03	0.00	0.22
AC-FT	576	619	25	0.3	0.00	423	746	144	626	79	42	124

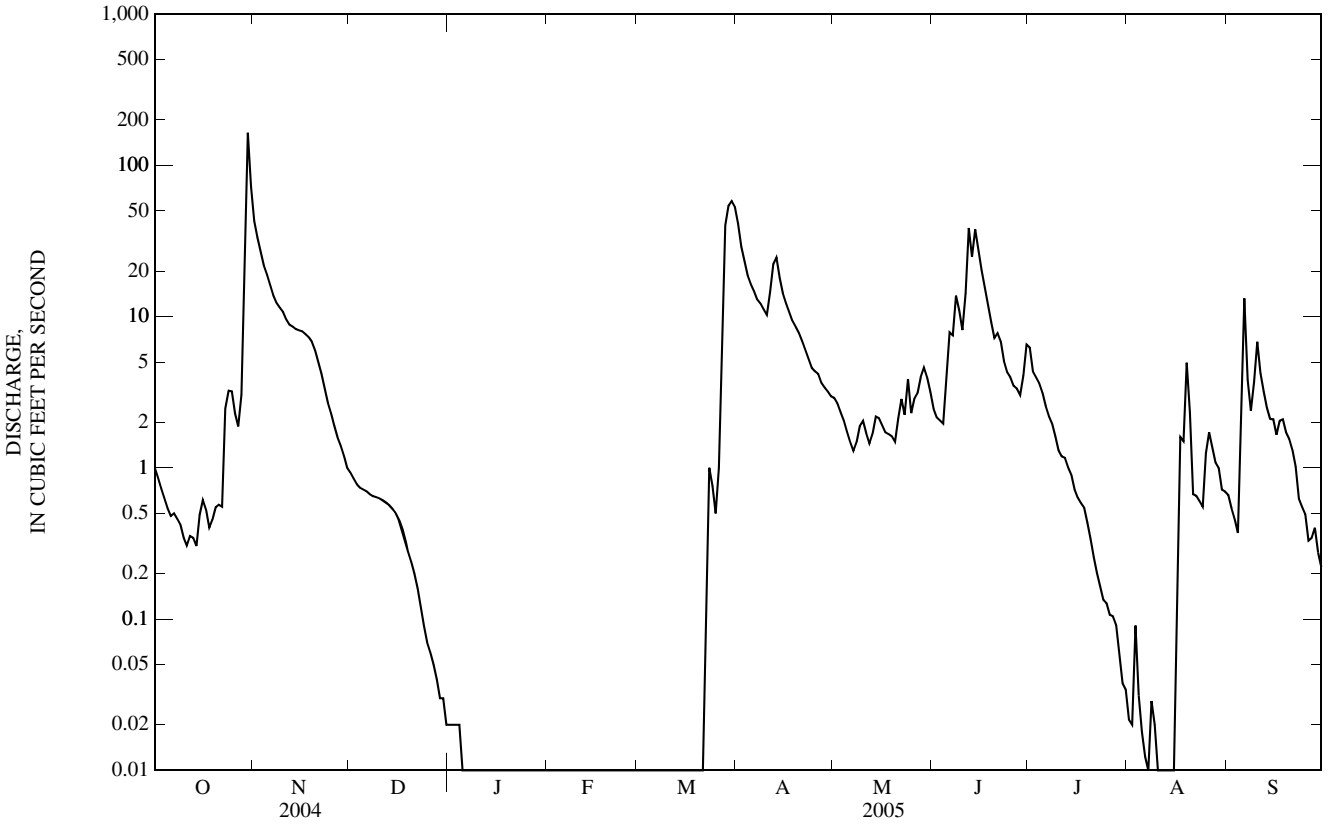
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2005 - 2005, BY WATER YEAR (WY)

MEAN	9.37	10.4	0.41	0.01	0.00	6.88	12.5	2.34	10.5	1.28	0.68	2.09
MAX	9.37	10.4	0.41	0.01	0.00	6.88	12.5	2.34	10.5	1.28	0.68	2.09
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)
MIN	9.37	10.4	0.41	0.01	0.00	6.88	12.5	2.34	10.5	1.28	0.68	2.09
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)

05078720 CO DITCH 140 ABV BR-6 IMP NR TILDEN JCT, MN (SW8)—Continued

SUMMARY STATISTICS	FOR 2005 WATER YEAR	
ANNUAL TOTAL	1,716.49	
ANNUAL MEAN	4.70	
HIGHEST DAILY MEAN	164	Oct 30
LOWEST DAILY MEAN	a0.00	Jan 14
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 14
MAXIMUM PEAK FLOW	b265	Oct 30
MAXIMUM PEAK STAGE	c7.20	Mar 23
INSTANTANEOUS LOW FLOW	a0.00	Jan 14
ANNUAL RUNOFF (AC-FT)	3,400	
10 PERCENT EXCEEDS	12	
50 PERCENT EXCEEDS	0.78	
90 PERCENT EXCEEDS	0.00	

a Many days.
b Gage height, 4.45 ft, from highwater mark.
c Backwater from ice.
e Estimated.



05078730 COUNTY DITCH 140 NEAR BENOIT, MN

LOCATION.--Lat 47°41'15", long 96°22'22", in NW$^1/_4$NW$^1/_4$ sec. 36, T.149 N., R.45 W., Polk County, Hydrologic Unit 09020303, at culvert on field access road, 1.0 mile south of County Highway 45, 1.4 miles southeast of Benoit.

DRAINAGE AREA.--11.8 mi^2.

PERIOD OF RECORD.--September 2002 to current year.

REVISED RECORDS.--WDR MN-04-1:2003.

GAGE.--Water-stage recorder. Datum of gage is 1,035.59 ft above sea level (NAVD of 1988).

REMARKS.--Records fair except those for estimated daily discharges and discharges less that 1.0 ft^3/s, which are poor.

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	3.2	73	e1.7	e0.25	e0.00	e0.00	e38	3.6	4.5	9.3	0.07	0.88
2	2.9	65	e1.6	e0.23	e0.00	e0.00	e34	3.4	3.9	7.5	0.02	0.71
3	2.2	58	e1.5	e0.22	e0.00	e0.00	32	3.2	3.5	6.7	0.11	0.69
4	1.9	50	e1.4	e0.20	e0.00	e0.00	30	3.1	3.4	5.8	0.13	0.68
5	1.9	43	e1.3	e0.19	e0.00	e0.00	25	2.9	12	4.8	0.05	1.3
6	1.4	36	e1.3	e0.18	e0.00	e0.00	21	2.6	19	4.3	0.00	5.3
7	1.7	31	e1.2	e0.17	e0.00	e0.00	19	2.7	18	3.7	0.00	2.8
8	1.4	25	e1.1	e0.16	e0.00	e0.00	17	2.6	32	3.2	0.01	2.5
9	1.1	20	e1.1	e0.15	e0.00	e0.00	15	3.0	27	2.8	0.00	3.4
10	1.2	16	e1.0	e0.14	e0.00	e0.00	13	2.8	17	2.4	0.00	5.1
11	0.92	14	e0.97	e0.13	e0.00	e0.00	16	2.6	23	2.1	0.01	3.5
12	0.66	12	e0.92	e0.12	e0.00	e0.00	25	2.5	56	1.7	0.01	3.0
13	0.63	e10	e0.89	e0.10	e0.00	e0.00	33	2.6	48	1.5	0.00	2.7
14	0.69	10	e0.85	e0.09	e0.00	e0.00	31	2.6	55	1.3	0.00	2.4
15	0.89	9.4	e0.82	e0.08	e0.00	e0.00	26	2.8	51	0.95	0.00	2.2
16	1.4	8.9	e0.77	e0.07	e0.00	e0.00	21	2.8	44	0.75	0.00	1.8
17	1.5	8.5	e0.74	e0.06	e0.00	e0.00	18	2.9	38	0.68	1.0	1.8
18	0.94	8.1	e0.70	e0.05	e0.00	e0.00	15	2.9	33	0.50	0.81	1.7
19	1.0	7.7	e0.65	e0.04	e0.00	e0.00	12	2.6	26	0.45	4.6	1.6
20	0.97	7.5	e0.60	e0.03	e0.00	e0.00	11	2.6	18	0.41	2.3	1.6
21	1.1	7.2	e0.55	e0.03	e0.00	e0.01	9.3	3.1	13	0.32	1.6	1.4
22	1.2	e6.4	e0.51	e0.03	e0.00	e0.09	7.9	2.8	11	0.35	1.9	1.3
23	2.6	e5.5	e0.47	e0.02	e0.00	e0.65	7.0	2.8	8.9	0.33	1.5	1.2
24	3.8	e4.6	e0.43	e0.02	e0.00	e1.0	6.3	2.9	7.5	0.29	1.3	1.0
25	4.7	e4.0	e0.40	e0.02	e0.00	e0.50	5.7	3.4	6.1	0.28	1.5	0.98
26	4.5	e3.3	e0.37	e0.01	e0.00	e1.0	5.1	3.6	5.4	0.25	1.9	0.95
27	4.3	e2.8	e0.34	e0.01	e0.00	e5.0	4.7	3.9	5.1	0.23	1.5	0.90
28	4.8	e2.4	e0.32	e0.01	e0.00	e33	4.4	4.6	4.6	0.22	1.4	0.72
29	23	e2.1	e0.30	e0.01	---	e41	4.1	5.6	4.9	0.21	1.3	0.74
30	88	e1.9	e0.28	e0.01	---	e44	3.8	5.8	7.6	0.20	1.2	0.64
31	84	---	e0.26	e0.01	---	e41	---	5.2	---	0.16	1.1	---
TOTAL	250.50	553.3	25.34	2.84	0.00	167.25	510.3	100.5	606.4	63.68	25.32	55.49
MEAN	8.08	18.4	0.82	0.09	0.00	5.40	17.0	3.24	20.2	2.05	0.82	1.85
MAX	88	73	1.7	0.25	0.00	44	38	5.8	56	9.3	4.6	5.3
MIN	0.63	1.9	0.26	0.01	0.00	0.00	3.8	2.5	3.4	0.16	0.00	0.64
AC-FT	497	1,100	50	5.6	0.00	332	1,010	199	1,200	126	50	110
CFSM	0.68	1.56	0.07	0.01	0.00	0.46	1.44	0.27	1.71	0.17	0.07	0.16
IN.	0.79	1.74	0.08	0.01	0.00	0.53	1.61	0.32	1.91	0.20	0.08	0.17

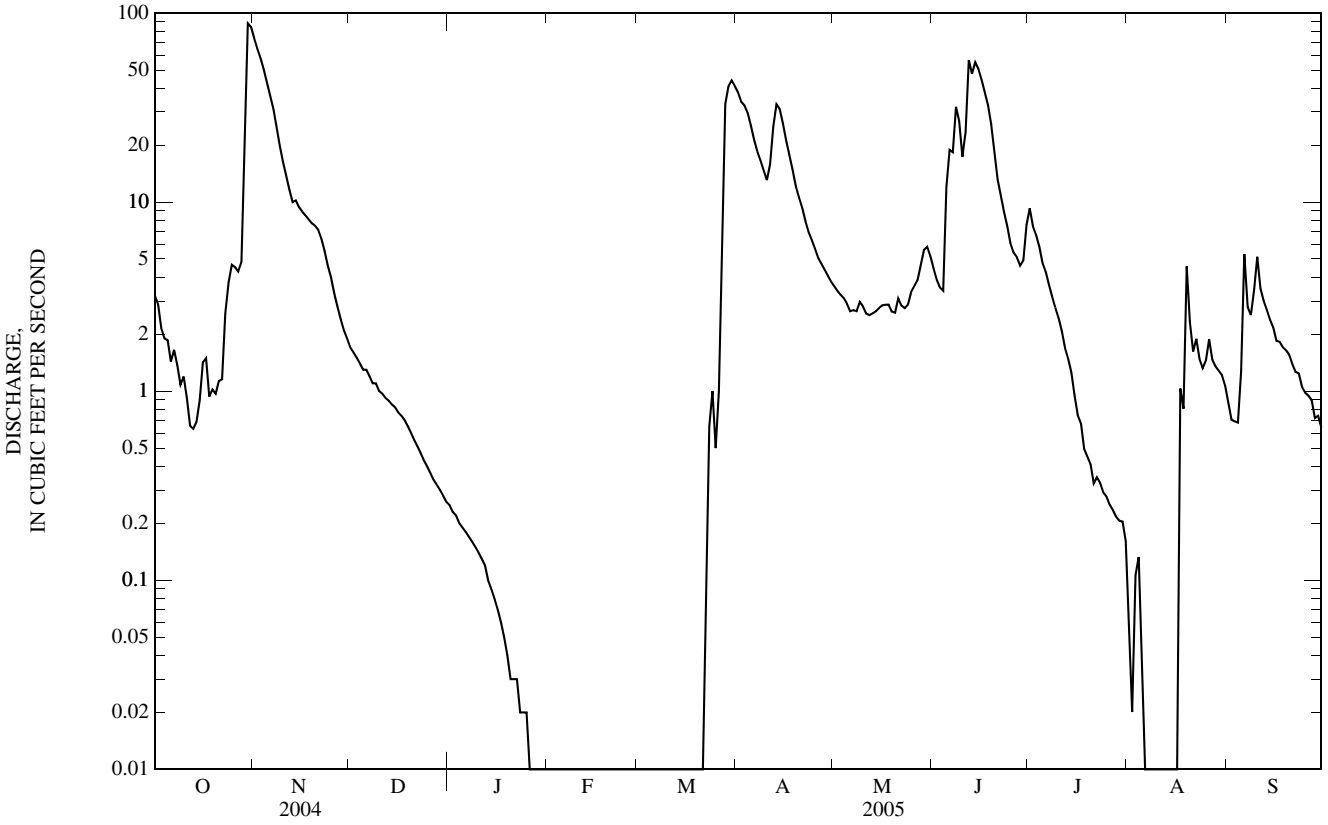
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2005, BY WATER YEAR (WY)

MEAN	2.73	6.21	0.31	0.03	0.00	4.47	7.41	4.16	11.9	2.14	0.44	2.07
MAX	8.08	18.4	0.82	0.09	0.00	5.68	17.0	7.64	20.2	3.79	0.82	4.03
(WY)	(2005)	(2005)	(2005)	(2005)	(2004)	(2004)	(2005)	(2004)	(2005)	(2003)	(2005)	(2004)
MIN	0.02	0.08	0.03	0.00	0.00	2.32	0.96	1.60	4.35	0.59	0.22	0.34
(WY)	(2004)	(2004)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2004)	(2004)	(2004)	(2003)

05078730 COUNTY DITCH 140 NEAR BENOIT, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2002 - 2005	
ANNUAL TOTAL	1,646.43		2,360.92			
ANNUAL MEAN	4.50		6.47		3.48	
HIGHEST ANNUAL MEAN					6.47	2005
LOWEST ANNUAL MEAN					1.71	2003
HIGHEST DAILY MEAN	88	Oct 30	88	Oct 30	88	Oct 30, 2004
LOWEST DAILY MEAN	0.00	Jan 6	a0.00	Feb 1	b0.00	Dec 26, 2002
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 6	0.00	Feb 1	0.00	Dec 26, 2002
MAXIMUM PEAK FLOW			99	Oct 30	99	Oct 30, 2004
MAXIMUM PEAK STAGE			6.15	Oct 30	6.15	Oct 30, 2004
INSTANTANEOUS LOW FLOW			a0.00	Feb 1	b0.00	Dec 26, 2002
ANNUAL RUNOFF (AC-FT)	3,270		4,680		2,520	
ANNUAL RUNOFF (CFSM)	0.381		0.548		0.295	
ANNUAL RUNOFF (INCHES)	5.19		7.44		4.00	
10 PERCENT EXCEEDS	10		21		8.0	
50 PERCENT EXCEEDS	0.85		1.4		0.20	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a Many days.
b Many days, several years.
e Estimated.



05078770 JUDICIAL DITCH 66 NEAR MARCOUX CORNERS, MN

LOCATION.--Lat 47°46'55", long 96°19'53", in SW¼NW¼ sec. 29, T.150 N., R.44 W., Red lake County, Hydrologic Unit 09020303, at culvert on township road, 1.5 miles north of U.S. Highway 2, 3.4 miles northwest of Marcoux Corners.

DRAINAGE AREA.--14.2 mi^2.

PERIOD OF RECORD.--September 2002 to September 2005, discontinued.

GAGE.--Water-stage recorder. Datum of gage is 1,040.84 ft above sea level (NAVD 1988).

REMARKS.--Records fair except those for estimated daily discharges, and discharges less that 1.0 ft^3/s, which are poor.

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	2.5	79	e2.4	e0.73	e0.46	e0.40	e61	e1.5	e3.6	8.4	1.5	1.7
2	2.2	60	e2.4	e0.71	e0.45	e0.40	e50	e1.4	e2.5	5.9	1.4	1.6
3	1.9	43	e2.3	e0.68	e0.45	e0.41	39	e1.3	e2.3	4.0	1.5	1.4
4	1.8	28	e2.3	e0.67	e0.45	e0.42	24	e1.3	e2.6	3.1	1.4	1.5
5	1.7	21	e2.3	e0.65	e0.44	e0.43	18	e1.2	e15	2.4	1.2	4.4
6	1.6	15	e2.2	e0.64	e0.44	e0.43	14	e1.2	e60	2.0	1.1	38
7	1.7	12	e2.2	e0.62	e0.44	e0.44	11	e1.4	18	1.7	0.89	12
8	1.5	9.5	e2.1	e0.61	e0.43	e0.44	9.3	e2.8	35	1.5	0.90	6.8
9	1.5	8.1	e2.1	e0.60	e0.43	e0.45	8.2	6.6	25	1.4	0.88	5.8
10	1.9	7.2	e2.1	e0.59	e0.43	e0.46	6.6	4.6	13	1.2	0.83	8.4
11	1.5	5.7	e2.1	e0.58	e0.43	e0.47	12	2.9	26	1.1	0.94	5.6
12	1.6	5.2	e2.0	e0.57	e0.42	e0.48	33	2.0	85	1.2	0.97	4.2
13	1.5	4.1	e2.0	e0.56	e0.42	e0.49	39	1.9	67	1.4	0.88	3.6
14	1.2	3.7	e2.0	e0.55	e0.42	e0.51	20	2.8	82	1.2	0.86	3.2
15	1.3	3.8	e1.9	e0.54	e0.42	e0.52	13	2.3	68	0.92	0.81	2.9
16	1.4	3.8	e1.7	e0.54	e0.41	e0.54	9.0	2.1	49	0.86	0.73	2.4
17	1.4	3.6	e1.6	e0.53	e0.41	e0.56	6.7	1.8	24	0.82	2.2	2.4
18	1.5	3.2	e1.5	e0.52	e0.41	e0.59	6.0	1.5	12	0.73	4.6	2.0
19	2.0	3.0	e1.4	e0.51	e0.41	e0.61	4.5	1.4	7.6	0.73	12	2.0
20	1.8	3.1	e1.3	e0.51	e0.41	e0.69	3.5	1.2	5.6	0.58	9.0	1.9
21	1.8	3.0	e1.3	e0.50	e0.41	e0.90	3.3	1.2	4.3	0.52	3.5	1.8
22	1.9	e2.9	e1.2	e0.50	e0.40	e1.3	2.8	e3.2	3.7	0.46	2.9	1.6
23	5.9	e2.8	e1.1	e0.49	e0.40	e2.3	2.4	e2.8	3.1	0.49	2.6	1.5
24	10	e2.7	e1.1	e0.49	e0.40	e1.8	e2.3	e2.2	2.8	0.53	2.4	1.7
25	12	e2.6	e1.0	e0.48	e0.40	e1.5	e2.2	e1.8	2.5	0.67	4.3	1.5
26	e13	e2.6	e0.99	e0.48	e0.40	e2.1	e2.1	e3.2	2.6	0.72	9.5	1.6
27	e13	e2.5	e0.93	e0.48	e0.40	e3.7	e1.9	e4.5	3.0	0.68	4.2	1.5
28	e17	e2.5	e0.87	e0.47	e0.40	e8.3	e1.8	e7.0	2.7	0.62	3.0	1.2
29	40	e2.4	e0.84	e0.47	---	e13	e1.6	e12	3.5	1.1	2.5	1.3
30	103	e2.4	e0.80	e0.47	---	e80	e1.6	e9.0	7.1	1.6	2.3	1.3
31	108	---	e0.76	e0.46	---	e76	---	e5.6	---	5.9	2.1	---
TOTAL	359.1	348.4	50.79	17.20	11.79	200.64	409.8	95.7	638.5	54.43	83.89	126.8
MEAN	11.6	11.6	1.64	0.55	0.42	6.47	13.7	3.09	21.3	1.76	2.71	4.23
MAX	108	79	2.4	0.73	0.46	80	61	12	85	8.4	12	38
MIN	1.2	2.4	0.76	0.46	0.40	0.40	1.6	1.2	2.3	0.46	0.73	1.2
AC-FT	712	691	101	34	23	398	813	190	1,270	108	166	252
CFSM	0.82	0.82	0.12	0.04	0.03	0.46	0.96	0.22	1.50	0.12	0.19	0.30
IN.	0.94	0.91	0.13	0.05	0.03	0.53	1.07	0.25	1.67	0.14	0.22	0.33

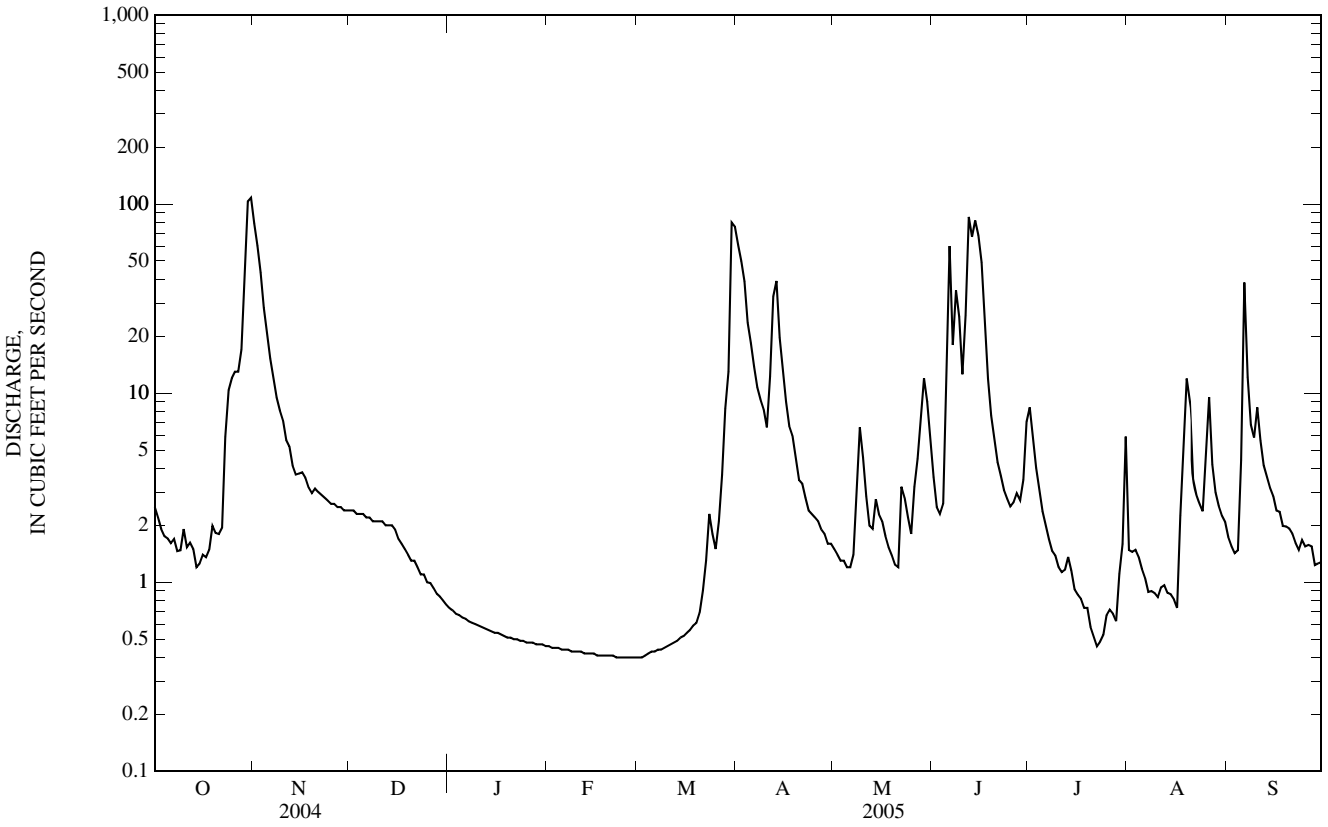
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2005, BY WATER YEAR (WY)

MEAN	4.58	4.67	1.00	0.45	0.29	5.46	7.36	5.83	11.6	1.92	2.13	4.92
MAX	11.6	11.6	1.64	0.73	0.42	7.11	13.7	9.84	21.3	2.43	3.54	10.3
(WY)	(2005)	(2005)	(2005)	(2003)	(2005)	(2004)	(2005)	(2004)	(2005)	(2003)	(2004)	(2004)
MIN	0.40	0.70	0.43	0.07	0.11	2.80	2.30	3.09	5.57	1.57	0.13	0.23
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2003)	(2003)	(2005)	(2004)	(2004)	(2003)	(2003)

05078770 JUDICIAL DITCH 66 NEAR MARCOUX CORNERS, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2000 - 2005	
ANNUAL TOTAL	2,107.76		2,397.04			
ANNUAL MEAN	5.76		6.57		4.18	
HIGHEST ANNUAL MEAN					6.57	2005
LOWEST ANNUAL MEAN					2.17	2003
HIGHEST DAILY MEAN	108	Oct 31	108	Oct 31	108	Oct 31, 2004
LOWEST DAILY MEAN	0.06	Jan 4	0.40	Feb 22 - Mar 2	0.02	Sep 5, 2003
ANNUAL SEVEN-DAY MINIMUM	0.06	Jan 4	0.40	Feb 22	0.04	Aug 30, 2003
MAXIMUM PEAK FLOW			122	Oct 30	122	Oct 30, 2004
MAXIMUM PEAK STAGE			a7.03	Mar 29	a7.06	Mar 26, 2004
INSTANTANEOUS LOW FLOW			b0.40	Feb 22	0.00	Sep 3, 2003
ANNUAL RUNOFF (AC-FT)	4,180		4,750		3,030	
ANNUAL RUNOFF (CFSM)	0.406		0.462		0.295	
ANNUAL RUNOFF (INCHES)	5.52		6.28		4.00	
10 PERCENT EXCEEDS	17		13		8.3	
50 PERCENT EXCEEDS	1.6		1.8		1.3	
90 PERCENT EXCEEDS	0.07		0.46		0.19	

a Backwater from ice.
b Estimated, minimum daily.
e Estimated.



05079000 RED LAKE RIVER AT CROOKSTON, MN

LOCATION.--Lat 47°46'32", long 96°36'33", in SW¼SW¼ sec. 30, T.150 N., R.46 W., Polk County, Hydrologic Unit 09020303, on right bank 100 ft upstream from Sargent Street bridge in Crookston, 0.3 mi downstream from Interstate Power Co.'s dam, 0.6 mi downstream from bridge on U.S. Highway 75, and 53 mi upstream from mouth.

DRAINAGE AREA.--5,270 mi^2.

PERIOD OF RECORD.--May 1901 to current year. Monthly discharge only for some periods, published in WSP 1308. Figures of daily discharge for Apr. 3-30, 1904, published in WSP 130, have been found unreliable and should not be used.

REVISED RECORDS.--WSP 1115: 1906, 1915-16, 1919-20, 1922, 1925, 1927, 1929. WSP 1308: 1916(M), 1919(M), 1928(M), 1930(M). (See also PERIOD OF RECORD).

GAGE.--Water-stage recorder. Datum of gage is 832.72 ft above sea level (NGVD of 1929). May 18, 1901 to June 30, 1909, nonrecording gage at bridge 300 ft upstream at same datum. July 1, 1909 to Sept. 25, 1911, nonrecording gage, Sept. 26, 1911 to Sept. 30, 1919, water-stage recorder, Oct. 1, 1919 to Sept. 30, 1930, nonrecording gage, at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diurnal fluctuation prior to 1975 caused by power plant 1,000 ft upstream. Runoff from 1,950 mi^2 in the headwaters of Red Lake River is completely controlled by dam at outlet of Lower Red Lake. Flow partially affected by occasional regulation at Thief and Mud Lakes in Thief River basin (see station 05076000).

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	1,460	9,580	1,310	e880	e1,080	e1,030	e9,850	2,260	3,360	3,890	1,160	1,130
2	1,380	8,550	1,410	e830	e1,170	e1,050	e10,100	2,240	3,180	5,050	1,110	1,100
3	1,520	7,380	1,460	e780	e1,210	e1,070	e9,940	2,220	3,020	4,960	1,060	1,110
4	1,550	6,320	1,310	e750	e1,220	e1,090	8,910	2,110	2,930	5,340	1,040	1,130
5	1,540	5,580	e1,280	e725	e1,210	e1,110	7,270	1,990	2,890	5,370	1,040	1,110
6	1,500	5,080	e1,280	e720	e1,180	e1,130	6,210	1,900	3,260	4,830	1,000	1,210
7	1,340	4,630	e1,270	e720	e1,140	e1,130	5,870	1,840	6,070	4,420	957	1,320
8	1,180	4,180	e1,330	e720	e1,100	e1,130	5,460	1,870	7,160	3,940	868	1,410
9	1,140	3,840	1,340	e690	e1,100	e1,150	5,020	1,960	7,800	3,580	883	1,480
10	1,270	3,580	e1,370	e665	e1,100	e1,170	4,650	2,930	7,490	3,400	875	1,440
11	1,310	3,310	e1,370	e670	e1,110	e1,170	4,340	3,290	6,810	3,120	830	1,280
12	1,270	3,150	e1,370	e675	e1,110	e1,170	4,390	3,060	8,280	2,870	826	1,300
13	1,300	3,030	e1,370	e635	e1,110	e1,140	5,310	2,890	9,980	2,720	833	1,290
14	e1,100	2,880	e1,360	e585	e1,100	e1,100	5,720	2,810	9,490	2,630	871	1,250
15	903	2,810	e1,360	e570	e1,060	e1,100	5,110	2,760	10,200	2,570	874	1,220
16	1,080	2,730	e1,300	e580	e1,020	e1,110	4,540	2,760	9,130	2,470	856	1,170
17	890	2,460	e1,300	e580	e975	e1,120	4,240	2,730	7,630	2,390	879	1,180
18	858	2,360	e1,270	e580	e970	e1,140	3,940	2,710	6,370	2,320	1,010	1,140
19	894	2,330	e1,240	e580	e970	e1,170	3,670	2,670	5,380	2,280	1,300	1,110
20	931	2,330	e1,210	e585	e975	e1,200	3,390	2,520	4,620	2,160	1,500	1,010
21	933	2,250	e1,020	e580	e980	e1,250	3,070	2,410	4,080	2,060	1,630	995
22	954	2,150	e960	e570	e990	e1,300	2,870	2,370	3,630	2,380	1,630	994
23	903	2,150	e950	e605	e1,000	e1,330	2,660	2,340	3,370	2,520	1,300	944
24	932	e1,970	e950	e660	e1,020	e1,360	2,520	2,350	3,220	2,530	1,120	929
25	1,240	e1,670	e955	e670	e1,030	e1,360	2,480	2,390	3,090	2,470	1,070	940
26	1,850	e1,230	e960	e670	e1,020	e1,490	2,420	2,420	3,050	2,370	1,130	974
27	2,150	e1,510	e970	e705	e1,020	e1,750	2,380	2,470	2,950	2,260	1,140	950
28	2,420	e1,470	e980	e760	e1,020	e2,700	2,360	2,820	2,850	1,880	1,140	940
29	2,350	e1,450	e985	e825	---	e4,200	2,340	3,290	2,850	1,410	1,240	934
30	4,240	1,260	e955	e915	---	e5,900	2,300	3,600	2,970	1,270	1,260	932
31	9,210	---	e920	e1,010	---	e8,280	---	3,530	---	1,240	1,220	---
TOTAL	51,598	103,220	37,115	21,490	29,990	53,400	143,330	79,510	157,110	92,700	33,652	33,922
MEAN	1,664	3,441	1,197	693	1,071	1,723	4,778	2,565	5,237	2,990	1,086	1,131
MAX	9,210	9,580	1,460	1,010	1,220	8,280	10,100	3,600	10,200	5,370	1,630	1,480
MIN	858	1,230	920	570	970	1,030	2,300	1,840	2,850	1,240	826	929
AC-FT	102,300	204,700	73,620	42,630	59,490	105,900	284,300	157,700	311,600	183,900	66,750	67,280
CFSM	0.32	0.65	0.23	0.13	0.20	0.33	0.91	0.49	0.99	0.57	0.21	0.21
IN.	0.36	0.73	0.26	0.15	0.21	0.38	1.01	0.56	1.11	0.65	0.24	0.24

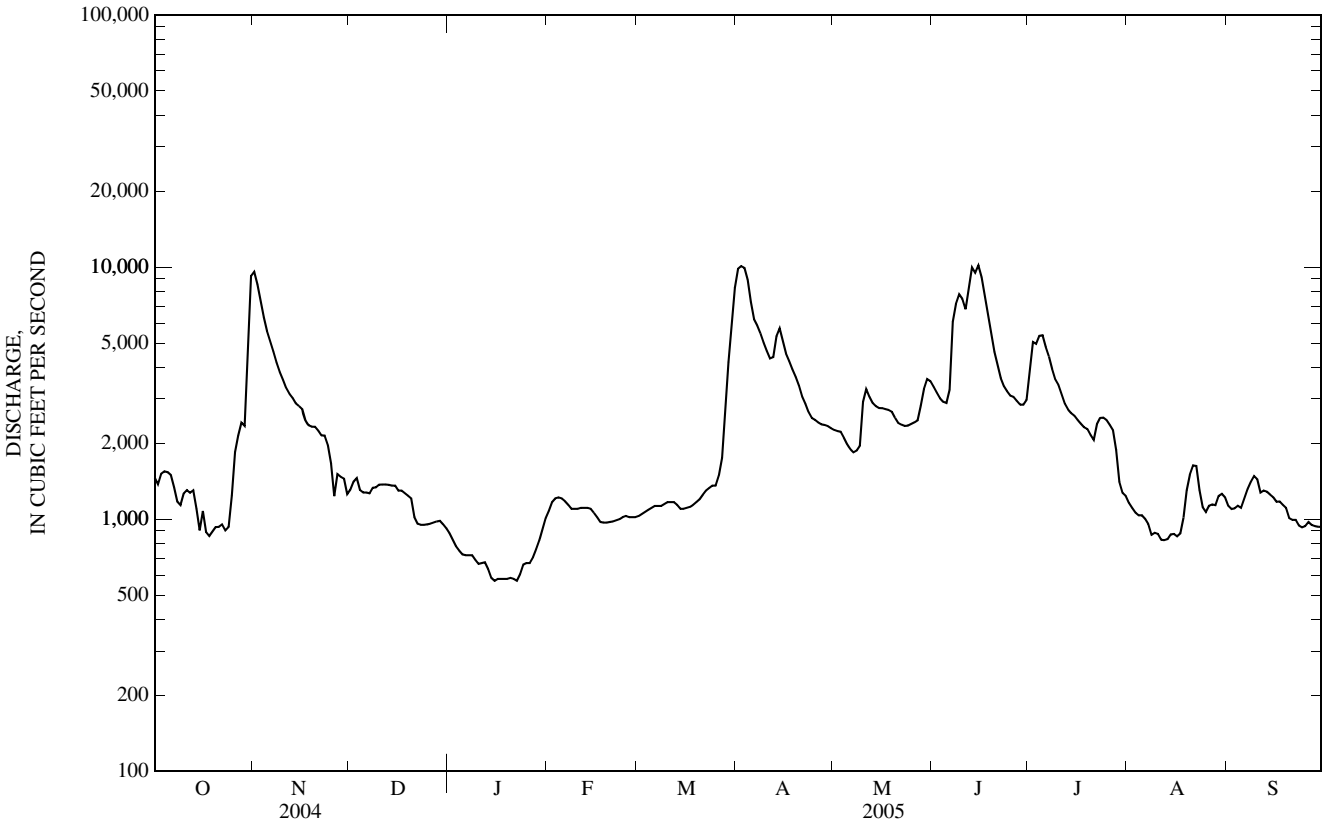
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1901 - 2005, BY WATER YEAR (WY)

MEAN	866	775	606	528	514	1,029	3,107	2,158	1,796	1,409	884	884
MAX	2,836	3,620	1,900	1,663	1,778	4,257	11,870	15,290	7,205	6,851	3,868	5,408
(WY)	(1972)	(2001)	(1904)	(1951)	(1998)	(1995)	(1997)	(1950)	(1962)	(1975)	(1985)	(1999)
MIN	8.02	10.1	5.34	15.6	17.8	24.9	232	154	80.4	26.2	12.3	8.87
(WY)	(1937)	(1937)	(1937)	(1934)	(1937)	(1936)	(1981)	(1934)	(1934)	(1936)	(1934)	(1934)

05079000 RED LAKE RIVER AT CROOKSTON, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1901 - 2005	
ANNUAL TOTAL	545,642		837,037			
ANNUAL MEAN	1,491		2,293		1,210	
HIGHEST ANNUAL MEAN					3,129	1950
LOWEST ANNUAL MEAN					83.6	1934
HIGHEST DAILY MEAN	10,900	May 31	10,200	Jun 15	27,500	Apr 18, 1997
LOWEST DAILY MEAN	105	Jan 31	570	Jan 15,22	2.5	Sep 29, 1936
ANNUAL SEVEN-DAY MINIMUM	109	Jan 30	579	Jan 15	3.9	Sep 28, 1936
MAXIMUM PEAK FLOW			a10,300	Jun 15	b28,400	Apr 12, 1969
MAXIMUM PEAK STAGE			c21.23	Apr 2	d28.40	Apr 17, 1997
INSTANTANEOUS LOW FLOW					f0.00	Jul 13, 1960
ANNUAL RUNOFF (AC-FT)	1,082,000		1,660,000		876,300	
ANNUAL RUNOFF (CFSM)	0.283		0.435		0.230	
ANNUAL RUNOFF (INCHES)	3.85		5.91		3.12	
10 PERCENT EXCEEDS	3,570		5,030		2,670	
50 PERCENT EXCEEDS	978		1,340		750	
90 PERCENT EXCEEDS	125		875		120	

a Gage height, 16.97 ft.
b Gage height, 27.33 ft.
c Backwater from ice.
d From highwater mark, backwater from ice.
e Estimated.
f From regulation by power plant upstream.



05079200 COUNTY DITCH 72 NEAR MAPLE BAY, MN

LOCATION.--Lat 47°48'13", long 96°16'36", in NW¼NE¼ sec. 22, T.150 N., R.44 W., Polk County, Hydrologic Unit 09020303, at culvert on State Highway 32, 2.4 miles west of Maple Bay.

DRAINAGE AREA.--10.3 mi^2.

PERIOD OF RECORD.--September 2002 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,133.55 ft above sea level (NAVD of 1988).

REMARKS.--Records poor.

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	0.34	14	0.60	e0.01	e0.00	e0.00	e11	1.4	1.1	8.0	0.02	0.35
2	0.26	13	0.51	e0.01	e0.00	e0.00	e28	1.2	0.83	6.9	0.02	0.28
3	0.22	12	e0.44	e0.01	e0.00	e0.00	29	0.89	0.80	8.3	0.03	0.25
4	0.18	12	e0.48	e0.01	e0.00	e0.00	28	0.76	0.82	7.4	0.03	0.22
5	0.12	12	0.37	e0.01	e0.00	e0.00	28	0.70	3.0	6.7	0.03	0.82
6	0.13	11	0.30	e0.00	e0.00	e0.00	25	0.62	5.6	6.2	0.02	5.3
7	0.10	11	0.30	e0.00	e0.00	e0.00	23	0.57	4.9	5.6	0.02	3.8
8	0.09	10	e0.30	e0.00	e0.00	e0.00	20	0.74	6.9	5.0	0.03	2.6
9	0.07	9.6	e0.29	e0.00	e0.00	e0.00	17	1.4	5.2	4.1	0.04	3.0
10	0.05	9.1	e0.29	e0.00	e0.00	e0.00	14	1.4	4.1	3.1	0.04	5.4
11	0.03	8.1	e0.29	e0.00	e0.00	e0.00	15	1.2	6.1	2.4	0.06	4.1
12	0.03	7.3	e0.28	e0.00	e0.00	e0.00	20	0.86	10	1.9	0.06	3.0
13	0.03	e6.4	e0.27	e0.00	e0.00	e0.00	19	0.94	8.0	1.5	0.05	2.3
14	0.01	e6.2	0.26	e0.00	e0.00	e0.00	15	1.5	10	1.2	0.04	1.9
15	0.02	e5.6	e0.24	e0.00	e0.00	e0.00	10	1.3	9.1	0.88	0.02	1.7
16	0.05	e5.1	e0.22	e0.00	e0.00	e0.00	5.7	1.1	9.4	0.67	0.02	1.5
17	0.07	e4.7	e0.20	e0.00	e0.00	e0.00	3.8	0.91	9.5	0.51	0.25	1.4
18	0.06	e4.3	0.17	e0.00	e0.00	e0.00	3.1	0.75	9.1	0.40	0.83	1.2
19	0.10	e3.9	0.12	e0.00	e0.00	e0.00	5.9	0.66	9.6	0.31	3.3	1.2
20	0.13	e3.5	e0.11	e0.00	e0.00	e0.02	8.3	0.53	10	0.22	3.6	1.1
21	0.14	e3.2	e0.09	e0.00	e0.00	e0.06	5.1	1.2	10	0.15	2.3	1.1
22	0.14	e2.7	e0.06	e0.00	e0.00	e0.12	3.6	1.8	9.0	0.10	1.7	0.97
23	1.3	e2.2	e0.05	e0.00	e0.00	e0.26	2.7	1.2	8.7	0.08	1.1	0.88
24	2.2	1.9	e0.04	e0.00	e0.00	e0.40	2.0	0.91	8.6	0.06	0.74	0.82
25	2.0	1.5	e0.03	e0.00	e0.00	e0.25	1.6	1.2	7.9	0.07	1.1	0.60
26	1.5	1.4	e0.03	e0.00	e0.00	e0.40	8.5	1.8	7.4	0.08	2.0	0.39
27	1.1	1.3	e0.02	e0.00	e0.00	e1.8	12	2.0	7.3	0.07	1.6	0.33
28	1.3	1.2	e0.02	e0.00	e0.00	e3.0	11	2.7	6.8	0.06	1.1	0.27
29	5.7	0.97	e0.02	e0.00	---	e4.7	4.8	3.1	6.9	0.04	0.82	0.24
30	30	0.85	e0.02	e0.00	---	e7.8	2.0	2.3	8.2	0.04	0.60	0.21
31	15	---	e0.02	e0.00	---	e7.8	---	1.5	---	0.03	0.45	---
TOTAL	62.47	186.02	6.44	0.05	0.00	26.61	382.1	39.14	204.85	72.07	22.02	47.23
MEAN	2.02	6.20	0.21	0.00	0.00	0.86	12.7	1.26	6.83	2.32	0.71	1.57
MAX	30	14	0.60	0.01	0.00	7.8	29	3.1	10	8.3	3.6	5.4
MIN	0.01	0.85	0.02	0.00	0.00	0.00	1.6	0.53	0.80	0.03	0.02	0.21
AC-FT	124	369	13	0.1	0.00	53	758	78	406	143	44	94
CFSM	0.19	0.58	0.02	0.00	0.00	0.08	1.19	0.12	0.64	0.22	0.07	0.15
IN.	0.22	0.65	0.02	0.00	0.00	0.09	1.33	0.14	0.71	0.25	0.08	0.16

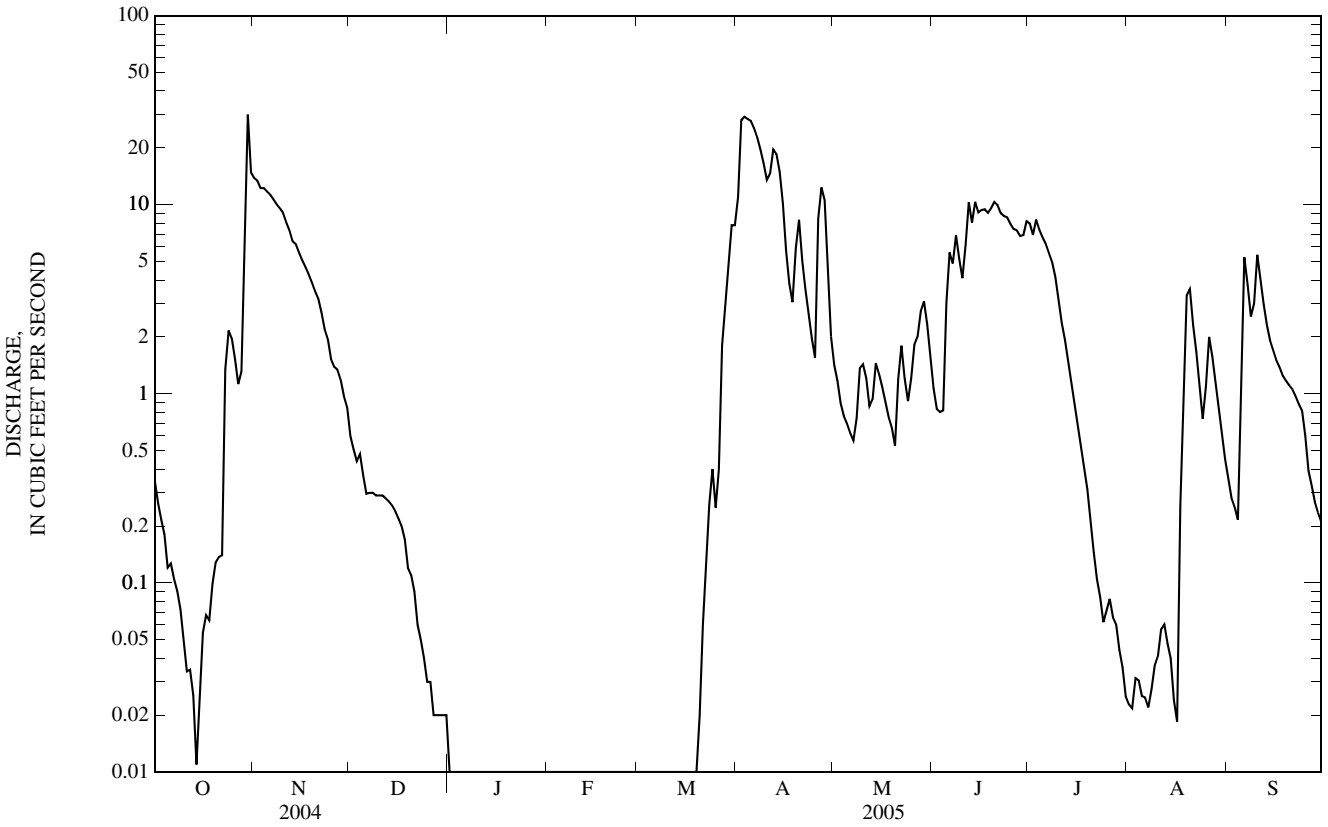
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2005, BY WATER YEAR (WY)

MEAN	0.88	2.26	0.08	0.00	0.00	2.20	5.38	2.95	4.97	1.76	0.28	0.78
MAX	2.02	6.20	0.21	0.00	0.00	4.94	12.7	4.67	6.83	2.32	0.71	1.57
(WY)	(2005)	(2005)	(2005)	(2005)	(2004)	(2004)	(2005)	(2004)	(2005)	(2005)	(2005)	(2005)
MIN	0.07	0.04	0.01	0.00	0.00	0.79	1.19	1.26	2.36	1.20	0.04	0.06
(WY)	(2004)	(2004)	(2004)	(2003)	(2003)	(2003)	(2003)	(2005)	(2004)	(2004)	(2003)	(2003)

05079200 COUNTY DITCH 72 NEAR MAPLE BAY, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2002 - 2005	
ANNUAL TOTAL	750.84		1,049.00			
ANNUAL MEAN	2.05		2.87		1.79	
HIGHEST ANNUAL MEAN					2.87	2005
LOWEST ANNUAL MEAN					1.13	2003
HIGHEST DAILY MEAN	41	Mar 28	30	Oct 30	a41	Mar 28, 2004
LOWEST DAILY MEAN	0.00	Jan 1	b0.00	Jan 6	c0.00	Dec 26, 2002
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Jan 6	0.00	Dec 26, 2002
MAXIMUM PEAK FLOW			52	Oct 30	52	Oct 30, 2004
MAXIMUM PEAK STAGE			4.68	Oct 30	4.68	Oct 30, 2004
INSTANTANEOUS LOW FLOW			d0.00	Jan 6	d0.00	Dec 26, 2002
ANNUAL RUNOFF (AC-FT)	1,490		2,080		1,300	
ANNUAL RUNOFF (CFSM)	0.192		0.269		0.167	
ANNUAL RUNOFF (INCHES)	2.61		3.65		2.27	
10 PERCENT EXCEEDS	5.5		9.1		5.1	
50 PERCENT EXCEEDS	0.28		0.60		0.25	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a Estimated daily-mean.
b Many days.
c Many days, several years.
d Estimated, minimum daily.
e Estimated.



05079250 COUNTY DITCH 65 NEAR MAPLE BAY, MN

LOCATION.--Lat 47°36'43", long 96°16'45", in SE¼NE¼ sec. 29, T.148 N., R.44 W., Polk County, Hydrologic Unit 09020303, at culvert on State Highway 32, 3.0 miles west of Maple Bay.

DRAINAGE AREA.--10.4 mi^2.

PERIOD OF RECORD.--September 2002 to current year.

REVISED RECORDS.--WDR MN-04-1:2003

GAGE.--Water-stage recorder. Datum of gage is 1,138.95 ft above sea level (NAVD of 1988).

REMARKS.--Records fair except those for estimated daily discharges and discharges less that 1.0 ft^3/s, which are poor.

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	0.65	82	1.6	e0.08	e0.00	e0.00	e24	1.9	3.1	6.7	0.02	1.4
2	0.60	40	1.5	e0.07	e0.00	e0.00	e22	1.8	3.4	4.8	0.02	0.10
3	0.55	29	e1.5	e0.06	e0.00	e0.00	21	1.5	6.5	7.6	0.02	0.16
4	0.57	22	e1.4	e0.05	e0.00	e0.00	21	1.4	7.7	6.0	0.02	0.04
5	0.51	17	e1.4	e0.04	e0.00	e0.00	19	1.3	18	4.0	0.01	0.43
6	0.51	14	e1.3	e0.04	e0.00	e0.00	15	1.3	25	2.9	0.00	2.2
7	0.49	12	e1.3	e0.03	e0.00	e0.00	15	1.3	18	2.1	0.00	1.7
8	0.48	10	e1.2	e0.03	e0.00	e0.00	12	1.4	29	1.7	0.00	0.78
9	0.47	8.9	e1.2	e0.02	e0.00	e0.00	11	2.8	20	1.3	0.00	1.1
10	0.39	8.1	e1.2	e0.02	e0.00	e0.00	11	2.7	13	0.91	0.00	2.8
11	0.37	6.3	e1.1	e0.02	e0.00	e0.00	22	2.1	17	0.82	0.00	1.7
12	0.36	5.4	e1.1	e0.02	e0.00	e0.00	33	1.7	48	1.2	0.00	1.1
13	0.36	5.1	e1.0	e0.02	e0.00	e0.00	34	1.9	38	1.2	0.00	0.78
14	0.38	4.8	e1.0	e0.01	e0.00	e0.00	23	3.1	45	1.1	0.00	0.73
15	0.53	4.6	e0.97	e0.01	e0.00	e0.00	16	2.7	36	0.97	0.00	0.62
16	0.62	4.7	e0.93	e0.01	e0.00	e0.00	13	2.2	24	0.85	0.00	0.51
17	0.52	4.5	e0.90	e0.01	e0.00	e0.00	11	1.8	14	0.65	0.20	0.45
18	0.49	4.3	e0.86	e0.01	e0.00	e0.00	8.6	1.6	9.7	0.68	0.89	0.43
19	0.61	4.0	e0.80	e0.01	e0.00	e0.00	7.3	1.4	6.9	0.63	2.2	0.32
20	0.65	4.5	e0.72	e0.00	e0.00	e0.01	6.2	1.2	4.7	0.43	1.9	0.29
21	0.60	4.3	e0.61	e0.00	e0.00	e0.07	5.0	2.9	3.6	0.34	0.77	0.27
22	0.63	4.2	e0.50	e0.00	e0.00	e0.30	4.4	3.9	2.6	0.22	0.40	0.25
23	2.9	e4.0	e0.41	e0.00	e0.00	e0.50	3.6	2.8	2.1	0.14	0.24	0.22
24	4.8	e3.5	e0.34	e0.00	e0.00	e0.40	3.1	2.2	2.1	0.09	0.16	0.17
25	5.6	3.0	e0.28	e0.00	e0.00	e0.30	2.9	2.9	1.6	0.20	0.39	0.21
26	4.0	3.0	e0.24	e0.00	e0.00	e0.45	2.8	4.3	1.6	0.34	0.63	0.15
27	3.1	e2.6	e0.20	e0.00	e0.00	e2.0	2.4	4.6	1.8	0.23	0.42	0.10
28	2.8	e2.1	e0.17	e0.00	e0.00	e22	2.2	7.1	1.6	0.16	0.38	0.12
29	11	1.7	e0.14	e0.00	---	e28	1.9	8.5	2.0	0.09	0.29	0.10
30	90	1.7	e0.12	e0.00	---	e31	1.8	7.0	5.5	0.04	0.21	0.08
31	96	---	e0.10	e0.00	---	e29	---	4.5	---	0.03	1.5	---
TOTAL	231.54	321.3	26.09	0.56	0.00	114.03	375.2	87.8	411.5	48.42	10.67	19.31
MEAN	7.47	10.7	0.84	0.02	0.00	3.68	12.5	2.83	13.7	1.56	0.34	0.64
MAX	96	82	1.6	0.08	0.00	31	34	8.5	48	7.6	2.2	2.8
MIN	0.36	1.7	0.10	0.00	0.00	0.00	1.8	1.2	1.6	0.03	0.00	0.04
AC-FT	459	637	52	1.1	0.00	226	744	174	816	96	21	38
CFSM	0.72	1.03	0.08	0.00	0.00	0.35	1.20	0.27	1.32	0.15	0.03	0.06
IN.	0.83	1.15	0.09	0.00	0.00	0.41	1.34	0.31	1.47	0.17	0.04	0.07

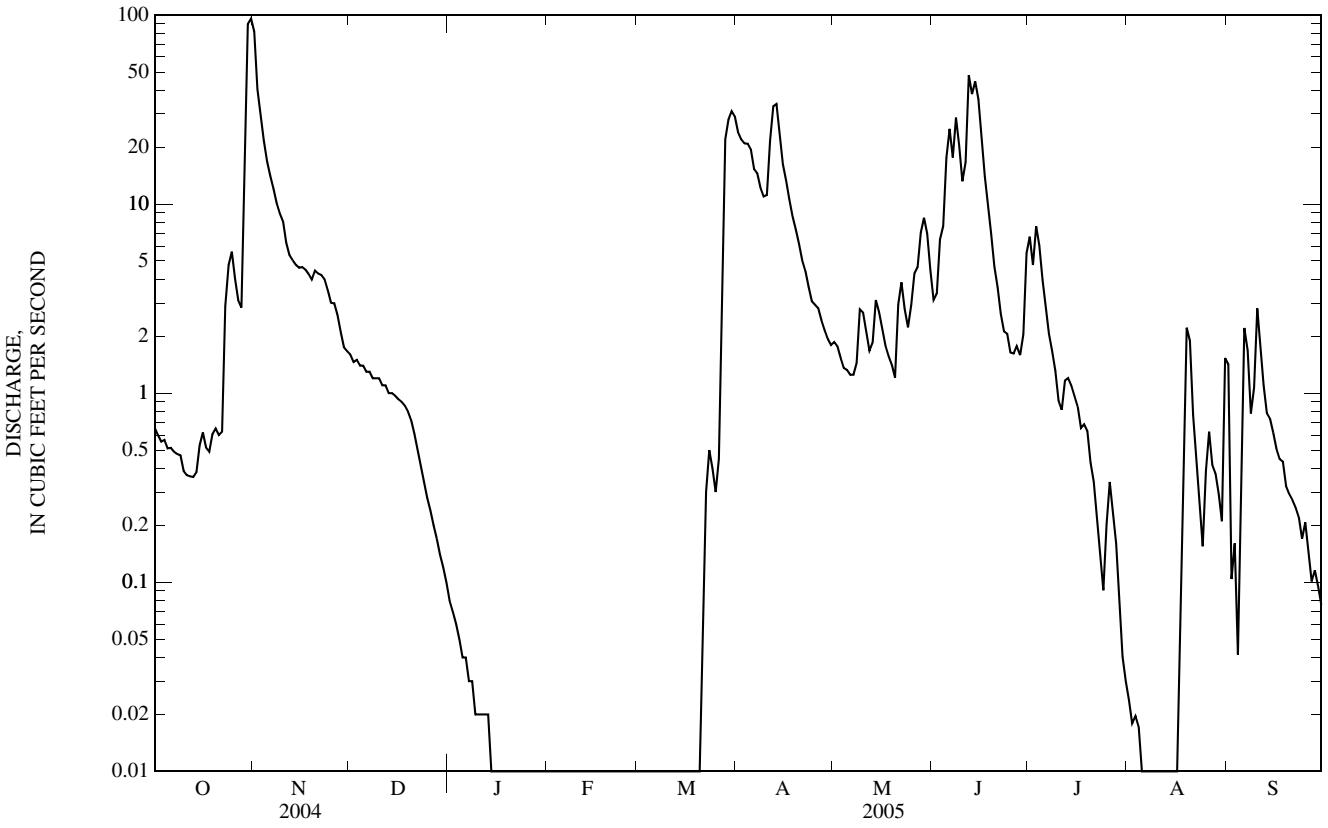
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2005, BY WATER YEAR (WY)

MEAN	2.63	3.86	0.38	0.06	0.03	3.60	6.13	6.54	9.91	2.74	0.20	0.63
MAX	7.47	10.7	0.84	0.09	0.07	5.91	12.5	9.38	13.7	5.11	0.34	1.22
(WY)	(2005)	(2005)	(2005)	(2003)	(2004)	(2004)	(2005)	(2004)	(2003)	(2004)	(2005)	(2004)
MIN	0.03	0.07	0.07	0.02	0.00	1.20	2.36	2.83	2.29	1.54	0.03	0.01
(WY)	(2004)	(2004)	(2004)	(2005)	(2005)	(2003)	(2003)	(2005)	(2004)	(2003)	(2003)	(2003)

05079250 COUNTY DITCH 65 NEAR MAPLE BAY, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2002 - 2005	
ANNUAL TOTAL	1,433.45		1,646.42			
ANNUAL MEAN	3.92		4.51		3.06	
HIGHEST ANNUAL MEAN					4.51	2005
LOWEST ANNUAL MEAN					2.32	2003
HIGHEST DAILY MEAN	96	Oct 31	96	Oct 31	96	Oct 31, 2004
LOWEST DAILY MEAN	0.03	Aug 5	a0.00	Jan 20	b0.00	Aug 22, 2003
ANNUAL SEVEN-DAY MINIMUM	0.04	Jan 27	0.00	Jan 20	0.00	Sep 3, 2003
MAXIMUM PEAK FLOW			c99	Oct 30	c99	Oct 30, 2004
MAXIMUM PEAK STAGE			d3.80	Mar 28	d4.37	Mar 25, 2004
INSTANTANEOUS LOW FLOW			f0.00	Jan 20	0.00	Aug 18, 2003
ANNUAL RUNOFF (AC-FT)	2,840		3,270		2,220	
ANNUAL RUNOFF (CFSM)	0.377		0.434		0.294	
ANNUAL RUNOFF (INCHES)	5.13		5.89		4.00	
10 PERCENT EXCEEDS	8.8		13		7.7	
50 PERCENT EXCEEDS	0.60		0.78		0.33	
90 PERCENT EXCEEDS	0.05		0.00		0.02	

a Many days.
b Many days, several years.
c Gage-height, 3.31 ft.
d Backwater from ice.
e Estimated.
f Estimated, minimum daily.



05080000 RED LAKE RIVER AT FISHER, MN

LOCATION.--Lat 47°48'01", long 96°48'31", in SW¼NE¼ sec. 21, T.150 N., R.48 W., Polk County, Hydrologic Unit 09020303, on left bank 10 ft upstream from bridge on county highway, 0.3 mile west of Fisher and at river mile 27.6.

DRAINAGE AREA.--5,680 mi^2.

PERIOD OF RECORD.--Mar. to Sep. 1999 (gage heights and maximum discharge only), Oct. 1, 1999 to current year.

GAGE.--Water-stage recorder. Datum of gage is 800.00 ft above sea level (levels by Minnesota Department of Transportation).

REMARKS.-- Records good except those for estimated daily discharges, which are poor. Runoff from 1,950 mi^2 of Red Lake River basin above Lower Red Lake outlet is completely comtrolled by dam at outlet of Lower Red Lake. Flow partially affected by occasional runoff of Thief and Mud Lakes in Thief River basin.

EXTREMES OUTSIDE PERIOD OF RECORD.-- A stage of 41.00 ft occurred in spring of 1997 (from information provided by the National Weather Service).

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	1,470	8,740	e1,410	e940	e1,040	e1,020	e10,000	2,170	3,410	3,850	1,220	1,210
2	1,410	9,380	e1,340	e900	e1,150	e1,050	e10,700	2,160	3,170	4,970	1,160	e1,170
3	1,420	8,770	e1,410	e850	e1,220	e1,080	e10,900	2,140	2,950	5,280	1,120	e1,140
4	1,500	7,730	e1,420	e800	e1,250	e1,100	e10,400	e2,050	2,870	5,300	1,080	1,170
5	1,510	6,720	e1,320	e760	e1,230	e1,120	9,600	e2,060	2,960	5,630	1,070	1,150
6	1,460	5,810	e1,310	e725	e1,200	e1,140	7,780	2,000	3,220	5,390	1,050	e1,270
7	1,430	5,130	e1,310	e720	e1,160	e1,140	6,630	1,860	4,880	4,880	1,010	e1,420
8	1,280	4,560	e1,310	e720	e1,110	e1,140	5,870	1,860	6,290	4,340	910	e1,430
9	1,190	4,140	e1,330	e720	e1,100	e1,140	5,280	1,970	7,060	3,910	906	1,450
10	1,250	3,830	e1,370	e685	e1,100	e1,170	4,830	2,980	7,480	3,730	906	e1,430
11	1,270	3,600	e1,390	e675	e1,110	e1,170	4,520	3,540	7,300	3,340	859	e1,350
12	1,300	3,370	e1,400	e680	e1,110	e1,160	4,420	3,160	7,390	3,020	854	e1,350
13	1,280	3,240	e1,410	e680	e1,110	e1,150	4,790	2,910	9,010	2,880	852	e1,270
14	1,210	3,130	e1,390	e620	e1,100	e1,120	5,540	2,870	10,800	2,760	857	e1,220
15	977	3,040	e1,390	e590	e1,090	e1,110	5,460	2,810	11,600	e2,730	857	e1,180
16	1,050	2,960	e1,390	e575	e1,060	e1,110	4,910	2,820	11,500	2,590	852	e1,140
17	1,110	2,740	e1,330	e580	e1,030	e1,120	4,410	2,780	9,960	2,490	953	1,140
18	885	2,510	e1,330	e585	e990	e1,140	4,120	2,740	8,190	2,390	1,180	e1,130
19	960	2,390	e1,300	e590	e980	e1,160	3,880	2,670	6,760	2,350	1,570	e1,120
20	978	2,410	e1,250	e590	e980	e1,200	3,640	2,410	5,450	2,240	1,700	e1,070
21	987	2,390	e1,200	e595	e980	e1,250	3,210	2,290	4,360	2,070	1,840	1,040
22	1,020	2,240	e1,050	e575	e990	e1,300	2,950	2,260	3,950	2,590	1,640	e1,070
23	962	2,130	e960	e580	e1,000	e1,320	2,690	2,210	3,720	2,790	1,400	1,020
24	991	e2,120	e960	e610	e1,010	e1,340	2,550	2,350	3,620	2,660	1,190	e1,020
25	1,030	e1,920	e960	e675	e1,030	e1,360	2,520	2,460	3,490	2,500	1,140	e1,010
26	1,530	e1,460	e970	e680	e1,030	e1,440	2,410	2,450	3,440	2,320	1,150	e1,060
27	1,950	e1,520	e980	e680	e1,020	e1,640	2,400	2,510	3,370	2,130	1,180	e1,050
28	2,300	e1,510	e990	e720	e1,020	e2,490	2,360	2,980	3,340	1,860	1,170	e1,040
29	2,430	e1,500	e1,000	e780	---	e3,840	2,350	3,470	3,260	1,460	e1,280	e1,010
30	3,050	e1,390	e1,000	e850	---	e5,690	2,220	3,740	3,360	1,320	e1,310	e1,010
31	6,530	---	e970	e940	---	e8,150	---	3,670	---	1,290	1,200	---
TOTAL	47,720	112,380	38,150	21,670	30,200	52,360	153,340	80,350	168,160	97,060	35,466	35,140
MEAN	1,539	3,746	1,231	699	1,079	1,689	5,111	2,592	5,605	3,131	1,144	1,171
MAX	6,530	9,380	1,420	940	1,250	8,150	10,900	3,740	11,600	5,630	1,840	1,450
MIN	885	1,390	960	575	980	1,020	2,220	1,860	2,870	1,290	852	1,010
AC-FT	94,650	222,900	75,670	42,980	59,900	103,900	304,100	159,400	333,500	192,500	70,350	69,700
CFSM	0.27	0.66	0.22	0.12	0.19	0.30	0.90	0.46	0.99	0.55	0.20	0.21
IN.	0.31	0.74	0.25	0.14	0.20	0.34	1.00	0.53	1.10	0.64	0.23	0.23

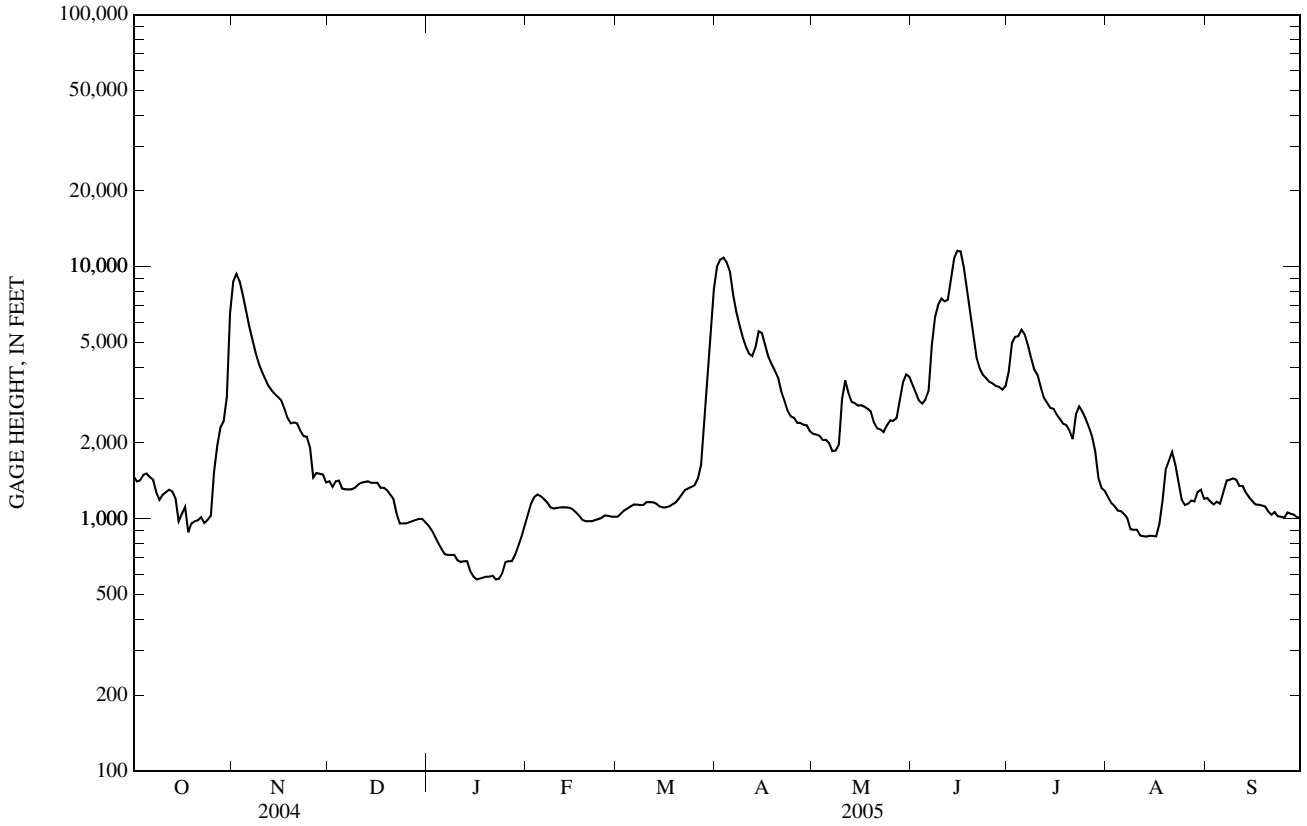
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2005, BY WATER YEAR (WY)

MEAN	1,250	2,126	1,044	743	743	1,384	3,314	2,317	3,694	2,470	1,487	1,272
MAX	2,261	4,103	1,582	1,187	1,106	2,280	8,063	3,666	6,374	5,711	3,188	2,878
(WY)	(2000)	(2001)	(2002)	(2001)	(2001)	(2000)	(2001)	(2001)	(2002)	(2002)	(2001)	(2002)
MIN	152	163	159	152	114	917	594	750	1,398	674	208	164
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2002)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)

05080000 RED LAKE RIVER AT FISHER, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2000 - 2005	
ANNUAL TOTAL	580,999		871,996			
ANNUAL MEAN	1,587		2,389		1,820	
HIGHEST ANNUAL MEAN					2,591	2001
LOWEST ANNUAL MEAN					672	2003
HIGHEST DAILY MEAN	10,800	Jun 1	11,600	Jun 15	22,200	Apr 10, 2001
LOWEST DAILY MEAN	110	Feb 3	575	Jan 16, 22	101	Sep 9, 2003
ANNUAL SEVEN-DAY MINIMUM	110	Feb 3	584	Jan 16	110	Feb 3, 2004
MAXIMUM PEAK FLOW			a11,900	Jun 16	24,500	Apr 10, 2001
MAXIMUM PEAK STAGE			b31.76	Apr 2	38.00	Apr 10, 2001
ANNUAL RUNOFF (AC-FT)	1,152,000		1,730,000		1,318,000	
ANNUAL RUNOFF (CFSM)	0.279		0.421		0.320	
ANNUAL RUNOFF (INCHES)	3.81		5.71		4.35	
10 PERCENT EXCEEDS	3,750		5,280		3,750	
50 PERCENT EXCEEDS	1,130		1,390		1,230	
90 PERCENT EXCEEDS	125		904		210	

a Gage height, 31.39 ft.
b Backwater from ice.
e Estimated.



05082500 RED RIVER OF THE NORTH AT GRAND FORKS, ND

LOCATION.--Lat 47°55'37", long 97°01'44", in sec.3, T.151 N., R.50 W., Grand Forks County, Hydrologic Unit 09020301, on left bank 50 ft downstream from the DeMers Avenue bridge, 0.4 mi downstream from Red Lake River, and at mile 297.6.

DRAINAGE AREA.--30,100 mi^2, approximately, including 3,800 mi^2 in closed basins.

PERIOD OF RECORD.--April 1882 to current year. Prior to January 1904 monthly discharge only, published in WSP 1308.

REVISED RECORDS.--WSP 855: 1936(M). WSP 1115: 1942. WSP 1175: 1897(M). WSP 1388: 1904, 1914-15, 1917-19, 1921-22, 1927, 1950. WSP 1728: Drainage area. WRD-ND-81-1: 1882, 1897 (M).

GAGE.--Water stage recorder. Datum of gage is 779.00 ft above National Geodetic Vertical Datum of 1929. Oct. 1, 1983, to Sept. 30, 1986, datum of gage was 780.00 ft at same site. Apr. 14, 1965, to Sept. 30, 1983, water-stage recorder 1.9 mi downstream at a datum of 778.35 ft. Nov. 3, 1933, to Apr. 13, 1965, water-stage recorder 0.3 mi upstream at 778.35 ft datum. See WSP 1728 or 1913 for history of changes prior to Nov. 3, 1933.

REMARKS.--Records good except for estimated daily discharges, which are poor.

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	6,260	17,800	3,330	e1,910	e2,120	e2,150	e20,400	5,450	8,620	12,500	5,420	6,490
2	5,800	e21,900	2,910	e1,850	e2,220	e2,170	e25,100	5,370	8,340	13,600	5,200	5,560
3	5,270	e23,800	2,840	e1,800	e2,310	e2,200	e30,100	5,310	7,880	15,100	4,920	4,930
4	4,940	24,100	2,930	e1,740	e2,300	e2,220	e29,900	5,200	7,470	16,000	4,600	4,560
5	4,640	23,100	e3,100	e1,690	e2,270	e2,250	28,300	4,940	7,400	16,700	4,370	4,350
6	4,440	21,400	e3,170	e1,620	e2,200	e2,280	24,800	4,780	7,970	17,100	4,170	4,540
7	4,350	19,400	3,180	e1,620	e2,110	e2,280	21,900	4,540	10,200	17,200	4,240	6,810
8	4,280	16,900	3,450	e1,630	e2,100	e2,280	19,200	4,370	14,100	16,900	4,720	9,150
9	4,140	14,100	3,900	e1,640	e2,100	e2,290	16,500	4,480	16,700	16,300	5,070	9,180
10	3,990	11,900	4,000	e1,600	e2,100	e2,360	14,000	5,010	18,400	15,600	5,080	8,410
11	3,950	10,400	4,020	e1,610	e2,120	e2,380	11,700	6,160	19,900	14,700	4,780	7,990
12	3,920	9,630	3,930	e1,620	e2,120	e2,380	10,000	6,620	22,500	13,500	4,400	7,530
13	3,840	8,770	3,860	e1,580	e2,120	e2,380	9,490	6,820	25,800	12,200	4,180	6,740
14	3,840	8,180	3,510	e1,520	e2,120	e2,390	10,500	6,690	29,500	11,100	4,170	5,650
15	3,640	7,710	3,020	e1,480	e2,100	e2,400	12,100	6,540	33,400	e10,300	4,090	4,800
16	3,420	7,410	2,790	e1,460	e2,030	e2,420	12,300	6,460	36,300	9,850	3,850	4,220
17	3,460	7,130	2,720	e1,450	e1,980	e2,490	11,900	6,460	37,900	9,660	4,180	3,800
18	3,470	6,710	2,660	e1,480	e1,940	e2,580	11,500	6,480	37,900	9,590	e4,490	3,460
19	3,320	6,430	2,470	e1,490	e1,890	e2,650	10,900	6,490	36,000	9,530	5,320	3,310
20	3,340	6,270	2,400	e1,500	e1,880	e2,750	9,890	6,480	33,900	9,090	7,230	3,310
21	3,320	6,140	2,340	e1,500	e1,880	e2,850	8,830	6,620	31,700	8,350	7,400	3,240
22	3,280	5,940	e2,260	e1,480	e1,900	e2,940	7,990	7,040	29,500	8,030	6,590	3,180
23	3,260	5,790	e2,190	e1,460	e1,920	e3,020	7,420	7,300	27,300	8,140	6,130	3,120
24	3,190	5,630	e2,130	e1,470	e1,980	e3,060	6,830	7,670	25,400	7,870	6,130	3,080
25	3,230	5,410	e2,100	e1,530	e2,040	e3,090	6,540	7,730	23,300	7,490	6,070	2,970
26	3,480	4,820	e2,090	e1,620	e2,090	e3,300	6,340	7,410	21,100	7,210	5,770	2,880
27	4,410	4,190	e2,090	e1,640	e2,120	e3,910	6,160	7,070	18,900	6,810	6,390	2,790
28	5,570	3,860	e2,040	e1,670	e2,130	e4,700	5,980	7,090	16,600	6,500	7,920	2,700
29	6,880	3,440	e2,020	e1,730	---	e7,400	5,800	7,680	14,200	5,910	8,600	2,650
30	7,750	3,450	e2,010	e1,820	---	e11,400	5,630	8,310	12,800	5,580	8,460	2,540
31	11,100	---	e1,990	e1,990	---	e16,100	---	8,640	---	5,500	7,600	---
TOTAL	139,780	321,710	87,450	50,200	58,190	109,070	408,000	197,210	640,980	343,910	171,540	143,940
MEAN	4,509	10,720	2,821	1,619	2,078	3,518	13,600	6,362	21,370	11,090	5,534	4,798
MAX	11,100	24,100	4,020	1,990	2,310	16,100	30,100	8,640	37,900	17,200	8,600	9,180
MIN	3,190	3,440	1,990	1,450	1,880	2,150	5,630	4,370	7,400	5,500	3,850	2,540
AC-FT	277,300	638,100	173,500	99,570	115,400	216,300	809,300	391,200	1,271,000	682,100	340,200	285,500

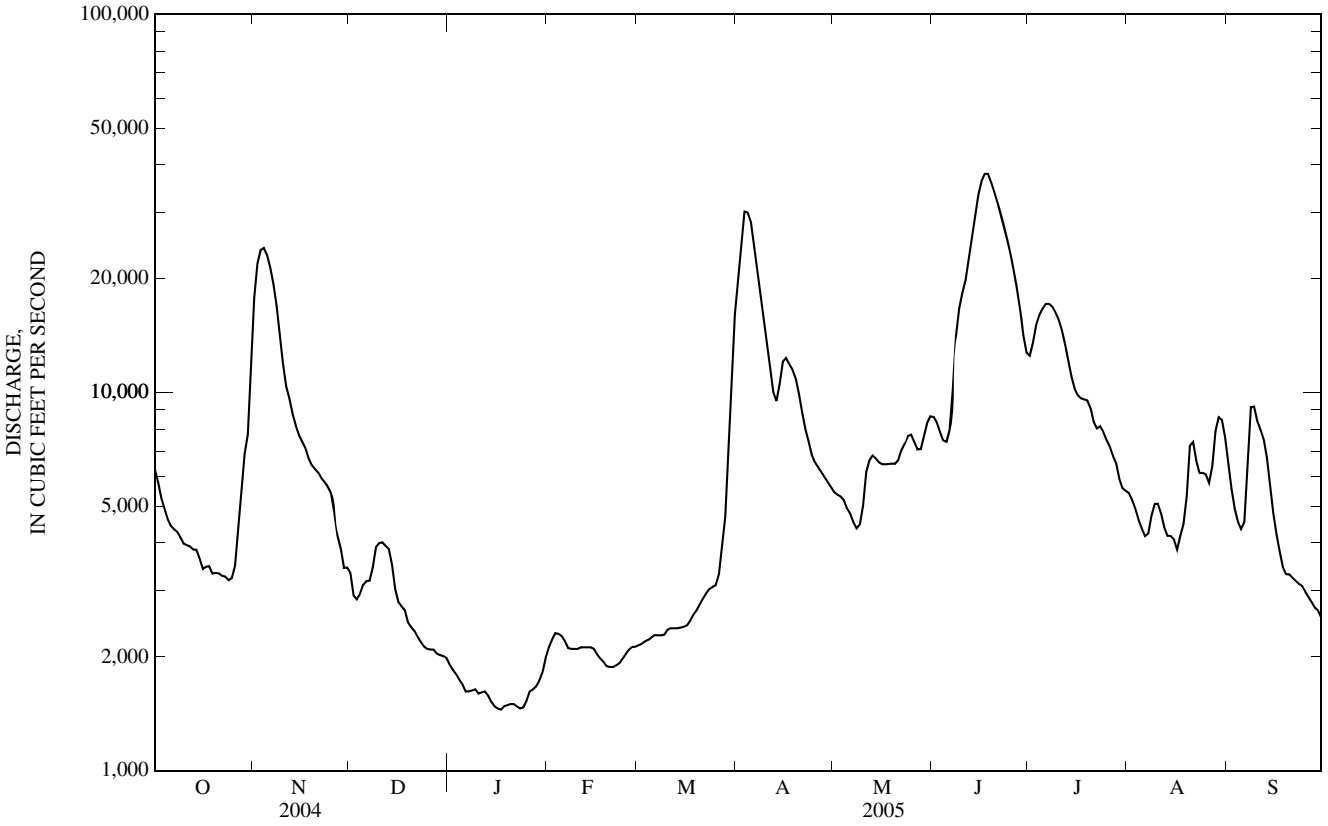
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 2005, BY WATER YEAR (WY)

MEAN	1,525	1,468	1,095	898	881	2,820	10,260	5,598	4,545	3,853	1,924	1,654
MAX	5,127	10,720	3,832	2,656	3,520	15,370	56,210	36,510	21,370	25,270	17,050	11,340
(WY)	(1995)	(2005)	(2001)	(2001)	(1998)	(1995)	(1997)	(1950)	(2005)	(1975)	(1993)	(1999)
MIN	12.1	30.5	17.8	18.8	2.87	42.1	954	373	151	88.8	30.6	20.3
(WY)	(1937)	(1937)	(1937)	(1937)	(1937)	(1937)	(1938)	(1934)	(1934)	(1936)	(1934)	(1936)

05082500 RED RIVER OF THE NORTH AT GRAND FORKS, ND—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1904 - 2005	
ANNUAL TOTAL	1,864,516		2,671,980			
ANNUAL MEAN	5,094		7,320		3,029	
HIGHEST ANNUAL MEAN					10,070	1997
LOWEST ANNUAL MEAN					244	1934
HIGHEST DAILY MEAN	32,900	Mar 31	37,900	Jun 17	127,000	Apr 18, 1997
LOWEST DAILY MEAN	430	Feb 1	1,450	Jan 17	1.80	Sep 2, 1977
ANNUAL SEVEN-DAY MINIMUM	440	Jan 28	1,480	Jan 15	2.5	Feb 12, 1937
MAXIMUM PEAK FLOW			38,300	Jun 18	a137,000	Apr 18, 1997
MAXIMUM PEAK STAGE			40.11	Jun 18	b54.35	Apr 22, 1997
ANNUAL RUNOFF (AC-FT)	3,698,000		5,300,000		2,194,000	
10 PERCENT EXCEEDS	12,000		16,900		6,650	
50 PERCENT EXCEEDS	3,320		4,920		1,460	
90 PERCENT EXCEEDS	497		1,960		295	

a Maximum observed, affected by breakout flow from Red River of the North about 20 miles upstream of gage, that entered Red Lake River about 2 miles from the confluence with Red River of the North.
b From floodmark.
e Estimated.



05085420 SNAKE RIVER ABOVE RADIUM, MN

LOCATION.--Lat 48°16'06", long 96°30'41", in NE¼NW¼ sec. 12, T.155 N., R.46 W., Marshall County, Hydrologic Unit 09020309, on right bank 30 ft downstream of bridge on County Highway 14 and 5.3 miles northeast of Radium.

PERIOD OF RECORD.--September 2004 to current year (no winter records).

GAGE.--Water-stage recorder. Datum of gage is 900.00 ft (NAVD of 1988).

REMARKS.--Records good.

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

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
SEP 09	4.1	SEP 15	1.5	SEP 21	24	SEP 27	14
SEP 10	1.7	SEP 16	1.8	SEP 22	26	SEP 28	8.7
SEP 11	0.96	SEP 17	1.8	SEP 23	23	SEP 29	4.1
SEP 12	0.72	SEP 18	1.3	SEP 24	33	SEP 30	2.4
SEP 13	0.62	SEP 19	0.99	SEP 25	31		
SEP 14	0.92	SEP 20	2.0	SEP 26	23		

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	1.7	20	0.49	---	---	---	---	1.4	14	322	0.29	1.7
2	1.5	15	0.46	---	---	---	---	1.3	11	239	0.19	1.2
3	2.0	12	0.49	---	---	---	---	1.2	8.2	271	0.14	0.96
4	3.8	10	0.52	---	---	---	134	1.2	8.2	220	0.11	0.76
5	1.6	8.4	0.39	---	---	---	112	1.1	47	156	0.08	1.1
6	1.1	6.7	0.38	---	---	---	83	1.0	185	107	0.06	3.0
7	0.92	5.3	0.41	---	---	---	61	0.96	165	71	0.06	1.1
8	0.84	3.9	0.41	---	---	---	49	1.4	137	55	0.05	2.9
9	0.83	3.1	0.41	---	---	---	39	5.0	107	45	0.06	1.9
10	0.75	2.8	0.40	---	---	---	32	13	71	31	0.06	0.86
11	0.72	2.1	0.43	---	---	---	29	13	80	22	0.05	0.56
12	0.77	1.8	0.44	---	---	---	44	11	392	29	0.05	0.48
13	0.98	1.5	0.37	---	---	---	58	9.3	305	21	0.05	0.45
14	1.1	1.4	0.29	---	---	---	51	9.5	318	15	0.05	0.41
15	1.6	1.4	0.31	---	---	---	35	10	276	12	0.04	0.37
16	2.5	1.5	0.28	---	---	---	26	8.7	192	9.0	0.04	0.38
17	2.5	1.6	0.30	---	---	---	20	6.6	130	6.2	20	0.48
18	2.8	1.5	0.27	---	---	---	16	4.9	83	3.6	229	0.53
19	15	1.3	0.17	---	---	---	19	3.9	53	2.3	354	0.44
20	3.3	1.2	0.20	---	---	---	17	2.6	51	55	329	0.41
21	1.2	1.1	0.20	---	---	---	9.5	2.8	48	51	214	0.32
22	0.99	1.1	0.15	---	---	---	6.6	12	33	31	148	0.30
23	1.4	1.1	---	---	---	---	5.8	20	21	16	104	0.32
24	1.8	0.89	---	---	---	---	3.6	20	14	9.4	70	0.40
25	2.3	0.78	---	---	---	---	2.8	20	9.2	4.4	46	0.40
26	2.6	0.72	---	---	---	---	2.7	19	5.6	3.4	37	0.30
27	2.6	0.69	---	---	---	---	2.0	16	11	2.0	25	0.28
28	2.4	0.60	---	---	---	---	1.8	22	16	4.0	16	0.40
29	3.5	0.55	---	---	---	---	1.6	27	25	2.1	9.2	0.38
30	10	0.54	---	---	---	---	1.3	26	281	0.84	4.6	0.35
31	22	---	---	---	---	---	---	19	---	0.45	2.3	---
TOTAL	97.10	110.57	---	---	---	---	---	310.86	3,097.2	1,816.69	1,609.48	23.44
MEAN	3.13	3.69	---	---	---	---	---	10.0	103	58.6	51.9	0.78
MAX	22	20	---	---	---	---	---	27	392	322	354	3.0
MIN	0.72	0.54	---	---	---	---	---	0.96	5.6	0.45	0.04	0.28
AC-FT	193	219	---	---	---	---	---	617	6,140	3,600	3,190	46

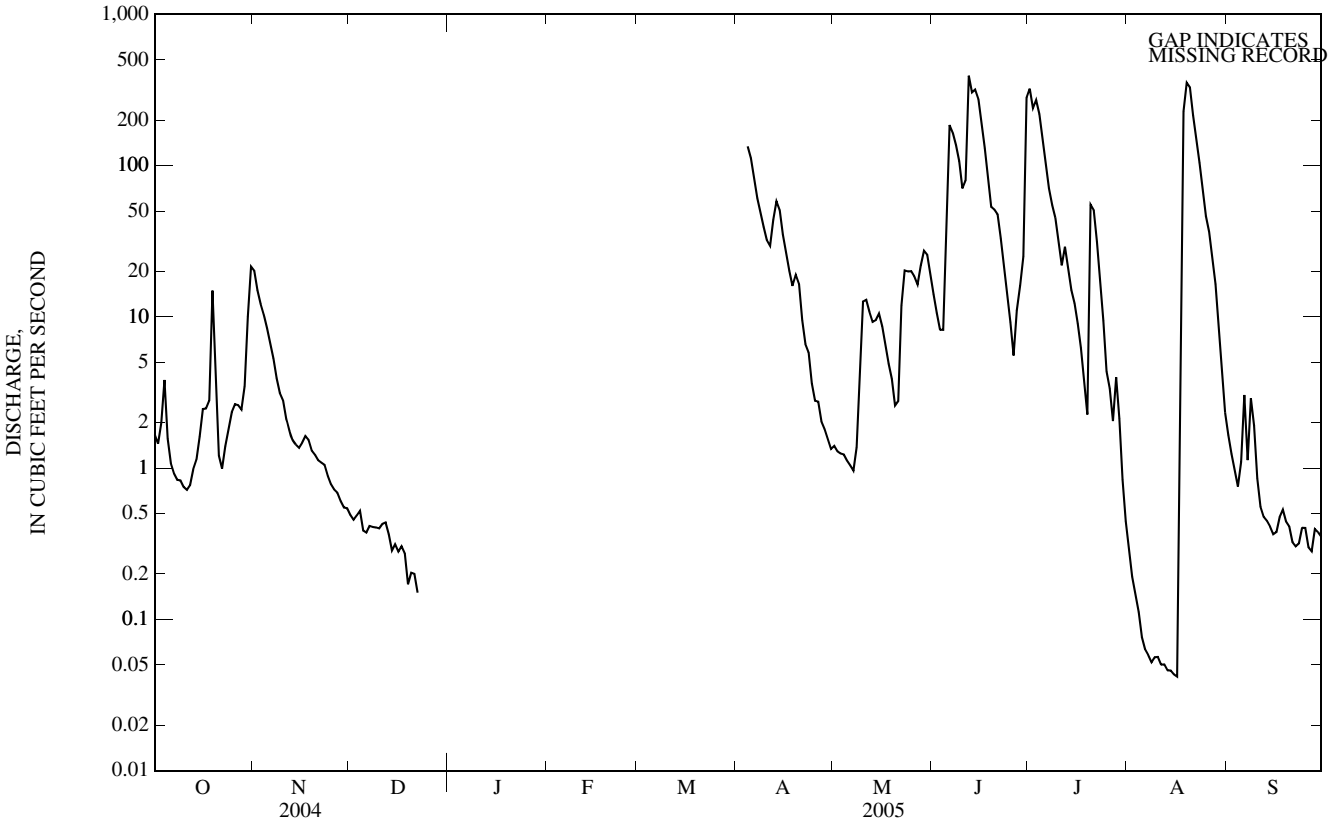
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2005, BY WATER YEAR (WY)

MEAN	3.13	3.69	---	---	---	---	---	10.0	103	58.6	51.9	0.78
MAX	3.13	3.69	---	---	---	---	---	10.0	103	58.6	51.9	0.78
(WY)	(2005)	(2005)	---	---	---	---	---	(2005)	(2005)	(2005)	(2005)	(2005)
MIN	3.13	3.69	---	---	---	---	---	10.0	103	58.6	51.9	0.78
(WY)	(2005)	(2005)	---	---	---	---	---	(2005)	(2005)	(2005)	(2005)	(2005)

05085420 SNAKE RIVER ABOVE RADIUM, MN—Continued

SUMMARY STATISTICS	WATER YEARS 2004 - 2005	
HIGHEST DAILY MEAN	392	Jun 12, 2005
LOWEST DAILY MEAN	0.04	Aug15,16,2005
ANNUAL SEVEN-DAY MINIMUM	0.05	Aug 10, 2005
MAXIMUM PEAK FLOW	a421	Jun 12, 2005
MAXIMUM PEAK STAGE	b86.47	Mar 30, 2005
INSTANTANEOUS LOW FLOW	0.04	Aug 12, 2005

a Gage-height, 86.42 ft.
b Backwater from ice.



05087500 MIDDLE RIVER AT ARGYLE, MN

LOCATION.--Lat 48°20'25", long 96°48'58", in NE¼NW¼ sec. 15, T.156 N., R.48 W., Marshall County, Hydrologic Unit 09020309, on left bank 30 ft upstream of bridge on County Highway 4 in Argyle and 14 mi upstream from mouth.

DRAINAGE AREA.--255 mi^2.

PERIOD OF RECORD.--March to September 1945, November 1950 to September 1981, February 1982 to current year. Monthly discharge only for some periods, published in WSP 1728.

GAGE.--Water-stage recorder. Datum of gage is 828.53 ft above sea level (NGVD of 1929). Prior to Nov. 8, 1951, nonrecording gage and Nov. 8, 1951 to Sept. 18, 1952, water-stage recorder at site 800 ft downstream at datum 1.0 ft higher. Sept. 19, 1952 to June 28, 1982, recording gage at site 800 feet downstream at present datum. June 29, 1982 to Sept. 20, 1983, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of April 1950 reached a stage of 15.25 ft present datum, site then in use, from floodmarks, discharge, 2,790 ft^3/s.

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	70	96	e9.6	e2.2	e2.3	e1.7	e930	56	193	606	65	117
2	55	149	e9.2	e2.0	e2.1	e1.8	e1,100	54	159	898	53	103
3	46	160	e8.7	e1.9	e1.9	e1.9	1,070	50	132	1,240	44	95
4	39	145	e8.4	e1.8	e1.7	e2.0	860	48	111	1,260	36	84
5	35	125	e8.0	e1.8	e1.7	e2.1	711	46	119	1,180	31	75
6	30	108	e7.8	e1.8	e1.7	e2.0	617	42	268	1,130	26	67
7	25	96	e7.6	e1.9	e1.8	e1.8	529	40	403	910	22	60
8	22	80	e7.4	e1.9	e1.9	e1.7	458	42	527	686	19	54
9	19	69	e7.3	e1.8	e2.1	e1.7	404	45	580	515	16	48
10	17	59	e7.1	e1.8	e2.3	e1.6	348	47	523	392	14	42
11	15	51	e7.0	e1.9	e2.4	e1.6	306	189	416	310	13	37
12	15	35	e7.0	e1.9	e2.4	e1.6	286	406	457	262	12	33
13	14	38	e7.0	e1.8	e2.2	e1.6	299	399	767	234	10	31
14	16	40	e6.9	e1.6	e2.0	e1.7	356	322	1,160	197	9.2	29
15	16	38	e6.6	e1.6	e1.8	e1.7	397	256	1,440	164	8.2	26
16	15	36	e6.2	e1.6	e1.8	e1.7	359	225	1,420	137	7.6	25
17	14	32	e5.6	e1.7	e1.7	e1.7	293	194	1,220	114	14	28
18	15	28	e5.1	e1.7	e1.7	e1.7	242	163	926	96	206	28
19	16	25	e5.0	e1.7	e1.7	e1.7	203	134	643	80	928	28
20	16	23	e5.0	e1.7	e1.7	e1.7	175	112	432	79	2,150	27
21	16	22	e3.8	e1.7	e1.7	e1.8	151	99	301	371	2,430	25
22	17	20	e2.1	e1.6	e1.7	e1.8	131	90	219	771	2,010	25
23	17	29	e2.0	e1.6	e1.8	e1.7	114	112	164	936	1,420	28
24	22	21	e2.0	e1.6	e1.8	e1.7	102	171	129	739	899	27
25	24	21	e2.0	e1.6	e1.8	e1.7	91	206	103	520	576	26
26	34	e17	e2.1	e1.7	e1.8	e1.8	83	210	83	362	396	26
27	49	e15	e2.2	e1.8	e1.7	e2.1	76	207	88	246	322	24
28	57	e13	e2.3	e1.9	e1.7	e3.1	71	201	104	169	281	21
29	56	e11	e2.4	e2.2	---	e5.0	65	206	106	128	224	20
30	54	e10	e2.4	e2.3	---	e12	60	219	216	103	174	21
31	57	---	e2.3	e2.3	---	e580	---	218	---	83	139	---
TOTAL	913	1,612	168.1	56.4	52.9	647.7	10,887	4,809	13,409	14,918	12,555.0	1,280
MEAN	29.5	53.7	5.42	1.82	1.89	20.9	363	155	447	481	405	42.7
MAX	70	160	9.6	2.3	2.4	580	1,100	406	1,440	1,260	2,430	117
MIN	14	10	2.0	1.6	1.7	1.6	60	40	83	79	7.6	20
AC-FT	1,810	3,200	333	112	105	1,280	21,590	9,540	26,600	29,590	24,900	2,540
CFSM	0.12	0.21	0.02	0.01	0.01	0.08	1.42	0.61	1.75	1.89	1.59	0.17
IN.	0.13	0.24	0.02	0.01	0.01	0.09	1.59	0.70	1.96	2.18	1.83	0.19

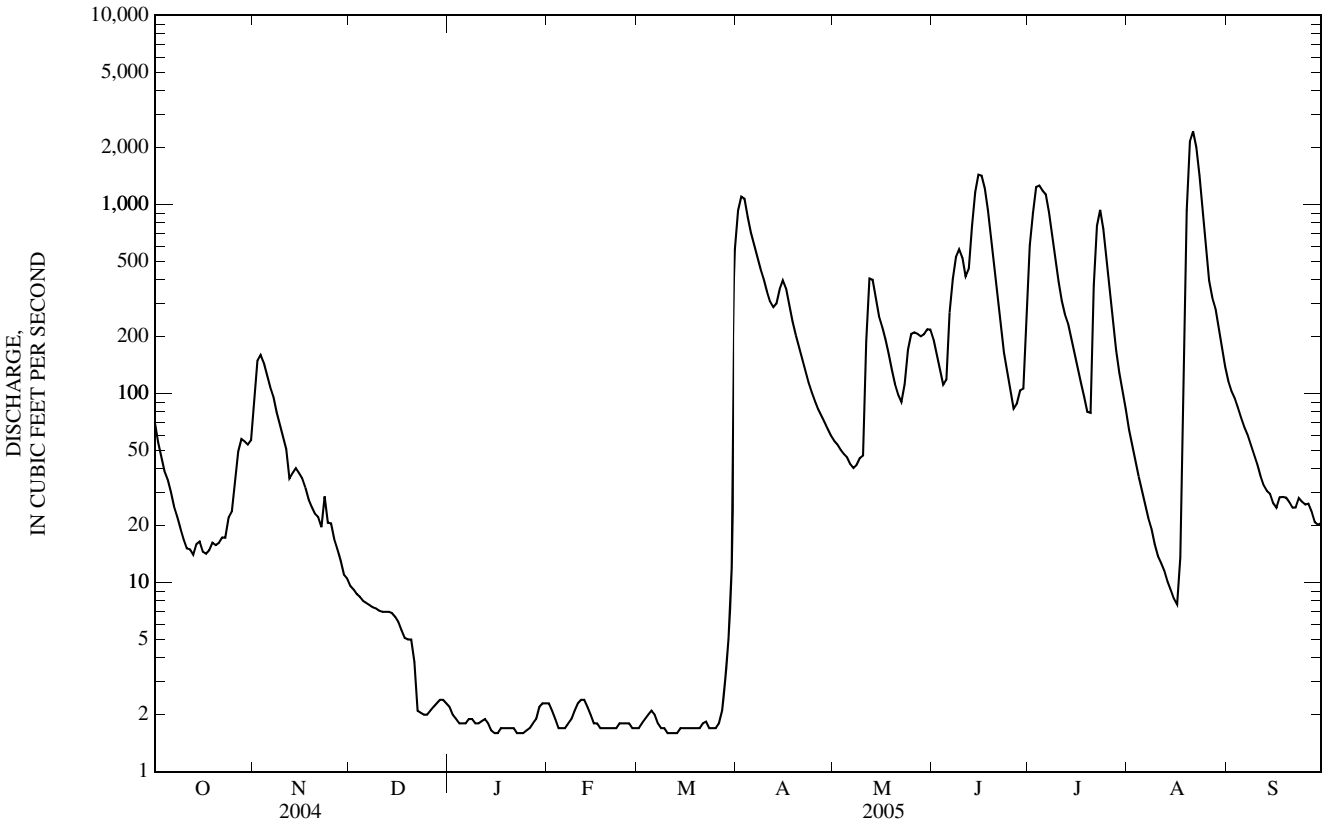
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2005, BY WATER YEAR (WY)

MEAN	12.8	19.3	3.79	1.54	2.88	37.6	235	102	102	68.4	21.7	19.5
MAX	94.1	535	22.2	8.77	69.8	335	966	896	660	688	405	272
(WY)	(1983)	(2001)	(1995)	(1995)	(2000)	(1995)	(1997)	(1996)	(1970)	(1975)	(2005)	(1993)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.20	2.12	0.37	0.00	0.00	0.00
(WY)	(1954)	(1954)	(1954)	(1953)	(1953)	(1954)	(1991)	(1981)	(1973)	(1961)	(1961)	(1952)

05087500 MIDDLE RIVER AT ARGYLE, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1945 - 2005	
ANNUAL TOTAL	39,476.01		61,308.1			
ANNUAL MEAN	108		168		a52.4	
HIGHEST ANNUAL MEAN					198	1999
LOWEST ANNUAL MEAN					1.60	1977
HIGHEST DAILY MEAN	1,950	May 15	2,430	Aug 21	4,800	May 19, 1996
LOWEST DAILY MEAN	0.44	Jan 26	b1.6	Jan 14	c0.00	Aug 18, 1952
ANNUAL SEVEN-DAY MINIMUM	0.45	Jan 24	1.6	Jan 19	0.00	Aug 18, 1952
MAXIMUM PEAK FLOW			2,500	Aug 21	5,020	May 19, 1996
MAXIMUM PEAK STAGE			15.73	Aug 21	d18.27	May 19, 1996
ANNUAL RUNOFF (AC-FT)	78,300		121,600		37,970	
ANNUAL RUNOFF (CFSM)	0.423		0.659		0.206	
ANNUAL RUNOFF (INCHES)	5.76		8.94		2.79	
10 PERCENT EXCEEDS	295		521		108	
50 PERCENT EXCEEDS	17		31		3.1	
90 PERCENT EXCEEDS	0.61		1.7		0.00	

a Median of annual mean discharges is 42 ft^3/s.
b Many days.
c Many days, several years.
d From floodmark.
e Estimated.



05092000 RED RIVER OF THE NORTH AT DRAYTON, ND

LOCATION.--Lat 48°34'20", long 97°08'50", in SE¼SE¼SE¼ sec.24, T.159 N., R.51 W., Pembina County, Hydrologic Unit 09020311, on downstream side of bridge on North Dakota State Highway 66, at the North Dakota-Minnesota border, 1.5 mi northeast of Drayton, and at mile 206.7.

DRAINAGE AREA.--34,800 mi^2, approximately, includes 3,800 mi^2 in closed basins.

PERIOD OF RECORD.--April 1936 to June 1937, April 1941 to current year (fragmentary prior to April 1949).

REVISED RECORDS.--WSP 1388: 1949-50. WSP 1728: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 755.00 ft above National Geodetic Vertical Datum of 1929 (Minnesota highway bench mark). Prior to Nov. 30, 1954, nonrecording gage at site 1.5 mi upstream at datum 1.59 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of April 1897 reached a stage of about 41 ft at site and datum in use prior to Nov. 30, 1954.

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	6,330	10,100	e3,690	e2,310	e2,200	e2,160	e10,800	6,460	10,300	24,700	6,280	8,350
2	6,150	14,000	e3,550	e2,300	e2,290	e2,190	e16,300	6,200	10,500	24,300	5,990	7,470
3	5,760	17,300	e3,430	e2,300	e2,340	e2,220	e25,900	5,940	10,500	23,800	5,710	6,430
4	5,330	19,800	e3,450	e2,300	e2,350	e2,250	e29,100	5,740	10,600	23,300	5,370	5,440
5	4,950	21,500	e3,580	e2,290	e2,330	e2,270	e30,900	5,580	11,000	22,800	4,990	4,840
6	4,690	22,500	e3,680	e2,290	e2,290	e2,300	30,600	5,390	11,700	22,200	4,680	4,410
7	4,490	22,700	e3,740	e2,280	e2,220	e2,310	28,900	5,170	11,900	22,200	4,520	4,300
8	4,350	20,700	e3,810	e2,280	e2,210	e2,320	27,800	5,020	13,200	22,200	4,390	5,120
9	4,280	19,700	e3,880	e2,270	e2,210	e2,330	26,400	5,580	15,500	22,100	4,340	7,200
10	4,180	18,500	e3,920	e2,260	e2,220	e2,430	24,600	6,240	17,700	21,900	4,640	8,530
11	4,060	16,800	e3,990	e2,250	e2,230	e2,460	22,400	6,150	19,400	21,500	4,860	8,650
12	4,000	14,800	e4,000	e2,250	e2,230	e2,460	19,900	6,670	21,600	21,100	4,790	8,310
13	3,950	12,600	e4,000	e2,180	e2,230	e2,460	17,500	7,540	24,000	20,400	4,550	7,870
14	3,940	10,700	e3,950	e2,130	e2,200	e2,460	16,600	8,120	26,300	19,500	4,240	7,280
15	3,900	9,300	e3,850	e2,090	e2,160	e2,470	16,100	8,300	28,200	18,300	4,070	6,430
16	3,840	8,440	e3,700	e2,050	e2,060	e2,510	15,800	8,100	29,400	16,900	3,950	5,390
17	3,720	7,910	e3,550	e2,020	e2,000	e2,580	15,500	7,870	30,200	15,300	3,920	4,720
18	3,660	7,550	e3,390	e2,010	e1,910	e2,650	15,000	7,760	30,600	13,800	5,310	4,220
19	3,660	7,230	e3,200	e2,010	e1,900	e2,750	14,600	7,690	30,900	12,900	7,110	3,820
20	3,590	6,990	e3,080	e2,000	e1,900	e2,850	14,000	7,580	30,900	12,100	8,490	3,640
21	3,570	6,660	e2,950	e1,990	e1,910	e2,950	13,300	7,540	31,100	11,400	10,200	3,640
22	3,540	6,400	e2,790	e1,950	e1,930	e3,050	12,700	7,620	31,100	10,700	11,400	3,550
23	3,550	6,180	e2,640	e1,940	e1,950	e3,190	11,900	7,870	31,000	10,400	11,400	3,400
24	3,540	5,930	e2,520	e1,940	e1,980	e3,200	11,200	8,220	30,400	e9,830	10,500	3,310
25	3,510	5,730	e2,480	e1,940	e2,060	e3,250	10,100	8,790	29,700	e9,510	9,330	3,140
26	3,500	5,540	e2,470	e1,930	e2,100	e3,460	9,020	9,240	28,800	e9,150	8,240	3,080
27	3,630	5,060	e2,430	e1,900	e2,130	e3,800	8,230	9,320	27,800	e8,700	7,360	2,990
28	4,100	4,580	e2,400	e1,900	e2,140	e4,110	7,600	9,150	26,800	e8,380	6,950	2,900
29	4,890	3,800	e2,390	e1,960	---	e4,510	7,110	9,020	25,700	e7,930	7,550	2,850
30	5,900	e3,780	e2,350	e2,010	---	e4,950	6,750	9,270	25,000	e7,340	8,440	2,760
31	7,230	---	e2,330	e2,110	---	e7,000	---	9,820	---	6,840	8,790	---
TOTAL	135,790	342,780	101,190	65,440	59,680	91,900	516,610	228,960	681,800	501,480	202,360	154,040
MEAN	4,380	11,430	3,264	2,111	2,131	2,965	17,220	7,386	22,730	16,180	6,528	5,135
MAX	7,230	22,700	4,000	2,310	2,350	7,000	30,900	9,820	31,100	24,700	11,400	8,650
MIN	3,500	3,780	2,330	1,900	1,900	2,160	6,750	5,020	10,300	6,840	3,920	2,760
AC-FT	269,300	679,900	200,700	129,800	118,400	182,300	1,025,000	454,100	1,352,000	994,700	401,400	305,500

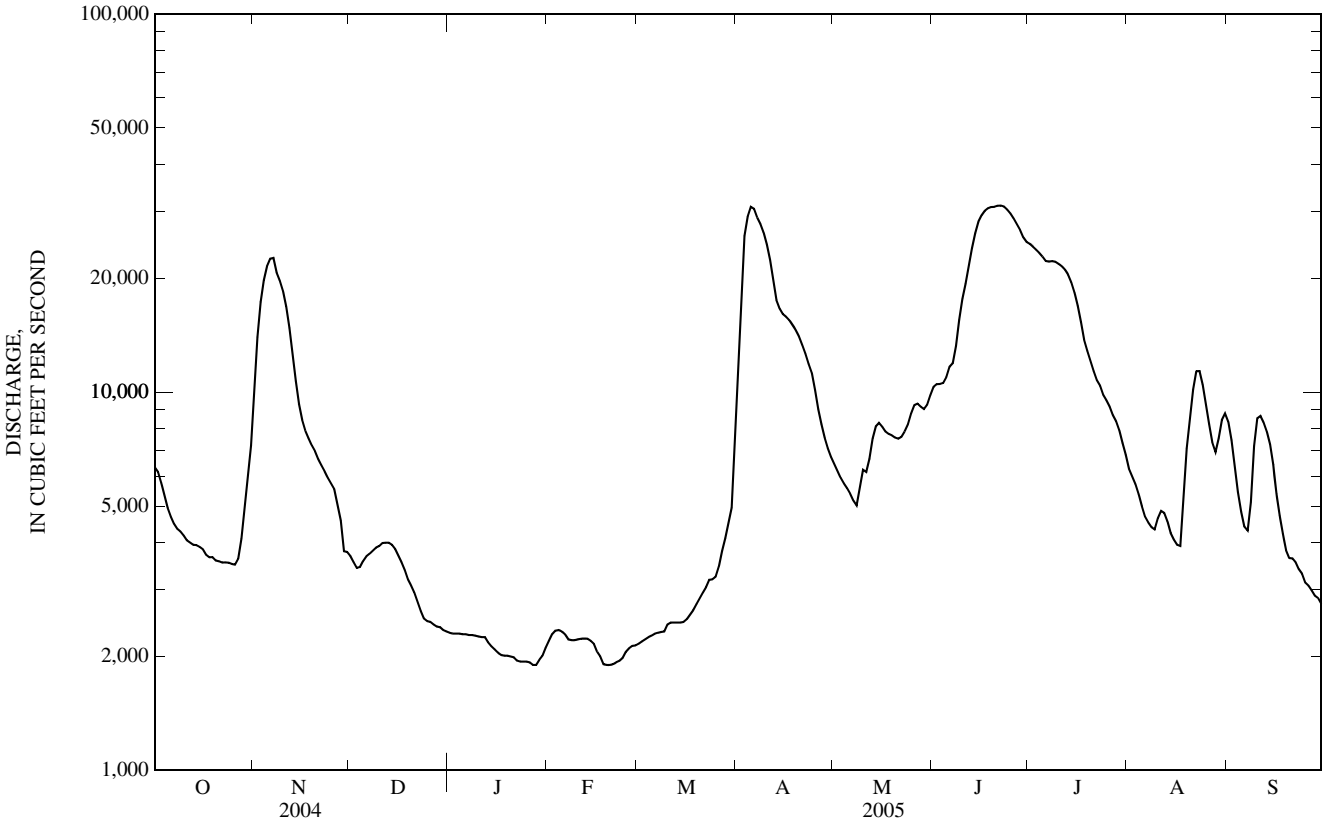
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2005, BY WATER YEAR (WY)

MEAN	2,003	2,055	1,473	1,202	1,164	3,372	15,360	9,495	6,484	5,739	2,732	2,241
MAX	5,194	11,840	4,168	2,679	2,598	16,290	54,710	58,890	23,420	28,240	21,580	12,140
(WY)	(1995)	(2001)	(1999)	(2001)	(1998)	(1998)	(1997)	(1950)	(1962)	(1975)	(1993)	(1999)
MIN	317	277	149	174	201	280	1,275	938	676	348	243	329
(WY)	(1991)	(1977)	(1977)	(1990)	(1977)	(1962)	(1981)	(1977)	(1977)	(1988)	(1977)	(1988)

05092000 RED RIVER OF THE NORTH AT DRAYTON, ND—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1949 - 2005	
ANNUAL TOTAL	2,231,535		3,082,030			
ANNUAL MEAN	6,097		8,444		4,465	
HIGHEST ANNUAL MEAN					11,280	1997
LOWEST ANNUAL MEAN					536	1977
HIGHEST DAILY MEAN	37,000	Apr 2	31,100	Jun 21	124,000	Apr 24, 1997
LOWEST DAILY MEAN	430	Feb 3	1,900	Jan 27	110	Dec 23, 1989
ANNUAL SEVEN-DAY MINIMUM	431	Feb 2	1,930	Feb 18	118	Dec 28, 1989
MAXIMUM PEAK FLOW			a31,200	Jun 21	124,000	Apr 24, 1997
MAXIMUM PEAK STAGE			37.16	Jun 24	45.55	Apr 24, 1997
INSTANTANEOUS LOW FLOW					7.7	Oct 16, 1936
ANNUAL RUNOFF (AC-FT)	4,426,000		6,113,000		3,235,000	
10 PERCENT EXCEEDS	16,900		22,200		10,400	
50 PERCENT EXCEEDS	3,700		5,310		1,970	
90 PERCENT EXCEEDS	520		2,200		500	

a Gage height, 37.00 ft.
e Estimated.



05094000 SOUTH BRANCH TWO RIVERS AT LAKE BRONSON, MN

LOCATION.--Lat 48°43'50", long 96°39'50", in SW¼SW¼ sec. 30, T.161 N., R.46 W., Kittson County, Hydrologic Unit 09020312, on left bank 70 ft upstream from culvert on U.S. Highway 59 at Lake Bronson and 3.4 mi downstream from dam at outlet of Bronson Lake.

DRAINAGE AREA.--422 mi^2.

PERIOD OF RECORD.--September 1928 to November 1936, April to September 1937, April 1941 to October 1943, April to December 1944, April 1945 to September 1947, October 1953 to September 1981, April 1985 to current year. Monthly discharge only for some periods, published in WSP 1308. October 1981 to March 1985, annual maximums only. Published as South Fork Two Rivers at Bronson prior to 1941.

REVISED RECORDS.--WSP 1308: 1929(M), 1931(M), 1936(M), 1944(M), 1947(M).

GAGE.--Water-stage recorder. Datum of gage is 928.53 ft above sea level (NGVD of 1929, Minnesota Department of Transportation benchmark). Prior to Nov. 23, 1953, nonrecording gage at bridge 100 ft downstream at datum 2.00 ft higher. Nov 23, 1953 to Oct. 5, 1963, water-stage recorder at same site at datum 2.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow partly regulated since 1937 at Bronson Lake; usable capacity, 3,700 acre-ft.

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	49	407	e8.4	e2.6	e10	e5.8	950	102	286	1,750	106	40
2	30	387	e7.6	e2.6	e10	e5.7	1,990	128	235	1,720	108	34
3	29	341	e7.0	e2.5	e10	e5.7	2,810	133	220	1,790	105	13
4	27	220	e6.5	e2.5	e10	e5.7	2,900	51	259	2,040	103	13
5	27	197	e6.3	e2.4	e9.8	e5.7	2,440	45	351	1,920	79	14
6	29	214	e6.0	e2.4	e9.6	e5.7	1,940	62	1,290	1,770	67	17
7	34	182	e5.8	e2.4	e9.3	e5.7	1,770	64	1,440	1,630	71	20
8	39	156	e5.6	e2.4	e9.0	e5.7	1,550	64	1,300	1,750	68	20
9	32	134	e5.4	e2.4	e8.8	e5.7	1,370	150	1,140	2,030	64	21
10	26	108	e5.2	e2.4	e8.5	e5.7	1,210	631	978	1,780	58	21
11	35	106	e5.0	e2.4	e8.2	e5.7	914	716	798	1,390	56	21
12	17	74	e4.9	e2.5	e8.0	e5.7	890	576	677	1,240	54	21
13	19	36	e4.8	e2.5	e8.0	e5.7	1,060	352	1,160	1,090	52	20
14	24	36	e4.8	e2.6	e8.0	e5.8	1,050	306	1,250	837	52	19
15	39	40	e4.7	e2.6	e8.0	e5.8	860	364	1,460	e599	35	18
16	53	47	e4.6	e2.6	e7.9	e5.7	714	300	1,470	823	8.1	17
17	51	52	e4.5	e2.7	e7.7	e5.7	569	e221	1,370	757	13	18
18	40	54	e4.4	e3.0	e7.4	e5.6	429	183	1,240	490	38	17
19	28	53	e4.4	e3.2	e7.2	e5.6	372	122	1,120	366	62	17
20	28	53	e4.3	e4.0	e7.0	e5.5	352	90	931	430	59	16
21	28	51	e4.1	e5.6	e6.8	e5.5	289	163	877	430	76	16
22	28	48	e3.0	e6.6	e6.6	e5.5	221	197	426	493	106	16
23	31	45	e2.6	e7.2	e6.5	e5.5	215	407	436	402	103	21
24	38	42	e2.6	e8.2	e6.4	e5.7	209	511	314	277	77	18
25	72	41	e2.6	e8.8	e6.2	e6.4	199	408	221	183	56	16
26	118	38	e2.7	e9.4	e6.1	e8.4	196	369	202	164	56	16
27	141	36	e2.7	e9.6	e6.0	e15	147	421	587	190	51	16
28	170	34	e2.8	e9.8	e5.9	e34	98	421	1,370	213	39	9.2
29	212	36	e2.8	e9.9	---	e80	100	534	1,080	174	39	5.1
30	287	26	e2.7	e10	---	e200	101	642	1,340	124	39	4.4
31	420	---	e2.7	e10	---	e460	---	422	---	100	39	---
TOTAL	2,201	3,294	141.5	147.8	222.9	939.9	27,915	9,155	25,828	28,952	1,939.1	534.7
MEAN	71.0	110	4.56	4.77	7.96	30.3	930	295	861	934	62.6	17.8
MAX	420	407	8.4	10	10	460	2,900	716	1,470	2,040	108	40
MIN	17	26	2.6	2.4	5.9	5.5	98	45	202	100	8.1	4.4
AC-FT	4,370	6,530	281	293	442	1,860	55,370	18,160	51,230	57,430	3,850	1,060
CFSM	0.17	0.26	0.01	0.01	0.02	0.07	2.20	0.70	2.04	2.21	0.15	0.04
IN.	0.19	0.29	0.01	0.01	0.02	0.08	2.46	0.81	2.28	2.55	0.17	0.05

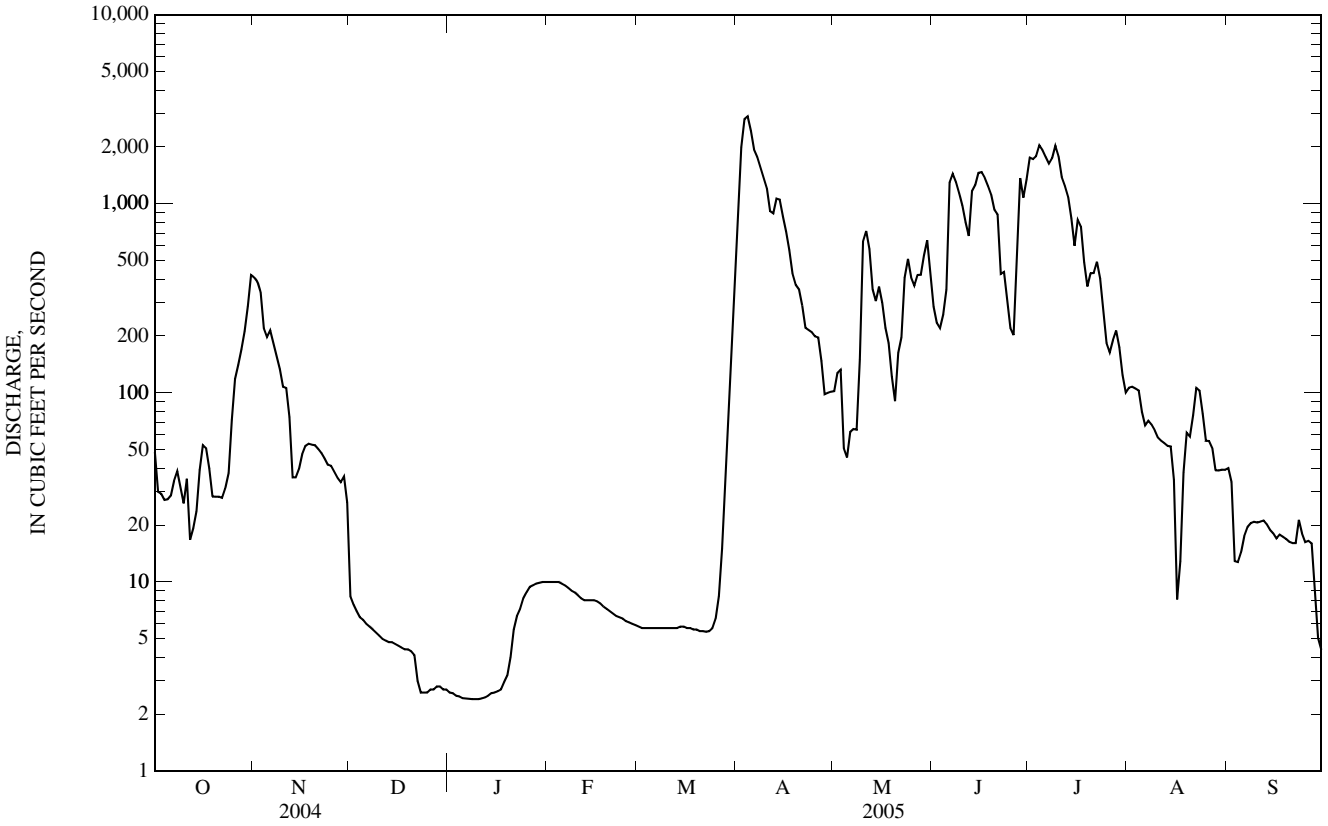
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2005, BY WATER YEAR (WY)

MEAN	22.5	33.6	5.98	3.53	6.04	78.4	456	234	206	132	54.0	44.7
MAX	153	1,132	37.9	15.3	93.1	689	1,977	1,500	1,336	1,136	1,349	525
(WY)	(1958)	(2001)	(2001)	(2001)	(1998)	(1995)	(1966)	(1996)	(1970)	(1956)	(1993)	(1957)
MIN	0.40	0.38	0.13	0.12	0.12	0.66	0.54	0.98	1.43	0.44	0.09	0.00
(WY)	(1991)	(1990)	(1987)	(1987)	(1987)	(1934)	(1991)	(1991)	(1980)	(1988)	(1988)	(1937)

05094000 SOUTH BRANCH TWO RIVERS AT LAKE BRONSON, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1929 - 2005	
ANNUAL TOTAL	98,605.6		101,270.9			
ANNUAL MEAN	269		277		a108	
HIGHEST ANNUAL MEAN					314	2001
LOWEST ANNUAL MEAN					2.89	1934
HIGHEST DAILY MEAN	3,510	May 16	2,900	Apr 4	5,290	Apr 5, 1966
LOWEST DAILY MEAN	2.6	Dec 23	2.4	Jan 5-11	b0.00	Jul 25, 1937
ANNUAL SEVEN-DAY MINIMUM	2.7	Dec 23	2.4	Jan 5	0.00	Aug 2, 1937
MAXIMUM PEAK FLOW			3,000	Apr 3	5,410	Apr 5, 1966
MAXIMUM PEAK STAGE			11.80	Apr 3	18.23	Apr 5, 1966
ANNUAL RUNOFF (AC-FT)	195,600		200,900		78,040	
ANNUAL RUNOFF (CFSM)	0.638		0.657		0.255	
ANNUAL RUNOFF (INCHES)	8.69		8.93		3.47	
10 PERCENT EXCEEDS	853		1,070		260	
50 PERCENT EXCEEDS	49		40		5.5	
90 PERCENT EXCEEDS	4.2		4.6		0.90	

a Median of annual mean discharges is 67 ft^3/s.
b Many days, several years.
e Estimated.



05104500 ROSEAU RIVER BELOW SOUTH FORK NEAR MALUNG, MN

LOCATION.--Lat 48°47'30", long 95°44'40", in NW¼SW¼ sec. 6, T.161 N., R.39 W., Roseau County, Hydrologic Unit 09020314, on left bank 0.3 mi downstream from South Fork and 1.5 mi northwest of Malung.

DRAINAGE AREA.--430 mi^2.

PERIOD OF RECORD.--October 1946 to current year.

REVISED RECORDS.--WSP 2113: 1948, 1950, 1951, 1956(M), 1957(M), 1962(M). WRIR 97-4249: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,029.67 ft above sea level (NGVD of 1912).

REMARKS.--Records good except those for estimated daily discharges, which are poor. Some flow bypasses the gaging station through a natural overflow channel 0.8 mi. upstream and returns to river 0.5 mi downstream. Overflow begins at stage of about 13.0 ft, discharge, 1,800 ft^3/s. These records include any flow in the overflow channel.

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	342	577	67	e13	e15	e12	e900	234	371	1,930	42	82
2	309	607	56	e13	e15	e12	e1,900	224	329	1,600	37	78
3	270	601	50	e13	e16	e12	e1,780	214	289	1,520	33	74
4	235	563	52	e13	e16	e12	e1,600	205	285	1,600	29	72
5	211	499	42	e13	e17	e12	1,380	193	321	1,350	24	69
6	193	443	37	e13	e17	e13	1,230	182	553	1,090	21	e74
7	178	401	e35	e13	e17	e13	1,130	165	807	840	18	e62
8	165	368	e33	13	e16	e12	1,070	161	930	664	16	49
9	156	342	e31	13	e16	e12	987	169	953	509	15	46
10	149	320	e29	13	e15	e12	880	272	913	412	14	42
11	145	289	e28	13	e15	12	799	397	791	402	13	36
12	139	249	e27	e13	e15	e12	807	430	882	327	15	33
13	131	216	26	e13	e16	e12	850	413	1,080	253	15	30
14	125	207	e25	e13	e16	e12	840	383	1,320	206	14	27
15	121	197	e25	13	e16	e12	805	373	1,660	207	12	27
16	118	187	24	13	e15	e12	749	375	1,750	213	12	25
17	123	179	e23	e13	e14	e12	679	359	1,520	295	13	24
18	125	172	e21	e13	e13	e12	611	331	1,130	326	15	e30
19	117	166	e19	e13	e13	e12	551	289	847	316	25	e28
20	119	160	e18	e13	e12	e12	501	252	669	272	63	25
21	134	143	e16	e13	e12	e12	460	238	488	206	59	21
22	140	136	e15	e13	e12	e12	422	301	368	160	94	19
23	150	119	e13	e13	e12	e12	387	424	294	135	119	18
24	180	e94	e12	e13	e12	12	359	486	223	119	110	18
25	256	e88	e11	e13	e12	12	335	490	177	99	89	18
26	327	e81	e10	e13	e12	12	315	498	150	84	82	17
27	353	e76	e10	e13	e12	13	297	487	283	72	72	15
28	359	e70	e10	e14	e12	14	278	461	276	63	68	14
29	360	66	e11	e14	---	e20	261	447	307	54	71	13
30	396	70	e12	e14	---	e75	245	438	1,360	50	74	12
31	498	---	e13	e14	---	e240	---	413	---	49	80	---
TOTAL	6,624	7,686	801	407	401	676	23,408	10,304	21,326	15,423	1,364	1,098
MEAN	214	256	25.8	13.1	14.3	21.8	780	332	711	498	44.0	36.6
MAX	498	607	67	14	17	240	1,900	498	1,750	1,930	119	82
MIN	117	66	10	13	12	12	245	161	150	49	12	12
AC-FT	13,140	15,250	1,590	807	795	1,340	46,430	20,440	42,300	30,590	2,710	2,180
CFSM	0.50	0.60	0.06	0.03	0.03	0.05	1.81	0.77	1.65	1.16	0.10	0.09
IN.	0.57	0.66	0.07	0.04	0.03	0.06	2.03	0.89	1.84	1.33	0.12	0.09

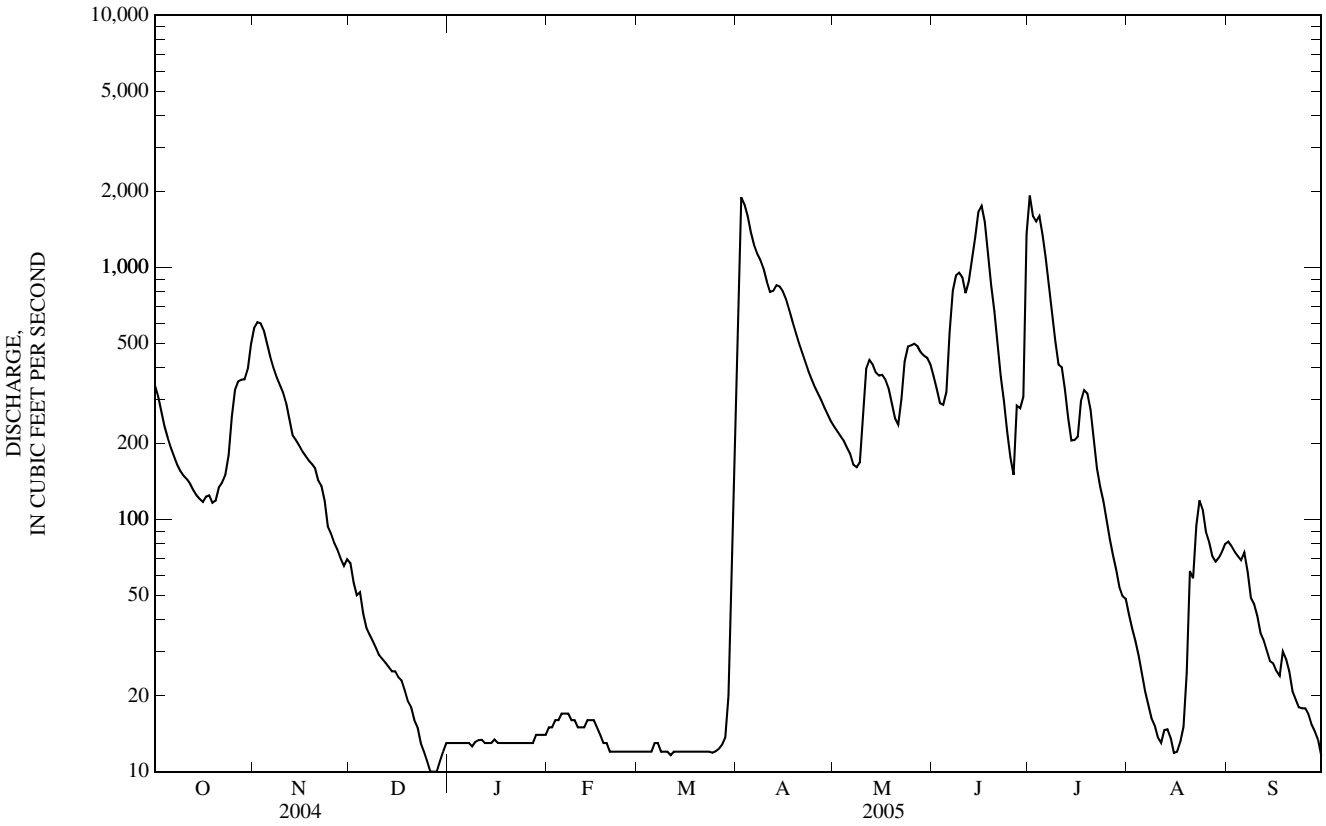
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2005, BY WATER YEAR (WY)

MEAN	67.0	66.9	17.4	8.07	8.74	67.7	607	345	286	162	74.1	82.6
MAX	351	848	65.6	22.2	102	524	2,035	1,589	2,787	1,152	896	710
(WY)	(1983)	(2001)	(1995)	(1997)	(1998)	(1995)	(1966)	(1950)	(2002)	(1968)	(2001)	(1957)
MIN	0.03	0.16	0.01	0.00	0.00	0.83	5.60	8.77	4.17	0.09	0.00	0.02
(WY)	(1991)	(1991)	(1977)	(1977)	(1977)	(1977)	(1991)	(1990)	(1980)	(1980)	(1961)	(1988)

05104500 ROSEAU RIVER BELOW SOUTH FORK NEAR MALUNG, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1947 - 2005	
ANNUAL TOTAL	115,917.0		89,518			
ANNUAL MEAN	317		245		a149	
HIGHEST ANNUAL MEAN					355	2001
LOWEST ANNUAL MEAN					7.28	1990
HIGHEST DAILY MEAN	6,230	May 14	1,930	Jul 1	15,800	Jun 12, 2002
LOWEST DAILY MEAN	7.2	Feb 20	b10	Dec 26-28	c0.00	Jul 23, 1961
ANNUAL SEVEN-DAY MINIMUM	7.3	Feb 16	11	Dec 24	0.00	Jul 23, 1961
MAXIMUM PEAK FLOW			d1,970	Jul 1	16,000	Jun 12, 2002
MAXIMUM PEAK STAGE			f16.24	Apr 2	26.96	Jun 12, 2002
INSTANTANEOUS LOW FLOW			bg10	Dec 26	c0.00	Jul 23, 1961
ANNUAL RUNOFF (AC-FT)	229,900		177,600		108,100	
ANNUAL RUNOFF (CFSM)	0.737		0.570		0.347	
ANNUAL RUNOFF (INCHES)	10.03		7.74		4.71	
10 PERCENT EXCEEDS	738		766		348	
50 PERCENT EXCEEDS	118		78		21	
90 PERCENT EXCEEDS	8.2		12		2.0	

a Median of annual mean discharges is 140 ft^3/s.
b Result of siphoning.
c Many days, several years.
d Gage-height, 13.28 ft.
e Estimated.
f Backwater from ice.
g Estimated, minimum daily.



05106000 SPRAGUE CREEK NEAR SPRAGUE, MANITOBA

LOCATION.--Lat 48°59'33", long 95°39'43", in NE¼NE¼sec. 34, T.164 N., R.39 W., Roseau County, Hydrologic Unit 09020314, on left bank 0.5 mi south of international boundary, 3.5 mi south of Sprague, Manitoba, 8 mi upstream from mouth, and 10.5 mi northeast of Roseau, MN.

DRAINAGE AREA.--176 mi^2.

PERIOD OF RECORD.--September 1928 to December 1981, October, 1999 to current year.

REVISED RECORDS.--WSP 1055: 1944. WSP 1308: 1931(M). WDR MN-81-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,038.40 ft above sea level, 1928 datum, (levels by Geodetic Survey of Canada). Prior to Mar. 15, 1929, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor.

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	157	269	e26	e5.5	e5.0	e4.4	e200	144	165	1,050	54	56
2	148	242	e24	e5.3	e5.2	e4.4	e325	135	154	892	48	55
3	132	218	e22	e5.1	e5.3	e4.4	e360	127	165	861	87	49
4	120	200	e20	e4.9	e5.4	e4.4	e370	121	172	974	133	43
5	107	182	e19	e4.7	e5.5	e4.5	376	116	232	891	86	43
6	100	168	e17	e4.6	e5.6	e4.7	419	112	407	725	53	63
7	94	155	e17	e4.6	e5.6	e4.7	426	105	428	586	41	61
8	95	139	e16	e4.5	e5.4	e4.6	430	108	455	477	34	49
9	105	128	e15	e4.5	e5.2	e4.5	427	140	449	422	30	44
10	98	123	e14	e4.4	e5.2	e4.5	411	241	436	356	25	42
11	93	109	e14	e4.4	e5.3	e4.5	383	257	422	306	23	41
12	84	e105	e13	e4.4	e5.4	e4.4	403	248	557	300	23	37
13	79	e100	e12	e4.4	e5.6	e4.4	413	235	724	247	21	35
14	76	e97	e12	e4.4	e5.6	e4.4	393	242	724	196	21	34
15	70	e93	e11	e4.4	e5.5	e4.4	369	244	776	171	19	32
16	72	89	e11	e4.4	e5.2	e4.4	345	223	690	132	19	30
17	68	88	e10	e4.4	e4.9	e4.5	329	201	554	116	20	34
18	62	87	e9.7	e4.3	e4.8	e4.6	317	180	448	106	20	38
19	64	83	e9.2	e4.3	e4.6	e4.6	308	165	366	98	41	36
20	90	e82	e8.5	e4.2	e4.6	e4.7	292	158	324	184	95	34
21	95	e78	e7.9	e4.1	e4.5	e4.8	272	176	290	150	84	31
22	100	e73	e7.0	e4.0	e4.5	e4.9	253	316	230	112	65	30
23	156	e67	e6.5	e4.1	e4.5	e5.0	223	321	185	97	54	27
24	218	e61	e5.8	e4.1	e4.4	e5.1	200	290	168	86	46	29
25	237	e48	e5.5	e4.2	e4.4	e5.2	192	290	157	70	49	29
26	232	e41	e5.2	e4.3	e4.4	e5.3	187	280	171	60	61	27
27	215	e36	e5.2	e4.4	e4.4	e6.0	175	260	295	53	61	26
28	279	e32	e5.2	e4.5	e4.4	e7.0	162	239	359	49	56	25
29	378	e30	e5.3	e4.7	---	e14	153	222	337	49	49	23
30	347	e29	e5.6	e4.8	---	e26	150	204	828	41	44	22
31	309	---	e5.7	e4.9	---	e65	---	184	---	50	44	---
TOTAL	4,480	3,252	365.3	139.8	140.4	238.3	9,263	6,284	11,668	9,907	1,506	1,125
MEAN	145	108	11.8	4.51	5.01	7.69	309	203	389	320	48.6	37.5
MAX	378	269	26	5.5	5.6	65	430	321	828	1,050	133	63
MIN	62	29	5.2	4.0	4.4	4.4	150	105	154	41	19	22
AC-FT	8,890	6,450	725	277	278	473	18,370	12,460	23,140	19,650	2,990	2,230
CFSM	0.82	0.62	0.07	0.03	0.03	0.04	1.75	1.15	2.21	1.82	0.28	0.21
IN.	0.95	0.69	0.08	0.03	0.03	0.05	1.96	1.33	2.47	2.09	0.32	0.24

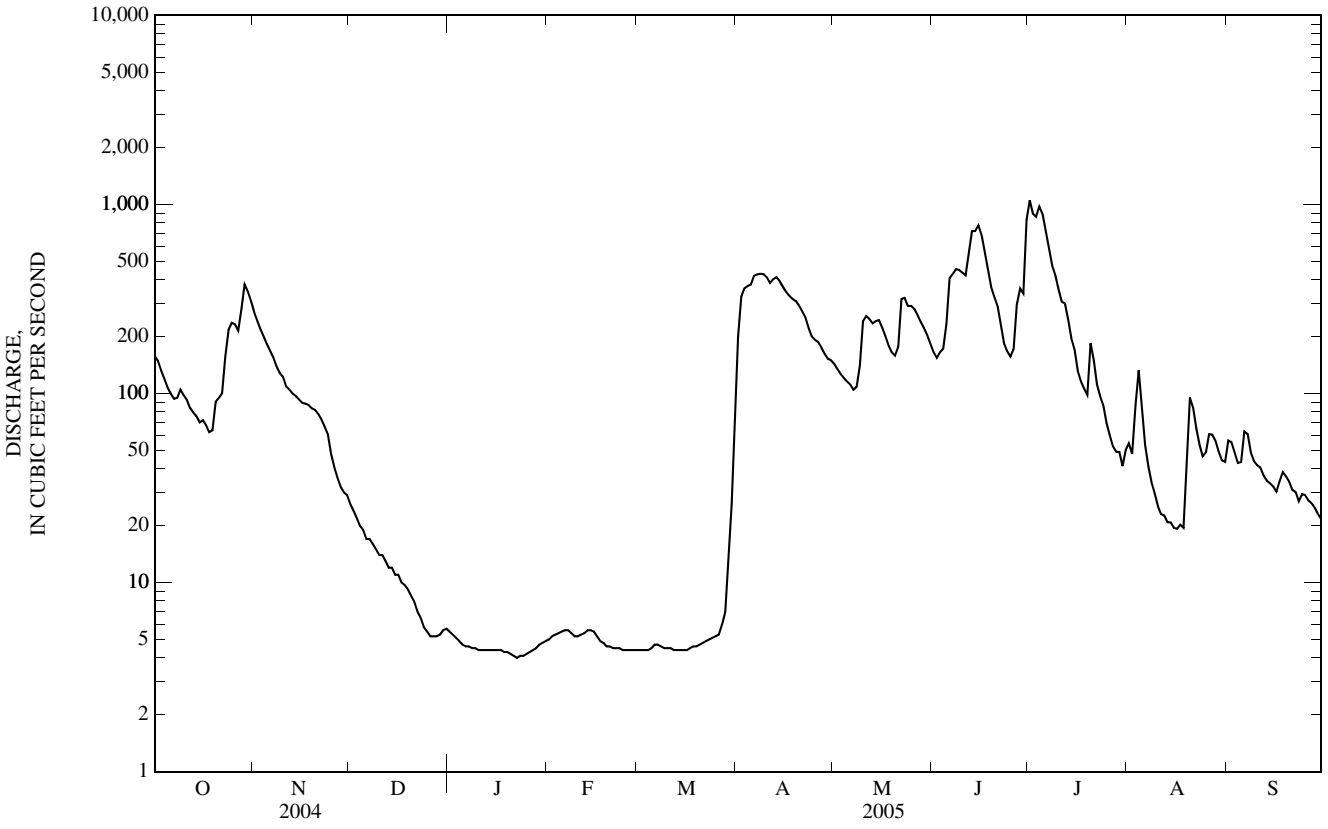
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2005, BY WATER YEAR (WY)

MEAN	36.4	31.6	5.75	2.29	1.95	16.8	178	169	136	55.8	27.7	44.3
MAX	259	460	30.1	10.3	7.32	193	633	709	1,238	320	160	419
(WY)	(1942)	(2001)	(2001)	(1966)	(2000)	(1945)	(1966)	(1950)	(2002)	(2005)	(1968)	(1941)
MIN	0.95	1.10	0.20	0.23	0.13	0.53	7.16	2.21	0.11	0.03	0.09	0.39
(WY)	(1953)	(1977)	(1977)	(1977)	(1977)	(1964)	(1981)	(1980)	(1980)	(1980)	(1961)	(1934)

05106000 SPRAGUE CREEK NEAR SPRAGUE, MANITOBA—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1929 - 2005	
ANNUAL TOTAL	58,665.2		48,368.8			
ANNUAL MEAN	160		133		63.5	
HIGHEST ANNUAL MEAN					150	2002
LOWEST ANNUAL MEAN					4.07	1980
HIGHEST DAILY MEAN	1,990	May 13	1,050	Jul 1	8,070	Jun 11, 2002
LOWEST DAILY MEAN	3.4	Feb 27	4.0	Jan 22	a0.00	Apr 1, 1930
ANNUAL SEVEN-DAY MINIMUM	3.4	Feb 27	4.1	Jan 19	0.00	Aug 7, 1936
MAXIMUM PEAK FLOW			1,080	Jul 1	b8,440	Jun 11, 2002
MAXIMUM PEAK STAGE			12.53	Jul 1	17.08	Jun 11, 2002
INSTANTANEOUS LOW FLOW			c4.0	Jan 22		
ANNUAL RUNOFF (AC-FT)	116,400		95,940		46,010	
ANNUAL RUNOFF (CFSM)	0.911		0.753		0.361	
ANNUAL RUNOFF (INCHES)	12.40		10.22		4.90	
10 PERCENT EXCEEDS	407		367		177	
50 PERCENT EXCEEDS	86		60		9.8	
90 PERCENT EXCEEDS	3.7		4.5		1.1	

a Many days, several years.
b From rating curve extended above 2,560 ft^3/s.
c Estimated, minimum daily.
e Estimated.



05107500 ROSEAU RIVER AT ROSS, MN

LOCATION.--Lat 48°54'37", long 95°55'18", in NE$^1/_4$SE$^1/_4$ sec. 27, T. 163 N., R. 41 W., Roseau County, Hydrologic Unit 09020314, on left bank 300 ft downstream from State Highway 89 bridge, 0.2 mi. north of Ross, and 2.3 mi downstream from Pine Creek.

DRAINAGE AREA.--1,090 mi^2.

PERIOD OF RECORD.--July 1928 to September 1991, April 1995 to current year.

REVISED RECORDS.--WSP 1055: 1945. WSP 1175: Drainage area. WSP 1308: 1936(m). WSP 1508: 1848-49(P).

GAGE.--Water-stage recorder. Datum of gage is 1,018.61 ft above sea level (NGVD of 1929, levels by Geodetic Survey of Canada). Prior to Mar. 13, 1929, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. High flow affected by natural storage in Roseau Lake.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 19 ft in 1896. Other floods reached the following stages, from information by local residents: flood of July 1919, 17.5 ft; flood of 1927, about 16 ft.

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	835	1,010	e139	e28	e21	e23	e430	1,230	913	1,880	819	237
2	800	1,040	e125	e29	e22	e23	e940	1,170	877	2,020	747	252
3	761	1,060	e114	e29	e22	e23	e1,450	1,120	841	2,170	691	233
4	721	1,080	e103	e28	e22	e24	e1,630	1,060	814	2,280	664	205
5	679	1,090	e93	e27	e23	e24	1,830	1,000	822	2,370	604	195
6	638	1,080	e86	e26	e23	e24	1,940	941	974	2,420	520	199
7	595	1,060	e80	e25	e22	e24	2,020	881	1,130	2,440	438	197
8	558	1,030	e75	e24	e22	e24	2,080	832	1,230	2,470	350	175
9	533	993	e70	e23	e21	e23	2,110	813	1,320	2,460	234	152
10	502	949	e66	e23	e21	e23	2,130	837	1,390	2,410	148	139
11	467	897	e62	e22	e22	e22	2,140	856	1,440	2,370	105	131
12	429	835	e58	e22	e22	e22	2,150	868	1,540	2,320	94	123
13	378	783	e55	e21	e23	e22	2,170	873	1,640	2,250	85	112
14	327	739	e52	e21	e23	e23	2,160	875	1,700	2,180	76	104
15	299	700	e50	e21	e22	e23	2,140	875	1,730	2,100	68	97
16	286	668	e48	e20	e22	e24	2,120	869	1,840	2,020	61	93
17	274	630	e46	e20	e21	e24	2,090	855	1,930	1,930	59	91
18	268	593	e44	e20	e21	e25	2,060	832	1,980	1,840	129	102
19	265	549	e42	e20	e21	e25	2,020	804	1,990	1,770	430	100
20	283	523	e39	e19	e21	e26	1,960	776	2,010	1,750	644	98
21	304	462	e37	e19	e21	e27	1,900	763	2,000	1,690	683	93
22	327	404	e35	e19	e21	e27	1,850	796	1,950	1,620	613	87
23	377	e360	e33	e19	e22	e28	1,780	855	1,890	1,530	569	81
24	494	e320	e31	e19	e22	e28	1,700	888	1,800	1,440	511	78
25	571	e295	e29	e20	e22	e29	1,640	919	1,730	1,360	447	80
26	620	e260	e27	e20	e22	e29	1,560	938	1,650	1,270	410	79
27	643	e225	e26	e20	e22	e30	1,490	955	1,640	1,190	371	69
28	719	e200	e25	e20	e23	e31	1,420	966	1,660	1,110	317	63
29	873	e175	e25	e20	---	e36	1,360	966	1,680	1,020	270	59
30	925	e155	e26	e21	---	e76	1,300	960	1,750	943	233	55
31	974	---	e28	e21	---	e180	---	943	---	891	213	---
TOTAL	16,725	20,165	1,769	686	612	992	53,570	28,316	45,861	57,514	11,603	3,779
MEAN	540	672	57.1	22.1	21.9	32.0	1,786	913	1,529	1,855	374	126
MAX	974	1,090	139	29	23	180	2,170	1,230	2,010	2,470	819	252
MIN	265	155	25	19	21	22	430	763	814	891	59	55
AC-FT	33,170	40,000	3,510	1,360	1,210	1,970	106,300	56,160	90,970	114,100	23,010	7,500
CFSM	0.49	0.62	0.05	0.02	0.02	0.03	1.64	0.84	1.40	1.70	0.34	0.12
IN.	0.57	0.69	0.06	0.02	0.02	0.03	1.83	0.97	1.57	1.96	0.40	0.13

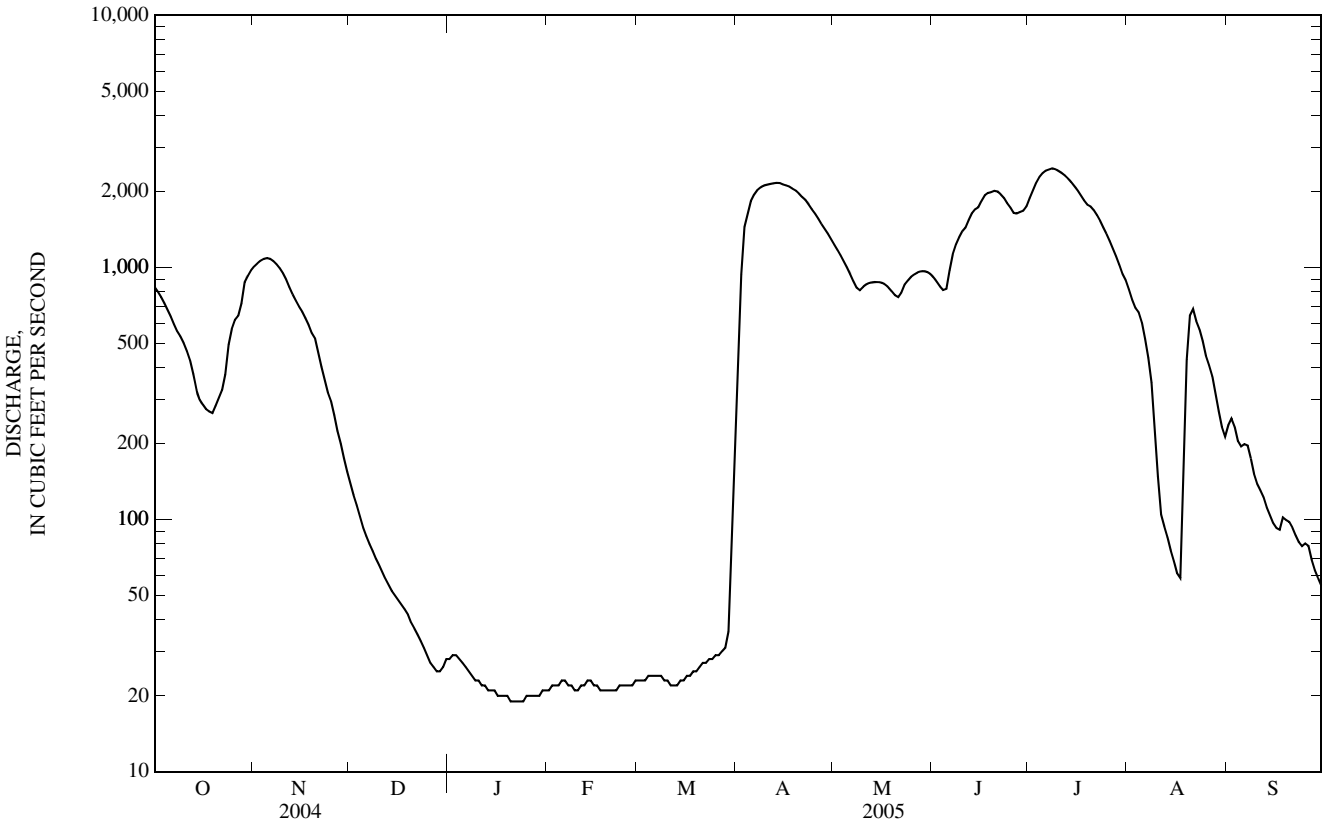
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2005, BY WATER YEAR (WY)

MEAN	139	126	37.7	16.6	14.7	85.5	904	937	612	355	145	139
MAX	974	1,926	395	66.5	99.2	551	3,234	4,583	4,553	2,300	1,352	1,041
(WY)	(1942)	(2001)	(2001)	(1997)	(1998)	(1946)	(1966)	(1950)	(2002)	(2002)	(1968)	(1968)
MIN	1.91	1.63	0.27	0.00	0.00	2.76	32.1	29.5	6.83	1.39	0.84	0.38
(WY)	(1991)	(1977)	(1977)	(1977)	(1977)	(1989)	(1991)	(1988)	(1980)	(1980)	(1961)	(1990)

05107500 ROSEAU RIVER AT ROSS, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1928 - 2005	
ANNUAL TOTAL	306,520		241,592			
ANNUAL MEAN	837		662		a293	
HIGHEST ANNUAL MEAN					759	2004
LOWEST ANNUAL MEAN					28.9	1934
HIGHEST DAILY MEAN	4,280	May 21	2,470	Jul 8	10,100	Jun 16, 2002
LOWEST DAILY MEAN	18	Feb 18	19	Jan 20-24	b0.00	Aug 29, 1961
ANNUAL SEVEN-DAY MINIMUM	19	Feb 13	19	Jan 18	0.00	Jan 3, 1977
MAXIMUM PEAK FLOW			2,480	Jul 8	10,500	Jun 16, 2002
MAXIMUM PEAK STAGE			14.62	Jul 8	18.89	Jun 16, 2002
INSTANTANEOUS LOW FLOW			c19	Jan 20	b0.00	Aug 29, 1961
ANNUAL RUNOFF (AC-FT)	608,000		479,200		212,600	
ANNUAL RUNOFF (CFSM)	0.768		0.607		0.269	
ANNUAL RUNOFF (INCHES)	10.46		8.25		3.66	
10 PERCENT EXCEEDS	2,470		1,930		940	
50 PERCENT EXCEEDS	394		360		43	
90 PERCENT EXCEEDS	20		22		6.2	

a Median of annual mean discharges is 240 ft^3/s.
b Many days, several years.
c Estimated, daily-mean discharge.
e Estimated.



05112000 ROSEAU RIVER BELOW STATE DITCH 51, NEAR CARIBOU, MN

LOCATION.--Lat 48°58'54", long 96°27'46", in SE¼SW¼ sec. 34, T.164 N., R.45 W., Kittson County, Hydrologic Unit 09020314, on left bank 400 ft downstream from State ditch 51 (known locally as Caribou cutoff ditch) and 0.6 mi west of Caribou.

DRAINAGE AREA.--1,420 mi^2.

PERIOD OF RECORD.--April to October 1917, April 1920 to current year (no winter records in water years 1931, 1932, 1934-36, 1938-40, 1944-72). Published as "at Caribou," prior to April 1929; as "below Cutoff ditch, near Cariboü April 1929 to September 1936. Records published for both sites April 1929 to September 1930. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 1308: 1938(M). WSP 1508: 1917(M), 1920, 1932(M), 1934-35(M). WSP 1913: 1954(M).

GAGE.--Water-stage recorder. Datum of gage is 1,002.31 ft above sea level (NGVD of 1929, levels by Geodetic Survey of Canada). Prior to Apr. 1, 1929, nonrecording gage at site at Caribou 0.6 mi upstream at datum 0.95 ft lower.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Some regulation from wildlife management impoundments several miles upstream of gage. Occasionally, at high stages, there is some natural diversion of flow above station to headwaters of Two Rivers.

COOPERATION.--Red Lake Watershed Management Board.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1916 is reported to have reached a stage of about 15.5 ft at former site.

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	1,110	1,270	e235	e30	e27	e24	e270	2,050	1,220	2,220	1,670	249
2	1,090	1,300	e215	e29	e28	e24	e460	1,990	1,210	2,190	1,590	265
3	1,060	1,320	e195	e29	e28	e24	e800	1,940	1,250	2,350	1,510	274
4	1,020	1,340	e175	e28	e28	e24	e1,350	1,880	1,400	2,340	1,420	262
5	975	1,360	e157	e28	e28	e24	e1,800	1,820	1,660	2,300	1,320	243
6	923	1,380	e140	e27	e29	e24	1,780	1,750	1,680	2,280	1,210	232
7	859	1,390	e130	e26	e28	e24	1,770	1,690	1,600	2,270	1,070	229
8	791	1,400	e117	e26	e27	e24	1,810	1,640	1,570	2,400	894	224
9	721	1,410	e106	e25	e27	e24	1,880	1,630	1,530	2,430	688	204
10	661	1,400	e100	e25	e27	e24	1,960	1,670	1,490	2,400	476	181
11	610	1,380	e94	e24	e27	e24	2,070	1,580	1,490	2,390	323	164
12	562	1,350	e89	e24	e28	e24	2,180	1,500	1,570	2,380	248	151
13	515	1,320	e85	e23	e28	e24	2,250	1,450	1,610	2,380	205	144
14	462	1,270	e79	e23	e28	e24	2,290	1,410	1,740	2,370	181	133
15	412	1,230	e75	e23	e28	e24	2,320	1,370	1,770	2,360	162	124
16	383	1,180	e72	e23	e28	e24	2,330	1,340	1,750	2,360	145	122
17	367	1,110	e68	e23	e27	e24	2,340	1,310	1,760	2,340	133	117
18	351	1,030	e65	e23	e27	e24	2,360	1,280	1,780	2,330	131	124
19	353	940	e63	e23	e26	e24	2,360	1,250	1,800	2,310	188	126
20	384	842	e59	e24	e26	e25	2,350	1,210	1,830	2,280	437	125
21	417	754	e56	e24	e26	e25	2,340	1,210	1,860	2,250	625	117
22	445	667	e53	e24	e26	e26	2,330	1,260	1,900	2,220	705	110
23	524	578	e48	e24	e25	e26	2,310	1,240	1,930	2,180	678	103
24	621	e520	e45	e25	e25	e27	2,290	1,230	1,960	2,140	624	102
25	743	e450	e42	e25	e25	e28	2,270	1,250	1,980	2,090	570	104
26	846	e400	e39	e26	e25	e29	2,240	1,240	2,000	2,050	531	136
27	910	e360	e37	e26	e24	e32	2,200	1,260	2,060	2,000	478	121
28	962	e320	e36	e26	e24	e36	2,160	1,310	2,060	1,950	424	102
29	1,070	e285	e34	e27	---	e57	2,130	1,300	2,080	1,890	365	82
30	1,170	e260	e33	e27	---	e88	2,090	1,270	2,210	1,820	313	74
31	1,220	---	e31	e27	---	e170	---	1,250	---	1,750	271	---
TOTAL	22,537	29,816	2,773	787	750	1,025	59,090	45,580	51,750	69,020	19,585	4,744
MEAN	727	994	89.5	25.4	26.8	33.1	1,970	1,470	1,725	2,226	632	158
MAX	1,220	1,410	235	30	29	170	2,360	2,050	2,210	2,430	1,670	274
MIN	351	260	31	23	24	24	270	1,210	1,210	1,750	131	74
AC-FT	44,700	59,140	5,500	1,560	1,490	2,030	117,200	90,410	102,600	136,900	38,850	9,410
CFSM	0.51	0.70	0.06	0.02	0.02	0.02	1.39	1.04	1.21	1.57	0.44	0.11
IN.	0.59	0.78	0.07	0.02	0.02	0.03	1.55	1.19	1.36	1.81	0.51	0.12

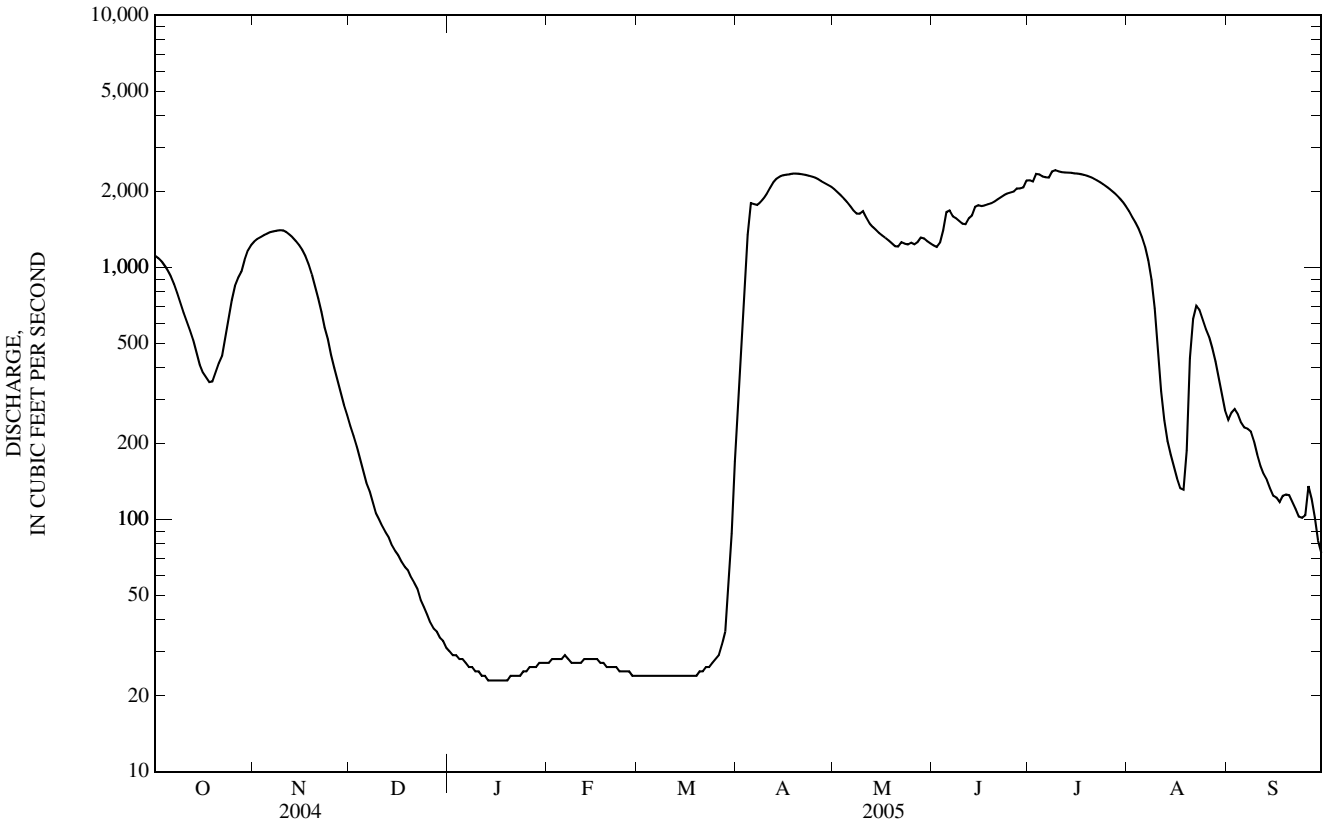
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1917 - 2005, BY WATER YEAR (WY)

MEAN	179	185	70.3	27.4	23.1	129	858	988	687	484	188	188
MAX	1,302	2,022	813	134	75.4	793	2,168	3,029	3,066	3,080	1,582	1,451
(WY)	(1942)	(2001)	(2001)	(1927)	(1997)	(1995)	(1966)	(1950)	(2004)	(2002)	(1993)	(1968)
MIN	0.12	0.26	0.53	0.09	0.06	1.57	38.2	26.9	6.70	0.65	2.09	0.30
(WY)	(1991)	(1991)	(1991)	(1991)	(1991)	(1989)	(1981)	(1988)	(1980)	(1980)	(1936)	(1990)

05112000 ROSEAU RIVER BELOW STATE DITCH 51, NEAR CARIBOU, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1917 - 2005	
ANNUAL TOTAL	362,618		307,457			
ANNUAL MEAN	991		842		359	
HIGHEST ANNUAL MEAN					933	2001
LOWEST ANNUAL MEAN					35.9	1977
HIGHEST DAILY MEAN	3,460	May 31	2,430	Jul 9	4,320	Jun 25, 2002
LOWEST DAILY MEAN	21	Feb 14	23	Jan 13-19	a0.00	Sep 15, 1990
ANNUAL SEVEN-DAY MINIMUM	22	Feb 10	23	Jan 13	0.04	Sep 12, 1990
MAXIMUM PEAK FLOW			2,450	Jul 8	4,320	Jun 24, 2002
MAXIMUM PEAK STAGE			9.39	Jul 8	11.91	Jun 24, 2002
INSTANTANEOUS LOW FLOW			b23	Jan 13	c.00	Aug 13, 1936
ANNUAL RUNOFF (AC-FT)	719,300		609,800		260,100	
ANNUAL RUNOFF (CFSM)	0.698		0.593		0.253	
ANNUAL RUNOFF (INCHES)	9.50		8.05		3.44	
10 PERCENT EXCEEDS	2,670		2,200		1,250	
50 PERCENT EXCEEDS	619		476		70	
90 PERCENT EXCEEDS	23		25		9.0	

a Also occurred, Sept. 16,17, 1990.
b Estimated, minimum-daily.
c Also occurred, Sept. 15-17, 1990.
e Estimated.



05124480 KAWISHIWI RIVER NEAR ELY, MN

LOCATION.--Lat 47°55'22", long 91°32'06", in SE¼SE¼ sec. 24, T.63 N., R.10 W., Lake County, Hydrologic Unit 09030001, in Superior National Forest, on left bank 100 ft upstream from rapids, 2 mi upstream from South Kawishiwi River, 2.2 mi southwest of Fernberg Lookout Tower and 14 mi east of Ely.

DRAINAGE AREA.--254 mi^2.

PERIOD OF RECORD.--June 1966 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,450 ft above sea level, from topographic map.

REMARKS.--Records good.

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	51	70	55	59	60	53	53	301	537	239	77	34
2	52	73	54	63	59	52	57	297	512	228	74	32
3	50	75	54	62	59	52	61	293	487	230	72	31
4	48	75	53	60	58	51	69	288	463	229	69	30
5	46	74	51	59	58	51	78	288	455	220	64	29
6	45	73	51	58	58	50	92	310	439	212	62	29
7	44	73	51	57	58	50	103	318	422	203	60	28
8	43	72	50	57	57	50	115	374	408	195	57	27
9	43	70	50	58	57	49	127	425	391	188	57	26
10	43	69	49	59	57	49	140	489	379	182	56	25
11	42	66	50	58	56	49	157	535	373	174	54	24
12	40	65	56	60	56	48	171	573	362	166	51	27
13	41	64	57	62	56	47	183	604	351	158	48	30
14	42	63	56	61	57	46	195	620	361	151	46	29
15	41	62	55	60	58	46	205	631	379	144	44	27
16	39	62	54	59	57	46	214	637	370	138	46	26
17	37	61	54	58	56	46	222	640	362	135	49	25
18	36	60	54	59	55	46	230	644	355	127	54	24
19	36	60	52	62	55	45	238	662	342	121	52	26
20	35	62	55	61	54	44	246	663	340	114	51	27
21	35	61	55	61	55	44	253	661	328	108	47	26
22	35	60	54	64	54	43	262	662	316	104	45	25
23	40	59	53	63	54	42	266	656	305	100	42	23
24	43	58	53	61	54	42	272	645	290	95	41	23
25	43	57	52	61	54	42	279	641	275	91	39	23
26	43	56	52	61	53	42	288	654	264	90	39	22
27	42	57	51	60	53	41	296	641	256	85	39	21
28	42	57	51	60	54	41	299	627	248	85	38	21
29	42	57	51	61	---	42	301	608	237	84	38	20
30	56	56	53	60	---	44	301	588	247	81	36	19
31	67	---	58	60	---	48	---	563	---	78	35	---
TOTAL	1,342	1,927	1,644	1,864	1,572	1,441	5,773	16,538	10,854	4,555	1,582	779
MEAN	43.3	64.2	53.0	60.1	56.1	46.5	192	533	362	147	51.0	26.0
MAX	67	75	58	64	60	53	301	663	537	239	77	34
MIN	35	56	49	57	53	41	53	288	237	78	35	19
AC-FT	2,660	3,820	3,260	3,700	3,120	2,860	11,450	32,800	21,530	9,030	3,140	1,550
CFSM	0.17	0.25	0.21	0.24	0.22	0.18	0.76	2.10	1.42	0.58	0.20	0.10
IN.	0.20	0.28	0.24	0.27	0.23	0.21	0.85	2.42	1.59	0.67	0.23	0.11

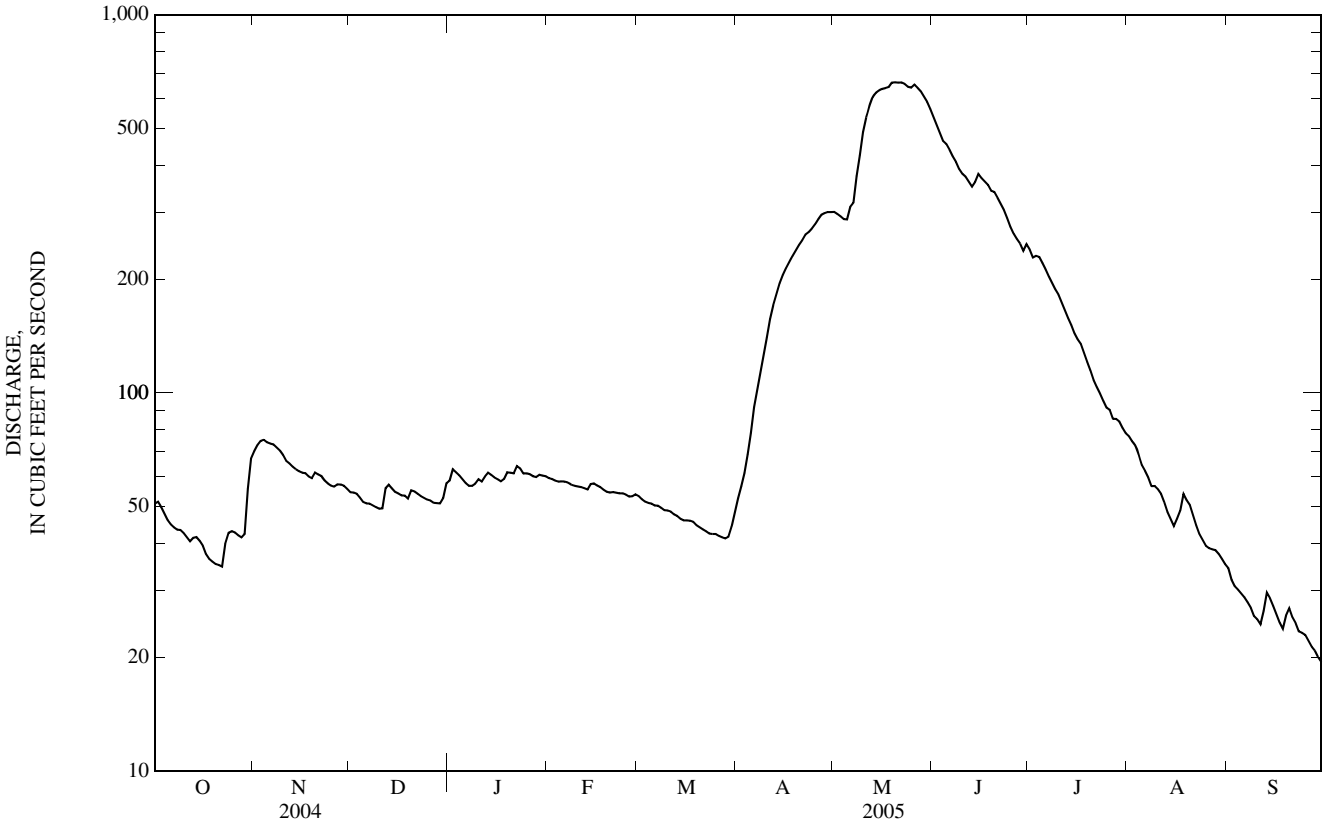
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2005, BY WATER YEAR (WY)

MEAN	143	154	131	92.0	67.4	56.3	239	628	365	206	143	129
MAX	881	684	345	163	107	85.2	785	1,133	1,070	523	758	698
(WY)	(1978)	(1971)	(1983)	(1984)	(1971)	(1969)	(1976)	(1979)	(1970)	(1999)	(1988)	(1988)
MIN	12.1	9.43	7.25	5.32	4.77	5.87	8.95	13.3	115	65.1	36.0	18.5
(WY)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1998)	(1998)	(1976)

05124480 KAWISHIWI RIVER NEAR ELY, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1966 - 2005	
ANNUAL TOTAL	59,376		49,871			
ANNUAL MEAN	162		137		197	
HIGHEST ANNUAL MEAN					313	1971
LOWEST ANNUAL MEAN					81.3	1998
HIGHEST DAILY MEAN	799	Apr 30	663	May 20	1,850	May 3, 2001
LOWEST DAILY MEAN	35	Oct 20	19	Sep 30	a4.5	Jan 31, 1977
ANNUAL SEVEN-DAY MINIMUM	36	Oct 16	21	Sep 24	4.6	Jan 29, 1977
MAXIMUM PEAK FLOW			665	May 19	1,870	May 4, 2001
MAXIMUM PEAK STAGE			4.82	May 19	6.07	May 4, 2001
INSTANTANEOUS LOW FLOW			b19	Sep 29	4.5	Jan 30, 1977
ANNUAL RUNOFF (AC-FT)	117,800		98,920		142,700	
ANNUAL RUNOFF (CFSM)	0.639		0.538		0.775	
ANNUAL RUNOFF (INCHES)	8.70		7.30		10.54	
10 PERCENT EXCEEDS	439		371		480	
50 PERCENT EXCEEDS	76		58		106	
90 PERCENT EXCEEDS	50		36		38	

a Occurred Jan. 31 to Feb. 2, 1977.
b Falling stage.



05125000 SOUTH KAWISHIWI RIVER NEAR ELY, MN

LOCATION.--Lat 47°50'24", long 91°41'43", in NE¼SW¼ sec. 23, T.62 N., R.11 W., Lake County, Hydrologic Unit 09030001, on left bank, 2.5 mi northeast of State Highway 1, 5 mi upstream from Birch Lake, and 9 mi southeast of Ely.

DRAINAGE AREA.--

PERIOD OF RECORD.--October 1951 to September 1961, April 1976 to September 1978, May 2003 to current year.

REMARKS.--Records good except those for estimated daily discharges, which are fair.

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	166	221	155	e135	e134	123	118	611	984	e511	118	57
2	171	236	154	e135	e135	122	121	595	970	e472	114	54
3	165	247	152	e134	135	121	126	575	888	e453	111	52
4	162	259	151	e133	134	121	164	553	850	e462	109	50
5	156	267	144	e132	135	118	193	548	818	e477	104	50
6	155	274	142	e132	133	117	245	574	780	e467	100	48
7	154	275	140	e131	132	116	309	572	755	e448	97	46
8	155	274	138	e131	131	117	396	654	735	e426	93	43
9	157	273	136	e131	133	112	505	751	731	e404	93	41
10	153	273	133	e131	133	112	622	909	747	e391	92	40
11	150	265	132	e131	133	111	742	1,110	772	e374	88	39
12	148	259	e135	e130	132	112	844	1,350	784	e358	84	39
13	149	250	e136	e130	131	112	915	1,540	790	e342	79	44
14	147	240	e134	e130	135	112	963	1,640	839	e323	79	42
15	144	233	e133	e130	133	112	981	1,660	895	e294	76	40
16	138	226	e132	e130	133	111	982	1,640	907	e273	77	39
17	134	215	e131	e130	133	110	962	1,590	953	e257	78	37
18	130	208	e131	e130	133	109	928	1,520	1,020	235	79	35
19	128	202	e131	e130	134	108	892	1,480	1,090	221	78	38
20	128	201	e131	e130	134	108	860	1,420	1,190	203	76	40
21	128	195	e131	e130	133	106	827	1,350	1,140	192	73	40
22	126	188	e131	e130	130	106	799	1,300	1,060	185	71	39
23	130	182	e131	e130	128	105	770	1,250	995	176	70	37
24	140	175	e131	e130	126	103	738	1,200	913	164	67	36
25	139	171	e131	e130	127	102	713	1,160	796	154	65	38
26	138	169	e132	e131	125	102	701	1,180	e703	145	65	38
27	139	168	e132	e132	124	100	691	1,160	e608	135	64	38
28	144	168	e133	e133	123	99	664	1,150	e564	133	63	37
29	159	162	e134	e134	---	100	646	1,130	e516	127	61	35
30	186	159	e135	e134	---	105	625	1,100	e506	123	59	36
31	209	---	e135	e134	---	112	---	1,060	---	120	58	---
TOTAL	4,628	6,635	4,227	4,074	3,682	3,424	19,042	34,332	25,299	9,045	2,541	1,248
MEAN	149	221	136	131	132	110	635	1,107	843	292	82.0	41.6
MAX	209	275	155	135	135	123	982	1,660	1,190	511	118	57
MIN	126	159	131	130	123	99	118	548	506	120	58	35
AC-FT	9,180	13,160	8,380	8,080	7,300	6,790	37,770	68,100	50,180	17,940	5,040	2,480

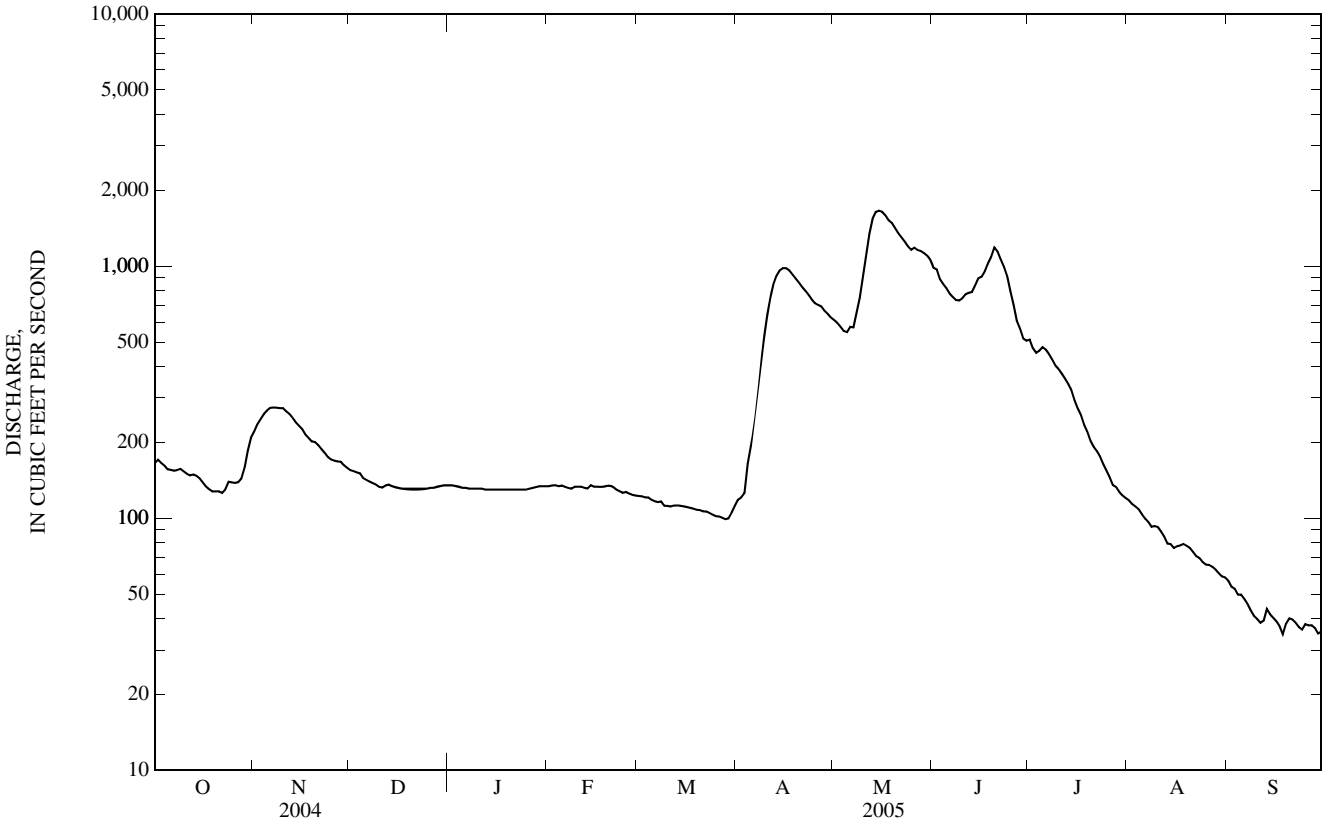
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2005, BY WATER YEAR (WY)

MEAN	372	286	226	170	133	115	709	1,224	766	431	268	347
MAX	1,733	757	456	295	179	150	2,278	3,141	1,440	885	1,125	1,099
(WY)	(1978)	(1978)	(1952)	(1978)	(1957)	(1953)	(1976)	(1954)	(1978)	(1952)	(1952)	(1977)
MIN	36.0	49.0	45.8	37.1	33.5	57.4	130	179	290	152	80.7	41.6
(WY)	(1961)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1958)	(1958)	(1961)	(2005)

05125000 SOUTH KAWISHIWI RIVER NEAR ELY, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1952 - 2005	
ANNUAL TOTAL	129,414		118,177			
ANNUAL MEAN	354		324		426	
HIGHEST ANNUAL MEAN					673	1978
LOWEST ANNUAL MEAN					233	1958
HIGHEST DAILY MEAN	1,940	Apr 25	1,660	May 15	5,110	May 5, 1954
LOWEST DAILY MEAN	98	Sep 4	35	Sep 18,29	27	Oct 10, 1960
ANNUAL SEVEN-DAY MINIMUM	103	Aug 29	37	Sep 24	29	Oct 6, 1960
MAXIMUM PEAK FLOW			1,680	May 15	5,130	May 4, 1954
MAXIMUM PEAK STAGE			4.90	May 15	7.25	May 4, 1954
INSTANTANEOUS LOW FLOW			a35	Sep 18	25	Oct 12, 1960
ANNUAL RUNOFF (AC-FT)	256,700		234,400		308,600	
10 PERCENT EXCEEDS	935		914		1,060	
50 PERCENT EXCEEDS	155		135		216	
90 PERCENT EXCEEDS	119		65		101	

a Daily-mean discharge.
e Estimated.



05126210 SOUTH KAWISHIWI RIVER ABOVE WHITE IRON LAKE NEAR ELY, MN

LOCATION.--Lat 47°50'31", long 91°47'56", in SW¼NW¼ sec. 19, T.62 N., R.11 W., Lake County, Hydrologic Unit 09030001, on right bank 0.5 mi above inlet to White Iron Lake, 1.9 mi downstream (north) of dam at State Highway 1, and 5 mi southeast of Ely.

DRAINAGE AREA.--837 mi^2.

PERIOD OF RECORD.--August 1975 to September 1978, May 2003 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,420 ft above mean sea level (from topographic map).

REMARKS.--Records good. Flow regulated by Minnesota Power Co. dam located 2.1 mi above gage at outlet of Birch Lake.

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	197	338	285	275	465	202	650	1,020	1,540	989	172	59
2	207	467	289	276	456	202	566	968	1,460	982	171	55
3	208	592	286	274	449	201	491	776	1,460	966	172	54
4	217	700	283	273	444	202	432	581	1,450	890	171	54
5	267	883	281	274	439	203	461	598	1,470	608	170	53
6	267	832	283	272	434	201	506	782	1,590	468	171	50
7	262	760	286	271	428	200	698	1,020	1,570	479	168	50
8	262	754	289	270	420	200	974	1,910	1,360	473	168	50
9	264	749	286	270	415	199	1,450	2,120	1,340	479	169	48
10	262	660	284	269	409	200	1,760	2,260	1,230	484	150	48
11	262	541	284	269	404	201	1,760	2,190	1,240	561	116	47
12	261	537	283	271	399	201	1,450	2,100	1,280	646	97	51
13	263	535	282	269	396	201	1,230	2,050	1,410	636	96	51
14	262	530	282	265	401	201	1,200	2,300	1,530	590	97	48
15	261	510	280	262	395	201	1,070	2,350	1,830	472	98	49
16	260	481	280	263	387	199	966	2,380	1,950	466	97	49
17	265	438	278	264	385	199	986	2,390	1,970	461	105	50
18	253	340	278	271	380	198	1,030	2,380	1,980	450	131	50
19	235	338	278	265	376	197	1,150	2,390	1,960	406	128	52
20	222	340	280	262	374	197	1,330	2,290	1,980	316	130	49
21	223	346	278	261	368	198	1,500	2,220	1,950	244	118	49
22	221	353	279	261	340	200	1,480	2,110	1,870	233	94	49
23	230	350	279	261	300	200	1,450	1,950	1,810	223	73	51
24	226	325	279	260	284	201	1,530	1,800	1,590	209	64	51
25	231	298	278	259	206	200	1,510	1,800	1,150	199	53	51
26	240	286	276	261	202	199	1,450	2,070	923	173	50	52
27	236	288	276	259	203	200	1,410	2,030	809	174	61	52
28	231	289	274	257	203	197	1,330	1,970	874	172	65	52
29	241	288	274	257	---	207	1,200	1,870	947	173	65	53
30	278	286	277	256	---	301	1,090	1,780	980	172	64	52
31	295	---	277	338	---	498	---	1,720	---	171	64	---
TOTAL	7,609	14,434	8,704	8,315	10,362	6,606	34,110	56,175	44,503	13,965	3,548	1,529
MEAN	245	481	281	268	370	213	1,137	1,812	1,483	450	114	51.0
MAX	295	883	289	338	465	498	1,760	2,390	1,980	989	172	59
MIN	197	286	274	256	202	197	432	581	809	171	50	47
AC-FT	15,090	28,630	17,260	16,490	20,550	13,100	67,660	111,400	88,270	27,700	7,040	3,030
CFSM	0.29	0.57	0.34	0.32	0.44	0.25	1.36	2.16	1.77	0.54	0.14	0.06
IN.	0.34	0.64	0.39	0.37	0.46	0.29	1.52	2.50	1.98	0.62	0.16	0.07

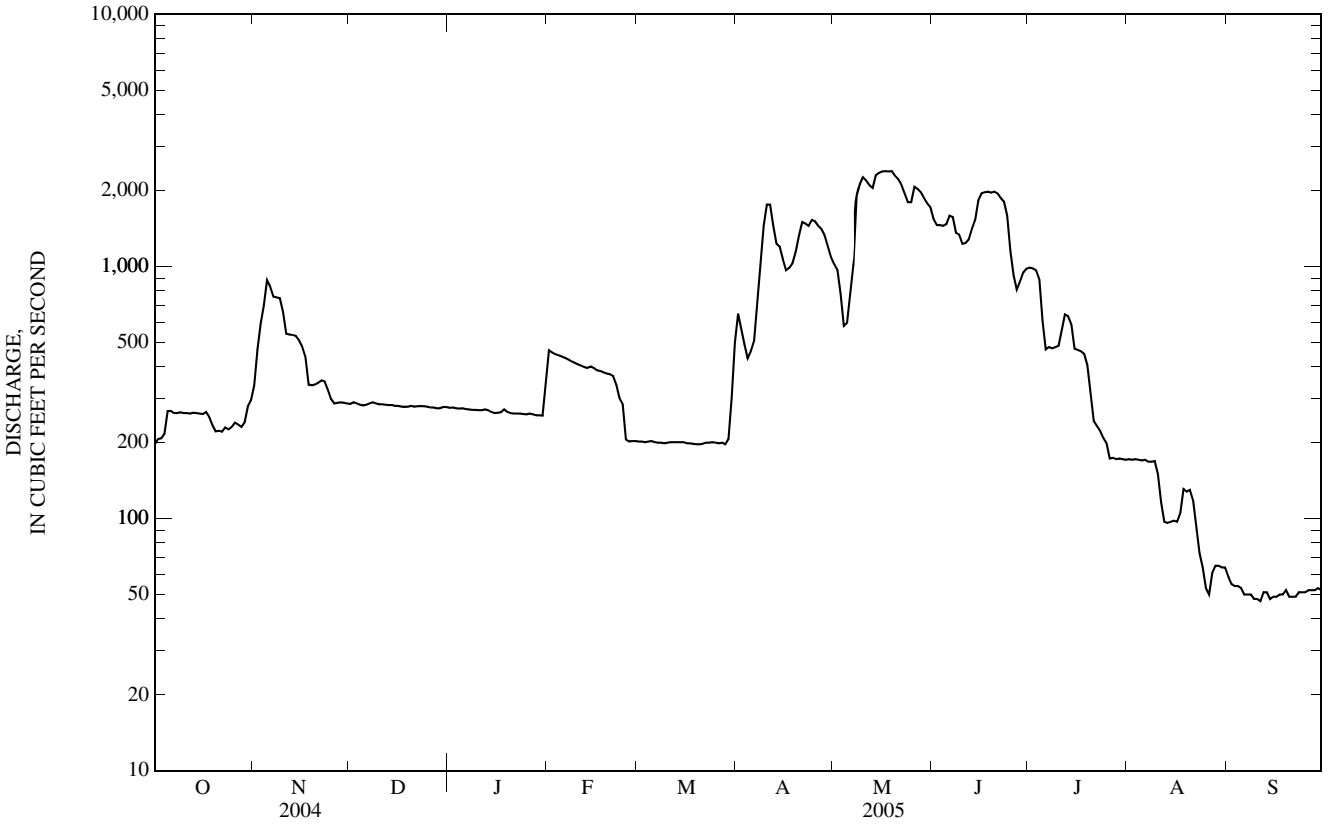
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2005, BY WATER YEAR (WY)

MEAN	802	537	458	359	299	261	1,486	1,430	1,306	777	311	548
MAX	2,831	1,325	871	666	381	397	3,730	2,125	2,394	1,253	842	1,934
(WY)	(1978)	(1978)	(1978)	(1978)	(2004)	(2004)	(1976)	(1978)	(1978)	(1978)	(1978)	(1977)
MIN	84.4	78.3	84.4	80.4	70.2	97.7	138	187	758	380	94.3	51.0
(WY)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(2003)	(2004)	(1976)	(2005)

05126210 SOUTH KAWISHIWI RIVER ABOVE WHITE IRON LAKE NEAR ELY, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1975 - 2005	
ANNUAL TOTAL	219,478		209,860			
ANNUAL MEAN	600		575		727	
HIGHEST ANNUAL MEAN					1,241	1978
LOWEST ANNUAL MEAN					408	1977
HIGHEST DAILY MEAN	2,980	Apr 25	2,390	May 17, 19	8,040	Apr 22, 1976
LOWEST DAILY MEAN	118	Sep 3	47	Sep 11	27	Mar 22, 1977
ANNUAL SEVEN-DAY MINIMUM	121	Aug 30	49	Sep 9	34	Aug 13, 1976
MAXIMUM PEAK FLOW			2,420	May 18	8,080	Apr 22, 1976
MAXIMUM PEAK STAGE			6.93	May 18	11.42	Apr 22, 1976
INSTANTANEOUS LOW FLOW			a46	Sep 11	19	Mar 22, 1977
ANNUAL RUNOFF (AC-FT)	435,300		416,300		526,700	
ANNUAL RUNOFF (CFSM)	0.716		0.687		0.869	
ANNUAL RUNOFF (INCHES)	9.75		9.33		11.80	
10 PERCENT EXCEEDS	1,730		1,590		1,780	
50 PERCENT EXCEEDS	320		281		394	
90 PERCENT EXCEEDS	143		65		84	

a Due in part to regulation.



05127000 KAWISHIWI RIVER NEAR WINTON, MN

LOCATION.--Lat 47°56'05", long 91°45'50", in NE¼NW¼ sec. 20, T.63 N., R.11 W., Lake County, Hydrologic Unit 09030001, Superior National Forest, at power plant of Minnesota Power Co., just upstream from Fall Lake, and 1.8 mi east of Winton.

DRAINAGE AREA.--1,230 mi^2.

PERIOD OF RECORD.--June 1905 to June 1907, October 1912 to September 1919 (fragmentary), September 1923 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WDR MN-77-1: Drainage area.

REMARKS.--No estimated daily discharges. Records fair. Daily discharge computed from power plant records. Flow regulated by power plant and by Camp Six, Bald Eagle, Gabbro, Little Gabbro, Birch, White Iron, South Farm, and Garden Lakes.

COOPERATION.--Records collected by Minnesota Power Co., under general supervision of the Geological Survey, in connection with a Federal Energy Regulatory Commission project.

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	231	587	303	448	395	262	705	1,400	2,180	1,470	244	49
2	226	694	303	451	448	255	597	1,330	1,940	1,370	244	49
3	215	656	319	439	451	255	550	1,020	1,830	1,200	219	49
4	198	739	370	397	451	256	505	906	1,830	936	205	49
5	189	872	303	355	451	256	486	812	1,770	764	205	49
6	189	899	252	328	451	256	437	837	1,840	763	199	49
7	207	895	277	328	451	255	639	979	1,840	761	165	49
8	250	809	303	310	451	248	878	1,920	1,840	760	156	49
9	293	794	320	303	451	231	1,150	2,250	1,760	716	138	49
10	335	733	327	303	451	229	1,520	2,670	1,530	542	138	49
11	301	611	327	303	451	208	1,680	2,630	1,530	563	131	49
12	261	583	356	303	451	197	1,610	2,670	1,610	564	99	49
13	266	583	365	307	451	268	1,180	2,470	1,740	664	94	50
14	292	572	372	336	451	192	791	2,460	1,860	738	94	50
15	312	514	375	341	451	307	754	2,480	2,100	699	94	50
16	266	459	375	341	451	393	747	2,500	2,240	616	94	50
17	259	459	365	341	451	443	841	2,550	2,210	638	107	50
18	259	445	357	341	451	442	985	2,760	2,210	614	239	49
19	266	366	356	341	451	442	1,310	2,970	2,200	510	255	58
20	255	442	356	341	451	442	1,400	2,950	2,200	420	255	78
21	237	507	341	341	451	442	1,500	2,940	2,200	323	163	78
22	264	408	278	346	451	703	1,630	2,910	2,170	318	89	78
23	302	231	257	356	454	861	1,630	2,630	2,160	271	80	78
24	338	328	262	366	452	795	1,760	2,450	1,790	205	81	78
25	338	365	292	366	418	678	1,830	2,440	1,620	195	66	78
26	338	319	305	366	398	622	1,830	2,350	1,280	194	52	78
27	305	284	305	366	360	622	1,830	2,420	913	218	49	78
28	268	348	305	353	314	612	1,840	2,480	1,100	260	49	78
29	268	357	305	305	---	619	1,610	2,470	1,460	243	49	80
30	414	347	308	305	---	710	1,410	2,460	1,570	243	49	44
31	453	---	378	305	---	815	---	2,300	---	244	49	---
TOTAL	8,595	16,206	10,017	10,732	12,259	13,316	35,635	68,414	54,523	18,022	4,151	1,771
MEAN	277	540	323	346	438	430	1,188	2,207	1,817	581	134	59.0
MAX	453	899	378	451	454	861	1,840	2,970	2,240	1,470	255	80
MIN	189	231	252	303	314	192	437	812	913	194	49	44
AC-FT	17,050	32,140	19,870	21,290	24,320	26,410	70,680	135,700	108,100	35,750	8,230	3,510
CFSM	0.23	0.44	0.26	0.28	0.36	0.35	0.97	1.79	1.48	0.47	0.11	0.05
IN.	0.26	0.49	0.30	0.32	0.37	0.40	1.08	2.07	1.65	0.55	0.13	0.05
+	77.4	-22.5	-31.6	-54.9	-206	-50.3	333	-11.6	-25.2	-49.2	-39.8	-4.19
MEAN ‡	355	518	292	291	232	379	1,521	2,195	1,792	532	94.1	54.8
CFSM ‡	.29	.42	.24	.24	.19	.31	1.24	1.78	1.46	.43	.08	.04
IN ‡	.33	.47	.28	.28	.20	.36	1.38	2.05	1.63	.50	.09	.04

CAL YR 04 ‡TOTAL 265,537 MEAN‡ 726 CFSM‡ 0.59 IN‡ 8.02
WTR YR 05 ‡TOTAL 251,346 MEAN‡ 689 CFSM‡ 0.56 IN‡ 7.61

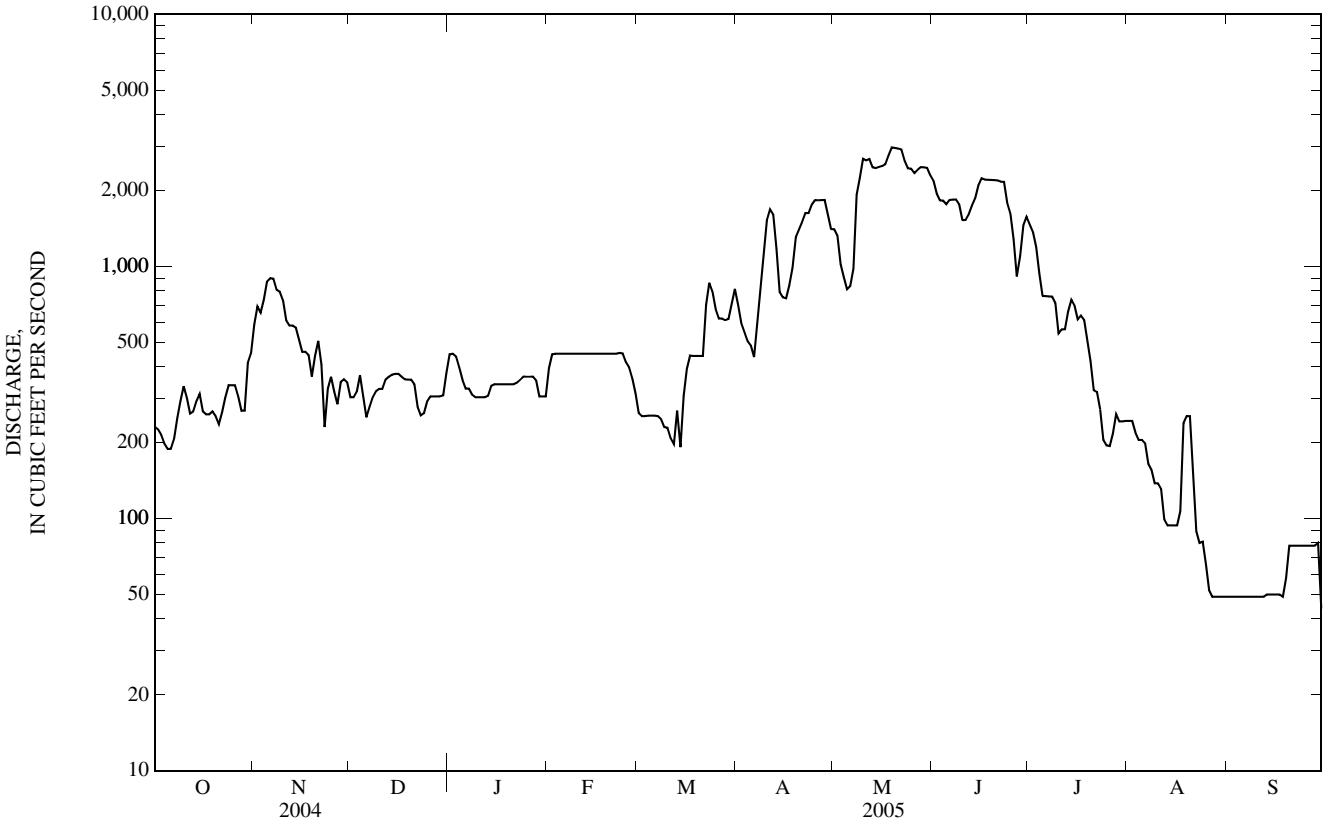
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1905 - 2005, BY WATER YEAR (WY)

MEAN	870	754	591	452	350	379	1,216	3,060	1,882	1,150	680	716
MAX	4,277	3,572	1,422	862	770	844	5,020	9,278	5,661	3,382	3,775	3,149
(WY)	(1947)	(1971)	(1983)	(1978)	(1927)	(1945)	(1945)	(1950)	(1968)	(1999)	(1988)	(1928)
MIN	66.5	8.97	76.1	80.3	74.5	103	19.3	111	519	217	51.7	38.1
(WY)	(1924)	(1924)	(1977)	(1977)	(1977)	(1924)	(1924)	(1924)	(1980)	(1961)	(1919)	(1919)

05127000 KAWISHIWI RIVER NEAR WINTON, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1905 - 2005	
ANNUAL TOTAL	264,109		253,641			
ANNUAL MEAN	722		695		1,018	
HIGHEST ANNUAL MEAN					1,967	1950
LOWEST ANNUAL MEAN					240	1924
HIGHEST DAILY MEAN	3,180	Apr 28	2,970	May 19	16,000	May 18, 1950
LOWEST DAILY MEAN	117	Aug 7,8,26-30	44	Sep 30	a0.00	Aug 24, 1905
ANNUAL SEVEN-DAY MINIMUM	120	Aug 25	49	Aug 27	0.00	Oct 13, 1923
ANNUAL RUNOFF (AC-FT)	523,900		503,100		737,200	
ANNUAL RUNOFF (CFSM)	0.587		0.565		0.827	
ANNUAL RUNOFF (INCHES)	7.99		7.67		11.24	
10 PERCENT EXCEEDS	2,040		1,850		2,400	
50 PERCENT EXCEEDS	440		375		595	
90 PERCENT EXCEEDS	205		79		199	

+ Change in contents, equivalent in cubic feet per second, in Camp Six, Bald Eagle, Gabbro, Little Gabbro, Birch, White Iron, Farm, South Farm, and Garden Lakes.
++Adjusted for change in reservoir contents.
a Many days, several years.



05127500 BASSWOOD RIVER NEAR WINTON, MN
(International Gaging Station)

LOCATION.--Lat 48°04'57", long 91°39'09", in SE¼SE¼ sec. 30, T.65 N., R.10 W., Lake County, Hydrologic Unit 09030001, in Superior National Forest, on island in Jackfish Bay of Basswood Lake, used to determine discharge at outlet (lat 48°06'21", long 91°38'51", in sec. 19, T.65 N., R.10 W., on international boundary 14 mi northeast of Winton).

DRAINAGE AREA.--1,740 mi^2, approximately, (above outlet of Basswood Lake).

PERIOD OF RECORD.--March to June 1924, September 1925 to March 1928, January 1930 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 955: Drainage area. WSP 1145: 1935, 1937.

GAGE.--Water-stage recorder. Datum of gage is 1,296.80 ft above sea level (NGVD of 1928, levels by Geodetic Survey of Canada). Prior to Oct. 27, 1938, nonrecording gages at several sites in vicinity of gage, at datum 3.0 ft higher. Oct. 28, 1938 to Sept. 30, 1966, water-stage recorder at datum 3.0 ft higher.

REMARKS.--Records good. Some regulation by power plant on Kawishiwi River at Winton, and by many lakes located upstream from station.

COOPERATION.--This station is one of the international gaging stations maintained by the United States under agreement with Canada.

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	410	456	560	562	600	625	680	1,950	3,760	2,360	637	269
2	404	473	561	592	593	619	707	1,940	3,680	2,320	614	262
3	397	493	558	592	592	610	722	1,920	3,580	2,300	599	258
4	389	499	545	592	592	597	750	1,890	3,480	2,270	562	254
5	384	523	544	592	593	592	773	1,870	3,420	2,200	536	247
6	377	543	544	592	592	589	805	1,910	3,340	2,110	509	235
7	374	555	541	592	592	580	841	1,880	3,290	2,010	484	226
8	370	583	537	592	592	570	889	1,950	3,230	1,930	464	220
9	372	605	535	592	593	562	942	2,060	3,120	1,860	452	214
10	372	611	526	592	599	557	1,010	2,210	3,060	1,780	434	209
11	368	628	523	592	598	548	1,120	2,380	3,000	1,710	419	201
12	366	639	549	594	599	544	1,230	2,540	2,910	1,620	390	208
13	373	648	557	594	600	539	1,320	2,700	2,840	1,540	368	218
14	376	650	559	592	614	529	1,400	2,850	2,880	1,470	354	209
15	371	651	556	592	617	521	1,440	2,970	2,930	1,410	338	205
16	357	651	549	592	617	517	1,450	3,090	2,920	1,370	330	198
17	353	651	551	592	617	513	1,460	3,160	2,940	1,320	350	193
18	355	647	544	592	618	513	1,470	3,230	2,960	1,260	394	185
19	352	649	546	592	617	520	1,480	3,360	2,960	1,230	379	199
20	347	651	568	592	622	520	1,510	3,420	2,980	1,160	370	204
21	348	650	560	592	625	520	1,550	3,500	2,980	1,110	356	199
22	345	651	560	600	626	528	1,580	3,600	2,980	1,060	350	192
23	370	630	556	607	626	534	1,610	3,690	2,960	1,010	343	188
24	378	622	552	604	626	547	1,650	3,710	2,890	936	334	184
25	380	612	552	610	625	569	1,700	3,740	2,830	888	322	183
26	384	603	552	611	628	585	1,760	3,830	2,750	834	314	177
27	385	596	546	609	631	594	1,830	3,840	2,690	787	307	174
28	386	590	536	609	633	601	1,870	3,830	2,590	754	302	164
29	394	583	535	609	---	614	1,910	3,820	2,470	730	295	161
30	426	574	538	608	---	631	1,940	3,820	2,430	698	290	157
31	445	---	559	601	---	655	---	3,800	---	667	282	---
TOTAL	11,708	17,917	16,999	18,474	17,077	17,543	39,399	90,460	90,850	44,704	12,478	6,193
MEAN	378	597	548	596	610	566	1,313	2,918	3,028	1,442	403	206
MAX	445	651	568	611	633	655	1,940	3,840	3,760	2,360	637	269
MIN	345	456	523	562	592	513	680	1,870	2,430	667	282	157
AC-FT	23,220	35,540	33,720	36,640	33,870	34,800	78,150	179,400	180,200	88,670	24,750	12,280
CFSM	0.22	0.34	0.32	0.34	0.35	0.33	0.75	1.68	1.74	0.83	0.23	0.12
IN.	0.25	0.38	0.36	0.39	0.37	0.38	0.84	1.93	1.94	0.96	0.27	0.13

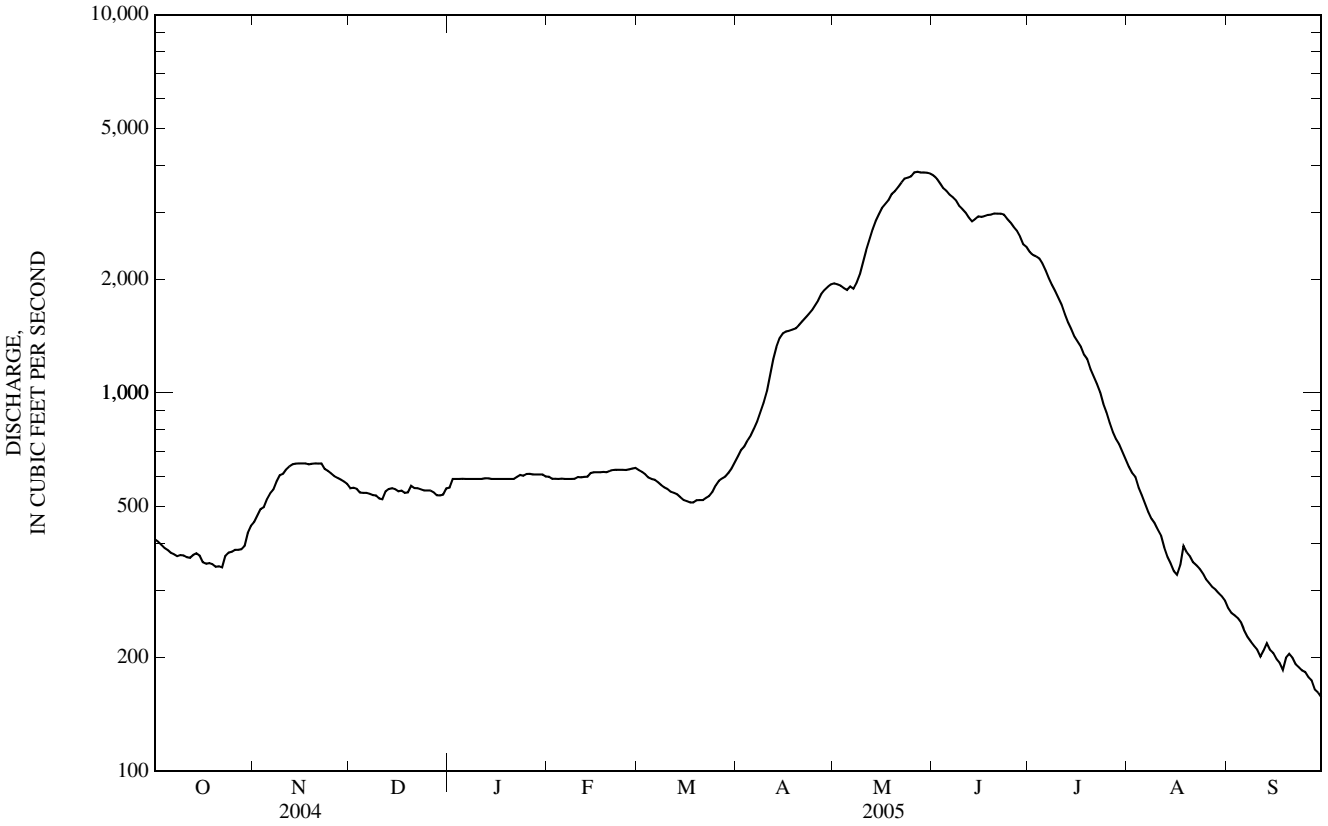
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2005, BY WATER YEAR (WY)

MEAN	1,056	1,000	875	728	599	572	1,233	3,661	2,800	1,809	1,115	961
MAX	5,320	3,879	2,510	1,475	1,229	1,143	5,069	9,114	7,332	4,453	3,487	5,034
(WY)	(1978)	(1971)	(1983)	(1966)	(1966)	(1966)	(1945)	(1950)	(1950)	(1944)	(1944)	(1988)
MIN	65.1	60.2	76.2	86.2	95.0	135	269	225	696	512	278	120
(WY)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1980)	(1980)	(1998)	(1976)

05127500 BASSWOOD RIVER NEAR WINTON, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1931 - 2005	
ANNUAL TOTAL	399,189		383,802			
ANNUAL MEAN	1,091		1,052		1,379	
HIGHEST ANNUAL MEAN					2,643	1950
LOWEST ANNUAL MEAN					557	1958
HIGHEST DAILY MEAN	3,730	May 5	3,840	May 27	15,200	May 24, 1950
LOWEST DAILY MEAN	345	Oct 22	157	Sep 30	58	Nov 3, 1976
ANNUAL SEVEN-DAY MINIMUM	351	Oct 16	171	Sep 24	58	Nov 7, 1976
MAXIMUM PEAK FLOW			3,850	May 26	15,600	May 24, 1950
MAXIMUM PEAK STAGE			5.31	May 26	a9.94	May 24, 1950
INSTANTANEOUS LOW FLOW			b153	Sep 30	55	Nov 18, 1976
ANNUAL RUNOFF (AC-FT)	791,800		761,300		998,900	
ANNUAL RUNOFF (CFSM)	0.627		0.604		0.792	
ANNUAL RUNOFF (INCHES)	8.53		8.21		10.77	
10 PERCENT EXCEEDS	2,890		2,920		3,190	
50 PERCENT EXCEEDS	644		594		860	
90 PERCENT EXCEEDS	388		319		371	

a Present datum.
b Falling stage.



05128000 NAMAKAN RIVER AT OUTLET OF LAC LA CROIX, ONTARIO
(International Gaging Station)

LOCATION.--Lat 48°21'14", long 92°13'01", at Campbell's Camp, on Lac La Croix Lake, used to determine discharge at outlet [Lat 48°23'00", long 92°10'40", 2.5 mi east of Campbell's Camp].

DRAINAGE AREA.--5,170 mi^2.

PERIOD OF RECORD.--September 1921 to January 1922, April 1922 to current year, in reports of U.S. Geological Survey. Monthly discharge only for some periods, published in WSP 1308. August 1921 to current year, in reports of Water Survey of Canada.

GAGE.--Water-stage recorder. Datum of gage is sea level (United States and Canadian Boundary Survey). Prior to October 1933, nonrecording gages at various sites on Lac la Croix. October 1933 to Mar. 13, 1963, nonrecording gage at present site and datum.

REMARKS.--Records furnished by Water Survey of Canada.

COOPERATION.--This station is one of the international stations maintained by Canada under agreement with the United States.

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	1,750	1,790	2,380	2,120	2,060	1,880	1,730	5,760	11,700	8,160	3,950	2,040
2	1,740	1,850	2,380	2,140	2,050	1,870	1,750	5,790	11,700	8,050	3,850	2,010
3	1,720	1,920	2,370	2,130	2,040	1,860	1,780	5,790	11,500	7,910	3,780	2,000
4	1,710	1,940	2,340	2,120	2,030	1,860	1,830	5,830	11,400	7,800	3,640	1,970
5	1,710	2,010	2,330	2,110	2,030	1,860	1,900	5,860	11,400	7,660	3,570	1,920
6	1,700	2,060	2,320	2,090	2,010	1,850	2,000	5,900	11,200	7,520	3,470	1,860
7	1,700	2,080	2,310	2,090	2,000	1,850	2,130	5,930	11,200	7,340	3,370	1,820
8	1,680	2,160	2,300	2,080	2,000	1,840	2,300	6,000	11,100	7,170	3,280	1,790
9	1,700	2,220	2,280	2,070	1,990	1,840	2,470	6,250	10,800	6,990	3,190	1,770
10	1,710	2,210	2,260	2,070	1,980	1,830	2,670	6,710	10,700	6,850	3,090	1,740
11	1,690	2,250	2,250	2,060	1,970	1,830	2,900	7,130	10,500	6,670	3,030	1,690
12	1,670	2,290	2,290	2,070	1,960	1,820	3,110	7,520	10,300	6,500	2,900	1,670
13	1,670	2,320	2,290	2,080	1,960	1,810	3,300	7,800	10,200	6,360	2,830	1,640
14	1,680	2,340	2,280	2,070	1,960	1,790	3,490	8,090	10,200	6,210	2,760	1,600
15	1,650	2,360	2,260	2,060	1,950	1,790	3,640	8,370	10,300	6,040	2,690	1,580
16	1,580	2,380	2,230	2,050	1,940	1,780	3,810	8,650	10,200	5,930	2,650	1,550
17	1,590	2,390	2,220	2,040	1,930	1,770	3,990	8,900	10,000	5,760	2,650	1,520
18	1,600	2,390	2,200	2,040	1,930	1,760	4,130	9,070	9,890	5,650	2,760	1,480
19	1,590	2,430	2,190	2,060	1,910	1,750	4,310	9,320	9,680	5,610	2,700	1,520
20	1,550	2,420	2,200	2,070	1,920	1,740	4,520	9,500	9,460	5,510	2,620	1,510
21	1,550	2,440	2,180	2,070	1,920	1,720	4,700	9,680	9,290	5,400	2,580	1,490
22	1,530	2,460	2,170	2,090	1,910	1,710	4,840	9,850	9,150	5,230	2,540	1,450
23	1,550	2,380	2,150	2,090	1,910	1,700	4,980	10,100	8,930	5,120	2,500	1,440
24	1,550	2,450	2,140	2,080	1,900	1,690	5,120	10,200	8,790	4,870	2,460	1,420
25	1,550	2,460	2,120	2,080	1,890	1,680	5,300	10,300	8,720	4,770	2,390	1,400
26	1,550	2,450	2,100	2,080	1,890	1,670	5,400	10,800	8,580	4,590	2,330	1,370
27	1,560	2,430	2,080	2,070	1,890	1,660	5,510	11,100	8,510	4,450	2,270	1,350
28	1,550	2,410	2,070	2,070	1,880	1,650	5,580	11,300	8,550	4,340	2,240	1,300
29	1,550	2,390	2,050	2,080	---	1,650	5,650	11,500	8,440	4,240	2,210	1,300
30	1,650	2,390	2,070	2,070	---	1,660	5,720	11,700	8,300	4,130	2,180	1,270
31	1,740	---	2,120	2,070	---	1,710	---	11,700	---	4,060	2,130	---
TOTAL	50,720	68,070	68,930	64,470	54,810	54,880	110,560	262,400	300,690	186,890	88,610	48,470
MEAN	1,636	2,269	2,224	2,080	1,958	1,770	3,685	8,465	10,020	6,029	2,858	1,616
MAX	1,750	2,460	2,380	2,140	2,060	1,880	5,720	11,700	11,700	8,160	3,950	2,040
MIN	1,530	1,790	2,050	2,040	1,880	1,650	1,730	5,760	8,300	4,060	2,130	1,270
AC-FT	100,600	135,000	136,700	127,900	108,700	108,900	219,300	520,500	596,400	370,700	175,800	96,140
CFSM	0.32	0.44	0.43	0.40	0.38	0.34	0.71	1.64	1.94	1.17	0.55	0.31
IN.	0.36	0.49	0.50	0.46	0.39	0.39	0.80	1.89	2.16	1.34	0.64	0.35

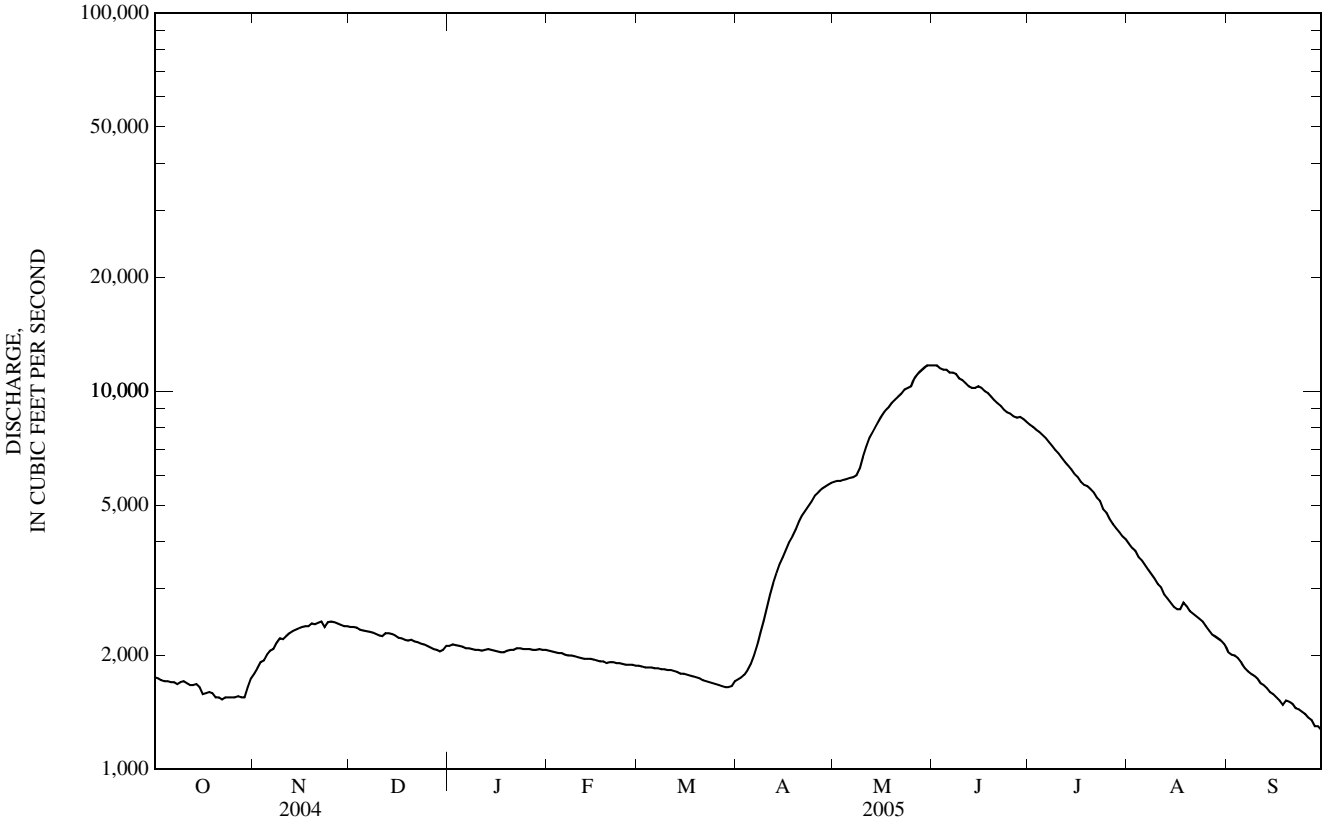
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2005, BY WATER YEAR (WY)

MEAN	3,024	2,884	2,589	2,194	1,891	1,682	2,613	7,628	7,896	6,019	4,038	3,133
MAX	14,200	10,610	7,189	4,568	3,432	2,996	9,071	16,900	22,120	15,930	11,200	13,140
(WY)	(1978)	(1978)	(1972)	(1978)	(1966)	(1966)	(1945)	(1938)	(1950)	(1968)	(1944)	(1988)
MIN	744	624	567	547	540	535	614	899	1,475	1,263	1,123	774
(WY)	(1999)	(1977)	(1977)	(1977)	(1924)	(1924)	(1977)	(1977)	(1924)	(1924)	(1998)	(1998)

05128000 NAMAKAN RIVER AT OUTLET OF LAC LA CROIX, ONTARIO—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1921 - 2005	
ANNUAL TOTAL	1,299,600		1,359,500			
ANNUAL MEAN	3,551		3,725		3,817	
HIGHEST ANNUAL MEAN					7,270	1950
LOWEST ANNUAL MEAN					964	1924
HIGHEST DAILY MEAN	8,620	May 12	11,700	May 30 - June 2	a28,200	May 31, 1950
LOWEST DAILY MEAN	1,530	Oct 22	1,270	Sep 30	535	Feb 4, 1924
ANNUAL SEVEN-DAY MINIMUM	1,550	Oct 20	1,340	Sep 24	535	Feb 4, 1924
MAXIMUM PEAK FLOW			11,800	May 31	28,200	May 31, 1950
MAXIMUM PEAK STAGE			1,187.95	May 31	a1,193.30	May 31, 1950
INSTANTANEOUS LOW FLOW			b1,230	Sep 30	c535	Feb 1, 1924
ANNUAL RUNOFF (AC-FT)	2,578,000		2,697,000		2,765,000	
ANNUAL RUNOFF (CFSM)	0.687		0.720		0.738	
ANNUAL RUNOFF (INCHES)	9.35		9.78		10.03	
10 PERCENT EXCEEDS	7,870		8,990		8,230	
50 PERCENT EXCEEDS	2,260		2,210		2,670	
90 PERCENT EXCEEDS	1,790		1,660		1,180	

a Occurred May 31 to June 2, 1950.
b Falling stage.
c Many days in 1924.



05129115 VERMILION RIVER NEAR CRANE LAKE, MN

LOCATION.--Lat 48°15'53", long 92°33'57", in NE¼NE¼ sec. 30, T.67 N., R.17 W., St. Louis County, Hydrologic Unit 09030002, in Superior National Forest, on left bank 350 ft downstream from bridge on Forest Route 491, 3.5 mi upstream from mouth, and 3.5 mi west of city of Crane Lake.

DRAINAGE AREA.-- 905 mi^2.

PERIOD OF RECORD.--August 1979 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,180 ft above sea level (from topographic map).

REMARKS.--Records fair.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of April 1979 reached a stage of 15.15 ft, from high-water mark, discharge approximately 4,600 ft^3/s.

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	353	1,470	439	340	338	270	740	1,220	2,270	1,050	323	108
2	373	1,490	427	349	333	264	1,000	1,170	2,110	1,020	314	99
3	376	1,440	416	351	329	257	1,240	1,130	1,970	1,020	315	93
4	369	1,340	411	350	326	258	1,530	1,090	1,840	1,020	300	89
5	359	1,220	398	342	322	263	1,790	1,040	1,760	1,010	269	88
6	346	1,110	388	335	321	265	2,030	1,040	1,740	969	252	86
7	330	1,010	384	336	316	269	2,230	1,030	1,670	924	235	78
8	321	936	387	338	307	263	2,460	1,040	1,680	880	225	72
9	322	886	381	343	300	251	2,640	1,110	1,710	841	213	69
10	318	847	376	343	297	246	2,630	1,350	1,700	801	203	71
11	311	807	365	339	298	248	2,560	1,550	1,670	761	192	69
12	302	772	371	341	299	245	2,480	1,580	1,660	724	186	68
13	293	746	358	342	295	237	2,370	1,550	1,610	686	172	69
14	289	721	358	339	297	233	2,250	1,500	1,590	651	166	67
15	288	697	360	330	295	230	2,120	1,460	1,730	643	155	66
16	276	680	359	310	290	228	2,000	1,410	1,820	630	151	65
17	265	663	349	299	283	227	1,890	1,350	1,830	607	153	65
18	257	645	344	e310	271	226	1,820	1,300	1,790	582	208	62
19	257	621	336	e325	267	224	1,730	1,290	1,710	556	211	70
20	258	623	343	341	265	222	1,680	1,300	1,640	556	205	75
21	251	606	343	352	275	222	1,640	1,300	1,540	514	184	72
22	247	595	337	359	280	221	1,560	1,320	1,460	485	170	71
23	269	582	327	363	279	221	1,500	1,330	1,390	462	162	69
24	319	538	317	368	276	222	1,430	1,320	1,320	447	154	68
25	370	518	310	368	274	221	1,370	1,320	1,230	419	148	70
26	394	494	309	360	272	219	1,340	1,950	1,160	399	142	68
27	398	482	306	353	270	216	1,340	2,530	1,110	381	133	66
28	396	470	311	349	271	217	1,320	2,680	1,070	370	127	60
29	393	456	309	344	---	237	1,290	2,660	1,030	351	119	58
30	576	447	312	340	---	296	1,260	2,570	1,060	339	112	56
31	1,220	---	330	339	---	314	---	2,430	---	333	109	---
TOTAL	11,096	23,912	11,061	10,598	8,246	7,532	53,240	46,920	47,870	20,431	6,008	2,187
MEAN	358	797	357	342	294	243	1,775	1,514	1,596	659	194	72.9
MAX	1,220	1,490	439	368	338	314	2,640	2,680	2,270	1,050	323	108
MIN	247	447	306	299	265	216	740	1,030	1,030	333	109	56
AC-FT	22,010	47,430	21,940	21,020	16,360	14,940	105,600	93,070	94,950	40,520	11,920	4,340
CFSM	0.40	0.88	0.39	0.38	0.33	0.27	1.96	1.67	1.76	0.73	0.21	0.08
IN.	0.46	0.98	0.45	0.44	0.34	0.31	2.19	1.93	1.97	0.84	0.25	0.09

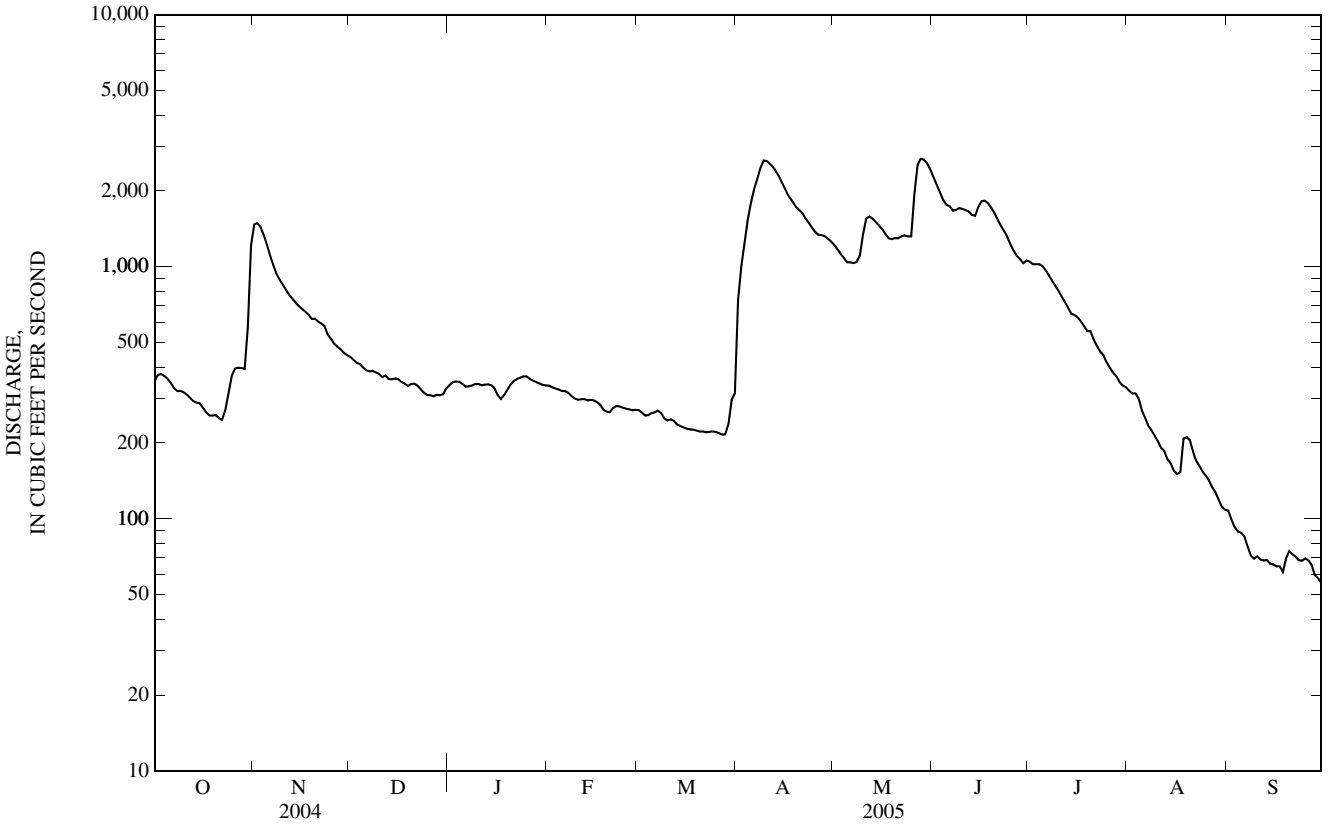
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2005, BY WATER YEAR (WY)

MEAN	540	542	412	288	235	281	1,204	1,369	974	749	514	450
MAX	1,436	1,138	872	476	374	574	2,286	3,012	2,234	1,609	2,225	1,880
(WY)	(1996)	(1983)	(1983)	(1996)	(1997)	(1995)	(2001)	(2001)	(2001)	(1985)	(2001)	(1988)
MIN	110	132	106	84.4	63.9	89.5	294	363	205	113	60.0	69.1
(WY)	(1998)	(2003)	(2003)	(2003)	(2003)	(1988)	(2003)	(2003)	(1980)	(1980)	(1980)	(1998)

05129115 VERMILION RIVER NEAR CRANE LAKE, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1979 - 2005	
ANNUAL TOTAL	229,622		249,101			
ANNUAL MEAN	627		682		632	
HIGHEST ANNUAL MEAN					1,132	2001
LOWEST ANNUAL MEAN					213	2003
HIGHEST DAILY MEAN	2,370	Apr 10	2,680	May 28	4,300	Apr 25, 1985
LOWEST DAILY MEAN	93	Aug 29	56	Sep 30	38	Aug 13, 1980
ANNUAL SEVEN-DAY MINIMUM	96	Aug 29	64	Sep 24	40	Aug 10, 1980
MAXIMUM PEAK FLOW			2,710	May 28	4,360	Apr 25, 1985
MAXIMUM PEAK STAGE			12.64	May 28	15.20	Apr 25, 1985
INSTANTANEOUS LOW FLOW			a55	Sep 30	38	Aug 13, 1980
ANNUAL RUNOFF (AC-FT)	455,500		494,100		457,900	
ANNUAL RUNOFF (CFSM)	0.693		0.754		0.698	
ANNUAL RUNOFF (INCHES)	9.44		10.24		9.49	
10 PERCENT EXCEEDS	1,520		1,670		1,440	
50 PERCENT EXCEEDS	362		353		417	
90 PERCENT EXCEEDS	186		146		153	

a Falling stage.
e Estimated.



05129290 GOLD PORTAGE OUTLET FROM KABETOGAMA LAKE NEAR RAY, MN

LOCATION.--Lat 48°31'28", long 93°04'29", in SW¼NE¼ sec. 30, T.70 N., R.21 W., St. Louis County, Hydrologic Unit 09030003, on right bank in bay at head of Gold Portage Outlet from Kabetogama Lake, 9.8 mi northeast of Ray.

PERIOD OF RECORD.--October 1982 to September 1993, October 1993 to September 1994 (peak gage height and discharge only), October 1997 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,100 ft above sea level (NGVD of 1912, U.S. Army Corp of Engineers benchmark), water surface transfer.

REMARKS.--Records good. Flow completely regulated by outlet dam on Namakan Lake.

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	383	363	216	178	115	42	12	200	782	588	486	422
2	384	363	217	181	112	40	15	208	779	594	483	420
3	373	365	216	180	109	39	18	218	764	597	477	433
4	370	344	209	180	107	37	25	231	750	599	452	441
5	378	341	209	180	106	35	33	242	738	600	463	438
6	377	331	208	181	101	34	43	254	709	595	469	426
7	377	310	204	178	99	32	55	275	717	587	469	427
8	366	310	202	176	97	31	65	286	722	583	473	433
9	373	311	199	173	94	30	76	308	692	574	471	440
10	375	286	196	171	92	29	89	332	685	570	469	444
11	366	284	196	168	89	26	103	363	684	560	473	438
12	362	284	191	165	87	26	113	402	682	550	460	452
13	348	282	190	160	85	25	120	424	674	546	462	446
14	353	280	191	158	82	23	124	440	684	549	464	439
15	344	278	188	153	78	22	126	466	693	542	458	446
16	317	277	182	149	75	21	128	498	699	544	458	438
17	324	273	184	146	72	20	130	525	701	549	477	436
18	333	267	178	145	69	19	133	541	704	519	506	428
19	337	271	178	142	65	18	140	554	697	534	496	431
20	325	260	179	140	63	17	143	558	685	534	476	427
21	332	262	173	138	61	16	147	568	674	538	470	432
22	328	265	173	135	58	15	146	569	670	535	472	422
23	324	243	172	134	55	14	151	581	661	536	468	433
24	326	251	172	131	53	13	158	588	636	505	470	432
25	324	252	170	128	50	12	165	612	633	500	460	431
26	326	247	169	125	49	12	169	666	636	487	452	427
27	325	236	169	123	46	11	174	732	621	485	445	431
28	322	229	170	123	44	10	181	764	609	481	441	404
29	319	226	171	121	---	10	193	775	620	487	444	421
30	341	223	174	120	---	9.6	198	784	596	491	446	418
31	362	---	177	117	---	11	---	786	---	489	445	---
TOTAL	10,794	8,514	5,823	4,699	2,213	699.6	3,373	14,750	20,597	16,848	14,455	12,956
MEAN	348	284	188	152	79.0	22.6	112	476	687	543	466	432
MAX	384	365	217	181	115	42	198	786	782	600	506	452
MIN	317	223	169	117	44	9.6	12	200	596	481	441	404
AC-FT	21,410	16,890	11,550	9,320	4,390	1,390	6,690	29,260	40,850	33,420	28,670	25,700

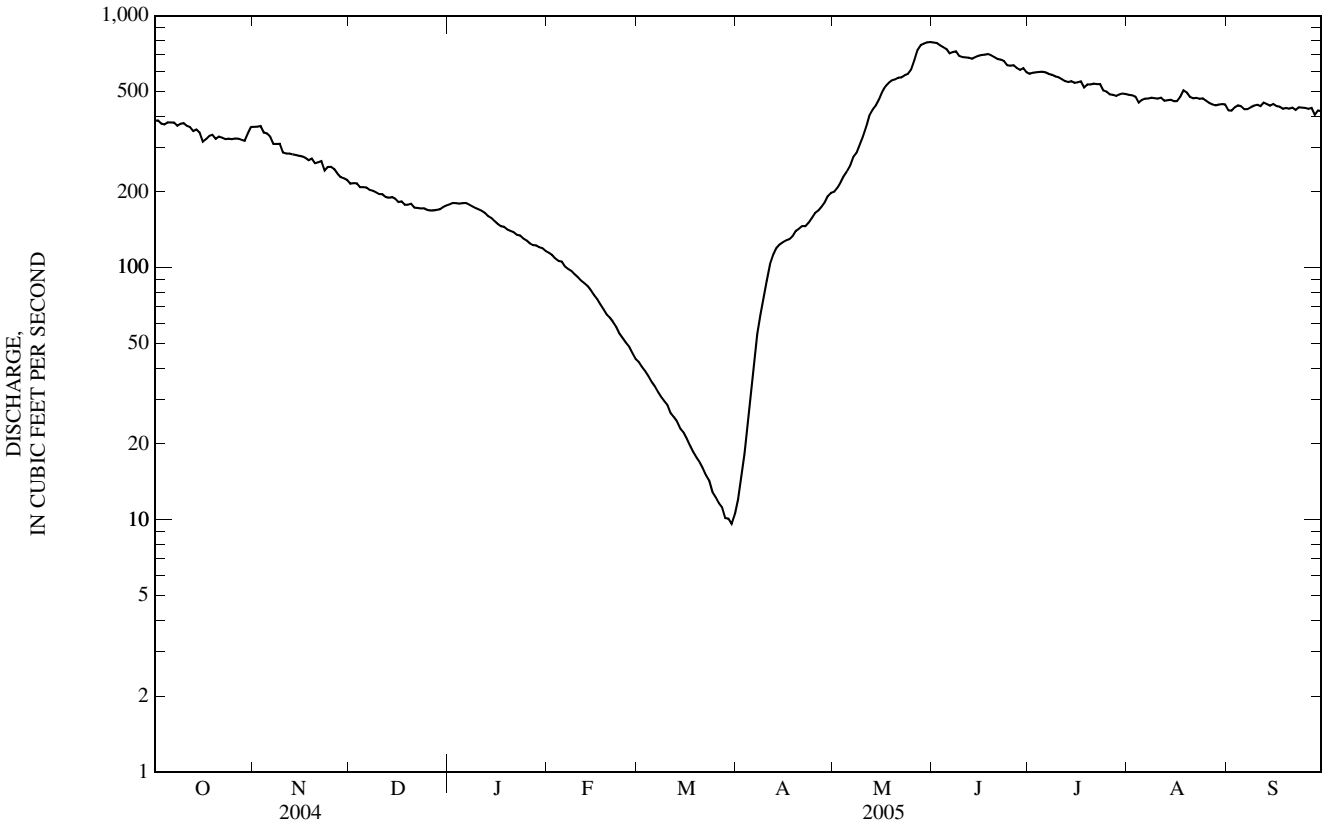
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2005, BY WATER YEAR (WY)

MEAN	354	194	87.1	27.4	7.84	1.66	11.8	165	431	536	517	474
MAX	530	284	188	152	79.0	22.6	112	798	950	690	686	787
(WY)	(1986)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2001)	(2001)	(2002)	(1988)	(1988)
MIN	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.1	32.5	0.23	0.12
(WY)	(2004)	(2004)	(2004)	(2004)	(1983)	(1983)	(1983)	(1987)	(2003)	(2003)	(2003)	(2003)

05129290 GOLD PORTAGE OUTLET FROM KABETOGAMA LAKE NEAR RAY, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1983 - 2005	
ANNUAL TOTAL	83,562.16		115,721.6			
ANNUAL MEAN	228		317		235	
HIGHEST ANNUAL MEAN					340	2001
LOWEST ANNUAL MEAN					67.1	2003
HIGHEST DAILY MEAN	652	Jun 11	786	May 31	1,310	May 30, 2001
LOWEST DAILY MEAN	0.00	Jan 1	9.6	Mar 30	a0.00	Jan 21, 1983
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	11	Mar 25	0.00	Jan 21, 1983
MAXIMUM PEAK FLOW			791	May 31	1,310	May 29, 2001
MAXIMUM PEAK STAGE			18.85	May 31	20.53	May 31, 2001
INSTANTANEOUS LOW FLOW			8.3	Mar 30	a0.00	Jan 21, 1983
ANNUAL RUNOFF (AC-FT)	165,700		229,500		170,300	
10 PERCENT EXCEEDS	527		604		589	
50 PERCENT EXCEEDS	224		310		147	
90 PERCENT EXCEEDS	0.00		43		0.00	

a Many days, several years.



05129400 RAINY LAKE NEAR FORT FRANCES, ONTARIO
(International Gaging Station)

LOCATION.--Lat 48°38'30", long 93°20'00", at Five Mile dock, approximately 5 mi northeast of city of Fort Frances.

PERIOD OF RECORD.--January 1910 to September 1917 and October 1934 to current year, in reports of Geological Survey. August 1911 to current year, in reports of Water Survey of Canada. Prior to October 1949, published as "at Ranier, Minn.", and as "at Fort Frances, Ontario" October 1949 to September 1964.

GAGE.--Water-stage recorder. Datum of gage is sea level (United States and Canadian Boundary Survey). January 1910 to December 1949, nonrecording gage 3 mi northeast at Ranier, Minn., at same datum. January 1950 to October 1964, water-stage recorder on Government dock at Pither's Point at Fort Frances, and supplementary gage in town pumping station, 0.5 mi south, used during winter months, at same datum.

REMARKS.-- Records furnished by Water Survey of Canada.

COOPERATION.--This station is one of the international gaging stations maintained by Canada under agreement with the United States.

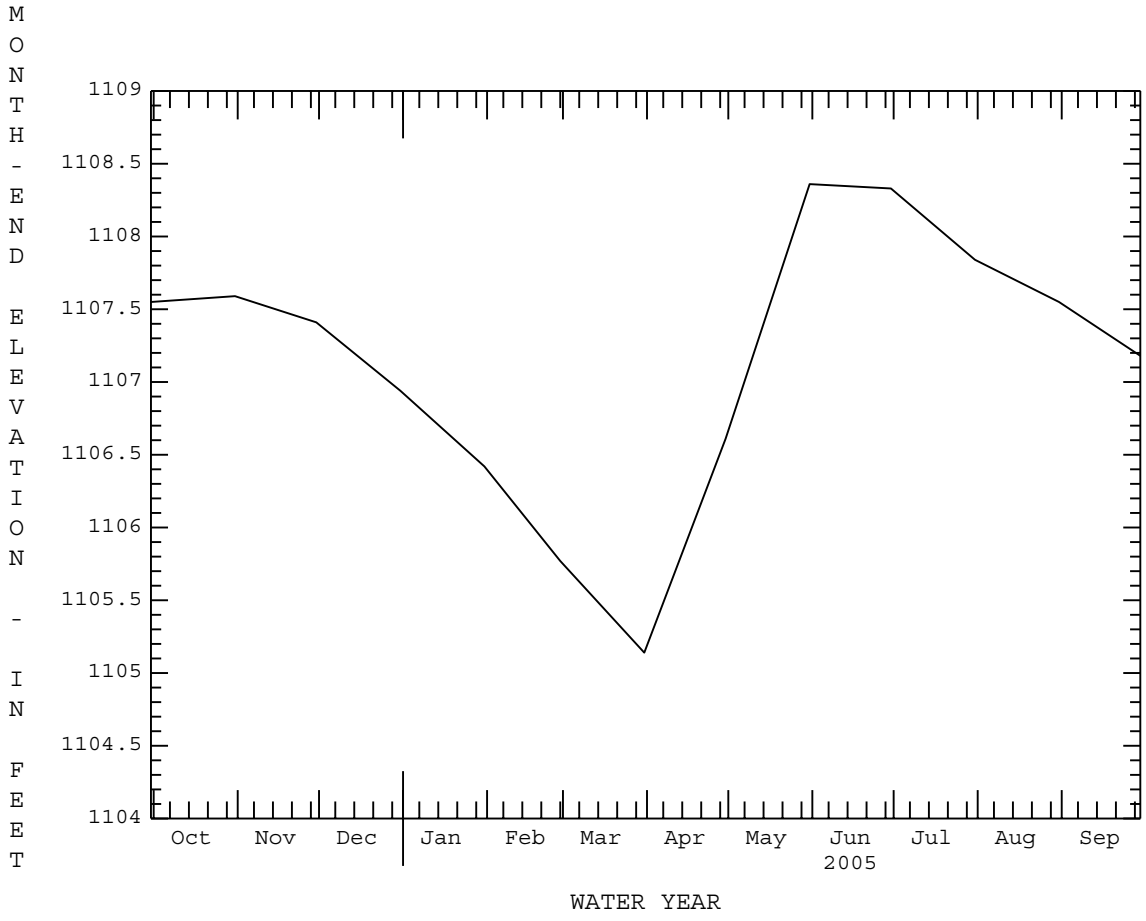
EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 1,112.97 ft, July 5, 1950; minimum observed, 1,101.26 ft, Apr. 17, 1923, Apr. 2, 1930.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,108.81 ft, June 14; maximum daily, 1108.78 ft, June 15; minimum elevation, 1,105.12 ft, Mar. 30; minimum daily, 1105.14 ft, Mar. 31.

MONTH-END ELEVATION, IN FEET ABOVE SEA LEVEL,
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Oct. 31	1107.59	Apr. 30	1106.61
Nov. 30	1107.41	May 31	1108.36
Dec. 31	1106.94	June 30	1108.33
Jan. 31	1106.42	July 31	1107.84
Feb. 28	1105.77	Aug. 31	1107.55
Mar. 31	1105.14	Sep. 30	1107.18

05129400 RAINY LAKE NEAR FORT FRANCES, ONTARIO—Continued



05130500 STURGEON RIVER NEAR CHISHOLM, MN

LOCATION.--Lat 47°40'25", long 92°54'00", in NE¼NW¼ sec. 20, T.60 N., R.20 W., St. Louis County, Hydrologic Unit 09030005, on left bank 1,000 ft upstream from County Highway 65 bridge, 0.6 mi downstream from East Branch Sturgeon River, and 11.5 mi north of Chisholm.

DRAINAGE AREA.--180 mi^2.

PERIOD OF RECORD.--August 1942 to current year.

REVISED RECORDS.--WSP 1438: 1946.

GAGE.--Water-stage recorder. Datum of gage is 1,305.7 ft above sea level (NGVD of 1929). Prior to Aug. 24, 1944, nonrecording gage at site 1,000 ft downstream at different datum. Aug. 25, 1944 to Sept. 30, 1975 at present site at datum 1.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are fair.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr 2	0730	(ice jam)	*4.85	May 28	0430	705	4.30
Apr 5	--	*e810	(daily)				

Minimum discharge, 14 ft^3/s, Sept. 4, gage height, 1.29 ft.

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	133	325	92	e49	e41	e32	e470	167	336	93	25	17
2	152	314	82	e49	e41	e31	e640	163	279	87	24	16
3	154	287	81	e49	e41	e31	e750	157	238	83	30	16
4	147	259	86	e48	e41	e31	e780	145	207	77	44	16
5	137	235	81	e47	e41	e30	e810	139	202	72	35	16
6	126	211	78	e46	e42	e30	e800	147	203	68	30	16
7	118	194	82	e45	e42	e29	781	153	197	64	27	15
8	112	177	85	e44	e43	e29	711	148	198	60	26	15
9	113	165	85	e43	e43	e29	626	145	206	57	26	15
10	110	156	85	e42	e43	e29	553	153	199	54	26	16
11	108	147	83	e42	e43	e28	518	145	195	50	24	16
12	106	141	80	e41	e42	e28	495	137	191	47	24	19
13	105	135	60	e41	e41	e28	465	141	182	44	23	29
14	106	130	e60	e40	e40	e28	421	159	239	41	24	27
15	105	125	e62	e40	e40	e28	376	170	397	42	23	25
16	103	121	e67	e40	e40	e28	335	172	446	41	22	24
17	103	121	e65	e39	e40	e28	298	162	404	39	22	26
18	101	119	e63	e39	e39	e29	278	151	324	40	23	24
19	100	119	e61	e39	e39	e29	257	153	248	38	23	26
20	100	121	e59	e39	e38	e29	242	158	199	36	22	28
21	97	119	e58	e39	e38	e29	228	156	172	33	21	28
22	96	117	e58	e39	e37	e29	209	161	150	31	19	30
23	111	114	e57	e39	e36	e30	197	173	133	29	19	25
24	145	113	e55	e39	e35	e31	185	181	117	29	18	25
25	186	111	e53	e39	e35	e32	178	215	105	27	18	27
26	202	105	e51	e39	e34	e33	179	511	91	28	18	28
27	202	103	e49	e40	e33	e35	186	653	85	26	18	29
28	188	101	e48	e40	e33	e38	185	701	81	26	17	27
29	180	89	e47	e40	---	e44	179	646	76	25	17	26
30	245	93	e47	e40	---	e60	173	524	88	25	16	26
31	303	---	e48	e40	---	e170	---	416	---	25	16	---
TOTAL	4,294	4,667	2,068	1,296	1,101	1,115	12,505	7,402	6,188	1,437	720	673
MEAN	139	156	66.7	41.8	39.3	36.0	417	239	206	46.4	23.2	22.4
MAX	303	325	92	49	43	170	810	701	446	93	44	30
MIN	96	89	47	39	33	28	173	137	76	25	16	15
AC-FT	8,520	9,260	4,100	2,570	2,180	2,210	24,800	14,680	12,270	2,850	1,430	1,330
CFSM	0.77	0.86	0.37	0.23	0.22	0.20	2.32	1.33	1.15	0.26	0.13	0.12
IN.	0.89	0.96	0.43	0.27	0.23	0.23	2.58	1.53	1.28	0.30	0.15	0.14

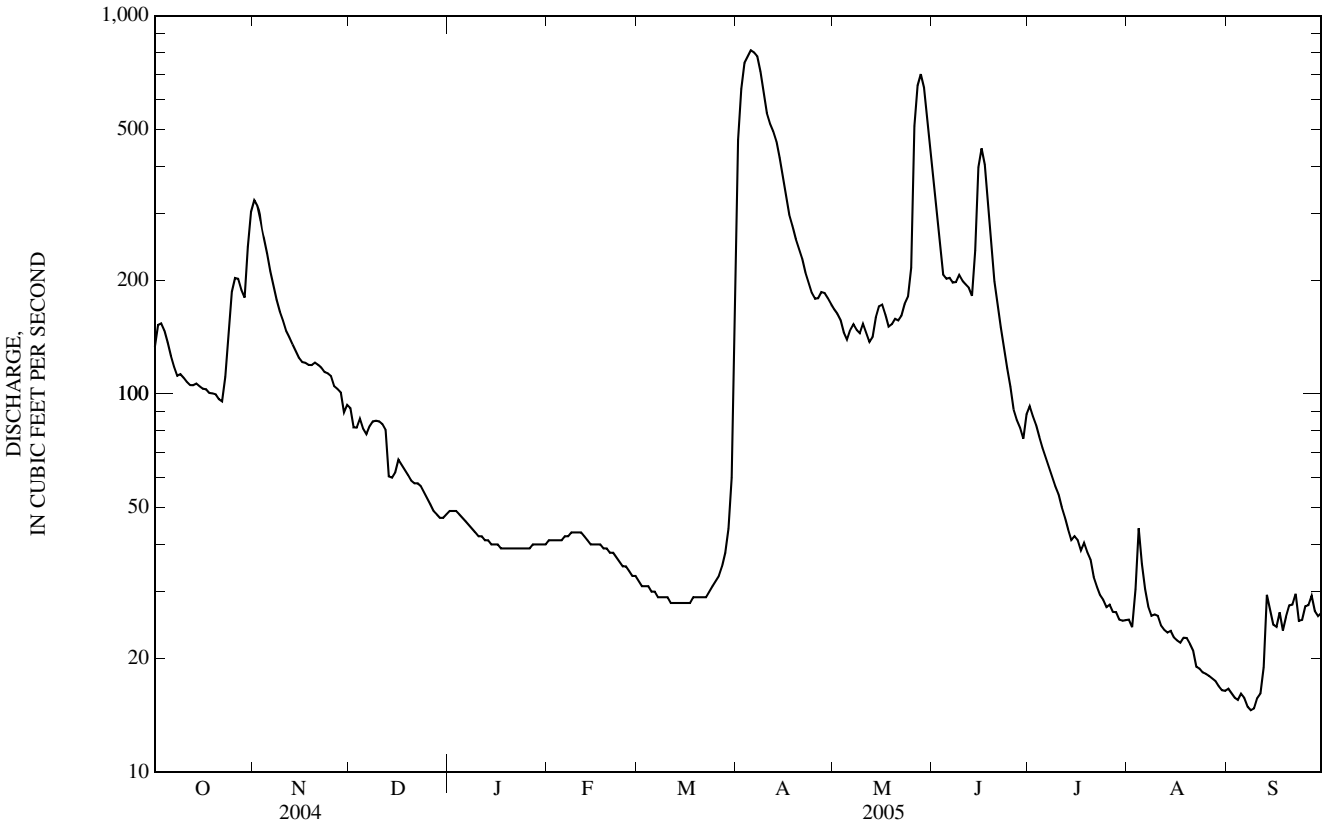
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2005, BY WATER YEAR (WY)

MEAN	120	95.9	50.6	29.7	24.0	50.6	364	292	182	123	71.7	91.0
MAX	600	264	135	66.0	47.7	337	868	1,451	528	623	268	424
(WY)	(1996)	(1978)	(1999)	(1966)	(1984)	(1945)	(1948)	(1950)	(1944)	(1993)	(1988)	(1977)
MIN	7.85	8.90	4.82	3.98	4.54	10.0	41.0	22.9	14.7	5.99	12.6	4.60
(WY)	(1977)	(1977)	(1977)	(1977)	(1977)	(1957)	(1977)	(1977)	(1988)	(1988)	(1961)	(1976)

05130500 STURGEON RIVER NEAR CHISHOLM, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1942 - 2005	
ANNUAL TOTAL	43,101		43,466			
ANNUAL MEAN	118		119		125	
HIGHEST ANNUAL MEAN					218	1996
LOWEST ANNUAL MEAN					63.1	1977
HIGHEST DAILY MEAN	667	Apr 3	810	Apr 5	3,530	May 8, 1950
LOWEST DAILY MEAN	18	Aug 29	15	Sep 7-9	2.5	Jul 30, 1988
ANNUAL SEVEN-DAY MINIMUM	19	Aug 25	16	Sep 3	3.0	Jul 24, 1988
MAXIMUM PEAK FLOW			a810	Apr 5	b3,630	May 7, 1950
MAXIMUM PEAK STAGE			c4.85	Apr 2	d7.41	May 7, 1950
INSTANTANEOUS LOW FLOW			14	Sep 4	a2.5	Jul 30, 1988
ANNUAL RUNOFF (AC-FT)	85,490		86,210		90,390	
ANNUAL RUNOFF (CFSM)	0.654		0.662		0.693	
ANNUAL RUNOFF (INCHES)	8.91		8.98		9.42	
10 PERCENT EXCEEDS	258		252		290	
50 PERCENT EXCEEDS	81		58		60	
90 PERCENT EXCEEDS	25		25		18	

a Estimated daily-mean discharge.
b From rating curve extended above 1,600 ft^3/s, on basis of slope-area measurement of peak flow.
c Backwater from ice.
d Present datum.
e Estimated.



05131448 WOOD DUCK CREEK NEAR NETT LAKE, MN

LOCATION.--Lat 48°09'24", long 93°08'20", in SW¼SW¼ sec. 35, T.66 N., R.22 W., Koochiching County, Hydrologic Unit 09030005, at bridge on Tribal Service Road, 2.9 miles above mouth at Nett Lake, and 3.5 miles northwest of the town of Nett Lake.

DRAINAGE AREA.--31.8 mi^2.

PERIOD OF RECORD.--October 1995 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,200.00 ft above sea level (NGVD of 1929), from GPS survey. Prior to Oct. 1, 2002 at datum 71.92 ft higher.

REMARKS.--Records poor. Backwater from Nett Lake occurs at times.

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	26	152	8.2	e2.4	e2.2	e1.2	e82	e58	113	9.9	4.5	1.2
2	23	126	8.1	e2.3	e2.3	e1.2	e135	e55	104	10	4.5	1.2
3	19	112	7.5	e2.3	e2.5	e1.2	175	e52	94	14	4.1	1.3
4	17	99	7.1	e2.3	e2.5	e1.1	200	e49	86	29	3.3	1.4
5	16	91	6.8	e2.2	e2.5	e1.1	234	e47	80	30	3.2	1.4
6	15	80	7.1	e2.2	e2.4	e1.2	243	e45	72	28	3.1	1.3
7	14	69	6.6	e2.1	e2.2	e1.2	203	e44	65	23	2.7	1.2
8	14	63	6.0	e2.1	e2.0	e1.1	183	43	58	18	2.5	1.2
9	14	60	5.7	e2.0	e1.9	e1.1	162	42	48	16	2.2	1.3
10	15	52	5.3	e2.0	e1.9	e1.1	148	58	42	14	2.0	1.4
11	14	e48	4.9	e2.0	e1.9	e1.1	141	61	37	13	1.9	1.3
12	13	e44	e4.7	e2.0	e1.9	e1.1	137	57	35	12	1.7	1.3
13	12	e41	e4.5	e1.9	e2.0	e1.1	127	52	31	11	1.5	1.3
14	13	e38	e4.3	e1.9	e2.1	e1.1	116	55	55	11	1.5	1.3
15	12	e35	e4.1	e1.9	e2.0	e1.1	108	57	106	12	1.4	1.4
16	13	e32	e4.0	e1.9	e1.9	e1.0	103	51	100	12	1.3	1.4
17	12	e30	e3.8	e1.8	e1.8	e1.0	e98	45	71	12	1.4	1.4
18	12	e28	e3.7	e1.8	e1.7	e1.0	e95	37	49	9.4	1.7	1.3
19	12	e26	e3.5	e1.8	e1.7	e1.1	e90	34	35	9.7	1.6	1.5
20	13	e24	e3.4	e1.9	e1.6	e1.1	e86	31	26	9.2	1.5	1.5
21	13	e22	e3.3	e1.9	e1.5	e1.1	e82	30	20	8.6	1.3	1.5
22	14	e20	e3.2	e1.9	e1.5	e1.2	e79	33	16	8.2	1.3	1.4
23	14	e18	e3.1	e1.9	e1.4	e1.2	e76	33	14	8.2	1.2	1.6
24	14	e17	e3.0	e1.9	e1.4	e1.3	e73	32	12	6.9	1.3	1.6
25	14	e15	e2.9	e1.9	e1.3	e1.3	e72	45	11	6.4	1.2	1.6
26	14	e13	e2.8	e1.9	e1.3	e1.5	e71	255	10	5.7	1.2	1.6
27	14	12	e2.7	e1.9	e1.3	e1.7	e70	297	9.3	5.6	1.2	1.7
28	14	11	e2.7	e2.0	e1.2	e2.1	e68	226	8.5	5.1	1.2	1.4
29	15	9.9	e2.6	e2.0	---	e4.4	e65	171	9.3	5.0	1.2	1.7
30	77	9.0	e2.5	e2.0	---	e13	e61	143	9.3	4.9	1.2	1.6
31	172	---	e2.4	e2.1	---	e40	---	127	---	4.8	1.3	---
TOTAL	674	1,396.9	140.5	62.2	51.9	91.0	3,583	2,365	1,426.4	372.6	61.2	42.3
MEAN	21.7	46.6	4.53	2.01	1.85	2.94	119	76.3	47.5	12.0	1.97	1.41
MAX	172	152	8.2	2.4	2.5	40	243	297	113	30	4.5	1.7
MIN	12	9.0	2.4	1.8	1.2	1.0	61	30	8.5	4.8	1.2	1.2
AC-FT	1,340	2,770	279	123	103	180	7,110	4,690	2,830	739	121	84
CFSM	0.68	1.46	0.14	0.06	0.06	0.09	3.76	2.40	1.50	0.38	0.06	0.04
IN.	0.79	1.63	0.16	0.07	0.06	0.11	4.19	2.77	1.67	0.44	0.07	0.05

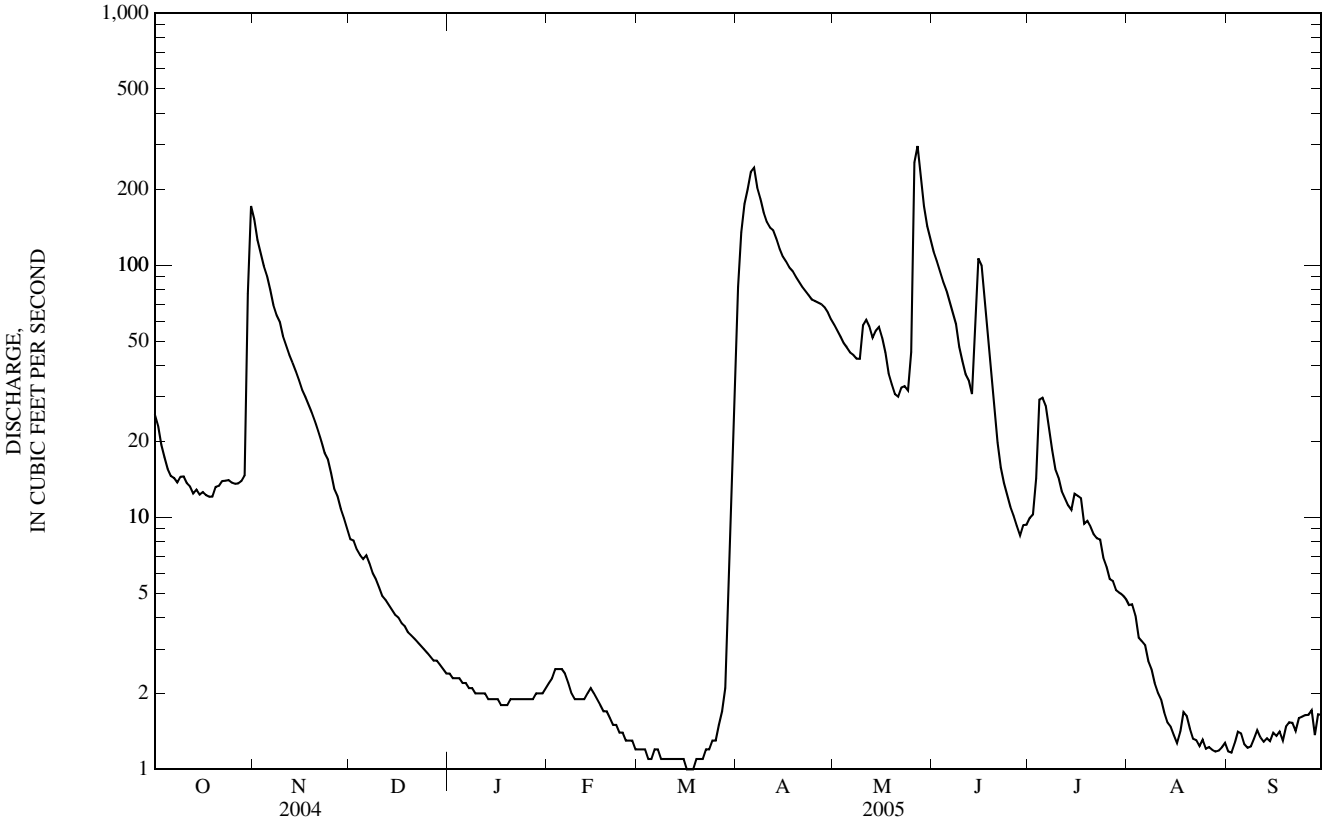
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2005, BY WATER YEAR (WY)

MEAN	18.0	19.5	6.40	2.23	1.58	3.70	81.2	60.0	23.6	12.3	14.6	12.0
MAX	65.4	46.6	18.6	6.18	4.61	10.9	148	136	58.8	32.5	75.7	48.0
(WY)	(1996)	(2005)	(2002)	(1997)	(1998)	(1998)	(2001)	(1996)	(2002)	(1996)	(2001)	(1999)
MIN	0.42	1.94	0.64	0.11	0.00	0.47	7.09	11.9	6.78	3.70	0.69	0.04
(WY)	(2004)	(2004)	(2003)	(2003)	(1999)	(2002)	(2003)	(2003)	(1998)	(2001)	(2004)	(1998)

05131448 WOOD DUCK CREEK NEAR NETT LAKE, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1996 - 2005	
ANNUAL TOTAL	8,636.26		10,267.0			
ANNUAL MEAN	23.6		28.1		21.3	
HIGHEST ANNUAL MEAN					38.3	2001
LOWEST ANNUAL MEAN					4.13	2003
HIGHEST DAILY MEAN	220	Jun 1	297	May 27	432	May 23, 2001
LOWEST DAILY MEAN	0.58	Aug 18	1.0	Mar 16-18	a0.00	Sep 8, 1998
ANNUAL SEVEN-DAY MINIMUM	0.63	Aug 17	1.1	Mar 12	0.00	Sep 8, 1998
MAXIMUM PEAK FLOW			327	May 26	bc445	May 23, 2001
MAXIMUM PEAK STAGE			82.88	May 26	cd84.80	Apr 7, 1997
INSTANTANEOUS LOW FLOW			f1.0	Mar 16	a0.00	Sep 7, 1998
ANNUAL RUNOFF (AC-FT)	17,130		20,360		15,400	
ANNUAL RUNOFF (CFSM)	0.742		0.885		0.668	
ANNUAL RUNOFF (INCHES)	10.10		12.01		9.08	
10 PERCENT EXCEEDS	67		86		56	
50 PERCENT EXCEEDS	7.5		6.9		5.5	
90 PERCENT EXCEEDS	0.75		1.3		0.44	

a Many days, several years.
b Gage height, 83.42 ft.
c Present datum.
d From highwater mark, backwater from ice.
e Estimated.
f Estimated, minimum daily.



05131450 NETT LAKE AT NETT LAKE, MN

LOCATION.-- Lat 48°06'57", long 93°05'58", in NE¼SE¼ sec. 13, T.65 N., R.22 W., Koochiching County, Hydrologic Unit 09030005, on Bois Forte Indian Reservation at Nett Lake town boat ramp.

PERIOD OF RECORD.-- June 1998 to September 2001 (no winter record), October 2001 to current year.

GAGE.-- Water-stage recorder. Datum of gage 1,200.00 ft above sea level (NGVD of 1929). Prior to Oct. 1, 2002, at datum 71.43 ft higher.

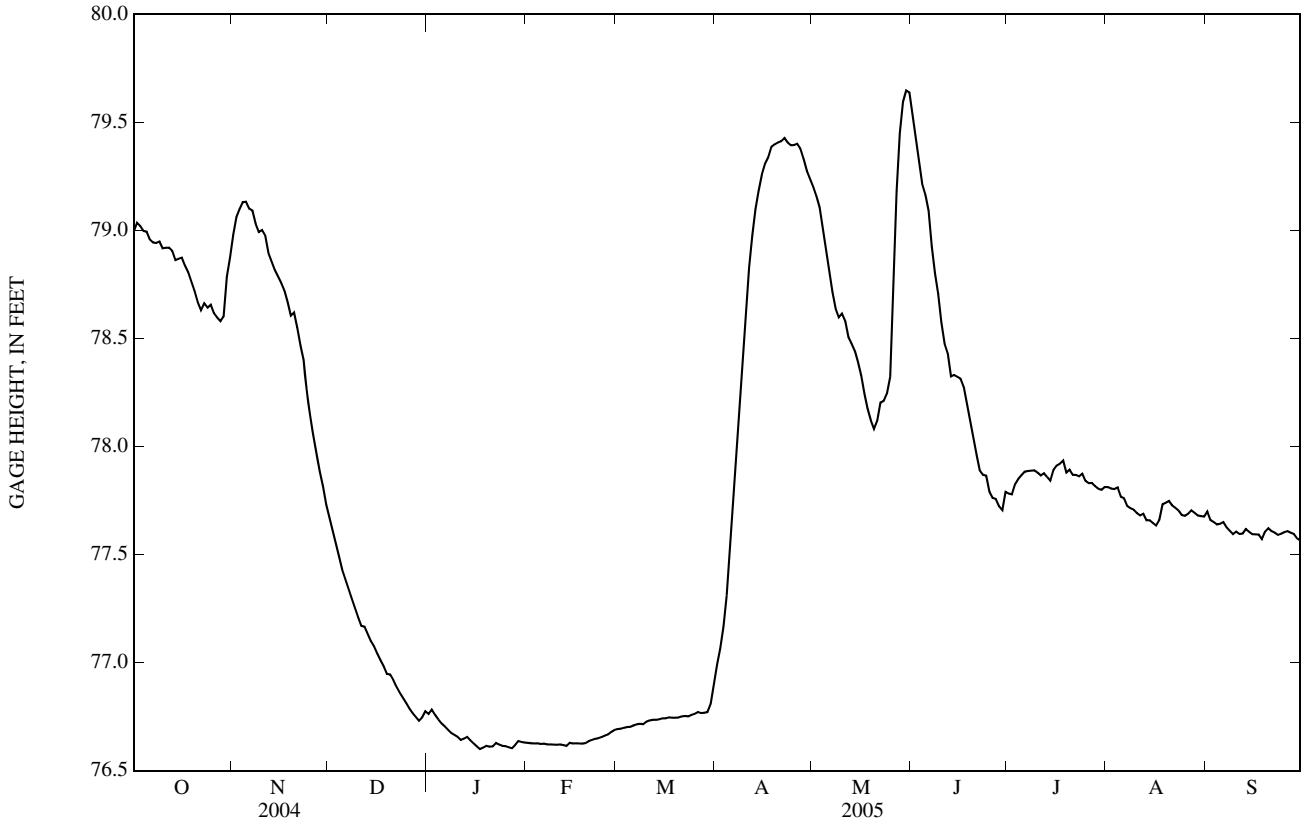
EXTREMES FOR PERIOD OF RECORD.--Maximum-recorded gage height, 80.00 ft., Apr. 18, 2001; maximum daily, 79.95 ft., Apr. 21, 2001; minimum-recorded gage height, 76.53 ft, Feb. 26-29, 2004, but may have been lower during period of no gage-height record, Feb. 16-25, 2004; minimum daily, 76.53 ft, Feb. 28, 2004.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 79.69 ft., May 29; maximum daily, 79.65 ft., May 30; minimum gage height, 76.59 ft, Jan. 17; minimum daily, 76.60 ft, Jan. 17, 27.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78.99	78.98	77.67	76.76	76.63	76.69	76.99	79.20	79.54	77.78	77.81	77.70
2	79.04	79.06	77.60	76.78	76.63	76.69	77.07	79.16	79.43	77.78	77.81	77.66
3	79.02	79.10	77.55	76.76	76.63	76.70	77.17	79.11	79.33	77.83	77.80	77.65
4	79.00	79.13	77.49	76.74	76.63	76.70	77.31	79.00	79.22	77.85	77.81	77.64
5	78.99	79.13	77.43	76.72	76.62	76.70	77.50	78.91	79.17	77.87	77.77	77.64
6	78.96	79.10	77.39	76.70	76.62	76.71	77.75	78.82	79.09	77.88	77.76	77.65
7	78.94	79.09	77.34	76.69	76.62	76.71	78.01	78.72	78.92	77.89	77.72	77.63
8	78.94	79.03	77.30	76.67	76.62	76.72	78.26	78.64	78.80	77.89	77.71	77.61
9	78.95	78.99	77.25	76.67	76.62	76.71	78.46	78.60	78.71	77.89	77.71	77.59
10	78.92	79.00	77.21	76.66	76.62	76.73	78.64	78.62	78.57	77.88	77.69	77.61
11	78.92	78.98	77.17	76.64	76.62	76.73	78.83	78.58	78.48	77.87	77.68	77.60
12	78.92	78.90	77.17	76.65	76.62	76.74	78.98	78.51	78.43	77.88	77.69	77.60
13	78.91	78.86	77.13	76.66	76.61	76.74	79.10	78.48	78.32	77.86	77.66	77.62
14	78.86	78.82	77.10	76.64	76.63	76.74	79.18	78.44	78.33	77.84	77.66	77.61
15	78.87	78.79	77.07	76.63	76.63	76.74	79.26	78.39	78.32	77.89	77.65	77.59
16	78.87	78.76	77.04	76.61	76.63	76.74	79.31	78.33	78.31	77.91	77.63	77.59
17	78.84	78.72	77.01	76.60	76.63	76.75	79.34	78.24	78.28	77.92	77.66	77.59
18	78.81	78.67	76.98	76.61	76.63	76.75	79.39	78.17	78.20	77.94	77.73	77.57
19	78.76	78.61	76.95	76.61	76.63	76.75	79.40	78.12	78.13	77.88	77.74	77.61
20	78.72	78.62	76.95	76.61	76.64	76.75	79.41	78.08	78.05	77.89	77.75	77.62
21	78.67	78.55	76.92	76.61	76.64	76.75	79.41	78.12	77.96	77.87	77.73	77.61
22	78.63	78.47	76.89	76.63	76.65	76.75	79.43	78.20	77.89	77.87	77.72	77.60
23	78.66	78.40	76.86	76.62	76.65	76.75	79.41	78.21	77.87	77.86	77.70	77.59
24	78.64	78.25	76.84	76.61	76.66	76.76	79.39	78.25	77.87	77.87	77.68	77.60
25	78.66	78.15	76.81	76.61	76.66	76.76	79.40	78.32	77.79	77.84	77.68	77.60
26	78.62	78.05	76.79	76.61	76.67	76.77	79.40	78.78	77.76	77.83	77.69	77.61
27	78.60	77.97	76.77	76.60	76.68	76.77	79.38	79.18	77.76	77.83	77.70	77.60
28	78.58	77.88	76.75	76.62	76.69	76.77	79.33	79.45	77.72	77.82	77.69	77.59
29	78.60	77.82	76.73	76.64	---	76.77	79.28	79.60	77.71	77.81	77.68	77.58
30	78.78	77.73	76.75	76.63	---	76.81	79.24	79.65	77.79	77.80	77.68	77.57
31	78.87	---	76.77	76.63	---	76.90	---	79.64	---	77.81	77.68	---
MEAN	78.82	78.65	77.09	76.65	76.64	76.74	78.77	78.69	78.39	77.86	77.71	77.61
MAX	79.04	79.13	77.67	76.78	76.69	76.90	79.43	79.65	79.54	77.94	77.81	77.70
MIN	78.58	77.73	76.73	76.60	76.61	76.69	76.99	78.08	77.71	77.78	77.63	77.57

05131450 NETT LAKE AT NETT LAKE, MN—Continued



05131455 NETT LAKE RIVER NEAR NETT LAKE, MN

LOCATION.--Lat 48°06'38", long 93°11'13", in NE¼NE¼ sec. 20, T.65 N., R.22 W., Koochiching County, Hydrologic Unit 09030005, downstream from dam at outlet of Nett Lake, 4 miles west of the town of Nett Lake.

DRAINAGE AREA.--128 mi^2.

PERIOD OF RECORD.--October 1995 to current year.

GAGE.--Water-stage recorder. Datum of gage 1,200.00 ft above sea level (NGVD of 1929). Prior to October 2002, water stage recorder at site 450 ft downstream at datum 70.05 ft higher.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Regulation from Nett Lake Dam upstream of gage.

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	19	338	318	55	e8.1	e2.9	12	239	785	1.5	1.3	0.77
2	16	379	299	e54	e7.8	e2.9	15	229	715	1.8	1.2	0.99
3	17	378	278	e53	e7.3	e2.9	23	382	646	1.7	0.93	1.2
4	59	364	251	e51	e7.2	e3.0	38	483	600	1.7	0.91	1.4
5	108	369	239	e48	e7.1	e3.3	26	456	540	1.7	1.1	1.3
6	110	372	226	e45	e7.0	e3.6	6.1	427	619	2.0	1.5	1.1
7	101	321	209	e43	e6.7	e3.5	7.4	409	723	2.2	1.6	0.66
8	90	339	194	e40	e6.4	e3.3	7.7	372	683	2.1	1.4	0.81
9	103	329	181	e37	e6.2	e3.1	8.1	362	583	2.0	1.0	0.75
10	97	279	165	e35	e6.0	3.0	8.8	368	565	1.9	1.1	0.99
11	93	258	155	e33	e5.8	2.7	19	374	533	1.4	0.81	0.95
12	87	257	145	e31	e5.5	2.9	37	365	479	1.6	0.90	0.79
13	87	240	179	e29	e5.3	2.4	58	384	474	1.8	0.87	0.67
14	81	224	154	e27	e5.0	2.0	74	454	489	1.8	1.0	0.60
15	77	211	132	e26	e4.7	1.8	67	437	487	2.1	1.2	0.71
16	59	202	116	e24	e4.4	1.5	77	429	476	2.1	1.3	0.80
17	65	311	113	e23	e4.2	1.4	94	428	460	1.7	1.1	0.84
18	140	373	103	e21	e4.0	1.2	89	405	428	1.3	1.3	0.80
19	217	354	95	e20	e3.8	1.1	108	382	395	1.5	0.95	0.79
20	188	308	98	e19	e3.5	1.0	111	161	372	1.9	0.94	0.86
21	180	295	87	e18	e3.3	1.1	104	3.3	350	1.9	1.0	0.91
22	171	500	85	e17	e3.2	1.1	118	2.9	178	2.1	1.2	0.77
23	163	617	85	e16	e3.1	1.1	103	3.4	65	1.6	1.3	0.78
24	155	658	87	e15	e3.0	1.1	95	3.3	48	1.9	1.4	0.77
25	153	552	79	e13	e3.0	1.4	139	4.6	58	1.4	1.4	0.69
26	157	497	69	e12	e2.9	1.7	229	24	57	1.5	1.3	0.59
27	156	455	65	e12	e2.9	1.8	303	107	45	1.7	0.90	0.73
28	149	414	58	e11	e2.9	2.1	288	197	27	1.7	0.89	0.58
29	155	378	53	e10	---	7.9	279	295	1.3	1.5	0.90	0.36
30	234	350	54	e9.3	---	8.5	261	369	1.0	1.5	0.95	0.54
31	285	---	56	e8.6	---	5.7	---	632	---	1.5	0.83	---
TOTAL	3,772	10,922	4,428	855.9	140.3	83.0	2,805.1	9,187.5	11,882.3	54.1	34.48	24.50
MEAN	122	364	143	27.6	5.01	2.68	93.5	296	396	1.75	1.11	0.82
MAX	285	658	318	55	8.1	8.5	303	632	785	2.2	1.6	1.4
MIN	16	202	53	8.6	2.9	1.0	6.1	2.9	1.0	1.3	0.81	0.36
AC-FT	7,480	21,660	8,780	1,700	278	165	5,560	18,220	23,570	107	68	49
CFSM	0.95	2.84	1.12	0.22	0.04	0.02	0.73	2.32	3.09	0.01	0.01	0.01
IN.	1.10	3.17	1.29	0.25	0.04	0.02	0.82	2.67	3.45	0.02	0.01	0.01

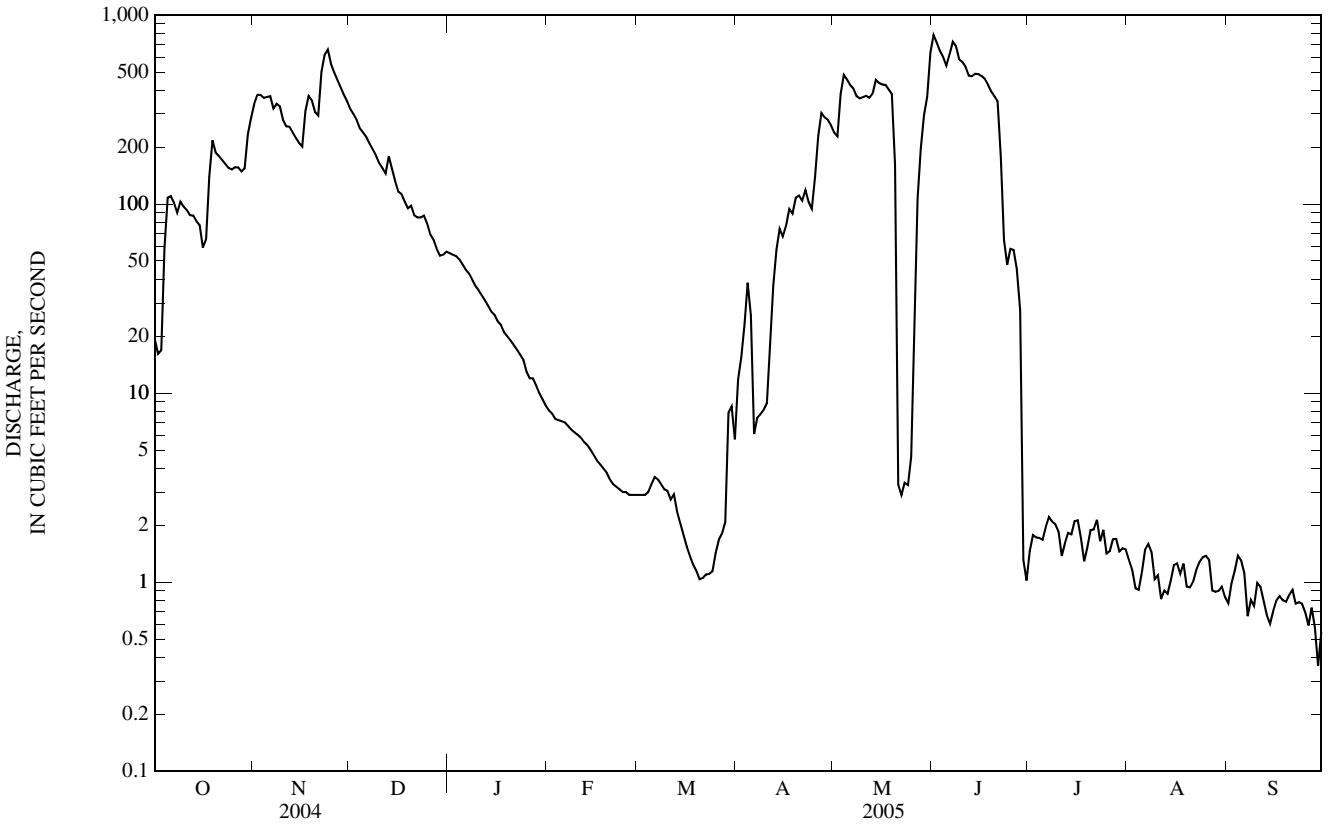
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2005, BY WATER YEAR (WY)

MEAN	68.4	119	83.6	32.1	15.1	12.6	225	286	144	58.0	18.8	27.7
MAX	187	364	174	56.2	37.3	40.1	464	566	396	142	98.0	154
(WY)	(2001)	(2005)	(2004)	(2004)	(1996)	(1998)	(1999)	(2001)	(2005)	(2003)	(2001)	(1999)
MIN	0.22	0.06	1.38	1.50	0.01	0.08	0.65	0.71	11.9	1.41	0.06	0.00
(WY)	(1999)	(1999)	(1999)	(1999)	(2003)	(2003)	(2003)	(2003)	(2000)	(1996)	(1998)	(1998)

05131455 NETT LAKE RIVER NEAR NETT LAKE, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1996 - 2005	
ANNUAL TOTAL	35,925.52		44,189.18			
ANNUAL MEAN	98.2		121		90.9	
HIGHEST ANNUAL MEAN					162	2001
LOWEST ANNUAL MEAN					29.2	2003
HIGHEST DAILY MEAN	658	Nov 24	785	Jun 1	1,470	Apr 13, 1999
LOWEST DAILY MEAN	0.02	Aug 30	0.36	Sep 29	a0.00	Jun 21, 1996
ANNUAL SEVEN-DAY MINIMUM	0.03	Aug 26	0.61	Sep 24	0.00	Aug 13, 1996
MAXIMUM PEAK FLOW			842	May 31	1,490	Apr 13, 1999
MAXIMUM PEAK STAGE			76.42	May 31	b7.26	Apr 13, 1999
INSTANTANEOUS LOW FLOW			0.22	Sep 29	a0.00	Jun 21, 1996
ANNUAL RUNOFF (AC-FT)	71,260		87,650		65,880	
ANNUAL RUNOFF (CFSM)	0.767		0.946		0.710	
ANNUAL RUNOFF (INCHES)	10.44		12.84		9.65	
10 PERCENT EXCEEDS	284		388		279	
50 PERCENT EXCEEDS	54		21		24	
90 PERCENT EXCEEDS	0.60		0.97		0.17	

a Many days, several years.
b Site and datum then in use.
e Estimated.



05131500 LITTLE FORK RIVER AT LITTLEFORK, MN

LOCATION.--Lat 48°23'45", long 93°32'57", in NE¼SE¼ sec. 9, T.68 N., R.25 W., Koochiching County, Hydrologic Unit 09030005, on right bank at town of Littlefork, 0.9 mi upstream from bridge on State Highway 217, 2.8 mi upstream from Beaver Creek, and 19 mi upstream from mouth.

DRAINAGE AREA.--1,680 mi^2.

PERIOD OF RECORD.--June to November 1909, April to November 1910, April 1911 to June 1917, September 1917, October 1917 to March 1919 (gage heights only), June 1928 to current year.

REVISED RECORDS.--WSP 955: Drainage area. WSP 1508: 1913, 1916, 1928-32, 1934. WRD MN-74: 1963.

GAGE.--Water-stage recorder. Datum of gage is 1,083.59 ft above sea level (NGVD of 1929). June 23, 1909 to March 4, 1917, nonrecording gage, and July 21, 1937 to October 23, 1979, water-stage recorder at site 1.2 mi downstream at datum 10.53 ft lower; March 5 to September 30, 1917, and June 22, 1928 to July 20, 1937, non-recording gage at site 1.18 mi downstream at datum 10.53 ft lower.

REMARKS.--Records good except those for estimated daily discharges, which are fair.

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	1,210	6,150	915	e310	e195	e170	e1,300	1,770	5,130	652	164	100
2	1,140	5,740	e870	e305	e195	e170	e4,000	1,650	4,360	663	159	95
3	1,260	5,040	e830	e300	e195	e165	e5,400	1,540	3,880	828	154	89
4	1,360	4,380	791	e295	e192	e165	e6,600	1,450	3,250	1,150	148	87
5	1,300	3,850	e760	e285	e190	e165	e7,540	1,480	2,800	1,190	140	90
6	1,230	3,320	e753	e280	e190	e165	e10,500	1,500	2,700	1,120	131	90
7	1,170	2,870	690	e275	e190	e160	12,500	1,460	2,560	904	125	87
8	1,070	2,510	e660	e270	e190	e160	8,770	1,500	2,430	747	138	81
9	1,000	2,210	e630	e260	e190	e160	7,440	1,530	2,460	633	158	78
10	977	1,990	e590	e255	e190	e155	6,600	1,660	2,380	555	142	79
11	956	1,820	e560	e250	e190	e155	5,920	2,580	2,270	483	130	76
12	925	1,630	e530	e245	e190	e155	5,780	3,140	2,170	448	140	93
13	887	1,450	e510	e235	e190	e155	5,630	2,800	2,130	429	140	107
14	828	1,310	e485	e230	e190	e153	5,140	2,630	2,300	381	132	84
15	787	1,220	e465	e225	e190	e150	4,650	2,760	3,420	344	126	75
16	770	1,220	e445	e220	e185	e150	4,180	2,830	4,850	456	120	74
17	749	1,200	e430	e215	e185	e150	3,720	2,660	4,870	421	116	75
18	710	1,130	e420	e210	e185	e150	3,290	2,420	4,390	378	126	87
19	696	1,130	e410	e205	e185	e145	2,990	2,200	3,690	390	168	112
20	730	1,170	e400	e205	e185	e145	3,050	2,100	2,880	387	187	107
21	777	1,160	e385	e205	e180	e145	2,800	2,100	2,270	436	205	98
22	754	1,130	e370	e200	e180	e145	2,480	1,900	1,850	356	200	97
23	775	e1,100	e355	e200	e180	e145	2,190	1,820	1,560	308	174	101
24	839	e1,060	e345	e200	e175	e145	1,940	1,890	1,220	279	149	103
25	1,000	e1,030	e340	e200	e175	e145	1,760	1,920	1,010	254	136	107
26	1,300	e1,100	e332	e195	e175	e150	1,690	5,790	842	228	128	107
27	1,400	e1,280	e330	e195	e175	e155	1,770	11,100	760	207	122	101
28	1,370	e1,200	e325	e195	e170	e165	1,900	12,500	690	195	121	96
29	1,330	e1,050	e320	e195	---	e180	1,920	10,900	630	184	116	95
30	3,160	979	e320	e195	---	e230	1,860	8,260	641	172	107	99
31	5,450	---	e315	e195	---	e550	---	6,380	---	169	102	---
TOTAL	37,910	62,429	15,881	7,250	5,202	5,298	135,310	106,220	76,393	15,347	4,404	2,770
MEAN	1,223	2,081	512	234	186	171	4,510	3,426	2,546	495	142	92.3
MAX	5,450	6,150	915	310	195	550	12,500	12,500	5,130	1,190	205	112
MIN	696	979	315	195	170	145	1,300	1,450	630	169	102	74
AC-FT	75,190	123,800	31,500	14,380	10,320	10,510	268,400	210,700	151,500	30,440	8,740	5,490
CFSM	0.73	1.24	0.30	0.14	0.11	0.10	2.68	2.04	1.52	0.29	0.08	0.05
IN.	0.84	1.38	0.35	0.16	0.12	0.12	3.00	2.35	1.69	0.34	0.10	0.06

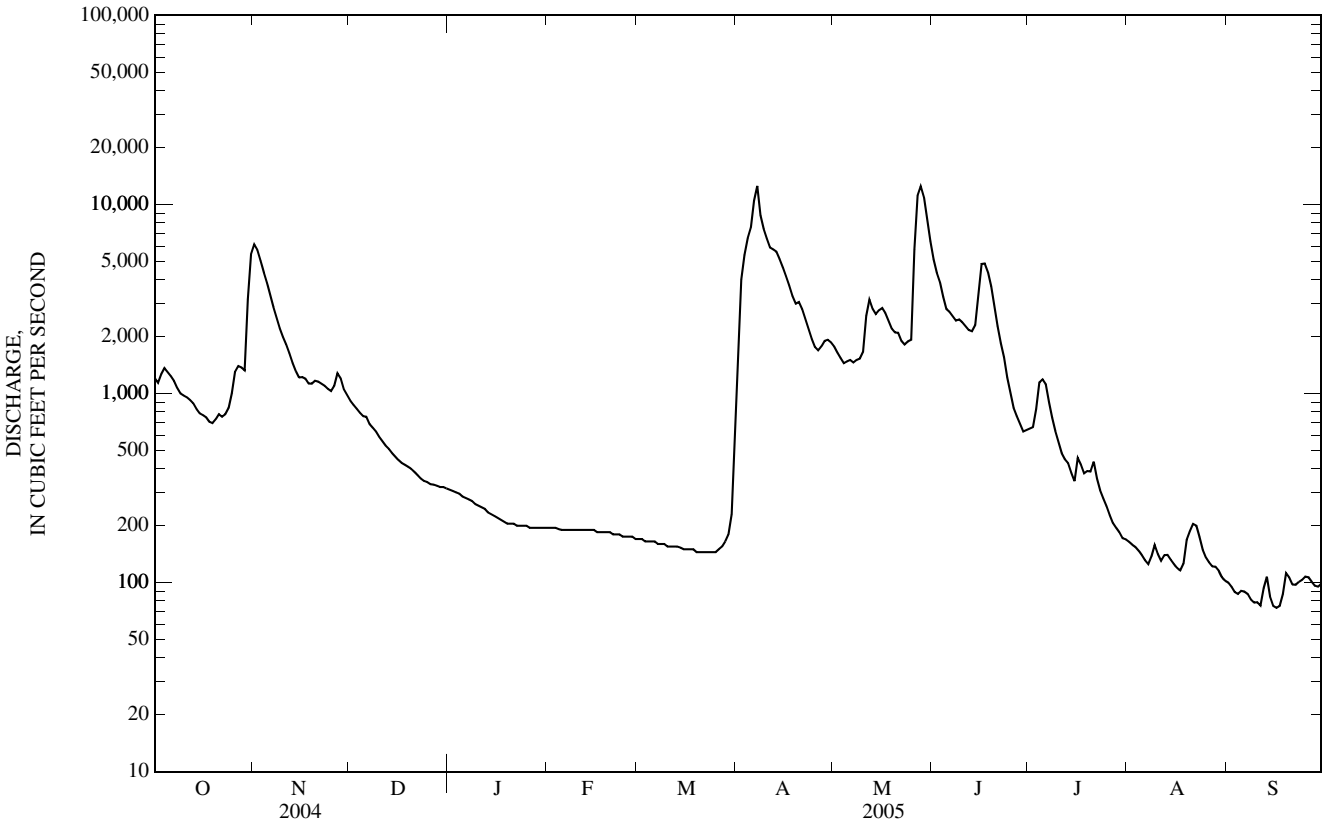
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 2005, BY WATER YEAR (WY)

MEAN	897	746	332	155	116	280	3,202	2,841	1,758	987	562	731
MAX	4,450	3,044	1,186	477	270	3,022	8,421	12,190	5,490	3,643	2,679	5,189
(WY)	(1996)	(1972)	(2002)	(1966)	(1969)	(1945)	(1966)	(1950)	(1944)	(1944)	(1988)	(1977)
MIN	43.4	60.8	52.6	43.5	42.2	50.2	292	173	182	75.4	34.3	29.2
(WY)	(1977)	(1977)	(1977)	(1931)	(1963)	(1940)	(1977)	(1977)	(1988)	(1988)	(1936)	(1976)

05131500 LITTLE FORK RIVER AT LITTLEFORK, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1909 - 2005	
ANNUAL TOTAL	435,687		474,414			
ANNUAL MEAN	1,190		1,300		1,064	
HIGHEST ANNUAL MEAN					1,912	1966
LOWEST ANNUAL MEAN					306	1931
HIGHEST DAILY MEAN	6,800	Jun 2	12,500	Apr 7,May28	25,000	Apr 18, 1916
LOWEST DAILY MEAN	115	Feb 13	74	Sep 16	21	Aug 26, 1936
ANNUAL SEVEN-DAY MINIMUM	115	Feb 13	83	Sep 5	22	Aug 21, 1936
MAXIMUM PEAK FLOW			a13,800	Apr 7	25,000	Apr 18, 1916
MAXIMUM PEAK STAGE			b19.19	Apr 6	c37.00	Apr 18, 1916
INSTANTANEOUS LOW FLOW			71	Sep 15	21	Aug 26, 1936
ANNUAL RUNOFF (AC-FT)	864,200		941,000		771,200	
ANNUAL RUNOFF (CFSM)	0.709		0.774		0.634	
ANNUAL RUNOFF (INCHES)	9.65		10.50		8.61	
10 PERCENT EXCEEDS	3,230		3,360		2,800	
50 PERCENT EXCEEDS	693		436		376	
90 PERCENT EXCEEDS	124		122		88	

a Gage height,16.89 ft.
b Backwater from ice.
c Also occurred May 11, 1950, site and datum then in use.
e Estimated.



05132000 BIG FORK RIVER AT BIG FALLS, MN

LOCATION.--Lat 48°11'45", long 93°48'25", in SW¼SE¼ sec.35, T.155 N., R.25 W., Koochiching County, Hydrologic Unit 09030006, on left bank at town of Big Falls, 700 ft downstream from falls, 0.3 mi downstream from bridge on U.S. Highway 71, and 4.8 mi upstream from Sturgeon River.

DRAINAGE AREA.--1,480 mi^2.

PERIOD OF RECORD.--August to November 1909, April to November 1910, April 1911 to September 1912 (gage heights and discharge measurements only), June 1928 to September 1979, October 1979 to September 1982 (annual maximum only), October 1982 to September 1993, October 1993 to September 1994 (annual maximum only) and October 1997 to current year.

REVISED RECORDS.--WSP 1308:1935 (M).

GAGE.--Water-stage recorder. Datum of gage is 1,144.71 ft above sea level (NGVD of 1929). Prior to June 10, 1911, nonrecording gage at railroad bridge about 0.4 mi upstream at different datum. June 10, 1911 to Sept. 30, 1912, and June 22, 1928 to Dec. 17, 1937, nonrecording gage at site 200 ft upstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Prior to 1971, a powerplant, located 0.3 mi upstream, caused some diurnal fluctuation at low flows.

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	1,260	5,340	e920	e390	e310	e295	e1,300	1,520	3,300	755	251	248
2	1,230	5,090	e880	e380	e310	e295	e1,850	1,480	2,770	759	241	250
3	1,200	4,240	e830	e380	e310	e290	e2,500	1,420	2,360	749	234	249
4	1,150	3,610	e800	e375	e310	e290	e3,300	1,360	2,060	729	230	251
5	1,070	3,130	e800	e370	e310	e290	e4,000	1,290	2,030	688	229	257
6	996	2,750	e810	e370	e305	e290	e6,000	1,220	2,220	646	234	261
7	934	2,460	e800	e365	e305	e290	6,260	1,180	2,460	607	222	257
8	895	2,230	e780	e365	e300	e290	5,730	1,160	2,460	557	217	256
9	881	2,030	e770	e360	e300	e285	4,770	1,160	2,400	507	214	260
10	855	1,900	e750	e355	e300	e285	4,220	1,190	2,250	467	214	279
11	833	1,790	e710	e350	e300	e285	3,850	1,290	2,060	439	214	287
12	804	1,650	e690	e350	e300	e285	3,690	1,360	1,910	419	214	308
13	769	1,540	e660	e345	e300	e285	3,540	1,370	1,750	418	216	299
14	751	1,450	e630	e345	e300	e282	3,310	1,390	1,840	457	224	299
15	738	1,390	e600	e340	e300	e280	3,090	1,540	2,380	503	223	310
16	734	1,340	e570	e340	e300	e280	2,880	1,670	2,900	504	225	311
17	726	1,320	e550	e335	e300	e280	2,650	1,630	2,790	501	242	311
18	720	1,300	e530	e335	e300	e275	2,490	1,500	2,480	486	272	311
19	716	1,270	e510	e330	e300	e275	2,400	1,400	2,060	440	264	320
20	696	1,250	e490	e330	e300	e275	2,360	1,360	1,740	413	263	326
21	682	1,230	e480	e325	e295	e270	2,250	1,340	1,790	376	258	326
22	674	1,190	e470	e325	e295	e270	2,120	1,340	1,910	349	256	326
23	721	1,190	e460	e320	e295	e270	2,000	1,400	1,800	327	257	324
24	787	938	e450	e320	e295	e270	1,870	1,550	1,530	308	255	323
25	904	e900	e440	e320	e295	e270	1,760	1,600	1,230	290	252	325
26	1,000	e890	e430	e320	e295	e270	1,710	3,470	1,000	272	248	324
27	1,030	e910	e420	e315	e295	e265	1,710	5,880	885	260	243	322
28	1,010	e920	e415	e315	e295	e265	1,690	6,790	800	255	245	324
29	1,020	e930	e410	e315	---	e265	1,650	5,900	731	256	247	329
30	2,010	e920	e400	e310	---	e295	1,570	4,830	709	256	250	330
31	4,110	---	e390	e310	---	e450	---	3,990	---	256	251	---
TOTAL	31,906	57,098	18,845	10,605	8,420	8,862	88,520	65,580	58,605	14,249	7,405	8,903
MEAN	1,029	1,903	608	342	301	286	2,951	2,115	1,954	460	239	297
MAX	4,110	5,340	920	390	310	450	6,260	6,790	3,300	759	272	330
MIN	674	890	390	310	295	265	1,300	1,160	709	255	214	248
AC-FT	63,290	113,300	37,380	21,040	16,700	17,580	175,600	130,100	116,200	28,260	14,690	17,660
CFSM	0.70	1.29	0.41	0.23	0.20	0.19	1.99	1.43	1.32	0.31	0.16	0.20
IN.	0.80	1.44	0.47	0.27	0.21	0.22	2.22	1.65	1.47	0.36	0.19	0.22

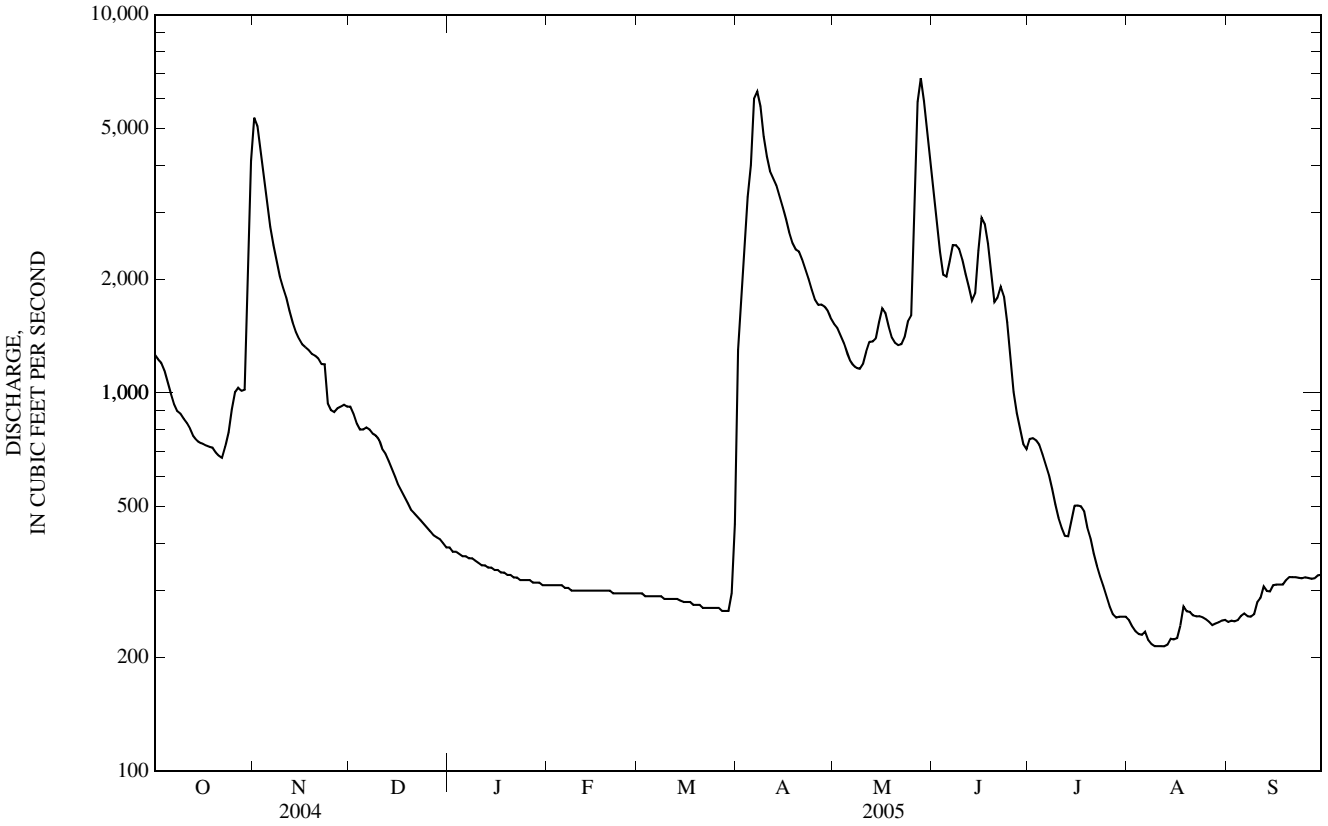
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 2005, BY WATER YEAR (WY)

MEAN	664	567	298	180	143	252	1,910	1,979	1,187	646	409	566
MAX	2,247	2,034	685	399	335	1,928	5,186	7,496	2,890	2,321	1,799	2,989
(WY)	(1970)	(1972)	(1970)	(1969)	(1969)	(1945)	(1966)	(1950)	(1974)	(1944)	(1978)	(1937)
MIN	38.3	44.5	31.6	22.2	22.9	32.9	175	138	180	46.0	26.7	22.4
(WY)	(1932)	(1935)	(1935)	(1935)	(1935)	(1940)	(1931)	(1931)	(1934)	(1931)	(1934)	(1934)

05132000 BIG FORK RIVER AT BIG FALLS, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1909 - 2005	
ANNUAL TOTAL	304,837		378,998			
ANNUAL MEAN	833		1,038		734	
HIGHEST ANNUAL MEAN					1,362	1950
LOWEST ANNUAL MEAN					92.0	1931
HIGHEST DAILY MEAN	5,340	Nov 1	6,790	May 28	14,800	May 9, 1950
LOWEST DAILY MEAN	92	Sep 4	214	Aug 9-12	14	Jan 10, 1940
ANNUAL SEVEN-DAY MINIMUM	95	Aug 29	216	Aug 7	18	Jan 22, 1935
MAXIMUM PEAK FLOW			a8,740	Apr 6	14,800	May 8, 1950
MAXIMUM PEAK STAGE			11.75	Apr 6	17.08	May 8, 1950
INSTANTANEOUS LOW FLOW			210	Aug 9	7.0	Aug 7, 1939
ANNUAL RUNOFF (AC-FT)	604,600		751,700		531,600	
ANNUAL RUNOFF (CFSM)	0.563		0.702		0.496	
ANNUAL RUNOFF (INCHES)	7.66		9.53		6.74	
10 PERCENT EXCEEDS	2,010		2,460		1,800	
50 PERCENT EXCEEDS	573		501		336	
90 PERCENT EXCEEDS	134		257		83	

a Release from storage behind upstream ice jam.
e Estimated.



05133500 RAINY RIVER AT MANITOU RAPIDS, MN
(International Gaging Station)

LOCATION.--Lat 48°38'04", long 93°54'47", in NW¼SE¼ sec. 36, T.160 N., R.26 W., Koochiching County, Hydrologic Unit 09030004, on left bank at Manitou Rapids, 4 mi west of Indus.

DRAINAGE AREA.--19,400 mi^2 (approximately).

PERIOD OF RECORD.--July 1928 to current year. Monthly discharge only for some periods, published in WSP 1308. October 1911 to October 1924 (gage heights only) at site near Birchdale in files of U.S. Army Corps of Engineers. Published as "near Birchdale" 1932-34.

GAGE.--Water-stage recorder. Datum of gage is 1,062.48 ft above sea level (NGVD of 1929). Prior to Nov. 10, 1934, nonrecording gage at site near Birchdale, 7 mi. downstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Diurnal fluctuation caused by power plants at International Falls. Some regulation at Rainy and Namakan Lakes affects low and medium flows.

COOPERATION.--This station is one of the international gaging stations maintained by the United States under agreement with Canada.

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	15,700	30,400	15,600	e10,700	e11,400	e11,600	e10,500	25,800	46,300	33,200	12,900	5,410
2	14,700	33,700	14,800	e10,500	e11,400	e11,500	e13,000	23,300	43,900	32,800	12,800	5,350
3	14,200	36,300	14,700	e10,500	e11,400	e11,200	15,300	19,700	42,100	34,100	12,900	5,120
4	14,200	35,400	14,400	e10,400	e11,500	e10,400	17,200	18,300	40,800	35,700	12,700	4,980
5	12,600	34,100	14,300	e10,500	e11,500	e10,300	20,500	17,700	40,200	35,300	12,500	4,940
6	11,200	30,900	e14,400	e10,700	e11,500	e10,300	25,100	17,900	40,600	34,500	11,400	4,990
7	11,300	29,100	e14,500	e11,000	e11,500	e10,100	32,400	18,000	41,100	32,700	10,300	5,050
8	11,300	27,800	e14,400	e11,300	e11,400	e10,000	34,900	17,900	41,400	31,100	9,190	5,100
9	11,000	25,700	e14,300	e11,300	e11,000	e10,000	33,000	18,300	40,900	28,900	8,600	5,120
10	10,600	24,500	e12,900	e11,300	e10,500	e9,900	29,400	20,600	40,300	27,600	8,010	5,110
11	10,800	24,000	e12,700	e11,300	e10,300	e9,600	27,800	21,200	39,600	26,800	7,790	5,060
12	11,300	23,400	e12,600	e11,300	e10,100	e9,400	30,400	23,500	39,300	24,300	7,650	5,180
13	11,400	21,800	e12,600	e11,500	e10,000	e9,300	32,100	24,100	38,800	23,000	7,710	5,840
14	11,400	20,700	e12,600	e11,700	e10,100	e9,300	32,200	24,200	39,800	21,800	7,600	6,670
15	10,700	20,000	e12,800	e11,900	e10,100	e9,200	32,000	24,800	41,400	18,100	7,480	6,890
16	10,200	18,600	e12,900	e12,000	e10,100	e9,200	31,800	25,100	42,800	16,600	6,510	6,840
17	10,100	18,000	e12,700	e12,100	e10,200	e9,200	31,200	25,200	43,600	16,200	5,930	6,780
18	10,100	17,800	e12,900	e12,100	e10,300	e9,100	30,300	24,900	43,000	15,400	6,650	6,680
19	9,320	17,600	e12,600	e11,600	e10,500	e8,900	29,400	24,700	41,700	15,300	8,650	6,660
20	8,860	17,600	e12,600	e10,800	e10,700	e8,700	29,400	26,200	43,800	14,600	9,470	6,250
21	8,820	17,600	e12,600	e10,800	e10,700	e8,500	29,800	26,900	41,200	14,400	9,540	6,000
22	8,800	17,400	e12,600	e11,400	e10,800	e8,600	29,700	27,000	39,600	14,700	9,640	5,450
23	9,220	17,300	e12,300	e11,600	e11,000	e8,600	29,300	27,100	38,300	15,300	9,440	5,150
24	9,900	16,900	e12,000	e11,600	e11,200	e8,700	28,900	27,300	37,100	15,400	7,720	4,960
25	10,400	15,900	e11,800	e11,600	e11,200	e8,700	28,500	30,000	35,900	15,300	6,710	4,890
26	11,000	15,300	e11,400	e11,600	e11,100	e8,700	28,300	39,500	34,900	15,200	6,410	4,830
27	12,800	16,100	e11,400	e11,500	e11,100	e8,700	28,200	47,700	34,400	14,800	6,110	4,810
28	13,400	16,700	e11,200	e11,500	e11,000	e8,600	27,900	53,900	33,900	13,600	5,700	4,740
29	13,500	16,600	e10,800	e11,500	---	e8,600	27,100	55,800	33,500	13,200	5,550	4,810
30	17,000	16,200	e10,800	e11,500	---	e8,500	26,500	53,500	33,300	13,000	5,510	4,740
31	25,800	---	e10,700	e11,400	---	e8,400	---	49,600	---	13,000	5,450	---
TOTAL	371,620	673,400	398,900	350,500	303,600	291,800	822,100	879,700	1,193,500	675,900	264,520	164,400
MEAN	11,990	22,450	12,870	11,310	10,840	9,413	27,400	28,380	39,780	21,800	8,533	5,480
MAX	25,800	36,300	15,600	12,100	11,500	11,600	34,900	55,800	46,300	35,700	12,900	6,890
MIN	8,800	15,300	10,700	10,400	10,000	8,400	10,500	17,700	33,300	13,000	5,450	4,740
AC-FT	737,100	1,336,000	791,200	695,200	602,200	578,800	1,631,000	1,745,000	2,367,000	1,341,000	524,700	326,100
CFSM	0.62	1.16	0.66	0.58	0.56	0.49	1.41	1.46	2.05	1.12	0.44	0.28
IN.	0.71	1.29	0.76	0.67	0.58	0.56	1.58	1.69	2.29	1.30	0.51	0.32

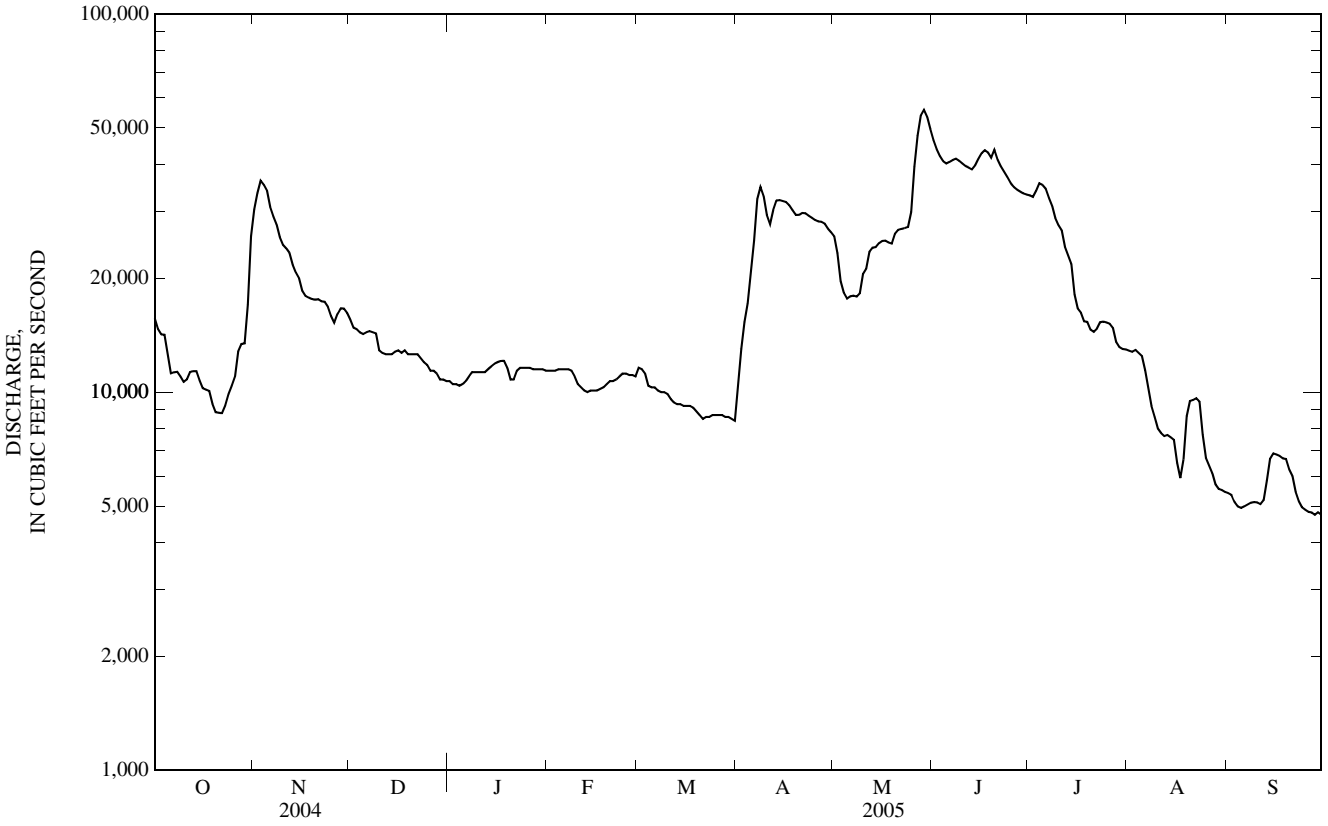
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2005, BY WATER YEAR (WY)

MEAN	11,710	11,500	10,210	9,186	8,705	8,910	15,660	19,690	20,490	16,820	11,470	10,990
MAX	42,410	37,280	27,790	18,430	17,240	16,640	38,100	52,880	49,480	47,970	33,700	30,620
(WY)	(1942)	(1972)	(1972)	(1972)	(1969)	(1945)	(1966)	(1950)	(1950)	(1950)	(1944)	(1988)
MIN	4,131	3,796	3,190	2,900	3,129	2,926	4,378	4,106	3,676	3,483	3,422	3,746
(WY)	(2004)	(1977)	(1930)	(1931)	(1931)	(1931)	(1977)	(1977)	(1980)	(1980)	(1980)	(1998)

05133500 RAINY RIVER AT MANITOU RAPIDS, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1929 - 2005	
ANNUAL TOTAL	5,248,220		6,389,940			
ANNUAL MEAN	14,340		17,510		12,960	
HIGHEST ANNUAL MEAN					23,260	1950
LOWEST ANNUAL MEAN					4,470	1931
HIGHEST DAILY MEAN	38,500	Jun 2	55,800	May 29	71,300	May 11, 1950
LOWEST DAILY MEAN	4,540	Aug 9	4,740	Sep 28, 30	928	Dec 26, 1929
ANNUAL SEVEN-DAY MINIMUM	4,670	Aug 17	4,830	Sep 24	1,500	Dec 24, 1929
MAXIMUM PEAK FLOW			56,200	May 29	71,600	May 12, 1950
MAXIMUM PEAK STAGE			17.87	May 29	21.04	May 12, 1950
ANNUAL RUNOFF (AC-FT)	10,410,000		12,670,000		9,388,000	
ANNUAL RUNOFF (CFSM)	0.739		0.902		0.668	
ANNUAL RUNOFF (INCHES)	10.06		12.25		9.08	
10 PERCENT EXCEEDS	26,600		34,900		25,700	
50 PERCENT EXCEEDS	12,600		12,600		10,300	
90 PERCENT EXCEEDS	5,320		6,700		5,000	

e Estimated.



05140520 LAKE OF THE WOODS AT WARROAD, MN
(International gaging station)

LOCATION.--Lat 48°54'15", long 95°18'57", in SW¼SE¼ sec.29, T. 163 N., R. 36 W., Roseau County, Hydrologic Unit 09030009, on left bank of Warroad River in Warroad, 300 ft downstream from Canadian National railroad bridge, 1,000 ft downstream from bridge on State Highway 11, and 4,000 ft upstream from mouth of Warroad River.

DRAINAGE AREA.--27,200 mi^2.

PERIOD OF RECORD.--April to September 1978, month-end elevations only. October 1978 to September 1985, daily-mean elevations; October 1985 to December 1994 and October 1997 to current year, daily-mean elevations (gage heights). Records collected prior to April 1978 are in reports of the Water Survey of Canada.

GAGE.--Water-stage recorder. Datum at gage is 1,000.00 ft above sea level (Lake of the Woods datum).

REMARKS.--Records good. Runoff conditions of the Warroad River can affect water levels at this station. Water level subject to fluctuation caused by changes in direction and velocity of wind and resulting seiches.

COOPERATION.--This station is one of the international gaging stations maintained by the United States under agreement with Canada.

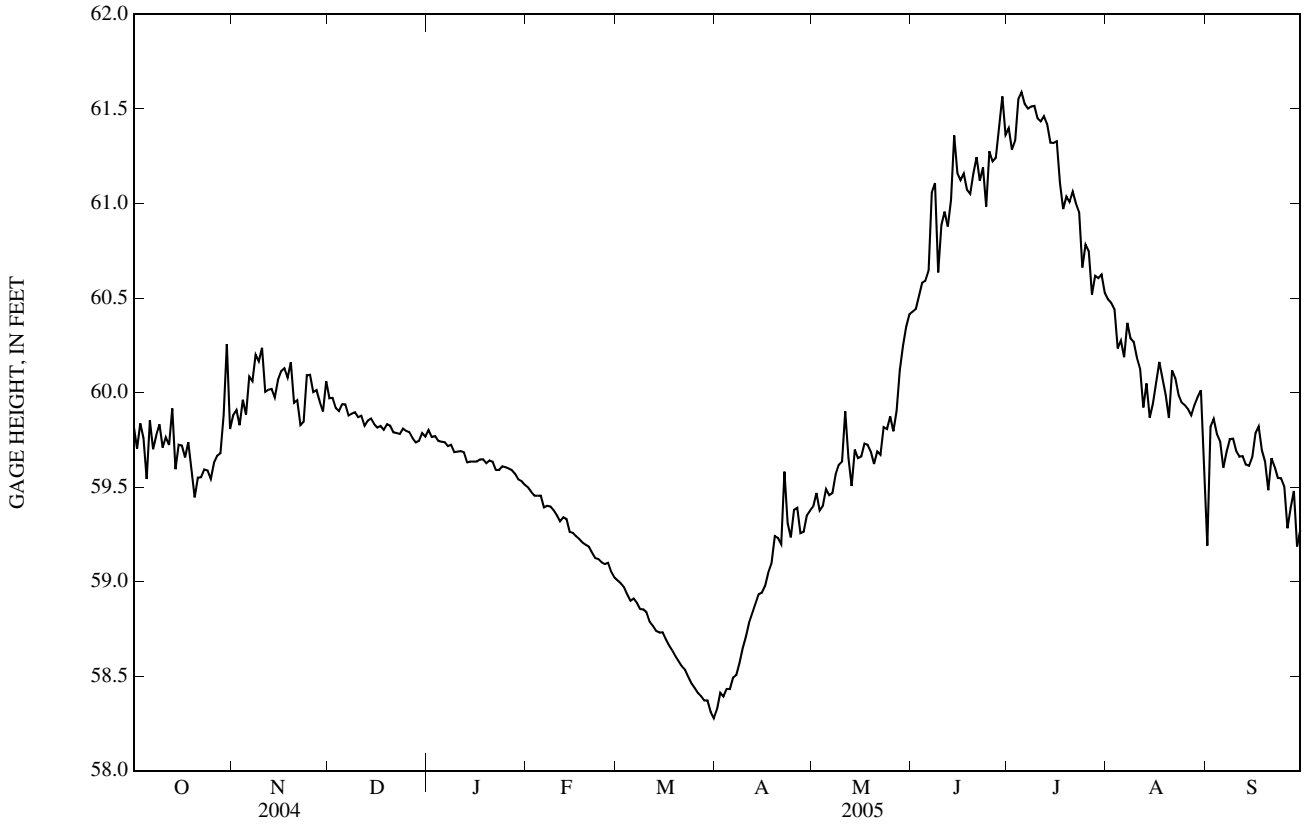
EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 62.55 ft, June 27, 2001; maximum daily, 62.31 ft, Jul. 9, 2002; minimum gage height recorded, 55.94 ft, Sept. 4, 1980; minimum daily recorded, 56.52 ft, Apr. 15, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 62.07 ft, June 23; maximum daily, 61.59 ft, July 5; minimum gage height, 58.24 ft, Mar. 31; minimum daily, 58.28 ft, Mar. 31.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59.82	59.88	59.97	59.80	59.50	59.01	58.33	59.40	60.43	61.40	60.49	59.19
2	59.70	59.91	59.97	59.77	59.48	58.99	58.41	59.47	60.44	61.28	60.48	59.82
3	59.84	59.83	59.92	59.77	59.45	58.97	58.39	59.38	60.51	61.33	60.44	59.86
4	59.76	59.96	59.90	59.74	59.45	58.93	58.43	59.40	60.58	61.55	60.23	59.78
5	59.54	59.88	59.94	59.74	59.45	58.90	58.43	59.49	60.59	61.59	60.27	59.74
6	59.85	60.08	59.94	59.74	59.39	58.91	58.49	59.46	60.64	61.53	60.19	59.60
7	59.70	60.06	59.88	59.72	59.40	58.89	58.50	59.47	61.06	61.50	60.37	59.69
8	59.77	60.20	59.89	59.72	59.40	58.85	58.57	59.57	61.11	61.51	60.29	59.75
9	59.83	60.17	59.90	59.68	59.38	58.85	58.65	59.62	60.63	61.52	60.27	59.76
10	59.71	60.24	59.87	59.69	59.35	58.84	58.71	59.63	60.89	61.45	60.18	59.69
11	59.76	60.00	59.88	59.69	59.32	58.79	58.78	59.90	60.96	61.43	60.13	59.66
12	59.72	60.01	59.82	59.68	59.34	58.77	58.83	59.65	60.88	61.46	59.92	59.66
13	59.92	60.02	59.85	59.63	59.33	58.74	58.88	59.51	61.02	61.42	60.05	59.62
14	59.59	59.97	59.86	59.63	59.26	58.73	58.93	59.70	61.36	61.32	59.87	59.61
15	59.72	60.07	59.83	59.63	59.26	58.73	58.94	59.65	61.16	61.32	59.94	59.66
16	59.72	60.11	59.81	59.64	59.24	58.70	58.98	59.66	61.12	61.33	60.05	59.78
17	59.66	60.13	59.82	59.65	59.23	58.66	59.05	59.73	61.16	61.11	60.16	59.82
18	59.74	60.08	59.80	59.65	59.21	58.64	59.09	59.72	61.07	60.97	60.08	59.69
19	59.60	60.16	59.83	59.63	59.19	58.61	59.24	59.69	61.05	61.04	59.99	59.63
20	59.45	59.95	59.82	59.64	59.18	58.58	59.23	59.62	61.16	61.01	59.87	59.48
21	59.55	59.96	59.79	59.63	59.15	58.55	59.20	59.69	61.24	61.06	60.12	59.65
22	59.55	59.83	59.79	59.59	59.12	58.53	59.58	59.67	61.12	61.00	60.08	59.61
23	59.59	59.85	59.78	59.59	59.12	58.50	59.31	59.82	61.19	60.95	59.99	59.55
24	59.59	60.09	59.81	59.61	59.10	58.46	59.23	59.81	60.98	60.66	59.95	59.55
25	59.54	60.09	59.80	59.60	59.09	58.44	59.38	59.87	61.28	60.78	59.93	59.50
26	59.63	60.00	59.79	59.60	59.10	58.41	59.39	59.80	61.22	60.75	59.91	59.28
27	59.67	60.01	59.76	59.59	59.05	58.39	59.26	59.90	61.24	60.52	59.88	59.39
28	59.68	59.95	59.74	59.57	59.02	58.37	59.26	60.12	61.42	60.62	59.93	59.48
29	59.88	59.90	59.74	59.54	---	58.37	59.35	60.25	61.57	60.60	59.98	59.19
30	60.26	60.06	59.79	59.53	---	58.31	59.38	60.35	61.36	60.62	60.01	59.27
31	59.81	---	59.77	59.51	---	58.28	---	60.41	---	60.53	59.68	---
MEAN	59.71	60.02	59.84	59.65	59.27	58.67	58.94	59.72	61.01	61.13	60.09	59.60
MAX	60.26	60.24	59.97	59.80	59.50	59.01	59.58	60.41	61.57	61.59	60.49	59.86
MIN	59.45	59.83	59.74	59.51	59.02	58.28	58.33	59.38	60.43	60.52	59.68	59.19

05140520 LAKE OF THE WOODS AT WARROAD, MN—Continued



05140521 LAKE OF THE WOODS AT SPRINGSTEEL ISLAND NEAR WARROAD, MN

LOCATION.--Lat 48°56'45", long 95°18'24", in SW¼SW¼ sec. 9, T. 163 N., R. 36 W., Roseau County, Hydrologic Unit 09030009, at Springsteel Resort on Springsteel Island, 2.8 mi north of Warroad.

DRAINAGE AREA.--27,200 mi^2.

PERIOD OF RECORD.--June 1985 to current year.

GAGE.--Water-stage recorder. Datum at gage is 1,000.00 ft above sea level (Lake of the Woods datum).

REMARKS.--Records good, except Jan. 14 to Apr. 25, June 9-20, which are fair. Water level subject to fluctuation caused by changes in direction and velocity of wind and resulting seiches.

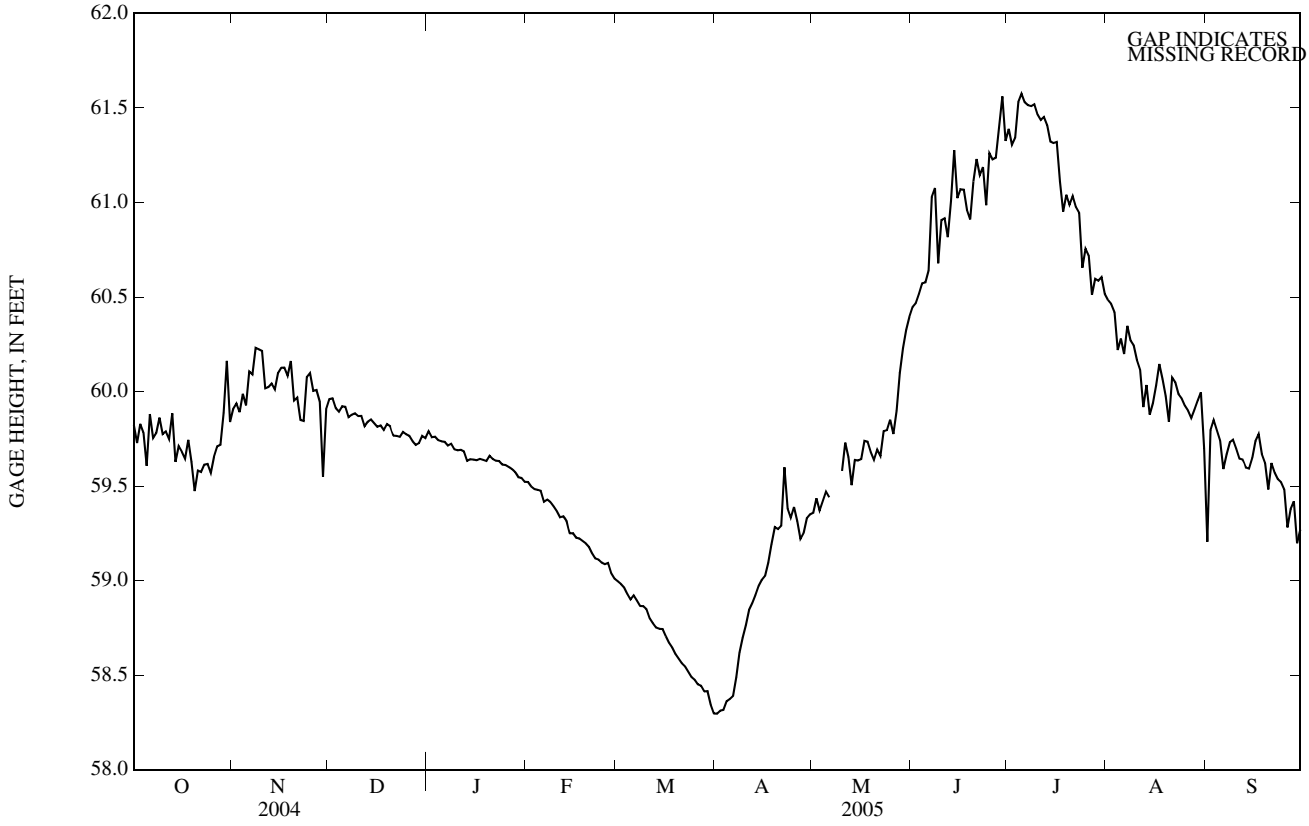
EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 62.53 ft, July 5, 2002; maximum daily, 62.25 ft, July 9, 2002; minimum gage height, 57.22 ft, Nov. 22, 1990; minimum daily, 57.43 ft, Mar. 18, 19, 20, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 61.91 ft, June 29; maximum daily, 61.58 ft, July 5; minimum gage height, 58.25 ft, Apr. 1; minimum daily, 58.30 ft., Mar. 31, Apr. 1.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59.82	59.91	59.96	59.79	59.52	59.00	58.30	59.36	60.45	61.39	60.48	59.20
2	59.73	59.94	59.96	59.76	59.50	58.98	58.31	59.44	60.47	61.30	60.46	59.80
3	59.83	59.89	59.91	59.76	59.48	58.96	58.32	59.37	60.52	61.34	60.42	59.85
4	59.78	59.99	59.89	59.74	59.48	58.93	58.36	59.42	60.57	61.53	60.22	59.79
5	59.61	59.93	59.92	59.74	59.48	58.90	58.37	59.47	60.58	61.58	60.28	59.74
6	59.88	60.11	59.92	59.73	59.42	58.92	58.39	59.44	60.64	61.53	60.20	59.59
7	59.75	60.09	59.86	59.71	59.43	58.89	58.49	---	61.03	61.51	60.35	59.67
8	59.78	60.23	59.88	59.72	59.41	58.87	58.62	---	61.08	61.51	60.27	59.73
9	59.86	60.22	59.88	59.69	59.39	58.86	58.70	---	60.68	61.52	60.24	59.75
10	59.77	60.21	59.87	59.69	59.37	58.85	58.76	59.58	60.91	61.46	60.17	59.70
11	59.79	60.02	59.87	59.69	59.33	58.80	58.84	59.73	60.92	61.44	60.12	59.64
12	59.75	60.02	59.82	59.68	59.34	58.77	58.88	59.65	60.82	61.45	59.92	59.64
13	59.88	60.04	59.84	59.63	59.32	58.75	58.92	59.50	61.01	61.41	60.03	59.60
14	59.63	60.01	59.85	59.64	59.25	58.74	58.97	59.64	61.28	61.32	59.88	59.59
15	59.71	60.10	59.83	59.64	59.25	58.74	59.00	59.63	61.02	61.31	59.94	59.65
16	59.68	60.13	59.81	59.64	59.23	58.71	59.02	59.64	61.07	61.32	60.03	59.74
17	59.65	60.13	59.82	59.64	59.22	58.67	59.10	59.74	61.07	61.11	60.15	59.77
18	59.74	60.08	59.80	59.64	59.21	58.65	59.19	59.73	60.96	60.95	60.07	59.67
19	59.63	60.16	59.83	59.63	59.20	58.61	59.28	59.68	60.91	61.04	59.97	59.62
20	59.47	59.95	59.82	59.66	59.18	58.59	59.27	59.64	61.11	60.99	59.84	59.48
21	59.58	59.97	59.77	59.64	59.14	58.56	59.29	59.69	61.23	61.03	60.07	59.62
22	59.57	59.85	59.77	59.63	59.12	58.55	59.60	59.66	61.14	60.98	60.05	59.57
23	59.61	59.84	59.76	59.63	59.11	58.52	59.38	59.79	61.19	60.95	59.99	59.54
24	59.62	60.08	59.79	59.61	59.09	58.49	59.33	59.80	60.99	60.65	59.96	59.52
25	59.57	60.10	59.77	59.61	59.09	58.48	59.39	59.85	61.26	60.75	59.93	59.48
26	59.66	60.00	59.77	59.60	59.09	58.45	59.31	59.77	61.23	60.72	59.90	59.28
27	59.71	60.01	59.74	59.59	59.04	58.44	59.22	59.90	61.24	60.51	59.86	59.38
28	59.72	59.95	59.72	59.57	59.01	58.41	59.25	60.10	61.40	60.60	59.90	59.42
29	59.89	59.55	59.73	59.55	---	58.42	59.33	60.23	61.56	60.59	59.95	59.20
30	60.16	59.91	59.77	59.54	---	58.34	59.35	60.33	61.33	60.60	60.00	59.27
31	59.84	---	59.75	59.52	---	58.30	---	60.40	---	60.52	59.70	---
MEAN	59.73	60.01	59.83	59.66	59.27	58.68	58.95	---	60.99	61.13	60.08	59.58
MAX	60.16	60.23	59.96	59.79	59.52	59.00	59.60	---	61.56	61.58	60.48	59.85
MIN	59.47	59.55	59.72	59.52	59.01	58.30	58.30	---	60.45	60.51	59.70	59.20

05140521 LAKE OF THE WOODS AT SPRINGSTEEL ISLAND NEAR WARROAD, MN—Continued



05200510 MISSISSIPPI RIVER NEAR BEMIDJI, MN

LOCATION.--Lat 47°29'00", long 94°43'40", in SE¼SW¼ sec. 3, T.146 N., R.32 W., Beltrami County, Hydrologic Unit 07010101, on right bank 100 ft upstream of County Highway 12, 400 ft downstream from Stump Lake dam, and 3.5 mi east of Bemidji .

DRAINAGE AREA.--610 mi^2 (approximately).

PERIOD OF RECORD.--September 1987 to September 2002 (no winter records). December 2003 to current year (some winter record available upon request).

GAGE.--Water-stage recorder. Elevation of gage is 1,315 ft above sea level (from topographic map).

REMARKS.--Records good. Flow regulated by Stump Lake Dam upstream from 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	408	362	235	---	---	---	377	364	515	356	123	90
2	405	412	252	---	---	---	377	357	566	301	126	88
3	403	416	---	---	---	---	369	354	704	291	91	84
4	400	470	---	---	---	---	380	348	772	292	82	82
5	407	555	---	---	---	---	412	346	795	291	86	83
6	409	590	---	---	---	---	490	346	998	290	81	88
7	413	594	---	---	---	---	544	345	1,070	228	77	86
8	418	662	---	---	---	---	537	342	1,010	129	78	86
9	411	685	---	---	---	---	542	353	1,060	126	78	88
10	403	727	---	---	---	---	544	361	901	123	79	92
11	399	766	---	---	---	---	660	373	874	197	77	92
12	399	789	---	---	---	---	728	372	908	226	76	125
13	400	788	---	---	---	---	724	364	800	292	74	154
14	401	770	---	---	---	---	665	362	778	330	74	243
15	395	757	---	---	---	---	634	364	777	325	74	285
16	392	754	---	---	---	---	641	368	776	323	73	232
17	378	748	---	---	---	---	649	363	741	320	74	155
18	350	723	---	---	---	---	592	365	729	204	78	154
19	321	654	---	---	---	---	521	367	728	140	87	149
20	321	535	---	---	---	---	534	273	735	140	88	112
21	294	540	---	---	---	---	528	209	730	129	85	110
22	281	528	---	---	---	---	514	209	589	121	85	110
23	292	543	---	---	---	---	522	147	463	119	85	146
24	293	554	---	---	---	---	519	108	457	116	84	e153
25	282	526	---	---	---	---	502	128	454	120	85	154
26	272	490	---	---	---	---	509	227	454	127	92	156
27	269	466	---	---	---	---	472	268	454	126	89	151
28	271	462	---	---	---	---	386	273	451	126	88	148
29	279	402	---	---	---	---	353	276	448	126	88	144
30	296	284	---	---	---	330	361	288	451	124	87	144
31	301	---	---	---	---	376	---	347	---	123	87	---
TOTAL	10,963	17,552	---	---	---	---	15,586	9,567	21,188	6,281	2,631	3,984
MEAN	354	585	---	---	---	---	520	309	706	203	84.9	133
MAX	418	789	---	---	---	---	728	373	1,070	356	126	285
MIN	269	284	---	---	---	---	353	108	448	116	73	82
AC-FT	21,750	34,810	---	---	---	---	30,910	18,980	42,030	12,460	5,220	7,900
CFSM	0.58	0.96	---	---	---	---	0.85	0.51	1.16	0.33	0.14	0.22
IN.	0.67	1.07	---	---	---	---	0.95	0.58	1.29	0.38	0.16	0.24

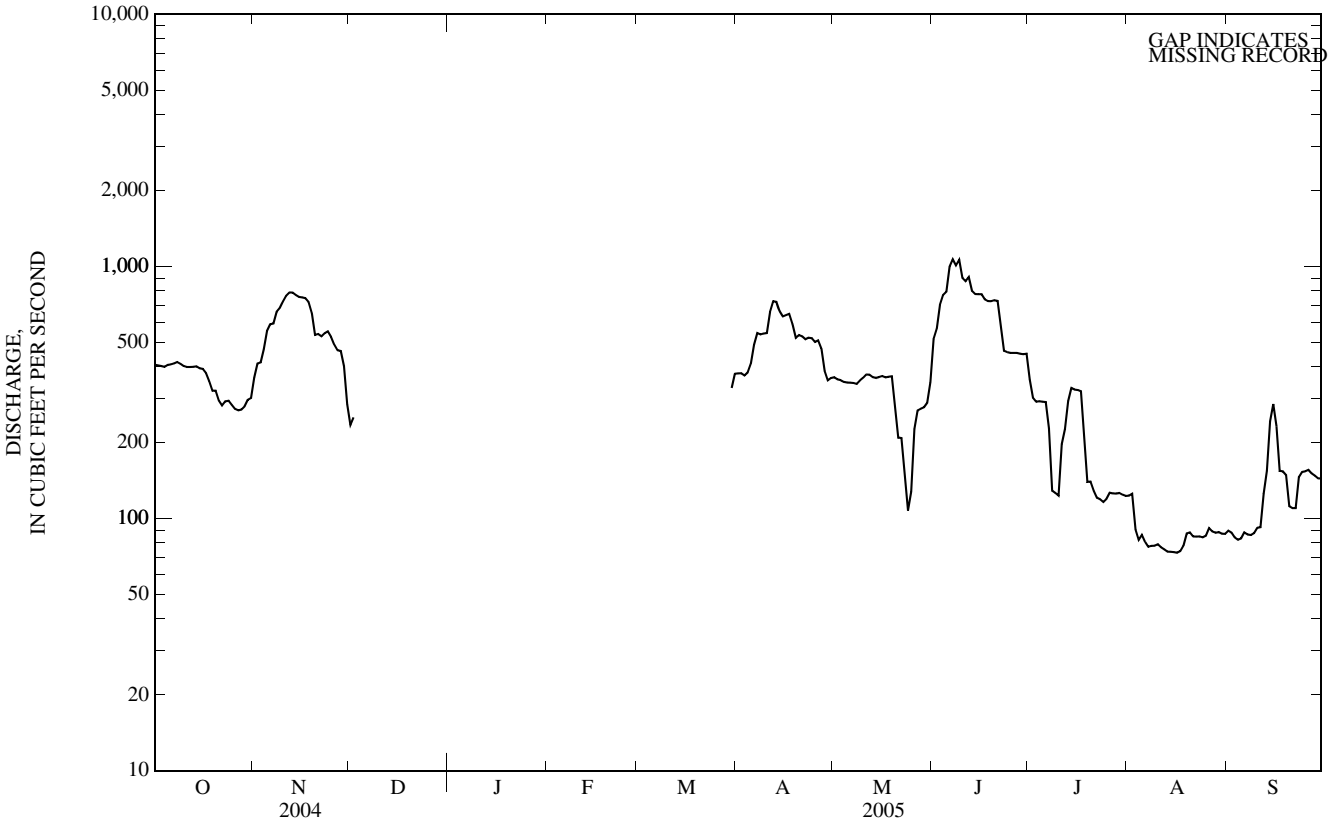
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2005, BY WATER YEAR (WY)

MEAN	244	492	330	---	166	210	434	443	340	325	204	250
MAX	471	790	406	---	166	247	889	858	866	912	477	837
(WY)	(2000)	(2001)	(2001)	---	(2005)	(1998)	(1997)	(2001)	(2001)	(1997)	(1999)	(1999)
MIN	75.5	322	254	---	166	161	148	181	104	62.2	61.9	62.3
(WY)	(1991)	(2000)	(2000)	---	(2005)	(2004)	(1992)	(1992)	(1988)	(1988)	(1989)	(1990)

05200510 MISSISSIPPI RIVER NEAR BEMIDJI, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1987 - 2005	
HIGHEST DAILY MEAN	789	Nov 12	1,070	Jun 7	1,320	Jul 14, 1997
LOWEST DAILY MEAN	57	Aug 24	a73	Aug 16	a22	Jul 12, 1988
ANNUAL SEVEN-DAY MINIMUM	63	Aug 24	75	Aug 11	24	Jul 7, 1988
MAXIMUM PEAK FLOW			1,210	Jun 6	1,820	Jul 11, 1997
MAXIMUM PEAK STAGE			5.21	Jun 6	5.98	Jul 11, 1997
INSTANTANEOUS LOW FLOW			a72	Aug 15	a16	Sep 26, 1988

a Minimum recorded.
e Estimated.



05211000 MISSISSIPPI RIVER AT GRAND RAPIDS, MN

LOCATION.--Lat 47°13'56", long 93°31'48", in SW¼NW¼ sec. 27, T.55 N., R.25 W., Itasca County, Hydrologic Unit 07010103, on left bank, 650 ft downstream from Blandin Dam, 150 ft upstream from bridge on U.S. Highway 169, 2.5 mi upstream from Prairie River, and at mile 1,182 upstream from Ohio River.

DRAINAGE AREA.--3,370 mi^2 (approximately).

PERIOD OF RECORD.--October 1883 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,242.03 ft above sea level (NGVD of 1929). See WSP 1914 for history of changes prior to Jan. 17, 1951.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow regulated by Winnibigoshish Lake, Leech Lake, Pokegama Lake, Blandin Paper Mill (up to 16 ft^3/s diverted for paper production), and occasionally at low flow by power plant at Blandin Dam. Backwater from Prairie River occurs at times in most years.

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	1,870	2,180	2,170	e1,980	e1,810	1,770	e1,240	1,720	2,170	e2,210	1,760	607
2	2,060	2,450	2,150	e1,980	e1,800	1,710	e1,260	1,560	2,240	e2,230	1,760	593
3	2,060	2,290	2,040	e1,980	e1,800	1,710	e1,270	1,180	2,240	e2,250	1,790	571
4	1,990	2,380	1,880	e1,980	e1,790	1,760	e1,320	1,230	2,290	e2,280	1,820	579
5	1,910	2,340	1,860	e1,980	e1,790	1,690	e1,330	974	2,300	2,300	1,600	619
6	1,980	2,320	1,690	e1,970	e1,770	1,680	e1,380	659	2,250	2,330	1,550	615
7	2,020	2,350	1,640	e1,970	e1,760	1,700	1,970	719	2,220	2,290	1,510	558
8	2,060	2,340	1,640	e1,970	e1,730	1,580	2,320	653	2,210	2,250	1,430	609
9	2,050	2,300	1,600	e1,980	e1,700	1,660	2,560	728	e2,200	2,340	1,310	547
10	2,010	2,280	1,660	e1,990	e1,740	1,580	e2,600	741	e2,170	2,370	1,340	595
11	1,990	2,290	1,770	e2,010	e1,740	1,640	e2,600	651	e2,160	2,320	1,120	611
12	2,060	2,250	1,860	e2,100	e1,740	1,650	e2,600	671	e2,160	2,290	1,000	592
13	2,130	2,270	e1,860	e2,060	e1,740	1,640	e2,580	706	e2,170	2,270	837	764
14	2,220	2,260	e1,870	e2,000	e1,730	1,630	2,530	755	e2,070	2,260	891	1,040
15	2,320	2,230	e1,870	e1,990	e1,700	1,640	2,500	721	e1,750	2,280	757	968
16	2,260	2,230	e1,860	e1,970	e1,650	1,610	2,530	709	e1,500	2,000	684	795
17	2,240	2,180	e1,850	e1,940	e1,650	1,590	2,510	862	e1,900	2,250	564	670
18	2,140	2,220	e1,850	e1,940	e1,660	1,610	2,490	936	e2,060	2,320	628	686
19	1,960	2,220	e1,840	e1,940	e1,670	1,580	2,390	966	e2,080	2,310	705	701
20	2,070	2,160	e1,830	e1,950	e1,690	1,570	2,260	1,010	e2,130	2,170	678	685
21	2,020	2,170	e1,830	e1,940	e1,700	1,530	2,220	994	2,230	2,090	572	647
22	2,090	2,230	e1,830	e1,920	e1,710	1,490	2,290	985	2,190	2,000	674	613
23	2,140	2,250	e1,830	e1,910	e1,710	1,510	2,270	1,030	2,190	2,040	658	610
24	2,170	2,200	e1,830	e1,900	e1,710	1,530	2,300	1,050	2,280	2,040	620	615
25	2,080	2,140	e1,830	e1,900	e1,710	1,550	2,310	1,060	2,290	2,050	621	619
26	2,060	2,120	e1,830	e1,880	e1,710	1,570	2,090	1,430	e2,300	2,050	704	528
27	2,070	2,170	e1,830	e1,870	e1,700	1,630	2,020	e1,600	e2,290	1,990	715	549
28	2,040	2,230	e1,830	e1,860	1,690	1,690	2,040	e1,620	e2,170	1,990	667	635
29	2,140	2,230	e1,820	e1,850	---	1,720	1,880	e1,600	e2,190	2,040	649	625
30	2,240	2,210	e1,900	e1,840	---	1,760	1,710	e1,680	e2,180	1,930	647	585
31	2,210	---	e1,990	e1,830	---	1,440	---	1,880	---	1,820	602	---
TOTAL	64,660	67,490	57,140	60,380	48,300	50,420	63,370	33,080	64,580	67,360	30,863	19,431
MEAN	2,086	2,250	1,843	1,948	1,725	1,626	2,112	1,067	2,153	2,173	996	648
MAX	2,320	2,450	2,170	2,100	1,810	1,770	2,600	1,880	2,300	2,370	1,820	1,040
MIN	1,870	2,120	1,600	1,830	1,650	1,440	1,240	651	1,500	1,820	564	528
AC-FT	128,300	133,900	113,300	119,800	95,800	100,000	125,700	65,610	128,100	133,600	61,220	38,540
CFSM	0.62	0.67	0.55	0.58	0.51	0.48	0.63	0.32	0.64	0.64	0.30	0.19
IN.	0.71	0.74	0.63	0.67	0.53	0.56	0.70	0.37	0.71	0.74	0.34	0.21

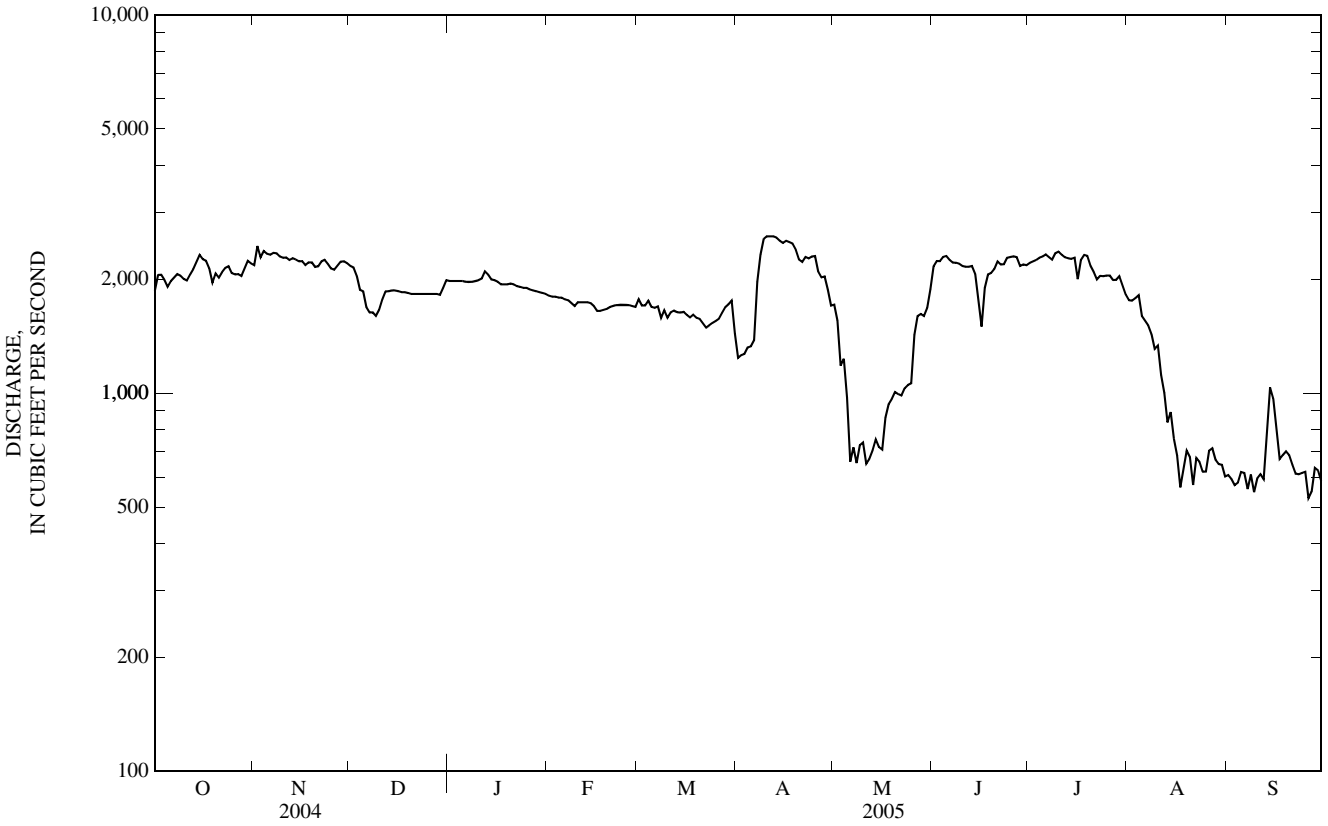
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1884 - 2005, BY WATER YEAR (WY)

MEAN	1,452	1,359	1,160	1,145	1,126	1,070	1,044	1,150	1,243	1,369	1,332	1,378
MAX	3,544	3,259	2,608	2,410	2,729	2,762	3,622	3,668	3,271	3,363	4,505	4,438
(WY)	(1902)	(1903)	(2000)	(1952)	(1945)	(1945)	(1901)	(1901)	(1962)	(1962)	(1905)	(1905)
MIN	103	122	150	165	155	129	106	32.5	185	125	88.3	89.2
(WY)	(1937)	(1937)	(1937)	(1937)	(1934)	(1937)	(1937)	(1949)	(1936)	(1961)	(1934)	(1934)

05211000 MISSISSIPPI RIVER AT GRAND RAPIDS, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1884 - 2005	
ANNUAL TOTAL	391,979		627,074			
ANNUAL MEAN	1,071		1,718		a1,244	
HIGHEST ANNUAL MEAN					2,429	1906
LOWEST ANNUAL MEAN					193	1934
HIGHEST DAILY MEAN	2,450	Nov 2	2,600	Apr 10-12	8,900	Sep 29, 1914
LOWEST DAILY MEAN	216	May 8	528	Sep 26	b0.00	Oct 2, 1948
ANNUAL SEVEN-DAY MINIMUM	267	Aug 29	585	Sep 3	24	May 9, 1949
MAXIMUM PEAK FLOW			2,830	Apr 12	c12,500	Sep 3, 1948
MAXIMUM PEAK STAGE			9.62	Apr 12	d15.20	Sep 3, 1948
INSTANTANEOUS LOW FLOW			f305	Sep 7	b0.00	Sep 3, 1948
ANNUAL RUNOFF (AC-FT)	777,500		1,244,000		901,600	
ANNUAL RUNOFF (CFSM)	0.318		0.510		0.369	
ANNUAL RUNOFF (INCHES)	4.33		6.92		5.02	
10 PERCENT EXCEEDS	2,150		2,290		2,350	
50 PERCENT EXCEEDS	795		1,860		1,150	
90 PERCENT EXCEEDS	370		671		313	

a Median of annual mean discharges is 1,230 ft^3/s.
b Many days, several years.
c From rating curve extended above 4,500 ft^3/s; result of dam failure.
d From floodmark; result of dam failure.
e Estimated.
f Result of regulation.



05212700 PRAIRIE RIVER NEAR TACONITE, MN

LOCATION.--Lat 47°23'20", long 93°22'50", in NW¼SW¼ sec. 27, T.57 N., R.24 W., Itasca County, Hydrologic Unit 07010103, on left bank 125 ft upstream from bridge on County Highway 7, 1.5 mi downstream from outlet of Lawrence Lake and 5 mi north of Taconite.

DRAINAGE AREA.--371 mi^2 (revised).

PERIOD OF RECORD.--April 1967 to September 1983, February 2001 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,294.81 ft above sea level (NGVD of 1929). Prior to Aug. 31, 1967, nonrecording gage at site 125 ft downstream (same datum).

REMARKS.--Records good except those for estimated daily discharges, which are poor.

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	337	254	138	e117	e124	e95	364	324	1,120	225	56	30
2	333	273	137	e116	e123	e96	467	303	1,090	210	54	29
3	328	289	137	e114	e120	e98	582	282	1,020	203	53	28
4	325	303	129	e112	e118	e99	718	262	959	196	51	28
5	319	307	129	e110	e117	e100	885	244	920	186	47	27
6	313	310	125	e109	e114	e101	1,080	230	863	176	44	29
7	304	309	126	e108	e112	e100	1,260	212	799	165	42	29
8	296	300	123	e109	e110	e99	1,340	203	744	156	41	28
9	284	291	123	e110	e110	e99	1,330	201	703	148	43	30
10	269	285	123	e110	e110	e98	1,280	207	657	137	42	32
11	256	270	120	e110	e110	e96	1,230	204	615	128	41	30
12	242	258	124	e109	e110	e95	1,160	194	574	126	40	35
13	233	244	e125	e108	e109	e94	1,090	196	538	118	39	43
14	213	229	e124	e106	e107	e94	1,030	204	523	111	38	40
15	202	215	e122	e104	e106	e93	983	208	527	106	35	40
16	194	203	e120	e103	e104	e93	944	207	520	100	34	41
17	181	195	e117	e103	e102	e92	902	209	509	94	34	41
18	169	189	e114	e105	e100	e92	859	216	497	95	34	43
19	159	182	e113	e107	e98	e92	818	239	481	92	34	45
20	154	181	e111	e108	e97	e91	765	246	474	92	34	45
21	147	176	e110	e109	e96	e89	714	249	453	89	33	45
22	144	170	e108	e111	e96	e85	670	266	419	86	32	47
23	147	169	e107	e112	e96	e81	611	281	387	82	31	43
24	151	164	e106	e112	e96	e77	559	283	359	79	31	44
25	152	159	e108	e112	e96	e81	513	324	325	75	31	47
26	158	154	e112	e112	e96	e78	474	579	291	73	33	44
27	172	155	e115	e113	e95	69	436	722	266	67	32	46
28	186	152	e117	e115	e95	72	401	809	247	65	32	47
29	204	147	e118	e120	---	86	371	904	224	62	32	43
30	226	142	e120	e123	---	144	346	1,010	225	58	31	42
31	240	---	e118	e124	---	240	---	1,100	---	57	30	---
TOTAL	7,038	6,675	3,719	3,441	2,967	3,019	24,182	11,118	17,329	3,657	1,184	1,141
MEAN	227	222	120	111	106	97.4	806	359	578	118	38.2	38.0
MAX	337	310	138	124	124	240	1,340	1,100	1,120	225	56	47
MIN	144	142	106	103	95	69	346	194	224	57	30	27
AC-FT	13,960	13,240	7,380	6,830	5,890	5,990	47,960	22,050	34,370	7,250	2,350	2,260
CFSM	0.61	0.60	0.32	0.30	0.29	0.26	2.17	0.97	1.56	0.32	0.10	0.10
IN.	0.71	0.67	0.37	0.35	0.30	0.30	2.42	1.11	1.74	0.37	0.12	0.11

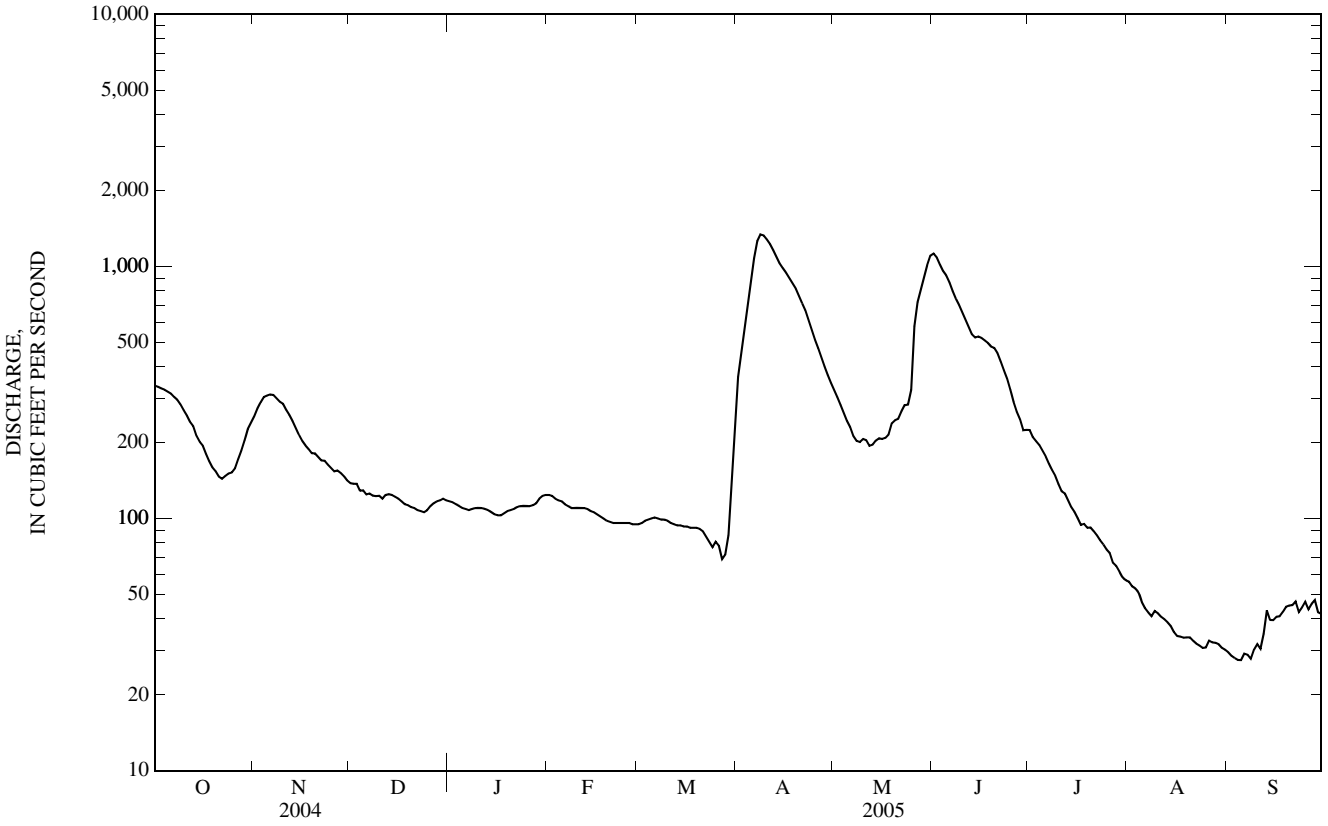
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2005, BY WATER YEAR (WY)

MEAN	190	193	109	76.0	71.9	92.0	595	503	365	227	108	125
MAX	586	605	222	111	106	170	1,329	1,094	866	618	295	482
(WY)	(1974)	(1972)	(1978)	(2005)	(2005)	(1983)	(1969)	(1975)	(1974)	(1975)	(1978)	(1977)
MIN	11.4	14.0	15.5	24.1	37.0	60.1	86.9	57.0	69.7	61.3	24.3	15.4
(WY)	(1977)	(1977)	(1977)	(1977)	(1968)	(1977)	(1977)	(1977)	(1980)	(1980)	(1976)	(1976)

05212700 PRAIRIE RIVER NEAR TACONITE, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1967 - 2005	
ANNUAL TOTAL	71,205		85,470			
ANNUAL MEAN	195		234		218	
HIGHEST ANNUAL MEAN					327	1974
LOWEST ANNUAL MEAN					89.1	1977
HIGHEST DAILY MEAN	752	Jun 8	1,340	Apr 8	3,240	Apr 17, 1969
LOWEST DAILY MEAN	34	Aug 29	27	Sep 5	8.0	Oct 5, 1970
ANNUAL SEVEN-DAY MINIMUM	35	Aug 24	28	Sep 2	11	Oct 17, 1976
MAXIMUM PEAK FLOW			1,350	Apr 8	3,260	Apr 17, 1969
MAXIMUM PEAK STAGE			8.93	Apr 8	11.81	Apr 17, 1969
INSTANTANEOUS LOW FLOW			26	Sep 5	7.0	Oct 5, 1970
ANNUAL RUNOFF (AC-FT)	141,200		169,500		158,200	
ANNUAL RUNOFF (CFSM)	0.524		0.631		0.588	
ANNUAL RUNOFF (INCHES)	7.14		8.57		8.00	
10 PERCENT EXCEEDS	434		594		507	
50 PERCENT EXCEEDS	140		123		112	
90 PERCENT EXCEEDS	57		41		49	

e Estimated.



05227500 MISSISSIPPI RIVER AT AITKIN, MN

LOCATION.--Lat 46°32'26", long 93°42'26", in SW¼NW¼ sec. 24, T.47 N., R.27 W., Aitkin County, Hydrologic Unit 07010104, on right bank upstream side of highway bridge at north edge of Aitkin, 1 mi downstream from Ripple River and at mile 1,055.9 upstream from Ohio River.

DRAINAGE AREA.--6,140 mi^2 (approximately).

PERIOD OF RECORD.--March 1945 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,182.41 ft above sea level (NGVD of 1929, levels by U.S. Army Corps of Engineers). Mar. 1, 1945 to Mar. 14, 1961, nonrecording gage, and Mar. 15, 1961 to Sept. 30, 1967, water-stage recorder at same site at datum 3.0 ft higher. Diversion channel: Non-recording gage and crest-stage gage. Datum of gage is 1,182.02 ft above sea level (NGVD of 1929). Apr. 9, 1955 to Apr. 10, 1956, nonrecording gage at site 4 mi downstream at different datum. Apr. 11, 1956 to Sept. 30, 1967, non-recording gage at same site at datum 3.0 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Winnibigoshish Lake, Leech Lake, Pokegama Lake, and Sandy Lake. Water diverted at medium and high stages into Aitkin diversion channel 6.5 mi above station, bypasses station and returns to river 15.5 mi below station. Diversion began Apr. 2, 1955. These records include flow in diversion channel.

EXTREMES FOR CURRENT YEAR.--Main channel: maximum discharge, 4,890 ft^3/s, Apr. 14; gage height, 13.10 ft. Diversion channel: maximum discharge, 3,690 ft^3/s, Apr. 14, gage height, 12.79 ft.

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	3,310	4,040	e2,730	e2,700	e2,370	e2,160	e5,300	4,700	6,520	5,260	2,270	863
2	3,390	4,190	e2,600	e2,690	e2,370	e2,170	e6,300	4,350	6,560	5,150	2,210	841
3	3,470	4,220	e2,500	e2,680	e2,360	e2,180	e7,000	4,030	6,530	4,980	2,130	809
4	3,530	4,270	e2,460	e2,670	e2,350	e2,190	e7,600	3,740	6,460	4,830	2,080	795
5	3,540	4,290	e2,370	e2,660	e2,360	e2,200	7,350	3,450	6,490	4,690	2,030	778
6	3,510	4,300	e2,300	e2,650	e2,360	e2,230	7,100	3,180	6,570	4,540	2,000	779
7	3,420	4,290	e2,450	e2,640	e2,360	e2,250	7,210	2,960	6,560	4,320	1,970	772
8	3,320	4,220	e2,650	e2,630	e2,360	e2,250	7,370	2,730	6,720	4,070	1,890	782
9	3,230	4,150	e2,800	e2,620	e2,370	e2,240	7,480	2,500	6,980	3,890	1,860	794
10	3,180	4,090	e2,730	e2,610	e2,380	e2,200	7,600	2,390	7,000	3,730	1,800	781
11	3,150	4,010	e2,680	e2,590	e2,390	e2,190	7,860	2,390	6,940	3,580	1,710	784
12	3,110	3,920	e2,600	e2,570	e2,390	e2,190	8,160	2,460	7,010	3,470	1,640	817
13	3,080	3,820	e2,530	e2,550	e2,400	e2,180	8,350	2,500	7,020	3,340	1,570	962
14	3,040	3,750	e2,450	e2,530	e2,400	e2,180	8,400	2,480	7,380	3,180	1,470	992
15	3,040	3,680	e2,400	e2,510	e2,400	e2,180	8,370	2,490	7,650	3,060	1,390	997
16	3,090	3,620	e2,330	e2,490	e2,380	e2,170	8,300	2,550	7,530	2,970	1,310	1,150
17	3,140	3,550	e2,280	e2,470	e2,360	e2,170	8,190	2,580	7,180	2,970	1,250	1,320
18	3,190	3,500	e2,240	e2,460	e2,330	e2,170	8,050	2,540	6,830	2,930	1,180	1,360
19	3,200	3,440	e2,200	e2,450	e2,300	e2,160	7,890	2,600	6,570	2,780	1,090	1,290
20	3,180	3,400	e2,170	e2,430	e2,270	e2,160	7,780	2,910	6,530	2,700	1,000	1,190
21	3,110	3,380	e2,160	e2,410	e2,230	e2,170	7,610	3,260	6,740	2,690	966	1,140
22	3,040	3,360	e2,160	e2,410	e2,200	e2,180	7,420	3,520	6,760	2,660	993	1,120
23	3,070	3,340	e2,150	e2,400	e2,190	e2,190	7,160	3,610	6,600	2,560	999	1,100
24	3,250	3,250	e2,140	e2,400	e2,180	e2,190	6,870	3,550	6,400	2,460	936	1,070
25	3,450	3,170	e2,150	e2,400	e2,170	e2,200	6,610	3,590	6,090	2,390	919	1,050
26	3,530	3,130	e2,180	e2,400	e2,160	e2,220	6,350	4,420	5,650	2,390	939	1,060
27	3,520	3,160	e2,240	e2,390	e2,150	e2,260	6,110	5,330	5,250	2,380	910	1,060
28	3,480	3,130	e2,340	e2,380	e2,150	e2,360	5,890	5,920	4,990	2,400	880	1,060
29	3,490	3,160	e2,500	e2,380	---	e2,760	5,610	6,240	4,790	2,380	883	1,030
30	3,630	e2,900	e2,620	e2,380	---	e3,350	5,190	6,420	5,180	2,340	898	1,000
31	3,860	---	e2,680	e2,370	---	e4,200	---	6,480	---	2,300	890	---
TOTAL	102,550	110,730	74,790	77,920	64,690	71,900	216,480	111,870	195,480	103,390	44,063	29,546
MEAN	3,308	3,691	2,413	2,514	2,310	2,319	7,216	3,609	6,516	3,335	1,421	985
MAX	3,860	4,300	2,800	2,700	2,400	4,200	8,400	6,480	7,650	5,260	2,270	1,360
MIN	3,040	2,900	2,140	2,370	2,150	2,160	5,190	2,390	4,790	2,300	880	772
AC-FT	203,400	219,600	148,300	154,600	128,300	142,600	429,400	221,900	387,700	205,100	87,400	58,600
CFSM	0.54	0.60	0.39	0.41	0.38	0.38	1.18	0.59	1.06	0.54	0.23	0.16
IN.	0.62	0.67	0.45	0.47	0.39	0.44	1.31	0.68	1.18	0.63	0.27	0.18

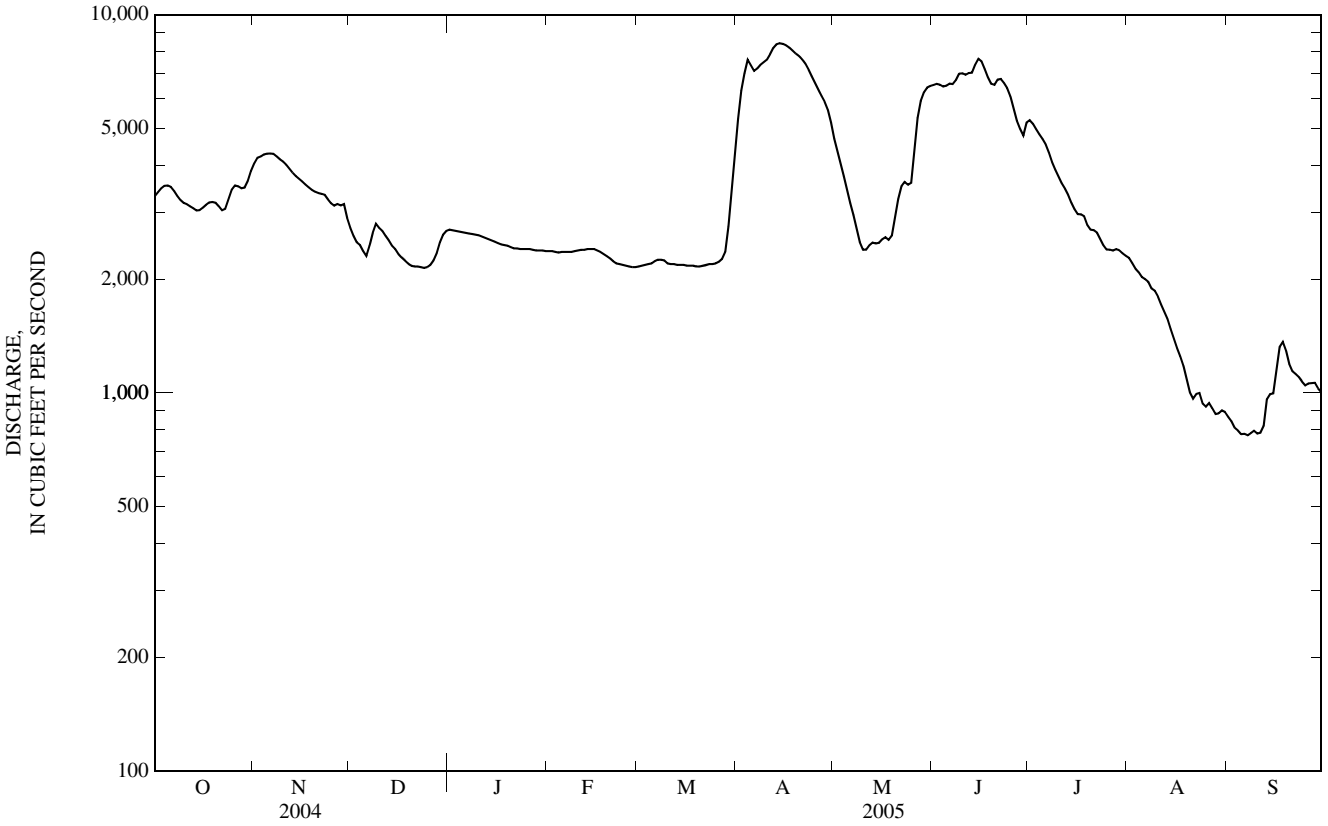
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2005, BY WATER YEAR (WY)

MEAN	2,682	2,812	2,302	1,990	1,885	2,221	5,168	5,160	3,693	3,126	2,314	2,190
MAX	6,534	6,756	4,498	3,525	3,196	5,415	10,830	15,510	8,072	8,201	8,270	6,689
(WY)	(1966)	(1972)	(1997)	(1966)	(1966)	(1945)	(1966)	(1950)	(1965)	(1993)	(1953)	(1986)
MIN	313	328	324	345	398	638	1,074	669	540	346	273	321
(WY)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1958)	(1988)	(1961)	(1961)	(1976)

05227500 MISSISSIPPI RIVER AT AITKIN, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1945 - 2005	
ANNUAL TOTAL	778,787		1,203,409			
ANNUAL MEAN	2,128		3,297		2,955	
HIGHEST ANNUAL MEAN					4,985	1966
LOWEST ANNUAL MEAN					796	1977
HIGHEST DAILY MEAN	4,740	Apr 9	8,400	Apr 14	19,900	May 20, 1950
LOWEST DAILY MEAN	447	Sep 3	772	Sep 7	153	Sep 1, 1961
ANNUAL SEVEN-DAY MINIMUM	474	Aug 28	781	Sep 5	195	Aug 26, 1961
MAXIMUM PEAK FLOW			8,420	Apr 14	20,000	May 20, 1950
MAXIMUM PEAK STAGE			13.10	Apr 14	a22.49	May 20, 1950
INSTANTANEOUS LOW FLOW			768	Sep 5	151	Sep 1, 1961
ANNUAL RUNOFF (AC-FT)	1,545,000		2,387,000		2,141,000	
ANNUAL RUNOFF (CFSM)	0.347		0.537		0.481	
ANNUAL RUNOFF (INCHES)	4.72		7.29		6.54	
10 PERCENT EXCEEDS	3,770		6,600		5,810	
50 PERCENT EXCEEDS	2,020		2,610		2,360	
90 PERCENT EXCEEDS	767		1,110		970	

a Present datum.
e Estimated.



05242300 MISSISSIPPI RIVER AT BRAINERD, MN

LOCATION.--Lat 46°22'40", long 94°10'59", in SE$^1/_4$/SW$^1/_4$ sec. 18, T.45 N., R.30 W., Crow Wing County, Hydrologic Unit 07010104, on left bank in hydropower plant of Wausau Paper Corporation in Brainerd, 12.7 mi upstream from Crow Wing River, and at mile 1,003.7 upstream from Ohio River.

DRAINAGE AREA.--7,320 mi^2 (approximately).

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

GAGE.--Water-stage recorder. Datum of gage is 1,146.96 ft above sea level (NGVD of 1929).

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Winnibigoshish Lake, Leech Lake, Pokegama Lake, Sandy Lake, Pine River Reservoir at Cross Lake, and by hydropower plant in Brainerd.

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	4,430	4,730	3,150	e3,100	e2,660	e2,390	5,720	5,910	8,300	7,000	2,860	1,030
2	4,020	4,920	2,910	e3,080	e2,650	e2,390	6,300	5,380	8,300	6,890	2,710	1,010
3	4,140	5,070	2,820	e3,030	e2,650	e2,400	6,800	4,860	8,350	6,600	2,690	1,010
4	4,160	5,050	3,030	e3,020	e2,650	e2,410	7,710	4,700	8,460	6,340	2,540	997
5	4,150	5,170	2,840	e3,010	e2,640	e2,420	9,030	4,230	8,440	6,280	2,440	920
6	4,230	5,180	2,560	e3,000	e2,650	e2,460	8,420	4,130	8,410	6,130	2,440	1,060
7	4,130	5,160	2,770	e2,980	e2,650	e2,480	8,470	3,640	8,480	5,950	2,390	878
8	3,950	5,160	3,110	e2,960	e2,640	e2,470	8,510	3,570	8,580	5,710	2,200	870
9	3,980	5,090	3,270	e2,930	e2,640	e2,460	8,630	3,330	8,860	5,410	2,300	985
10	3,700	4,920	3,350	e2,910	e2,650	e2,450	8,760	3,090	9,070	5,110	2,360	897
11	3,670	4,910	3,260	e2,900	e2,660	e2,430	9,070	3,070	9,020	4,990	2,160	879
12	3,720	4,720	3,190	e2,890	e2,680	e2,420	9,490	2,930	9,050	4,670	1,870	1,190
13	3,710	4,680	2,730	e2,870	e2,690	e2,400	9,680	3,220	9,230	4,340	1,960	1,270
14	3,550	4,660	2,650	e2,840	e2,690	e2,390	9,850	3,300	9,410	4,220	1,830	1,290
15	3,610	4,460	2,880	e2,820	e2,680	e2,380	9,910	3,170	9,980	3,970	1,660	1,240
16	3,580	4,420	2,770	e2,800	e2,650	e2,380	9,770	3,160	9,990	3,770	1,670	1,400
17	3,600	4,370	2,660	e2,780	e2,620	e2,370	9,740	3,370	9,790	3,640	1,670	1,500
18	3,760	4,210	2,530	e2,770	e2,590	e2,370	9,500	3,450	9,330	3,640	1,540	1,750
19	3,790	4,250	e2,500	e2,750	e2,560	e2,370	9,480	3,310	8,960	3,610	1,340	1,800
20	3,650	4,210	e2,470	e2,730	e2,530	e2,380	9,340	3,530	8,890	3,350	1,330	1,710
21	3,700	4,110	e2,460	e2,700	e2,510	e2,380	9,000	3,880	8,860	3,300	1,330	1,560
22	3,640	4,140	e2,440	e2,690	e2,490	e2,380	8,900	4,260	8,960	3,290	1,120	1,500
23	3,540	4,160	e2,440	e2,680	e2,480	e2,380	8,460	4,590	8,900	3,190	1,100	1,500
24	3,590	4,060	e2,430	e2,680	e2,460	e2,380	8,100	4,420	8,690	3,060	1,150	1,550
25	3,840	3,850	e2,420	e2,680	e2,430	2,380	7,810	4,750	8,340	3,160	1,200	1,460
26	4,050	3,810	e2,460	e2,680	e2,410	2,470	7,490	5,210	7,900	2,890	1,350	1,390
27	4,020	3,810	e2,520	e2,670	e2,400	2,530	7,290	6,370	7,220	2,910	1,110	1,380
28	3,980	3,810	e2,640	e2,670	e2,390	2,610	7,000	7,250	6,870	3,100	1,080	1,410
29	4,090	3,610	e2,800	e2,670	---	3,090	6,690	7,690	6,500	2,970	1,070	1,240
30	4,270	3,000	e3,000	e2,670	---	3,650	6,420	8,140	6,890	2,840	1,050	1,410
31	4,450	---	e3,080	e2,670	---	4,700	---	8,200	---	2,930	1,050	---
TOTAL	120,700	133,700	86,140	87,630	72,400	79,170	251,340	140,110	258,030	135,260	54,570	38,086
MEAN	3,894	4,457	2,779	2,827	2,586	2,554	8,378	4,520	8,601	4,363	1,760	1,270
MAX	4,450	5,180	3,350	3,100	2,690	4,700	9,910	8,200	9,990	7,000	2,860	1,800
MIN	3,540	3,000	2,420	2,670	2,390	2,370	5,720	2,930	6,500	2,840	1,050	870
AC-FT	239,400	265,200	170,900	173,800	143,600	157,000	498,500	277,900	511,800	268,300	108,200	75,540
CFSM	0.53	0.61	0.38	0.39	0.35	0.35	1.14	0.62	1.18	0.60	0.24	0.17
IN.	0.61	0.68	0.44	0.45	0.37	0.40	1.28	0.71	1.31	0.69	0.28	0.19

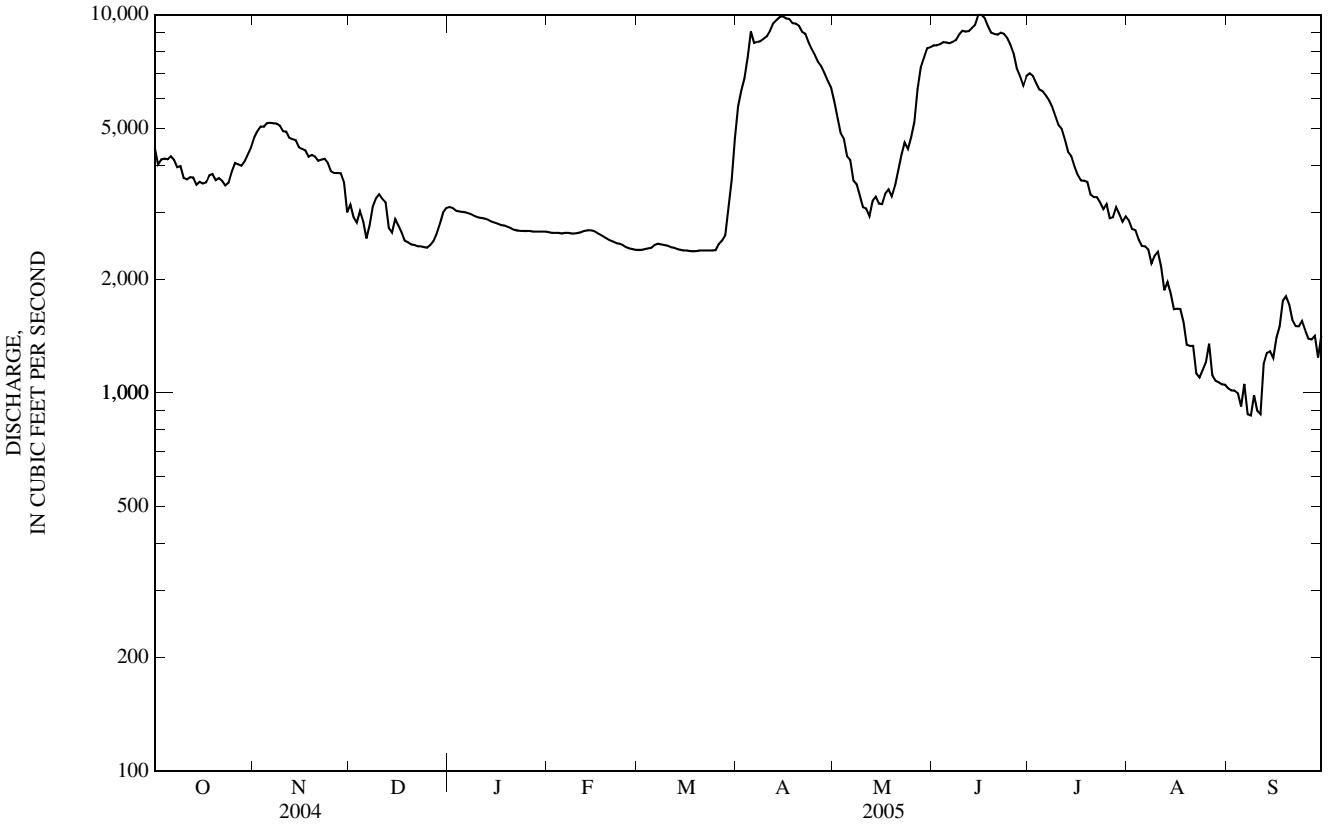
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2005, BY WATER YEAR (WY)

MEAN	3,262	3,634	3,053	2,599	2,374	2,705	6,039	5,621	4,273	4,349	2,521	2,402
MAX	8,002	6,655	5,926	4,081	3,973	4,306	12,890	12,890	10,100	10,260	6,950	6,925
(WY)	(1996)	(2001)	(1997)	(1997)	(1997)	(2000)	(1997)	(2001)	(2001)	(1993)	(1999)	(1999)
MIN	858	1,248	1,362	1,140	1,040	1,385	2,184	1,928	662	442	779	831
(WY)	(2004)	(2004)	(1991)	(1991)	(1991)	(2003)	(2003)	(1988)	(1988)	(1988)	(2004)	(2003)

05242300 MISSISSIPPI RIVER AT BRAINERD, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1987 - 2005	
ANNUAL TOTAL	936,194		1,457,136			
ANNUAL MEAN	2,558		3,992		3,604	
HIGHEST ANNUAL MEAN					5,707	2001
LOWEST ANNUAL MEAN					1,946	2004
HIGHEST DAILY MEAN	5,740	Apr 5	9,990	Jun 16	17,400	Apr 28, 2001
LOWEST DAILY MEAN	613	Sep 4	870	Sep 8	348	Jul 30, 1988
ANNUAL SEVEN-DAY MINIMUM	627	Aug 25	927	Sep 5	357	Jul 29, 1988
MAXIMUM PEAK FLOW			10,100	Jun 15	17,500	Apr 30, 2001
MAXIMUM PEAK STAGE			12.00	Jun 15	16.70	Apr 30, 2001
INSTANTANEOUS LOW FLOW			a813	Sep 29	a273	Jul 12, 1988
ANNUAL RUNOFF (AC-FT)	1,857,000		2,890,000		2,611,000	
ANNUAL RUNOFF (CFSM)	0.349		0.545		0.492	
ANNUAL RUNOFF (INCHES)	4.76		7.41		6.69	
10 PERCENT EXCEEDS	4,450		8,460		6,720	
50 PERCENT EXCEEDS	2,400		3,090		3,030	
90 PERCENT EXCEEDS	1,030		1,500		1,350	

a Result of regulation.
e Estimated.



05243725 STRAIGHT RIVER NEAR PARK RAPIDS, MN

LOCATION.--Lat 46°52'30", long 95°03'56", in NW¼NE¼ sec. 11, T. 139 N., R. 35 W., Hubbard County, Hydrologic Unit 07010106, upstream from culvert on U.S. Highway 71, 3.2 mi south of Park Rapids.

DRAINAGE AREA.--53.2 mi^2.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1970-71, 1973, 1975-76. October 1986 to current year (no winter records in 1987, 1990-91). May 1988 through August 1989, records of hourly water temperature (available in files of the Geological Survey).

GAGE.--Water-stage recorder. Datum of gage is 1,399.55 ft above sea level (NGVD of 1929, levels by Minnesota Department of Natural Resources).

REMARKS.--Records good except those for estimated daily discharges, which are fair. Diurnal flucations in flow due to ground-water withdrawals.

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	59	76	e64	e54	e55	e56	70	56	62	69	50	54
2	58	73	e61	e53	e56	e56	68	56	61	67	51	51
3	56	71	e64	e52	e56	e57	68	55	60	63	52	50
4	56	68	62	e52	e57	e57	68	55	63	61	51	53
5	54	66	56	e52	e57	57	69	54	70	59	50	48
6	55	65	60	e51	e57	57	68	55	76	55	48	54
7	56	64	e62	e51	e57	57	67	55	71	52	47	51
8	56	63	61	e51	e56	56	66	55	69	51	46	53
9	55	62	61	e50	e56	e55	66	57	68	50	52	55
10	55	62	61	e50	e56	e55	67	57	68	49	53	56
11	55	61	61	e50	e57	55	70	57	68	50	53	53
12	55	61	58	e50	e58	e55	80	57	70	55	52	55
13	57	60	e57	e49	e59	e55	80	60	73	53	52	58
14	59	60	e57	e49	e59	e54	75	60	75	52	52	57
15	58	60	e57	e49	e58	e54	71	59	72	50	52	55
16	58	60	e56	e49	e58	e54	69	58	68	49	51	54
17	58	61	e56	e50	e59	54	66	57	66	49	53	54
18	57	61	e55	e50	e59	54	64	58	63	49	54	54
19	57	61	e54	e51	e59	54	63	58	61	48	56	55
20	57	62	e53	e51	e60	54	62	58	62	46	56	52
21	58	63	e53	e51	e60	54	61	62	60	45	57	53
22	59	62	e53	e51	e60	54	60	68	59	45	57	54
23	70	62	e52	e51	e60	54	60	66	57	47	55	53
24	79	e60	e52	e52	e60	55	59	64	57	47	54	54
25	78	e62	e52	e52	e60	55	58	70	55	49	55	56
26	76	61	e52	e53	e59	56	57	79	58	51	57	56
27	73	61	e53	e53	e59	57	56	75	60	50	56	56
28	71	e61	e53	e54	e58	60	56	72	60	51	56	57
29	72	e60	e54	e54	---	65	55	70	65	51	55	56
30	77	e62	e54	e55	---	70	55	69	71	50	53	55
31	80	---	e55	e55	---	69	---	65	---	50	54	---
TOTAL	1,924	1,891	1,759	1,595	1,625	1,755	1,954	1,897	1,948	1,613	1,640	1,622
MEAN	62.1	63.0	56.7	51.5	58.0	56.6	65.1	61.2	64.9	52.0	52.9	54.1
MAX	80	76	64	55	60	70	80	79	76	69	57	58
MIN	54	60	52	49	55	54	55	54	55	45	46	48
AC-FT	3,820	3,750	3,490	3,160	3,220	3,480	3,880	3,760	3,860	3,200	3,250	3,220
CFSM	1.17	1.18	1.07	0.97	1.09	1.06	1.22	1.15	1.22	0.98	0.99	1.02
IN.	1.35	1.32	1.23	1.12	1.14	1.23	1.37	1.33	1.36	1.13	1.15	1.13

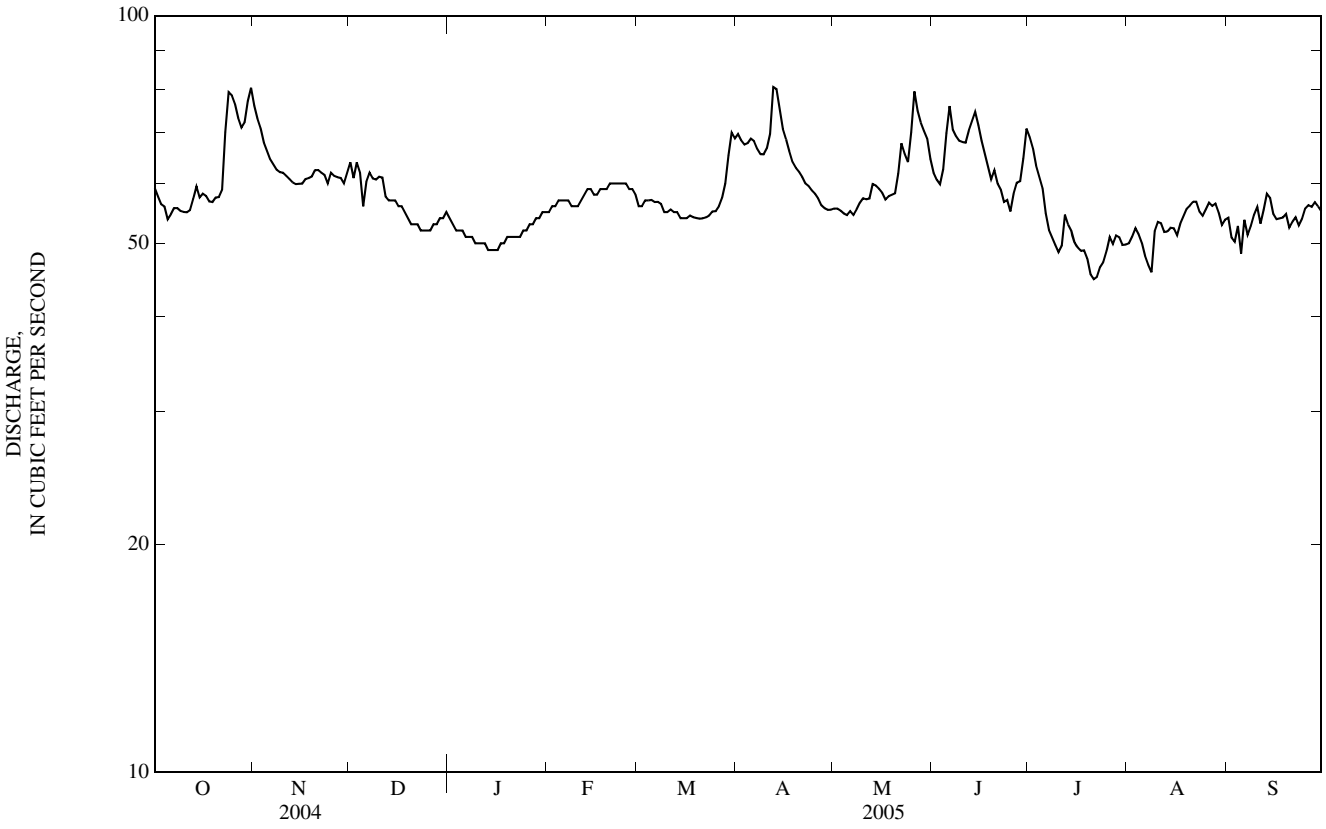
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2005, BY WATER YEAR (WY)

MEAN	62.1	62.8	59.0	54.6	55.2	61.1	69.4	65.9	60.5	57.2	54.6	58.4
MAX	83.1	77.6	74.5	77.7	69.8	76.8	101	86.6	76.1	81.5	81.2	81.4
(WY)	(1996)	(1998)	(1995)	(1999)	(1998)	(1995)	(1997)	(1999)	(1999)	(1997)	(1999)	(1999)
MIN	42.2	46.2	39.7	39.2	42.1	48.8	48.8	46.2	41.9	39.5	35.9	38.0
(WY)	(1993)	(2004)	(2004)	(2004)	(2004)	(2003)	(2004)	(1992)	(1992)	(1988)	(1990)	(2003)

05243725 STRAIGHT RIVER NEAR PARK RAPIDS, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1987 - 2005	
ANNUAL TOTAL	18,526		21,223			
ANNUAL MEAN	50.6		58.1		60.8	
HIGHEST ANNUAL MEAN					78.3	1999
LOWEST ANNUAL MEAN					46.3	2004
HIGHEST DAILY MEAN	84	Sep 24	80	Oct 31, Apr 12,13	144	Apr 6, 1997
LOWEST DAILY MEAN	36	Aug 21	45	Jul 21,22	a28	Jan 9, 1992
ANNUAL SEVEN-DAY MINIMUM	38	Jan 18	47	Jul 18	34	Aug 5, 1990
MAXIMUM PEAK FLOW			b85	Apr 13	149	Apr 6, 1997
MAXIMUM PEAK STAGE			c2.54	Dec 15	c3.42	Mar 15, 2003
INSTANTANEOUS LOW FLOW			d36	Mar 12	d21	Nov 23, 2003
ANNUAL RUNOFF (AC-FT)	36,750		42,100		44,040	
ANNUAL RUNOFF (CFSM)	0.951		1.09		1.14	
ANNUAL RUNOFF (INCHES)	12.95		14.84		15.53	
10 PERCENT EXCEEDS	63		69		78	
50 PERCENT EXCEEDS	48		57		60	
90 PERCENT EXCEEDS	39		51		44	

a Estimated, result of freezeup.
b Gage height, 1.78 ft.
c Backwater from ice.
d Result of freezeup.
e Estimated.



05244000 CROW WING RIVER AT NIMROD, MN

LOCATION.--Lat 46°38'25", long 94°52'44", in SE¼NW¼ sec. 32, T. 137 N., R. 33 W., Wadena County, Hydrologic Unit 07010106, on right bank 200 ft upstream from County Highway 227 bridge, 0.2 mi north of Nimrod, and 0.7 mi upstream from Cat River.

DRAINAGE AREA.--1,030 mi^2.

PERIOD OF RECORD.--April 1910 to September 1914, July 1930 to September 1981, October 1991 to current year (winter records incomplete prior to 1940). October 1981 to September 1987, annual maximums only.

REVISED RECORDS.--WSP 1508: 1910-11, 1913-14, 1937, 1942(M), 1944(M).

GAGE.--Water-stage recorder. Datum of gage is 1,313.27 ft above sea level (NGVD of 1929, levels by Wadena County Highway Department from Minnesota Department of Transportation benchmark). Apr. 15, 1910 to Sept. 30, 1914, nonrecording gage at same site, at datum 2.2 ft lower. July 28, 1930 to Nov. 4, 1949, nonrecording gages at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow affected by natural storage in many lakes.

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	727	632	e440	e350	e373	e339	e808	585	784	757	364	305
2	743	637	e395	e343	e377	e339	e840	570	761	702	352	294
3	723	629	e365	e340	e380	e340	830	552	735	678	353	297
4	686	610	e390	e338	e382	e342	847	535	735	662	361	304
5	655	597	e380	e337	e387	e348	847	524	784	649	369	299
6	629	587	e380	e336	e380	e360	828	512	773	632	351	324
7	597	575	e385	e336	e370	e371	792	499	775	604	335	322
8	575	561	e390	e336	e362	e368	767	496	890	584	321	308
9	558	551	e392	e336	e350	e355	748	520	898	569	359	298
10	542	542	e393	e336	e352	e347	751	548	895	544	369	293
11	529	526	e395	e336	e360	e340	806	533	914	517	361	284
12	517	521	e390	e337	e370	e340	996	516	1,020	532	359	315
13	511	520	e330	e338	e375	e340	1,040	530	957	601	352	397
14	500	514	e310	e339	e373	e340	997	535	993	592	346	398
15	491	509	e355	e340	e370	e339	956	538	996	553	334	382
16	488	508	e400	e338	e362	e338	942	519	964	518	325	359
17	477	507	e395	e334	e354	e333	943	498	908	493	336	336
18	471	511	e374	e335	e350	e331	946	499	859	481	344	338
19	460	525	e348	e342	e345	e330	950	506	814	470	357	332
20	451	552	e337	e348	e340	e330	946	498	910	446	364	319
21	453	556	e331	e350	e339	e330	913	490	1,050	435	353	308
22	443	555	e329	e350	e338	e332	884	493	978	428	349	292
23	505	542	e326	e350	e338	e334	868	488	899	411	342	285
24	551	e525	e322	e350	e338	e337	845	482	820	408	334	298
25	540	e505	e328	e357	e338	e340	808	650	759	417	325	313
26	528	e495	e335	e360	e338	e350	763	975	721	436	341	319
27	518	e475	e340	e355	e338	e370	700	993	723	418	334	321
28	536	e460	e346	e357	e338	e410	649	984	688	420	323	317
29	560	e450	e350	e360	---	e490	623	919	694	395	314	335
30	599	e445	e355	e365	---	e600	601	858	795	377	311	343
31	624	---	e358	e370	---	e740	---	817	---	375	307	---
TOTAL	17,187	16,122	11,264	10,699	10,017	11,503	25,234	18,662	25,492	16,104	10,645	9,635
MEAN	554	537	363	345	358	371	841	602	850	519	343	321
MAX	743	637	440	370	387	740	1,040	993	1,050	757	369	398
MIN	443	445	310	334	338	330	601	482	688	375	307	284
AC-FT	34,090	31,980	22,340	21,220	19,870	22,820	50,050	37,020	50,560	31,940	21,110	19,110
CFSM	0.54	0.52	0.35	0.34	0.35	0.36	0.82	0.58	0.82	0.50	0.33	0.31

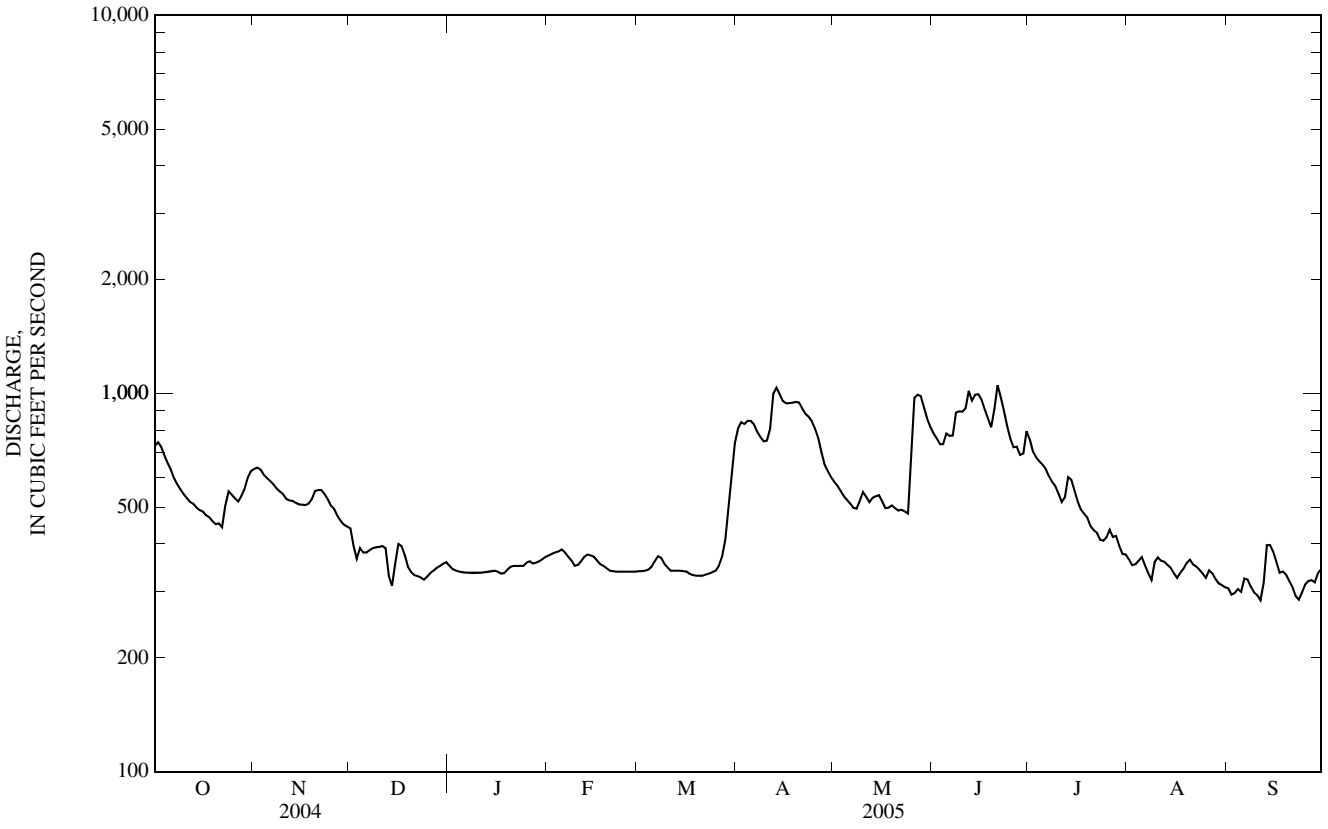
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 2005, BY WATER YEAR (WY)

MEAN	416	416	352	306	312	411	760	677	578	454	375	383
MAX	1,463	871	692	462	527	780	1,624	1,615	1,354	1,124	1,452	929
(WY)	(1974)	(1972)	(1999)	(1966)	(2000)	(1995)	(1966)	(1950)	(1965)	(1997)	(1944)	(1944)
MIN	137	146	131	125	170	171	202	181	149	84.0	74.3	131
(WY)	(1937)	(1937)	(1940)	(1940)	(1940)	(1940)	(1911)	(1911)	(1934)	(1936)	(1936)	(1934)

05244000 CROW WING RIVER AT NIMROD, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1910 - 2005	
ANNUAL TOTAL	138,357		182,564			
ANNUAL MEAN	378		500		481	
HIGHEST ANNUAL MEAN					757	1999
LOWEST ANNUAL MEAN					230	1940
HIGHEST DAILY MEAN	743	Oct 2	1,050	Jun 21	3,580	Oct 10, 1973
LOWEST DAILY MEAN	161	Sep 4	284	Sep 11	45	Aug 7, 1936
ANNUAL SEVEN-DAY MINIMUM	177	Aug 29	302	Aug 30	55	Aug 3, 1936
MAXIMUM PEAK FLOW			a1,080	Jun 20	b3,700	Oct 10, 1973
MAXIMUM PEAK STAGE			c6.12	Apr 1	c7.64	Apr 20, 1950
INSTANTANEOUS LOW FLOW			d93	Dec 13	45	Aug 7, 1936
ANNUAL RUNOFF (AC-FT)	274,400		362,100		348,400	
ANNUAL RUNOFF (CFSM)	0.374		0.495		0.476	
10 PERCENT EXCEEDS	587		834		822	
50 PERCENT EXCEEDS	356		411		400	
90 PERCENT EXCEEDS	207		330		240	

a Gage-height, 4.09 ft.
b Gage-height, 7.35 ft.
c Backwater from ice.
d Result of freezeup.
e Estimated.



05245100 LONG PRAIRIE RIVER AT LONG PRAIRIE, MN

LOCATION.--Lat 45°58'30", long 94°51'56", in NE¼NW¼ sec. 20, T. 129 N., R. 33 W., Todd County, Hydrologic Unit 07010108, on right bank 90 ft upstream from bridge on First Avenue at Long Prairie and 400 ft downstream from Venewitz Creek.

DRAINAGE AREA.--434 mi^2.

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,281.74 ft above sea level (NGVD of 1929).

REMARKS.--Records good except those for estimated daily discharges, which are poor.

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	171	134	e64	e53	e74	e82	559	200	296	401	148	224
2	191	133	e66	e52	e74	e82	485	194	263	342	144	236
3	216	127	e68	e53	e78	e83	390	189	237	331	145	243
4	237	123	e70	e53	e81	e84	307	178	225	366	140	249
5	238	119	e65	e54	e85	e97	275	173	290	421	134	244
6	209	115	e60	e54	e82	e126	276	172	364	454	131	311
7	184	110	e63	e55	e80	e178	265	175	409	448	129	310
8	173	105	e69	e56	e77	e195	242	181	432	421	126	293
9	160	103	e72	e54	e74	e188	226	192	463	374	139	286
10	145	102	e72	e54	e72	e171	224	216	469	326	138	281
11	134	97	e70	e54	e78	e146	288	240	474	283	137	281
12	126	92	e68	e54	e83	e128	450	247	531	262	134	293
13	123	88	e57	e50	e87	e118	574	252	560	242	131	333
14	118	88	e53	e47	e91	e109	642	279	589	215	130	331
15	118	86	e67	e46	e86	e109	655	300	659	203	130	321
16	115	86	e59	e46	e81	e107	650	310	672	195	130	315
17	113	87	e58	e48	e75	e106	580	300	651	186	140	302
18	110	87	e54	e51	e74	e107	511	285	644	180	137	289
19	107	91	e46	e51	e73	e106	462	297	601	172	143	283
20	103	100	e46	e51	e73	e105	432	325	572	169	140	274
21	102	102	e45	e51	e74	e105	393	342	538	166	135	263
22	112	103	e44	e50	e76	e104	352	321	486	161	130	254
23	122	101	e44	e50	e77	e113	313	276	438	161	128	242
24	124	e90	e49	e56	e78	e122	282	245	390	158	126	234
25	128	e77	e51	e62	e80	e137	264	260	349	174	130	244
26	125	e65	e52	e62	e80	e148	253	318	309	185	198	256
27	120	e65	e54	e63	e81	e156	235	362	277	169	199	250
28	120	e65	e53	e67	e81	181	220	389	250	164	189	245
29	126	e64	e53	e70	---	237	211	402	255	160	185	238
30	128	e64	e53	e70	---	415	206	375	440	157	190	239
31	131	---	e52	e70	---	493	---	327	---	154	206	---
TOTAL	4,429	2,869	1,797	1,707	2,205	4,638	11,222	8,322	13,133	7,800	4,542	8,164
MEAN	143	95.6	58.0	55.1	78.8	150	374	268	438	252	147	272
MAX	238	134	72	70	91	493	655	402	672	454	206	333
MIN	102	64	44	46	72	82	206	172	225	154	126	224
AC-FT	8,780	5,690	3,560	3,390	4,370	9,200	22,260	16,510	26,050	15,470	9,010	16,190
CFSM	0.33	0.22	0.13	0.13	0.18	0.34	0.86	0.62	1.01	0.58	0.34	0.63
IN.	0.38	0.25	0.15	0.15	0.19	0.40	0.96	0.71	1.13	0.67	0.39	0.70

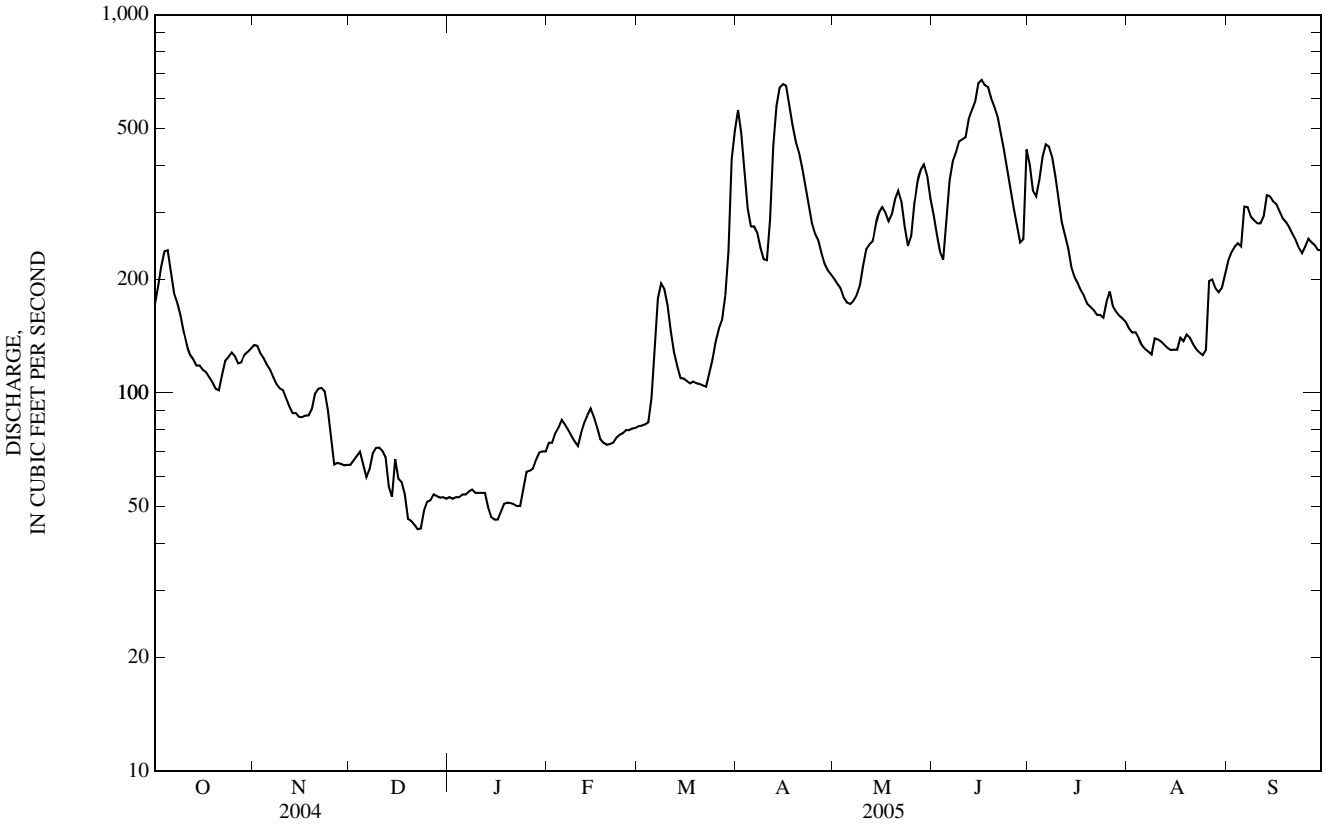
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2005, BY WATER YEAR (WY)

MEAN	131	116	75.7	62.8	66.6	167	370	279	244	209	141	126
MAX	512	425	270	217	208	441	1,062	653	774	777	715	607
(WY)	(1987)	(1972)	(1987)	(1987)	(1987)	(1985)	(2001)	(1986)	(2001)	(1972)	(1972)	(1986)
MIN	13.4	8.69	3.19	1.05	1.62	19.8	71.8	45.5	27.5	4.73	10.0	5.32
(WY)	(1977)	(1977)	(1977)	(1977)	(1977)	(1989)	(1977)	(1977)	(1988)	(1988)	(1989)	(1976)

05245100 LONG PRAIRIE RIVER AT LONG PRAIRIE, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1972 - 2005	
ANNUAL TOTAL	39,980		70,828			
ANNUAL MEAN	109		194		166	
HIGHEST ANNUAL MEAN					366	1972
LOWEST ANNUAL MEAN					25.2	1977
HIGHEST DAILY MEAN	349	Mar 29	672	Jun 16	2,900	Jul 22, 1972
LOWEST DAILY MEAN	34	Jan 30	44	Dec 22,23	0.84	Jan 12, 1977
ANNUAL SEVEN-DAY MINIMUM	37	Jan 29	46	Dec 19	0.84	Jan 12, 1977
MAXIMUM PEAK FLOW			710	Jun 15	3,270	Jul 22, 1972
MAXIMUM PEAK STAGE			5.71	Jun 15	9.37	Jul 22, 1972
INSTANTANEOUS LOW FLOW			a44	Dec 22	0.84	Jan 12, 1977
ANNUAL RUNOFF (AC-FT)	79,300		140,500		120,100	
ANNUAL RUNOFF (CFSM)	0.252		0.447		0.382	
ANNUAL RUNOFF (INCHES)	3.43		6.07		5.19	
10 PERCENT EXCEEDS	190		401		367	
50 PERCENT EXCEEDS	96		143		108	
90 PERCENT EXCEEDS	48		55		28	

a Estimated daily-mean discharge, backwater from ice.
e Estimated.



05247500 CROW WING RIVER NEAR PILLAGER, MN

LOCATION.--Lat 46°18'18", long 94°22'38", in SW¼NE¼ sec. 30, T. 133 N., R. 29 W., Cass County, Hydrologic Unit 07010106, at Sylvan Dam power plant of Minnesota Power Co., 3.6 mi above mouth and 4.9 mi southeast of Pillager.

DRAINAGE AREA.--3,760 mi^2 (revised).

PERIOD OF RECORD.--October 1968 to September 1986, October 1987 to current year. Records for August 1924 to September 1968 available in files of the Minnesota District Office.

GAGE.--Water-stage recorder. Datum of gage is 1,151.00 ft above sea level, adjustment of 1912. Prior to January 16, 1991, staff gage attached to retaining wall approximately 20 ft below the turbine outlet bays, at datum 1,150.00 ft, adjustment of 1912.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Discharge computed on the basis of power plant records prior to January 16, 1991. Records for Oct. 1, 1968 to Sept. 30, 1975, were adjusted for storage change in the Sylvan dam reservoir. Flow partly regulated by Sylvan Dam power plant and Gull Lake reservoir.

COOPERATION.--Prior to February 1991, records collected by Minnesota Power Company in connection with a Federal Energy Regulatory Commision project.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum daily discharge since 1924, 18,300 ft^3/s, Apr. 14, 1965.

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	2,410	2,100	906	836	776	853	3,940	1,960	3,600	2,690	940	1,120
2	2,520	2,290	1,210	832	919	832	5,650	1,820	3,390	2,780	942	1,220
3	2,630	2,160	1,100	893	795	853	5,530	1,750	3,140	2,820	934	1,180
4	2,560	2,250	1,100	957	889	818	5,130	1,730	3,040	2,630	932	1,220
5	2,350	2,050	1,200	839	918	844	4,380	1,540	3,090	2,560	798	1,260
6	2,320	2,030	1,130	e790	921	838	3,910	1,650	3,150	2,460	932	1,380
7	2,320	1,910	1,080	e760	907	866	3,620	1,480	3,160	2,390	831	1,490
8	2,270	1,860	1,210	e760	912	949	3,280	1,550	3,350	2,190	819	1,280
9	1,900	1,800	1,390	831	958	1,030	3,260	1,590	3,440	2,060	1,100	1,450
10	1,880	1,770	1,450	816	939	989	2,940	1,660	3,450	1,880	754	1,450
11	1,740	1,700	1,400	782	957	1,040	3,190	1,790	3,570	1,740	1,030	1,390
12	1,780	1,650	1,390	812	893	997	3,490	1,750	3,610	1,700	1,030	1,460
13	1,610	1,650	1,150	e795	905	999	3,590	1,970	3,800	1,570	1,010	1,610
14	1,540	1,510	762	e780	934	962	3,860	2,040	e5,480	1,540	872	1,610
15	1,480	1,500	912	e800	873	894	3,990	1,980	e5,890	1,570	892	1,870
16	1,490	1,510	975	e790	924	936	3,990	2,160	e5,900	1,590	803	1,830
17	1,550	1,600	1,160	e780	918	840	3,910	2,100	e5,800	1,290	1,240	1,800
18	1,400	1,630	1,300	e810	895	876	3,850	2,150	e5,300	1,520	1,040	1,760
19	1,430	1,560	961	e740	893	864	3,650	2,270	4,370	1,160	1,220	1,660
20	1,510	1,500	989	822	918	854	3,580	2,170	3,600	1,150	1,140	1,520
21	1,370	1,670	940	832	797	877	3,430	2,320	3,430	1,280	1,170	1,670
22	1,420	1,720	965	803	871	875	3,440	2,200	3,550	998	1,130	1,590
23	1,460	1,770	e780	e780	836	903	3,260	2,050	3,510	1,040	1,010	1,520
24	1,640	1,410	e805	802	825	1,020	3,140	2,100	3,340	1,030	1,050	1,510
25	1,950	1,220	e820	760	825	1,060	2,920	2,410	3,120	1,200	924	1,510
26	1,730	1,340	e700	830	825	1,470	2,780	2,800	2,920	1,040	1,150	1,550
27	1,860	1,580	705	802	855	1,590	2,560	3,230	2,740	1,140	1,180	1,520
28	1,800	1,330	834	797	814	1,860	2,290	3,650	2,550	1,200	1,340	1,470
29	1,960	1,180	e740	852	---	2,340	2,370	3,650	2,480	1,090	1,410	1,480
30	2,120	1,160	824	805	---	3,120	2,070	3,750	2,630	1,080	1,320	1,550
31	2,160	---	e790	867	---	3,470	---	3,670	---	1,080	1,360	---
TOTAL	58,160	50,410	31,678	25,155	24,692	36,719	107,000	68,940	110,400	51,468	32,303	44,930
MEAN	1,876	1,680	1,022	811	882	1,184	3,567	2,224	3,680	1,660	1,042	1,498
MAX	2,630	2,290	1,450	957	958	3,470	5,650	3,750	5,900	2,820	1,410	1,870
MIN	1,370	1,160	700	740	776	818	2,070	1,480	2,480	998	754	1,120
AC-FT	115,400	99,990	62,830	49,890	48,980	72,830	212,200	136,700	219,000	102,100	64,070	89,120
CFSM	0.50	0.45	0.27	0.22	0.23	0.32	0.95	0.59	0.98	0.44	0.28	0.40
IN.	0.58	0.50	0.31	0.25	0.24	0.36	1.06	0.68	1.09	0.51	0.32	0.44

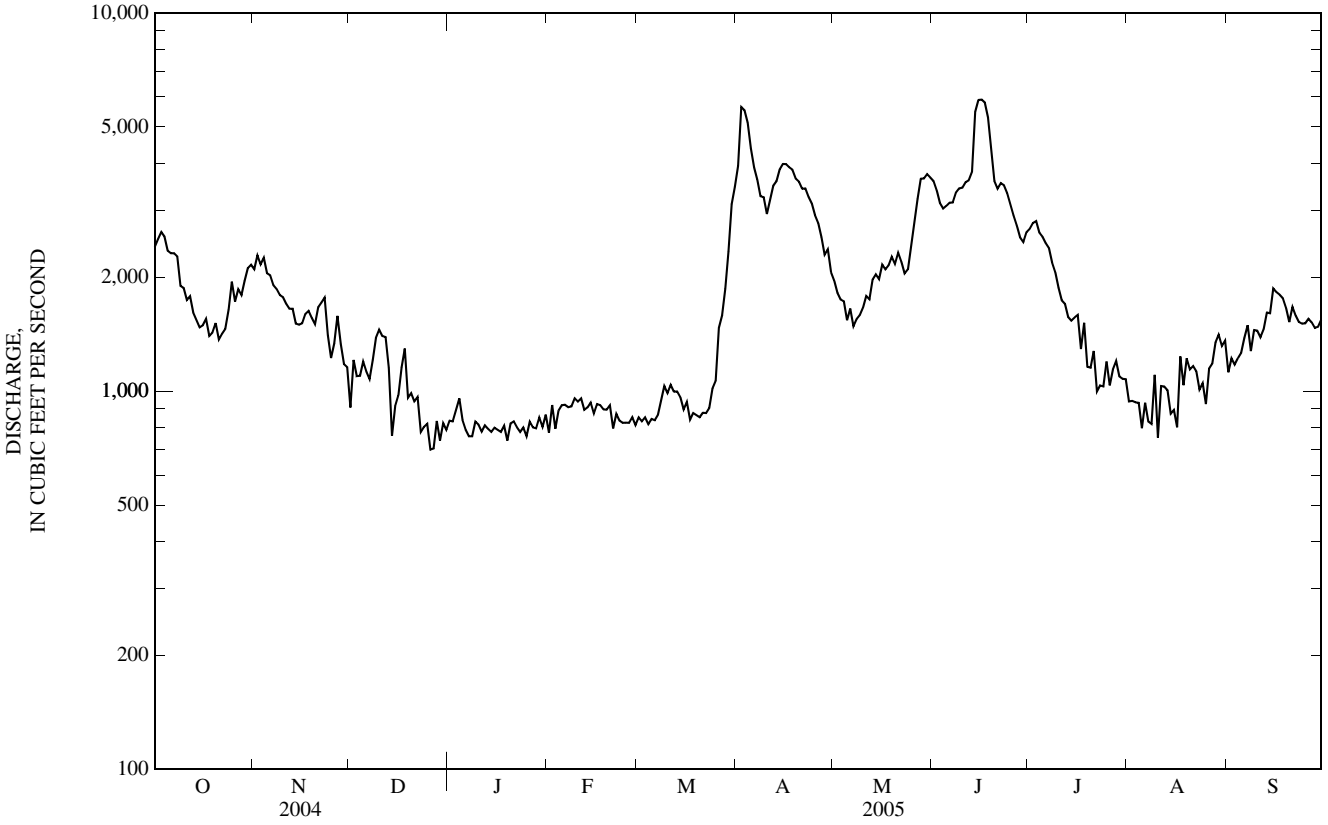
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2005, BY WATER YEAR (WY)

MEAN	1,241	1,241	888	722	735	1,372	3,366	2,460	1,848	1,550	1,015	986
MAX	3,771	3,674	1,699	1,188	1,360	2,996	8,266	5,671	5,307	3,295	3,520	3,309
(WY)	(1974)	(1972)	(1999)	(1986)	(1998)	(1972)	(2001)	(1986)	(2001)	(1972)	(1972)	(1986)
MIN	215	215	199	218	255	548	882	545	447	206	120	161
(WY)	(1977)	(1977)	(1977)	(1977)	(1977)	(1981)	(1981)	(1977)	(1988)	(1988)	(1976)	(1976)

05247500 CROW WING RIVER NEAR PILLAGER, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1969 - 2005	
ANNUAL TOTAL	468,964		641,855			
ANNUAL MEAN	1,281		1,759		1,453	
HIGHEST ANNUAL MEAN					2,564	1972
LOWEST ANNUAL MEAN					446	1977
HIGHEST DAILY MEAN	3,050	Apr 1	5,900	Jun 16	16,900	Apr 12, 2001
LOWEST DAILY MEAN	400	Feb 5	700	Dec 26	60	Aug 10, 1976
ANNUAL SEVEN-DAY MINIMUM	425	Feb 2	769	Dec 23	68	Aug 9, 1976
MAXIMUM PEAK FLOW			6,460	Apr 2	17,500	Apr 12, 2001
MAXIMUM PEAK STAGE			7.21	Apr 2	a12.11	Apr 12, 2001
INSTANTANEOUS LOW FLOW			b305	Aug 9	b78	Jul 17, 2001
ANNUAL RUNOFF (AC-FT)	930,200		1,273,000		1,053,000	
ANNUAL RUNOFF (CFSM)	0.341		0.468		0.386	
ANNUAL RUNOFF (INCHES)	4.64		6.35		5.25	
10 PERCENT EXCEEDS	2,150		3,440		2,940	
50 PERCENT EXCEEDS	1,140		1,470		996	
90 PERCENT EXCEEDS	564		820		465	

a Since stage record began, Jan. 16, 1991.
b Result of regulation.
e Estimated.



05267000 MISSISSIPPI RIVER NEAR ROYALTON, MN

LOCATION.--Lat 45°49'34", long 94°21'18", sec. 32, T. 39 N., R. 32 W., Morrison County, Hydrologic Unit 07010201, on left bank at upstream side of bridge on County Highway 26, 2.5 mi west of Royalton, and at mile 954 upstream from Ohio River.

DRAINAGE AREA.--11,600 mi^2 (approximately).

PERIOD OF RECORD.--March 1924 to Sept. 30, 1993, discharges obtained from Minnesota Power and adjusted to U.S. Geological Survey streamflow measurements; Oct. 1993 to Sept. 30, 2000, discharges flow-averaged between Mississippi River at Ft. Ripley (05261000) and Mississippi River at St. Cloud (05270700); Oct. 2000 to July, 2001, discharges obtained from Minnesota Power and adjusted to U.S. Geological Survey streamflow measurements; July 2001 to current year.

GAGE.--Water-stage recorder.

REMARKS.--Records good to fair except those for estimated days, which are fair to poor. Flow partly regulated by power plants and Winnibigoshish, Leech, Pokegama, Sandy, and Gull Lakes and by Pine River Reservoir.

COOPERATION.--Minnesota Power Co. in connection with a Federal Energy Regulatory Commission project.

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	6,780	6,990	3,990	e4,000	e3,550	e3,270	11,100	8,830	13,300	11,100	4,380	2,740
2	6,800	7,030	3,970	e3,960	e3,600	e3,270	12,900	8,480	13,000	10,600	3,840	2,440
3	6,780	7,400	3,920	e3,940	e3,640	e3,260	13,500	7,650	12,800	10,400	4,050	2,610
4	6,940	7,290	4,430	e3,910	e3,610	e3,270	13,500	7,290	12,700	9,960	3,830	2,610
5	6,700	7,350	4,070	e3,890	e3,610	e3,350	14,200	7,060	12,900	9,660	3,700	2,600
6	6,710	7,290	3,850	e3,870	e3,610	e3,360	14,100	6,610	12,600	9,310	3,540	2,830
7	6,530	7,160	4,120	e3,830	e3,610	e3,410	13,600	6,370	12,800	8,890	3,670	2,800
8	6,460	6,930	4,030	e3,790	e3,630	e3,420	13,500	5,950	13,300	8,600	3,450	2,790
9	6,200	6,940	4,710	e3,780	e3,630	e3,420	13,100	5,870	13,600	8,010	3,360	2,590
10	5,940	6,820	4,900	e3,760	e3,630	e3,560	13,200	5,700	14,000	7,630	3,790	2,780
11	5,410	6,640	4,910	e3,740	e3,670	e3,430	13,600	5,650	14,100	7,010	3,300	2,710
12	5,300	6,420	4,760	e3,710	e3,680	e3,400	14,300	5,540	14,700	6,910	3,550	2,880
13	5,610	6,260	4,360	e3,690	e3,680	e3,330	15,200	6,000	15,000	6,670	3,090	3,480
14	5,320	6,250	3,960	e3,680	e3,670	e3,320	15,400	5,830	15,300	5,940	3,250	3,300
15	5,080	6,200	3,550	e3,660	e3,620	e3,270	15,500	6,510	16,000	6,090	2,850	3,600
16	4,930	5,990	4,060	e3,670	e3,580	e3,260	15,500	5,960	16,200	5,810	2,970	3,390
17	5,030	5,940	e4,100	e3,560	e3,530	e3,260	15,200	6,220	16,000	e5,210	2,830	3,760
18	5,220	5,960	3,860	e3,550	e3,500	e3,260	15,100	6,540	15,500	e5,240	3,180	3,550
19	5,330	5,980	3,340	e3,600	e3,460	e3,280	14,700	6,690	14,700	e5,140	3,030	3,870
20	5,120	5,940	e3,500	e3,590	e3,410	e3,310	14,700	6,540	14,200	e4,900	2,790	3,770
21	5,100	5,850	e3,450	e3,530	e3,390	e3,350	14,300	6,830	14,000	4,660	2,840	3,420
22	5,040	5,800	e3,440	e3,580	e3,350	3,560	13,900	7,300	13,600	4,650	2,790	3,290
23	5,250	6,030	e3,430	e3,580	e3,330	3,560	13,500	7,050	13,800	4,420	2,500	3,090
24	5,180	6,030	e3,420	e3,580	e3,310	3,840	12,900	7,420	13,400	4,360	2,390	3,110
25	5,460	5,380	e3,500	e3,560	e3,320	3,920	12,400	7,700	12,800	4,310	2,530	3,260
26	6,200	5,100	e3,190	e3,570	e3,300	4,250	12,000	8,900	12,000	4,720	2,880	3,000
27	5,920	5,180	e3,320	e3,580	e3,280	4,940	11,000	10,300	11,200	3,870	2,910	3,070
28	5,870	5,610	e3,360	e3,560	e3,270	5,700	10,500	12,300	10,600	4,560	2,690	2,940
29	5,980	4,910	e3,390	e3,570	---	6,150	10,200	13,000	9,790	4,360	2,900	2,700
30	6,520	4,770	e3,470	e3,610	---	7,550	9,860	13,400	10,500	4,220	2,660	2,720
31	6,690	---	e3,690	e3,640	---	10,200	---	13,500	---	4,110	2,730	---
TOTAL	181,400	187,440	120,050	114,540	98,470	123,730	402,460	238,990	404,390	201,320	98,270	91,700
MEAN	5,852	6,248	3,873	3,695	3,517	3,991	13,420	7,709	13,480	6,494	3,170	3,057
MAX	6,940	7,400	4,910	4,000	3,680	10,200	15,500	13,500	16,200	11,100	4,380	3,870
MIN	4,930	4,770	3,190	3,530	3,270	3,260	9,860	5,540	9,790	3,870	2,390	2,440
AC-FT	359,800	371,800	238,100	227,200	195,300	245,400	798,300	474,000	802,100	399,300	194,900	181,900
CFSM	0.50	0.54	0.33	0.32	0.30	0.34	1.16	0.66	1.16	0.56	0.27	0.26
IN.	0.58	0.60	0.38	0.37	0.32	0.40	1.29	0.77	1.30	0.65	0.32	0.29

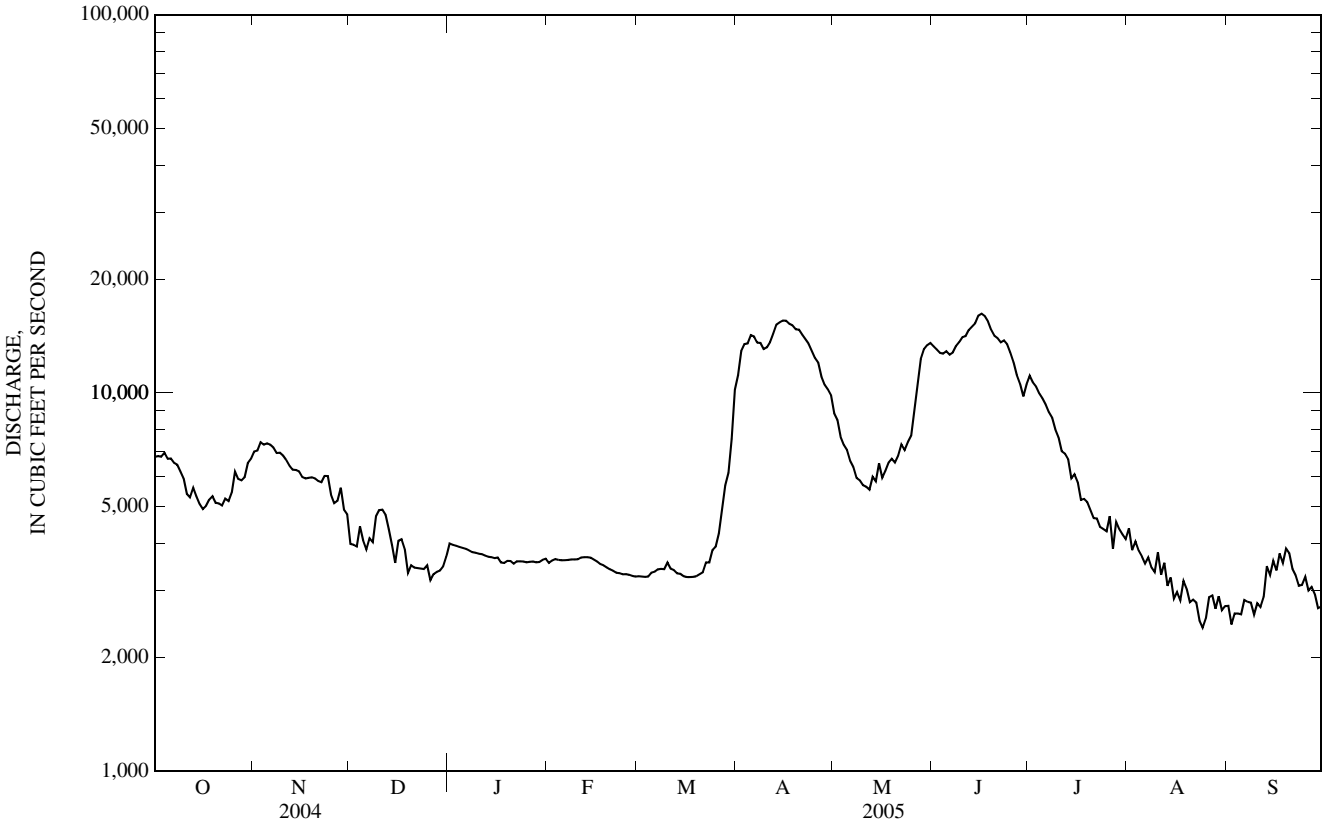
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 2005, BY WATER YEAR (WY)

MEAN	4,190	4,072	3,197	2,809	2,690	3,877	9,328	8,667	6,611	5,073	3,714	3,572
MAX	12,930	14,640	7,297	5,713	5,480	12,290	25,430	24,600	18,160	15,250	15,230	12,940
(WY)	(1966)	(1972)	(1997)	(1966)	(1997)	(1966)	(1997)	(1950)	(1965)	(1993)	(1953)	(1986)
MIN	632	618	627	534	758	968	1,924	1,663	1,071	648	449	535
(WY)	(1937)	(1937)	(1935)	(1935)	(1937)	(1940)	(1931)	(1977)	(1988)	(1988)	(1934)	(1934)

05267000 MISSISSIPPI RIVER NEAR ROYALTON, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1924 - 2005	
ANNUAL TOTAL	1,465,840		2,262,760			
ANNUAL MEAN	4,005		6,199		4,842	
HIGHEST ANNUAL MEAN					9,555	1966
LOWEST ANNUAL MEAN					1,213	1934
HIGHEST DAILY MEAN	7,900	Apr 5	16,200	Jun 16	38,200	Apr 8, 1997
LOWEST DAILY MEAN	1,340	Aug 21	2,390	Aug 24	254	Nov 25, 1936
ANNUAL SEVEN-DAY MINIMUM	1,460	Aug 21	2,630	Aug 30	358	Sep 3, 1936
MAXIMUM PEAK FLOW			a16,500	Jun 15		
MAXIMUM PEAK STAGE			a13.42	Jun 15		
INSTANTANEOUS LOW FLOW			a1,910	Sep 2		
ANNUAL RUNOFF (AC-FT)	2,907,000		4,488,000		3,508,000	
ANNUAL RUNOFF (CFSM)	0.345		0.534		0.417	
ANNUAL RUNOFF (INCHES)	4.70		7.26		5.67	
10 PERCENT EXCEEDS	6,810		13,400		9,850	
50 PERCENT EXCEEDS	3,710		4,660		3,560	
90 PERCENT EXCEEDS	1,780		3,150		1,360	

a Due in part to regulation.
e Estimated.



05270500 SAUK RIVER NEAR ST. CLOUD, MN

LOCATION.--Lat 45°33'35", long 94°14'00", in SW¼SW¼ sec. 8, T. 124 N., R. 28 W., Stearns County, Hydrologic Unit 07010203, on right bank 0.5 mi northwest of Waite Park, 3 mi west of St. Cloud, and 5 mi upstream from mouth.

DRAINAGE AREA.--1,030 mi^2.

PERIOD OF RECORD.--July 1909 to December 1912, April to December 1913, May to November 1929, March 1930 to September 1931, April to November 1932, March to November 1933, March 1934 to September 1981, October 1990 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORD--WSP 895: Drainage area. WSP 1308: 1912(M), 1932 (M). WSP 1508: 1937(m).

GAGE.--Water-stage recorder. Datum of gage is 1,034.63 ft above sea level (NGVD of 1929). Prior to Nov. 22, 1934, nonrecording gage on highway bridge 1 mi downstream at datum 6.77 ft lower.

REMARKS.--Records good to except those for Mar. 21 to June 8, which are fair, and those for estimated daily discharge, which are poor. Flow may be influenced by regulation from power plant and small lakes upstream from gage.

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	324	501	314	e91	e123	e142	622	598	648	721	255	199
2	325	508	302	e91	e131	e144	665	558	652	652	240	199
3	299	500	295	e92	e137	e147	661	511	651	631	235	200
4	289	499	286	e93	e140	e150	636	475	648	606	235	257
5	276	498	275	e93	e145	e157	615	450	702	567	218	257
6	273	503	264	e93	e144	e233	602	450	742	528	200	301
7	263	504	272	e92	e138	e278	595	430	710	502	192	328
8	258	485	270	e92	e133	e297	583	415	755	483	182	346
9	249	463	266	e92	e130	e321	561	410	789	470	184	366
10	235	459	272	e92	e129	e346	546	413	819	452	173	372
11	229	444	272	e91	e132	e346	578	391	888	432	166	379
12	221	436	e228	e91	e137	e336	670	356	965	409	162	466
13	219	431	e136	e84	e141	e325	732	364	933	381	159	668
14	210	423	e103	e81	e143	e312	789	390	977	359	144	622
15	210	414	e126	e77	e140	e305	893	403	994	347	136	600
16	221	413	e123	e78	e138	e299	994	403	980	335	144	598
17	206	407	e120	e80	e132	e291	1,050	397	975	323	129	585
18	187	404	e115	e82	e131	286	1,060	418	961	316	139	571
19	180	402	e103	e85	e130	278	1,050	485	950	284	144	582
20	192	435	e93	e85	e129	269	1,030	494	1,000	284	153	563
21	187	433	e89	e85	e131	256	985	494	1,030	261	153	546
22	184	429	e84	e84	e132	252	956	511	985	245	140	547
23	202	430	e80	e85	e136	256	914	510	972	266	133	501
24	222	408	e82	e94	e137	267	877	485	959	274	135	468
25	220	388	e85	e102	e137	276	844	500	916	263	129	455
26	219	374	e86	e101	e137	288	802	600	880	310	188	453
27	212	369	e87	e101	e138	302	754	627	854	293	202	425
28	296	363	e90	e109	e139	326	710	631	813	281	211	417
29	408	348	e91	e114	---	353	660	635	774	269	209	397
30	487	327	e91	e116	---	425	628	648	772	258	199	373
31	522	---	e91	e118	---	551	---	653	---	259	191	---
TOTAL	8,025	12,998	5,191	2,864	3,790	8,814	23,062	15,105	25,694	12,061	5,480	13,041
MEAN	259	433	167	92.4	135	284	769	487	856	389	177	435
MAX	522	508	314	118	145	551	1,060	653	1,030	721	255	668
MIN	180	327	80	77	123	142	546	356	648	245	129	199
AC-FT	15,920	25,780	10,300	5,680	7,520	17,480	45,740	29,960	50,960	23,920	10,870	25,870
CFSM	0.25	0.42	0.16	0.09	0.13	0.28	0.75	0.47	0.83	0.38	0.17	0.42
IN.	0.29	0.47	0.19	0.10	0.14	0.32	0.83	0.55	0.93	0.44	0.20	0.47

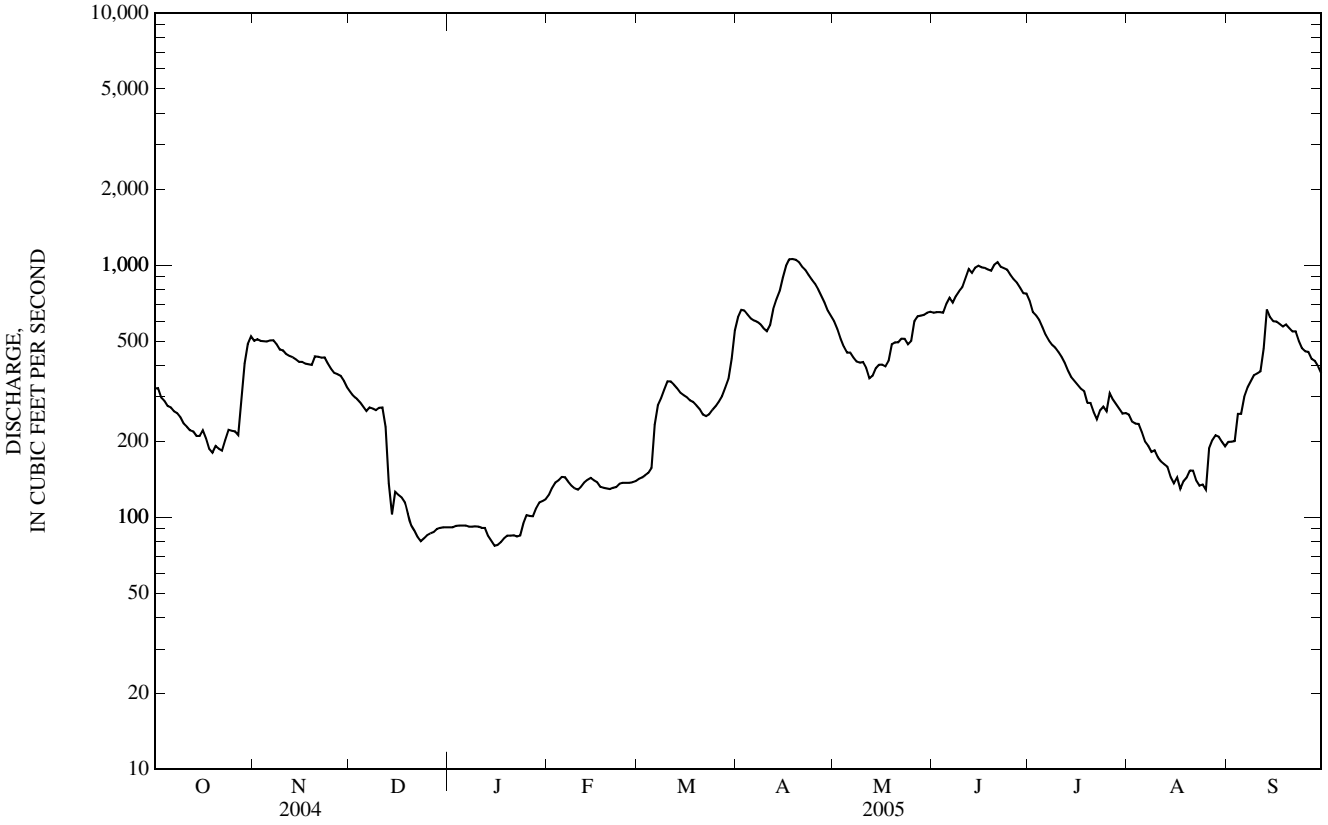
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 2005, BY WATER YEAR (WY)

MEAN	177	190	138	102	110	309	835	529	427	339	217	189
MAX	1,154	1,091	528	336	568	1,380	2,997	1,862	1,333	1,262	1,250	1,136
(WY)	(1996)	(1972)	(1972)	(1980)	(1966)	(1966)	(1997)	(2001)	(1957)	(1993)	(1972)	(1957)
MIN	6.22	6.18	5.15	3.25	7.61	28.7	16.5	7.84	15.9	10.6	10.5	10.7
(WY)	(1934)	(1934)	(1935)	(1935)	(1935)	(1940)	(1934)	(1934)	(1934)	(1934)	(1933)	(1933)

05270500 SAUK RIVER NEAR ST. CLOUD, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1909 - 2005	
ANNUAL TOTAL	95,105		136,125			
ANNUAL MEAN	260		373		a312	
HIGHEST ANNUAL MEAN					732	1972
LOWEST ANNUAL MEAN					51.0	1931
HIGHEST DAILY MEAN	755	Jun 14	1,060	Apr 18	7,940	Apr 14, 1965
LOWEST DAILY MEAN	53	Jan 30	77	Jan 15	1.3	Jan 6, 1935
ANNUAL SEVEN-DAY MINIMUM	56	Jan 29	81	Jan 13	1.5	Jan 2, 1935
MAXIMUM PEAK FLOW			1,130	Jun 20	9,100	Apr 13, 1965
MAXIMUM PEAK STAGE			4.16	Jun 20	10.68	Apr 13, 1965
INSTANTANEOUS LOW FLOW			b77	Jan 15	0.30	Nov 25, 1936
ANNUAL RUNOFF (AC-FT)	188,600		270,000		226,000	
ANNUAL RUNOFF (CFSM)	0.252		0.362		0.303	
ANNUAL RUNOFF (INCHES)	3.43		4.92		4.12	
10 PERCENT EXCEEDS	501		754		775	
50 PERCENT EXCEEDS	219		302		157	
90 PERCENT EXCEEDS	84		98		42	

a Median of annual mean discharges is 300 ft^3/s.
b Daily-mean discharge, backwater from ice.
e Estimated.



05270700 MISSISSIPPI RIVER AT ST. CLOUD, MN

LOCATION.--Lat 45°32'50", long 94°08'44", in SE¼SW¼ sec. 1, T. 35 N., R. 31 W., Sherburne County, Hydrologic Unit 07010203, on left bank about 250 ft below the left downstream end of the City of St. Cloud hydropower dam and at mile 926.3 upstream from Ohio River.

DRAINAGE AREA.--13,320 mi^2 (approximately).

PERIOD OF RECORD.--October 1988 to current year.

GAGE.--Water-stage recorder. Datum of gage is 958.49 ft above sea level (NGVD of 1929).

REMARKS.--Records good except those for estimated daily discharge, which are fair to poor. Flow partly regulated by power plants and reservoirs.

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	7,740	7,980	4,820	4,320	e3,940	e3,690	13,100	9,850	15,800	12,000	4,640	2,700
2	6,950	8,050	4,790	4,340	e3,960	e3,690	14,500	9,400	15,200	12,000	4,310	2,550
3	7,280	8,090	4,680	e4,250	e3,990	e3,690	15,500	8,720	14,500	12,200	4,250	2,780
4	7,200	8,470	4,940	e4,230	e3,990	e3,720	15,000	8,560	14,300	11,600	4,190	2,560
5	7,140	7,960	4,540	e4,210	e3,970	e3,750	16,100	8,060	15,000	10,500	3,960	2,860
6	7,060	8,050	4,260	e4,160	e3,980	e3,770	17,100	7,870	14,800	10,400	3,600	3,240
7	6,990	7,830	4,710	e4,140	e3,970	e4,210	15,000	7,460	15,300	10,000	3,680	2,960
8	6,800	7,490	4,480	e4,090	e3,990	e4,080	14,800	7,010	16,300	9,630	3,520	3,150
9	6,440	7,640	5,120	e4,070	e3,990	e4,070	14,300	7,120	16,700	8,750	3,720	2,860
10	6,300	7,520	5,150	e4,050	e4,010	e4,210	14,400	6,830	17,500	8,310	3,450	2,690
11	6,070	7,130	5,480	e4,040	e4,020	e4,030	15,300	6,520	17,900	7,680	3,300	3,280
12	5,840	6,950	5,020	e4,020	e4,030	e3,980	16,700	6,670	19,300	7,630	3,490	3,500
13	6,030	6,610	4,050	e3,920	e4,050	e3,890	18,400	6,640	19,400	7,240	3,020	4,280
14	5,790	6,630	3,590	e3,700	e4,060	e3,840	18,900	7,110	20,000	6,570	2,870	4,410
15	5,690	6,720	3,650	e3,850	e4,040	e3,760	19,400	7,170	20,800	6,680	2,950	4,280
16	5,320	6,550	4,210	e4,000	e4,020	e3,720	19,200	6,840	21,100	6,010	2,640	4,540
17	5,390	6,750	4,090	e4,020	e3,990	e3,680	18,800	7,110	20,800	5,960	3,010	4,550
18	5,410	6,410	3,650	e4,020	e3,940	e3,700	18,500	7,500	20,200	5,470	3,470	4,560
19	5,640	6,290	3,940	e4,050	e3,900	3,720	17,900	7,910	18,800	5,400	3,000	4,960
20	5,550	6,610	2,640	e4,040	e3,870	3,780	17,600	7,700	17,900	5,490	2,910	4,580
21	5,490	6,630	4,010	e4,010	e3,830	3,850	16,800	7,730	17,500	5,030	2,890	4,470
22	5,310	6,560	4,450	e4,020	e3,810	3,850	16,300	8,520	16,400	5,270	2,820	4,230
23	5,790	6,720	4,400	e4,010	e3,790	4,420	15,300	8,450	16,700	5,180	2,310	3,890
24	5,650	6,820	4,340	e3,990	e3,770	4,860	14,000	8,310	15,900	4,930	2,070	3,830
25	5,600	6,340	4,030	e3,960	e3,760	5,230	13,600	9,130	15,100	4,860	2,420	4,130
26	6,520	5,840	4,100	e3,960	e3,740	5,490	13,000	10,600	13,900	5,130	3,630	4,000
27	6,280	5,980	4,230	e3,950	e3,720	6,080	11,900	11,800	13,100	4,470	3,020	3,990
28	6,680	6,160	3,910	e3,940	e3,700	7,220	11,100	14,000	12,100	4,690	2,670	3,990
29	7,040	5,980	4,380	e3,930	---	7,750	10,700	15,100	11,300	5,000	3,050	3,590
30	7,390	5,220	4,240	e3,930	---	9,850	10,400	15,600	11,600	4,470	2,590	3,720
31	7,580	---	4,450	e3,960	---	12,100	---	16,200	---	4,530	2,850	---
TOTAL	195,960	207,980	134,350	125,180	109,830	147,680	463,600	277,490	495,200	223,080	100,300	111,130
MEAN	6,321	6,933	4,334	4,038	3,922	4,764	15,450	8,951	16,510	7,196	3,235	3,704
MAX	7,740	8,470	5,480	4,340	4,060	12,100	19,400	16,200	21,100	12,200	4,640	4,960
MIN	5,310	5,220	2,640	3,700	3,700	3,680	10,400	6,520	11,300	4,470	2,070	2,550
AC-FT	388,700	412,500	266,500	248,300	217,800	292,900	919,600	550,400	982,200	442,500	198,900	220,400
CFSM	0.47	0.52	0.33	0.30	0.29	0.36	1.16	0.67	1.24	0.54	0.24	0.28
IN.	0.55	0.58	0.38	0.35	0.31	0.41	1.29	0.77	1.38	0.62	0.28	0.31

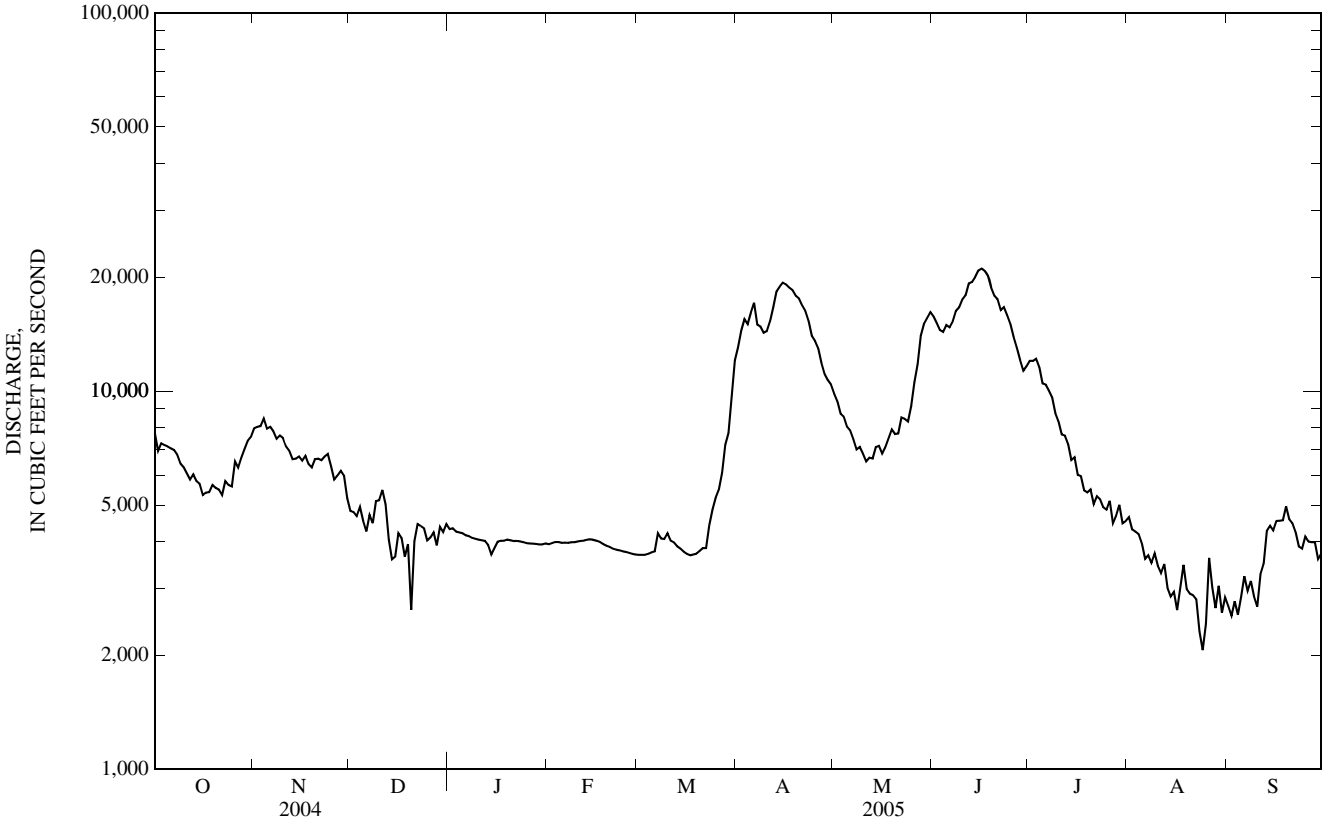
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2005, BY WATER YEAR (WY)

MEAN	5,554	5,813	4,624	3,954	3,808	5,976	13,310	11,250	8,800	8,258	4,613	4,610
MAX	15,680	9,675	7,434	5,616	5,796	10,600	29,710	22,020	20,310	16,830	9,687	9,763
(WY)	(1996)	(1996)	(1997)	(1997)	(1997)	(1995)	(2001)	(2001)	(2001)	(1993)	(1999)	(1999)
MIN	1,922	2,370	2,310	1,927	1,815	3,075	6,134	5,054	3,743	3,606	1,535	2,064
(WY)	(2004)	(2004)	(1991)	(1991)	(1990)	(2003)	(2000)	(2004)	(1992)	(2004)	(1989)	(2003)

05270700 MISSISSIPPI RIVER AT ST. CLOUD, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1988 - 2005	
ANNUAL TOTAL	1,686,930		2,591,780			
ANNUAL MEAN	4,609		7,101		6,708	
HIGHEST ANNUAL MEAN					9,947	2001
LOWEST ANNUAL MEAN					3,723	2004
HIGHEST DAILY MEAN	8,910	Jun 5	21,100	Jun 16	45,100	Apr 9, 1997
LOWEST DAILY MEAN	1,190	Aug 21	2,070	Aug 24	1,010	Aug 24, 1989
ANNUAL SEVEN-DAY MINIMUM	1,400	Aug 29	2,630	Aug 19	1,250	Aug 13, 1989
MAXIMUM PEAK FLOW			a22,100	Jun 14	46,900	Apr 8, 1997
MAXIMUM PEAK STAGE			8.04	Jun 14	11.44	Apr 8, 1997
INSTANTANEOUS LOW FLOW			a1,600	Aug 24	b478	Aug 22, 2004
ANNUAL RUNOFF (AC-FT)	3,346,000		5,141,000		4,860,000	
ANNUAL RUNOFF (CFSM)	0.346		0.533		0.504	
ANNUAL RUNOFF (INCHES)	4.71		7.24		6.84	
10 PERCENT EXCEEDS	7,510		15,300		12,600	
50 PERCENT EXCEEDS	4,360		5,150		5,360	
90 PERCENT EXCEEDS	2,120		3,590		2,550	

a Due in part to regulation.
b Due to rgulation.
e Estimated.



05275000 ELK RIVER NEAR BIG LAKE, MN

LOCATION.--Lat 45°20'02", long 93°40'00", in NE¼SW¼ sec. 23, T.33 N., R.27 W., Sherburne County, Hydrologic Unit 07010203, on right bank at upstream side of County Highway 15 bridge, 4 mi east of Big Lake and 4 mi downstream from St. Francis River.

DRAINAGE AREA.--559 mi^2.

PERIOD OF RECORD.--April 1911 to September 1917, April to September 1931, April to November 1932, March to November 1933, March 1934 to September 1987, October 1990 to current year.

REVISED RECORDS.--WSP 895: 1939. WSP 1308: 1912(M), 1915-17(M).

GAGE.--Water-stage recorder. Datum of gage is 899.60 ft above sea level (NGVD of 1929). April 1911 to Sept. 30, 1917, April 1, 1931 to July 26, 1934, nonrecording gage at same site and datum.

REMARKS.--Records good except those for periods of estimated daily discharge, which are fair to poor.

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	281	379	e229	e103	e128	e144	e735	408	625	300	119	124
2	291	414	e223	e101	e132	e145	800	382	589	275	114	110
3	285	445	e211	e101	e144	e147	853	358	548	268	109	104
4	273	469	e204	e101	e150	e151	912	342	532	264	105	118
5	265	478	205	e101	e152	e155	928	328	563	251	99	120
6	257	478	202	e101	e151	e213	932	319	560	244	92	150
7	246	465	202	e100	e148	e255	912	305	556	232	85	151
8	239	446	202	e99	e142	e278	862	280	630	221	83	138
9	236	429	201	e98	e139	e264	794	268	727	214	82	125
10	232	413	211	e98	e138	e251	760	266	929	202	91	120
11	225	391	212	e97	e142	e238	766	257	1,050	190	85	110
12	210	365	212	e97	e147	e232	768	262	1,140	183	83	130
13	197	336	e175	e93	e148	e226	750	293	1,210	178	79	464
14	191	313	e145	e88	e149	e218	736	304	1,240	169	76	439
15	189	301	e153	e83	e146	e209	751	311	1,210	158	75	405
16	186	296	e147	e85	e142	e205	793	310	1,170	149	78	351
17	183	293	e142	e87	e139	e205	821	303	1,120	140	109	292
18	181	291	e135	e88	e136	e206	807	328	1,030	127	100	244
19	181	294	e122	e89	e134	e206	779	381	930	114	98	227
20	180	313	e111	e91	e135	e215	743	392	867	113	100	205
21	180	310	e103	e90	e135	e224	705	395	826	116	94	200
22	182	301	e96	e91	e135	e221	669	413	742	109	89	299
23	186	300	e90	e91	e139	e222	632	438	686	118	86	274
24	187	300	e92	e100	e140	e233	596	464	615	141	82	224
25	186	294	e95	e106	e140	e239	555	483	535	140	77	204
26	182	287	e97	e107	e139	e243	519	511	453	144	116	214
27	181	279	e98	e108	e140	e271	498	506	407	151	163	198
28	251	263	e100	e114	e141	e350	482	506	436	143	154	188
29	375	249	e101	e120	---	e441	457	538	378	141	151	181
30	366	e233	e103	e123	---	e544	430	592	333	136	150	173
31	357	---	e103	e126	---	e654	---	634	---	128	141	---
TOTAL	7,161	10,425	4,722	3,077	3,951	7,805	21,745	11,877	22,637	5,459	3,165	6,282
MEAN	231	348	152	99.3	141	252	725	383	755	176	102	209
MAX	375	478	229	126	152	654	932	634	1,240	300	163	464
MIN	180	233	90	83	128	144	430	257	333	109	75	104
AC-FT	14,200	20,680	9,370	6,100	7,840	15,480	43,130	23,560	44,900	10,830	6,280	12,460
CFSM	0.41	0.62	0.27	0.18	0.25	0.45	1.30	0.69	1.35	0.32	0.18	0.37
IN.	0.48	0.69	0.31	0.20	0.26	0.52	1.45	0.79	1.51	0.36	0.21	0.42

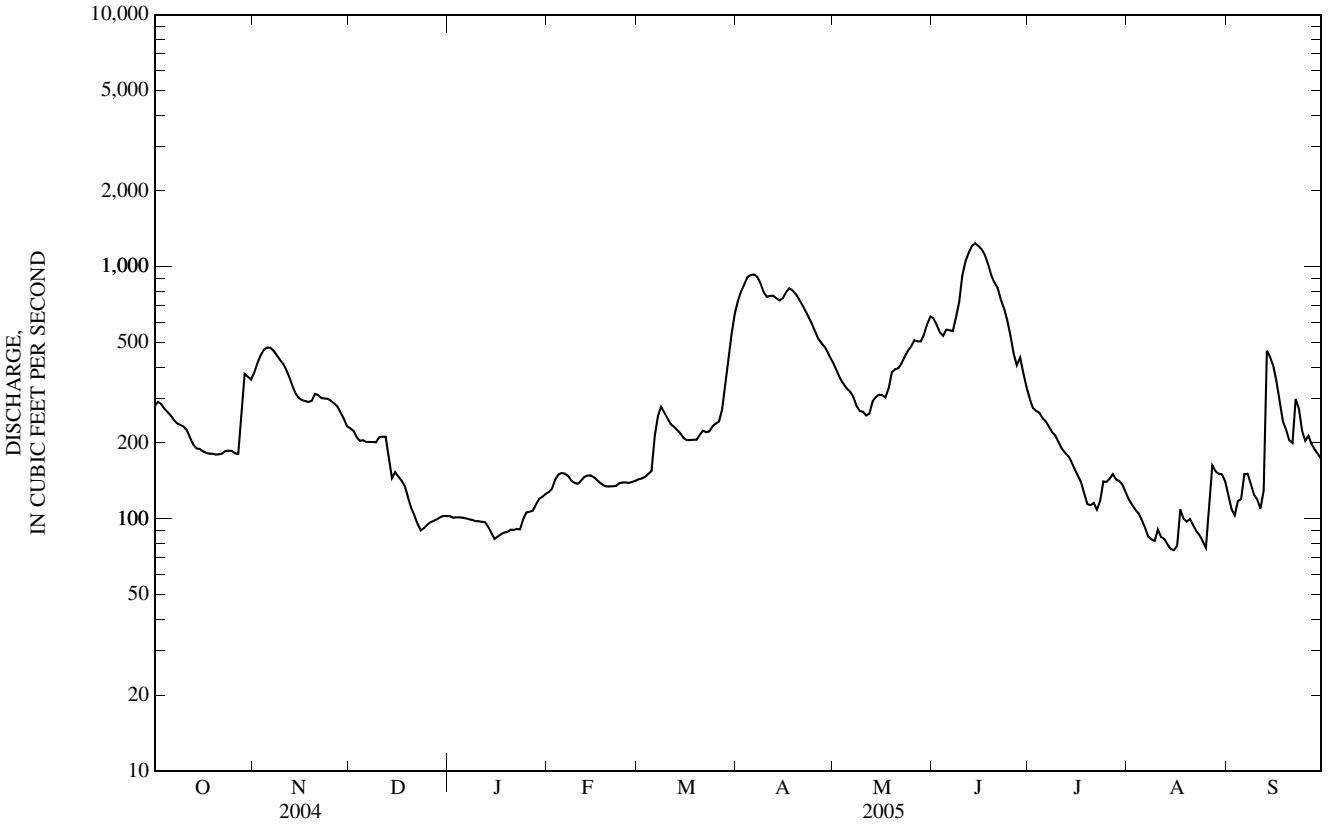
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 2005, BY WATER YEAR (WY)

MEAN	210	213	149	111	117	296	662	443	348	273	183	205
MAX	778	794	410	290	392	1,125	1,823	1,620	1,647	1,026	926	1,050
(WY)	(1985)	(1972)	(1966)	(1979)	(1984)	(1966)	(1969)	(1986)	(1984)	(1978)	(1972)	(1986)
MIN	32.7	56.3	44.1	38.4	29.8	58.8	75.5	37.5	20.5	8.94	8.74	23.4
(WY)	(1934)	(1935)	(1935)	(1935)	(1936)	(1934)	(1934)	(1934)	(1934)	(1934)	(1934)	(1932)

05275000 ELK RIVER NEAR BIG LAKE, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1911 - 2005	
ANNUAL TOTAL	94,439		108,306			
ANNUAL MEAN	258		297		a277	
HIGHEST ANNUAL MEAN					669	1986
LOWEST ANNUAL MEAN					88.0	1935
HIGHEST DAILY MEAN	1,110	Jun 6	1,240	Jun 14	7,170	Apr 16, 1965
LOWEST DAILY MEAN	50	Jan 30	75	Aug 15	4.0	Aug 1, 1934
ANNUAL SEVEN-DAY MINIMUM	54	Jan 28	81	Aug 10	4.5	Jul 27, 1934
MAXIMUM PEAK FLOW			1,250	Jun 14	7,360	Apr 16, 1965
MAXIMUM PEAK STAGE			4.19	Jun 14	10.86	Apr 16, 1965
INSTANTANEOUS LOW FLOW			73	Aug 16, 26	3.6	Jul 31, 1934
ANNUAL RUNOFF (AC-FT)	187,300		214,800		200,800	
ANNUAL RUNOFF (CFSM)	0.462		0.531		0.496	
ANNUAL RUNOFF (INCHES)	6.28		7.21		6.74	
10 PERCENT EXCEEDS	470		676		579	
50 PERCENT EXCEEDS	204		211		170	
90 PERCENT EXCEEDS	77		98		72	

a Median of annual mean discharges is 260 ft^3/s.
e Estimated.



05280000 CROW RIVER AT ROCKFORD, MN

LOCATION.--Lat 45°05'12", long 93°44'02", in sec. 29, T.119 N., R.24 W., Hennepin County, Hydrologic Unit 07010204, on right bank at Rockford, 150 ft downstream from bridge on State Highway 55, 2 miles downstream from confluence of North and South Forks, and 23 miles upstream from confluence with the Mississippi River.

DRAINAGE AREA.--2,640 mi^2.

PERIOD OF RECORD.--April to July 1906 (published as "near Dayton"), June 1909 to September 1917, April to November 1929, March 1930 to September 1931, April to November 1932, March to November 1933, March 1934 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 1115: 1932. WSP 1508: 1933. WDR MN-77-2: 1972 (M)(m).

GAGE.--Water-stage recorder. Datum of gage is 893.08 ft above sea level (NGVD of 1929). Apr. 13 to July 21, 1906, nonrecording gage at Berning Mill 14 mi downstream at different datum. June 4, 1909 to Sept. 30, 1917, nonrecording gage at site 600 ft downstream at different datum;. Apr. 23, 1929 to Aug. 21, 1934, nonrecording gage at site 600 ft downstream at present datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair to poor.

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	704	1,490	900	e284	e213	e282	1,580	2,370	1,960	2,600	531	315
2	675	1,670	899	e278	e222	e295	1,780	2,250	1,910	2,480	478	279
3	649	1,820	874	e267	e232	e312	1,650	2,130	1,830	2,360	433	262
4	628	1,930	959	e255	e243	e328	1,510	2,010	1,790	2,220	406	297
5	602	2,000	956	e245	e259	e352	1,410	1,900	1,790	2,080	377	297
6	569	2,040	890	e241	e265	e417	1,340	1,790	1,780	1,930	346	372
7	546	2,050	875	e239	e270	e510	1,280	1,700	1,840	1,780	318	441
8	524	2,030	836	e236	e265	e620	1,240	1,620	2,020	1,650	298	444
9	499	1,960	812	e233	e260	e700	1,210	1,570	2,230	1,520	280	440
10	483	1,870	801	e231	e260	e730	1,200	1,520	2,580	1,400	268	430
11	469	1,740	793	e228	e265	e740	1,290	1,480	2,900	1,290	261	396
12	455	1,620	775	e228	e270	e740	1,540	1,440	3,220	1,180	248	393
13	434	1,500	e346	e225	e270	e730	1,860	1,470	3,550	1,100	235	655
14	419	1,380	e382	e219	e265	e720	2,110	1,500	3,940	1,020	222	1,230
15	411	1,300	e404	e211	e260	e709	2,280	1,510	4,400	958	210	1,620
16	404	1,230	e411	e205	e255	e690	2,470	1,500	4,900	894	200	1,830
17	396	1,180	e407	e202	e252	e679	2,720	1,500	5,290	831	191	2,010
18	389	1,130	e375	e205	e250	e670	2,990	1,570	5,510	767	186	2,150
19	384	1,110	e343	e208	e247	e665	3,260	1,690	5,490	703	181	2,260
20	370	1,120	e325	e211	e240	e657	3,500	1,810	5,340	673	176	2,300
21	360	1,110	e311	e211	e240	e639	3,660	1,930	5,090	635	174	2,300
22	355	1,110	e300	e212	e242	e626	3,690	2,010	4,770	605	169	2,260
23	360	1,110	e282	e213	e243	e642	3,610	2,050	4,410	585	164	2,140
24	359	1,090	e282	e213	e247	e707	3,470	2,070	4,050	567	157	1,990
25	372	1,070	e260	e213	e251	e828	3,310	2,070	3,710	576	150	1,900
26	385	1,050	e263	e212	e255	e916	3,140	2,070	3,390	726	235	1,850
27	388	1,040	e260	e210	e266	e1,010	2,970	2,060	3,140	754	327	1,820
28	477	1,030	e263	e209	e270	e1,110	2,800	2,050	3,010	741	374	1,790
29	739	1,000	e274	e208	---	e1,170	2,650	2,040	2,840	711	380	1,750
30	1,050	964	e282	e206	---	e1,290	2,500	2,020	2,720	657	377	1,700
31	1,300	---	e284	e209	---	1,480	---	2,000	---	588	349	---
TOTAL	16,155	42,744	16,424	6,967	7,077	21,964	70,020	56,700	101,400	36,581	8,701	37,921
MEAN	521	1,425	530	225	253	709	2,334	1,829	3,380	1,180	281	1,264
MAX	1,300	2,050	959	284	270	1,480	3,690	2,370	5,510	2,600	531	2,300
MIN	355	964	260	202	213	282	1,200	1,440	1,780	567	150	262
AC-FT	32,040	84,780	32,580	13,820	14,040	43,570	138,900	112,500	201,100	72,560	17,260	75,220
CFSM	0.20	0.54	0.20	0.09	0.10	0.27	0.88	0.69	1.28	0.45	0.11	0.48
IN.	0.23	0.60	0.23	0.10	0.10	0.31	0.99	0.80	1.43	0.52	0.12	0.53

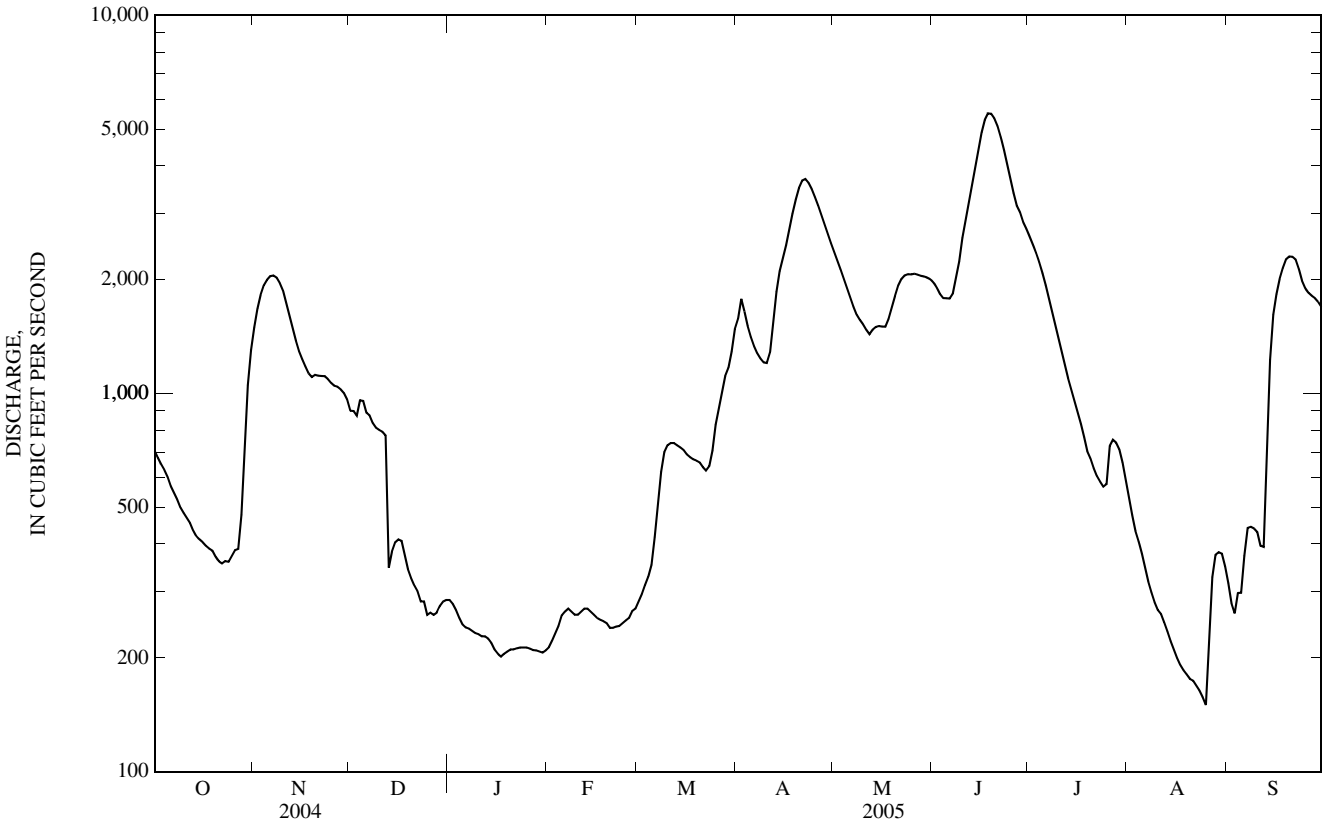
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1906 - 2005, BY WATER YEAR (WY)

MEAN	450	431	296	174	173	843	2,215	1,500	1,357	1,104	586	505
MAX	3,809	1,909	1,477	928	1,115	4,085	9,026	5,992	6,166	6,759	4,175	4,941
(WY)	(1986)	(1972)	(1983)	(1992)	(1966)	(1983)	(1965)	(1986)	(1906)	(1993)	(2002)	(1991)
MIN	16.6	28.3	17.3	12.4	12.5	25.1	57.1	26.7	14.8	5.76	5.87	13.0
(WY)	(1934)	(1937)	(1938)	(1938)	(1959)	(1934)	(1934)	(1934)	(1934)	(1934)	(1934)	(1933)

05280000 CROW RIVER AT ROCKFORD, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1906 - 2005	
ANNUAL TOTAL	326,754		422,654			
ANNUAL MEAN	893		1,158		a834	
HIGHEST ANNUAL MEAN					2,754	1986
LOWEST ANNUAL MEAN					64.5	1931
HIGHEST DAILY MEAN	6,850	Jun 17	5,510	Jun 18	22,100	Apr 16, 1965
LOWEST DAILY MEAN	63	Jan 30	150	Aug 25	3.8	Aug 4, 1934
ANNUAL SEVEN-DAY MINIMUM	67	Jan 29	167	Aug 19	4.0	Jul 31, 1934
MAXIMUM PEAK FLOW			5,540	Jun 18	22,400	Apr 16, 1965
MAXIMUM PEAK STAGE			8.79	Jun 18	b19.27	Apr 16, 1965
INSTANTANEOUS LOW FLOW			147	Aug 25	c1.8	Nov 15, 1936
ANNUAL RUNOFF (AC-FT)	648,100		838,300		604,000	
ANNUAL RUNOFF (CFSM)	0.338		0.439		0.316	
ANNUAL RUNOFF (INCHES)	4.60		5.96		4.29	
10 PERCENT EXCEEDS	2,010		2,490		2,320	
50 PERCENT EXCEEDS	440		730		289	
90 PERCENT EXCEEDS	100		232		42	

a Median of annual mean discharges is 720 ft^3/s.
b From floodmark.
c Result of ice jam upstream.
e Estimated.



05284000 MILLE LACS LAKE AT COVE BAY NEAR ONAMIA, MN

LOCATION.--Lat 46°06'36", long 93°37'08", in NE¼NE¼ sec. 21, T.42 N., R.26 W., Mille Lacs County, Hydrologic Unit 07010207, in Minnesota Department of Natural Resources boathouse at Cove Bay boatlanding, 3.6 mi northeast of Onamia.

PERIOD OF RECORD.--June 1931 to current year. Monthend records for the period October 1939 to September 1953 published in WSP 1278 (fragmentary 1940-41). Published as "at Wealthwood" prior to October 1939, and as "at Garrison" October 1939 to September 1987 (gage heights collected at Wealthwood October 1939 to September 1941, but converted to gage datum at Garrison for publication).

GAGE.--Water-stage recorder. Datum of gage is 1,240.40 ft above sea level (NGVD of 1929, levels by Minnesota Department of Natural Resources). Gage readings have been converted to elevations above sea level. Prior to Oct. 1, 1941, nonrecording gage at Wealthwood, 17 mi north of present site, at various datums; gage readings were converted to elevations (adjustment of 1912). Oct. 1, 1941 to Sept. 30, 1958, water-stage recorder at Garrison, 16 mi northwest of present site at datum 1,240.50 ft (adjustment of 1912). To convert these readings to NGVD of 1929, subtract 0.10 ft. Oct. 1, 1958 to Sept. 30, 1987, water-stage recorder at Garrison at present datum.

REMARKS.--Records fair to poor. Water level affected by fixed-crest spillway constructed in 1953 at outlet of Ogechie Lake, 2.7 mi downstream from outlet of Mille Lacs Lake, with crest at elevation 1,250.50 ft. Water level subject to fluctuation caused by seiches.

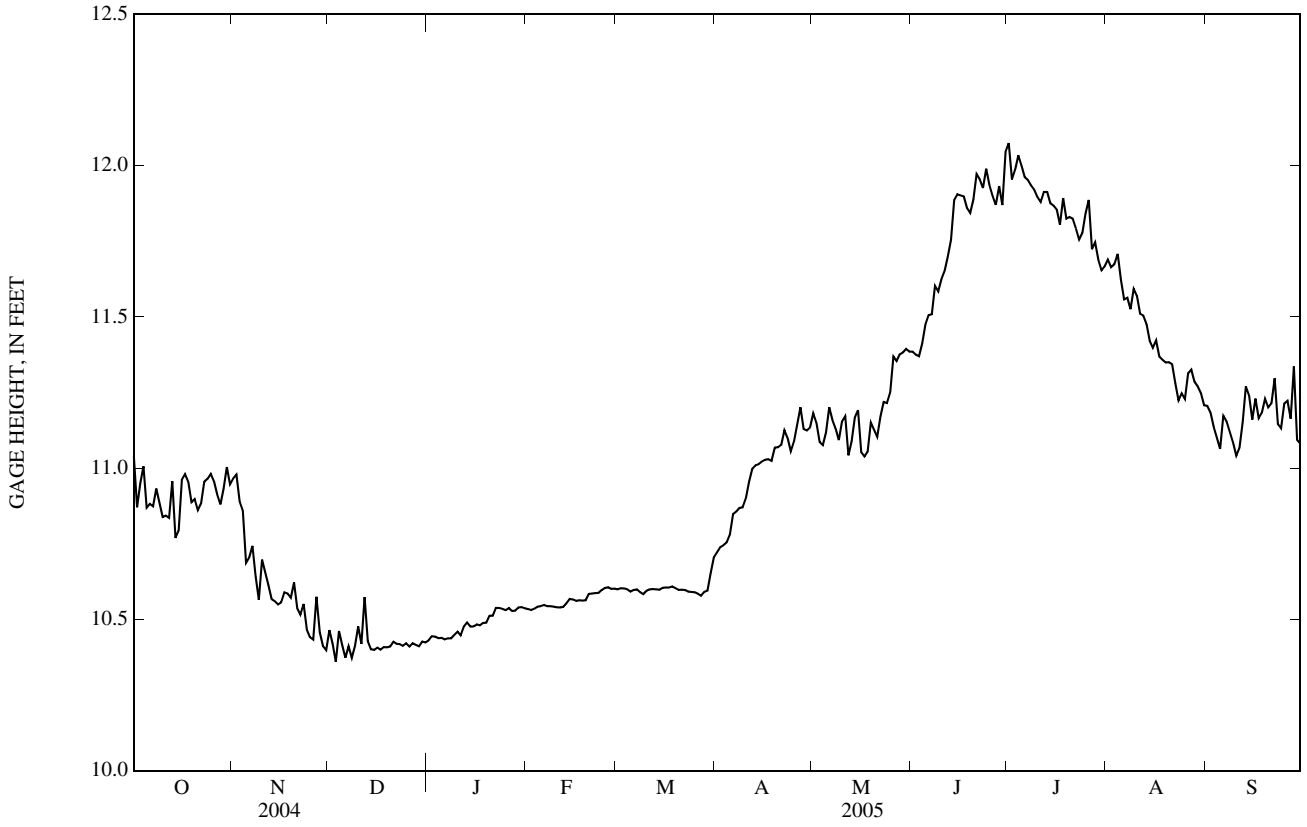
EXTREMES FOR PERIOD OF RECORD.--Maximum gage-height, 13.64 ft, July 21, 2002, affected by seiche action; maximum daily, 13.03 ft, Aug. 22, 1972; minimum gage-height observed, 5.34 ft (present datum) Oct. 16-19, 1936.

EXTREMES FOR CURRENT YEAR.--Maximum daily gage-height, 12.07 ft, July 1, affected by seiche action; minimum daily gage-height, 10.36 ft, Dec. 3, due in part to seiche. Maximum or minimum instantaneous values not available for 2005 water year.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.04	10.97	10.46	10.43	10.53	10.60	10.72	11.18	11.38	12.07	11.69	11.21
2	10.87	10.98	10.42	10.44	10.53	10.60	10.74	11.15	11.38	11.95	11.66	11.18
3	10.95	10.89	10.36	10.44	10.54	10.60	10.75	11.09	11.37	11.99	11.67	11.14
4	11.01	10.86	10.46	10.44	10.54	10.60	10.75	11.08	11.41	12.03	11.71	11.10
5	10.87	10.69	10.42	10.44	10.54	10.59	10.78	11.12	11.47	12.00	11.62	11.06
6	10.88	10.71	10.37	10.43	10.55	10.60	10.85	11.20	11.51	11.96	11.56	11.17
7	10.87	10.74	10.41	10.44	10.54	10.60	10.86	11.16	11.51	11.95	11.56	11.15
8	10.93	10.64	10.37	10.44	10.54	10.59	10.87	11.13	11.60	11.93	11.53	11.12
9	10.88	10.56	10.41	10.45	10.54	10.58	10.87	11.09	11.58	11.92	11.59	11.09
10	10.84	10.70	10.48	10.46	10.54	10.59	10.90	11.15	11.62	11.90	11.57	11.04
11	10.84	10.65	10.42	10.45	10.54	10.60	10.96	11.17	11.65	11.88	11.51	11.07
12	10.84	10.61	10.57	10.48	10.54	10.60	11.00	11.04	11.70	11.91	11.50	11.15
13	10.96	10.57	10.43	10.49	10.55	10.60	11.01	11.09	11.75	11.91	11.48	11.27
14	10.77	10.56	10.40	10.48	10.57	10.60	11.01	11.17	11.89	11.88	11.42	11.24
15	10.79	10.55	10.40	10.48	10.57	10.60	11.02	11.19	11.91	11.87	11.40	11.16
16	10.96	10.56	10.41	10.48	10.56	10.61	11.03	11.05	11.90	11.85	11.42	11.23
17	10.98	10.59	10.40	10.48	10.56	10.61	11.03	11.04	11.90	11.81	11.37	11.17
18	10.96	10.59	10.41	10.49	10.56	10.61	11.02	11.05	11.86	11.89	11.36	11.18
19	10.89	10.57	10.41	10.49	10.56	10.60	11.07	11.15	11.84	11.82	11.35	11.23
20	10.90	10.62	10.41	10.51	10.58	10.60	11.07	11.13	11.89	11.83	11.35	11.20
21	10.86	10.54	10.43	10.51	10.59	10.60	11.08	11.10	11.97	11.82	11.34	11.21
22	10.88	10.52	10.42	10.54	10.59	10.60	11.13	11.17	11.95	11.79	11.28	11.30
23	10.96	10.55	10.42	10.54	10.59	10.59	11.10	11.22	11.93	11.76	11.22	11.15
24	10.97	10.47	10.41	10.53	10.60	10.59	11.06	11.21	11.99	11.78	11.25	11.13
25	10.98	10.44	10.42	10.53	10.60	10.59	11.09	11.25	11.94	11.84	11.23	11.21
26	10.96	10.43	10.41	10.54	10.61	10.59	11.15	11.37	11.90	11.89	11.31	11.22
27	10.91	10.58	10.42	10.53	10.60	10.58	11.20	11.35	11.87	11.72	11.33	11.16
28	10.88	10.46	10.42	10.53	10.60	10.59	11.13	11.38	11.93	11.75	11.29	11.34
29	10.93	10.41	10.41	10.54	---	10.60	11.12	11.38	11.87	11.69	11.27	11.09
30	11.00	10.40	10.43	10.54	---	10.65	11.13	11.39	12.05	11.65	11.25	11.08
31	10.95	---	10.42	10.54	---	10.71	---	11.38	---	11.67	11.21	---
MEAN	10.91	10.61	10.42	10.49	10.56	10.60	10.98	11.18	11.75	11.86	11.43	11.17
MAX	11.04	10.98	10.57	10.54	10.61	10.71	11.20	11.39	12.05	12.07	11.71	11.34
MIN	10.77	10.40	10.36	10.43	10.53	10.58	10.72	11.04	11.37	11.65	11.21	11.04

05284000 MILLE LACS LAKE AT COVE BAY NEAR ONAMIA, MN—Continued



05284305 SEGUCHIE CREEK AT HOLT LAKE OUTLET, NEAR GARRISON, MN

LOCATION.--Lat 46°15'07", long 93°49'38", in SE¼SW¼NW¼ sec. 36, T.44 N., R.28 W., Crow Wing County, Hydrologic Unit 07010207, on left bank, 50 feet upstream from Holt Lake outlet and 3 miles south of Garrison.

DRAINAGE AREA.--16.7 mi^2.

PERIOD OF RECORD.--May 2004 to current year.

GAGE.--Water-stage recorder.

REMARKS.--Records fair except those for estimated daily discharge, which are poor. Water levels affected by weir dam at outlet of Holt Lake. Some natural regulation from Holt Lake and other lakes upstream.

REVISIONS.--Daily-mean discharges, August 7-30, 2004 (unpublished).

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	7.3	e5.3	6.4	5.1	5.1	5.3	14	12	14	12	4.6	6.0
2	7.0	e3.5	6.2	5.4	5.1	5.2	15	11	14	11	4.7	5.7
3	6.8	e2.2	6.1	5.4	5.1	5.1	15	11	13	11	4.9	5.7
4	6.3	e1.8	6.0	5.4	5.1	5.0	15	10	14	10	5.2	6.1
5	6.0	e17	5.8	5.3	5.2	4.8	15	10	17	9.0	4.8	6.4
6	6.0	30	5.8	5.3	5.2	4.9	18	10	16	8.2	4.6	7.5
7	5.9	24	5.8	5.3	5.2	4.9	18	9.7	16	7.5	4.5	7.2
8	6.2	19	5.7	5.2	5.2	4.8	18	9.6	21	7.0	4.5	6.9
9	e5.9	15	5.7	5.3	5.3	4.7	18	10	21	6.5	5.2	6.7
10	e3.2	13	6.2	5.4	5.3	4.9	19	11	21	6.1	5.2	6.6
11	e0.72	12	e6.0	5.3	5.3	4.9	20	10	21	5.6	5.0	6.4
12	e0.32	10	5.9	5.7	5.3	4.9	22	9.5	26	6.0	4.9	9.5
13	5.4	9.4	5.7	5.7	5.4	4.8	22	9.6	25	6.4	4.8	13
14	8.1	8.7	5.5	5.5	5.8	4.7	21	9.9	e23	5.8	4.7	12
15	7.3	8.3	5.3	5.4	5.7	4.8	21	9.4	e22	5.5	4.6	11
16	6.9	8.1	5.2	5.3	5.6	4.7	21	9.0	e20	5.2	4.6	11
17	6.1	8.0	5.1	5.3	5.5	4.8	20	8.7	e19	4.8	4.7	10
18	e5.7	7.9	5.0	5.3	5.5	4.7	20	9.3	e17	4.5	4.8	10
19	e3.7	7.9	4.9	5.2	5.4	4.6	19	11	e16	4.3	5.0	11
20	e0.57	8.4	4.9	5.3	5.6	4.6	19	11	e15	4.2	5.1	11
21	e0.34	8.0	4.9	5.6	5.6	4.5	18	11	e15	4.2	5.0	11
22	e0.21	7.8	4.9	5.9	5.5	4.4	17	11	e14	4.1	4.9	10
23	e0.54	7.7	4.8	5.7	5.4	4.4	16	9.8	e14	4.0	5.0	9.7
24	e1.6	7.4	4.8	5.5	5.5	4.4	15	9.4	e13	4.0	4.9	9.6
25	e1.4	7.2	4.7	5.4	5.6	4.4	15	12	13	4.4	5.0	10
26	e1.3	7.1	4.7	5.3	5.5	4.4	15	16	12	4.8	6.6	11
27	e1.2	7.2	4.7	5.3	5.4	4.5	14	16	11	4.5	6.6	11
28	e1.1	6.9	4.6	5.2	5.4	4.8	13	17	9.7	5.1	6.4	10
29	e1.8	6.7	4.7	5.2	---	5.2	13	16	9.2	4.9	6.3	9.6
30	e6.4	6.6	4.9	5.1	---	8.3	12	16	13	4.7	6.1	9.3
31	e6.6	---	4.9	5.1	---	13	---	15	---	4.7	6.1	---
TOTAL	127.90	292.1	165.8	166.4	150.8	159.4	518	350.9	494.9	190.0	159.3	270.9
MEAN	4.13	9.74	5.35	5.37	5.39	5.14	17.3	11.3	16.5	6.13	5.14	9.03
MAX	8.1	30	6.4	5.9	5.8	13	22	17	26	12	6.6	13
MIN	0.21	1.8	4.6	5.1	5.1	4.4	12	8.7	9.2	4.0	4.5	5.7
AC-FT	254	579	329	330	299	316	1,030	696	982	377	316	537

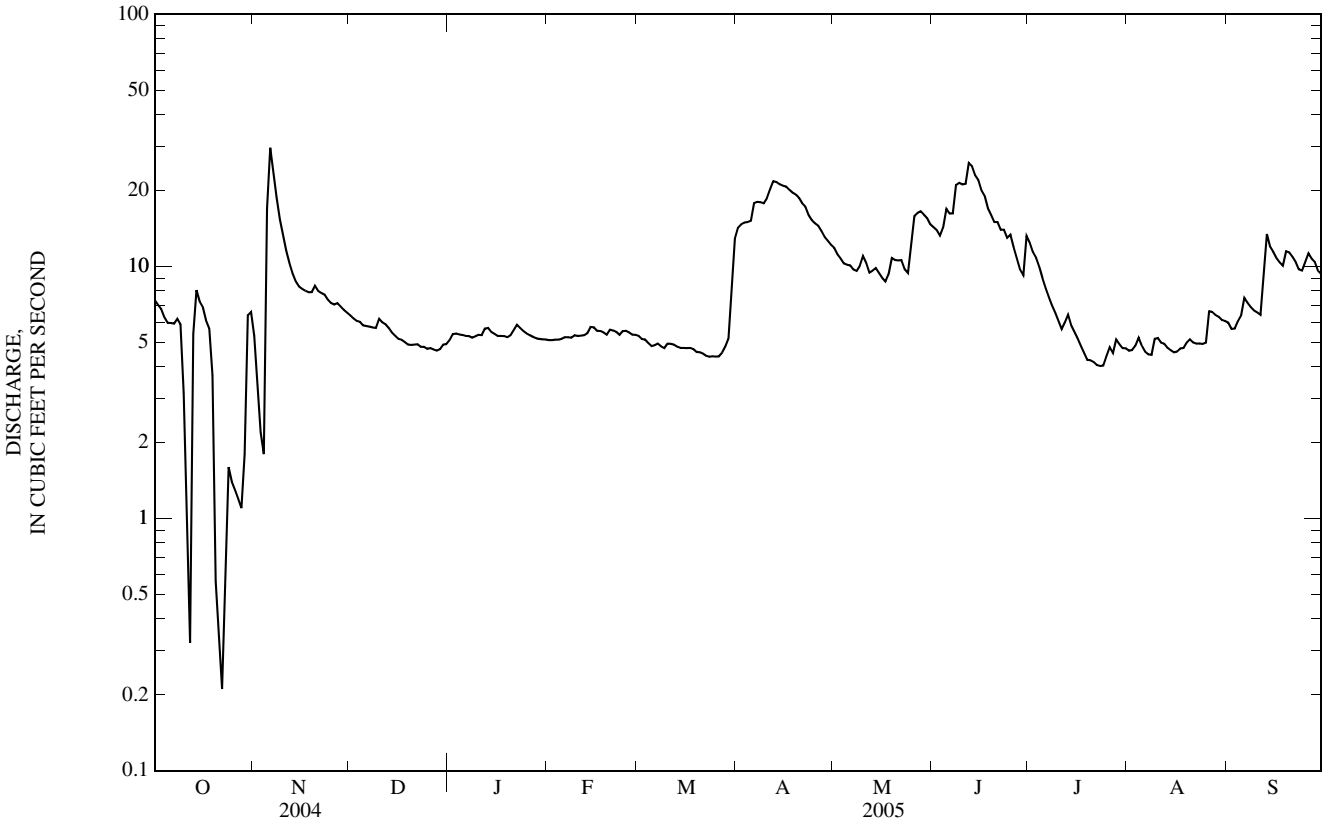
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2005, BY WATER YEAR (WY)

MEAN	4.13	9.74	5.35	5.37	5.39	5.14	17.3	11.3	11.5	4.53	3.08	7.31
MAX	4.13	9.74	5.35	5.37	5.39	5.14	17.3	11.3	16.5	6.13	5.14	9.03
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)
MIN	4.13	9.74	5.35	5.37	5.39	5.14	17.3	11.3	6.45	2.93	1.02	5.59
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2004)	(2004)	(2004)	(2004)

05284305 SEGUCHIE CREEK AT HOLT LAKE OUTLET, NEAR GARRISON, MN—Continued

SUMMARY STATISTICS	FOR 2005 WATER YEAR		WATER YEARS 2004 - 2005	
ANNUAL TOTAL	3,046.40			
ANNUAL MEAN	8.35		8.35	
HIGHEST ANNUAL MEAN			8.35	2005
LOWEST ANNUAL MEAN			8.35	2005
HIGHEST DAILY MEAN	30	Nov 6	30	Nov 6, 2004
LOWEST DAILY MEAN	0.21	Oct 22	0.21	Oct 22, 2004
ANNUAL SEVEN-DAY MINIMUM	0.85	Oct 20	0.30	Aug 21, 2004
MAXIMUM PEAK FLOW	a38	Nov 5	a38	Nov 5, 2004
MAXIMUM PEAK STAGE	7.72	Nov 5	7.72	Nov 5, 2004
INSTANTANEOUS LOW FLOW	b0.21	Oct 22	b0.21	Oct 22, 2004
ANNUAL RUNOFF (AC-FT)	6,040		6,050	
10 PERCENT EXCEEDS	16		16	
50 PERCENT EXCEEDS	6.0		6.0	
90 PERCENT EXCEEDS	4.6		4.6	

a Result of beaver dam failure below gage and resulting lake drawdown.
b Estimated, daily-mean discharge; backwater from beaver dam.
e Estimated.



052484305 SEGUCHIE CREEK AT HOLT LAKE OUTLET, NEAR GARRISON, MN

PERIOD OF RECORD.-- Water years 2004 to current year.

PERIOD OF DAILY RECORD:

SPECIFIC CONDUCTANCE.-- May 2004 to current year.

WATER TEMPERATURES.-- May 2004 to current year.

REMARKS.-- Records considered good. Conductance and water temperatures were obtained by continuous water-sensor monitors, and checked independently by U.S. Geological Survey personnel.

EXTREMES FOR PERIOD OF DAILY RECORD:

SPECIFIC CONDUCTANCE.-- Maximum recorded, 276 µS/cm, several days in 2005; minimum, 130 µS/cm, Apr. 2, 7, 2005.

WATER TEMPERATURES.-- Maximum, 28.5 C, July 21, 2004; minimum recorded, 0.5 C, many days in 2005.

EXTREMES FOR CURRENT YEAR:

SPECIFIC CONDUCTANCE.-- Maximum recorded, 276 µS/cm, several days; minimum, 130 µS/cm, Apr. 2, 7.

WATER TEMPERATURES.-- Maximum recorded, 28.0 C, July 16, 17; minimum recorded, 0.5 C, many days.

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	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	216	212	215
28	---	---	---	---	---	---	---	---	---	216	208	213
29	---	---	---	---	---	---	---	---	---	218	212	216
30	---	---	---	---	---	---	---	---	---	218	214	216
31	---	---	---	---	---	---	---	---	---	217	214	216
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

052484305 SEGUCHIE CREEK AT HOLT LAKE OUTLET, NEAR GARRISON, MN

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	216	214	215	227	215	224	225	220	223	230	228	228
2	216	212	214	224	222	223	225	216	222	230	228	229
3	216	213	214	226	220	224	222	219	221	232	229	231
4	215	213	214	225	219	220	221	218	220	234	229	232
5	214	210	212	221	218	220	222	214	220	234	213	225
6	215	210	212	224	216	220	222	214	220	222	214	219
7	216	210	213	218	214	217	223	220	222	225	221	223
8	216	210	213	220	215	218	227	222	224	226	218	224
9	214	209	212	232	218	220	224	222	223	226	225	226
10	215	209	212	232	220	223	222	219	221	227	226	226
11	216	210	213	225	206	211	222	220	221	228	225	226
12	217	212	213	217	211	213	223	221	222	229	226	227
13	216	210	214	221	216	218	224	221	223	231	228	230
14	216	211	214	222	215	219	226	221	224	232	230	231
15	216	209	212	225	218	221	227	222	224	230	223	226
16	218	212	214	223	217	220	231	222	228	226	223	224
17	216	211	213	224	215	219	231	226	229	228	226	227
18	216	212	213	224	217	220	229	226	227	228	223	227
19	217	213	215	225	219	222	229	225	227	228	225	226
20	220	217	218	224	220	222	231	228	229	229	226	228
21	222	218	219	226	219	223	229	226	228	228	222	224
22	222	219	220	223	218	221	232	228	229	224	220	223
23	220	215	218	223	218	221	231	230	230	224	222	223
24	218	215	216	222	219	221	233	228	231	224	223	223
25	219	216	217	228	219	222	235	230	233	226	223	225
26	220	217	218	224	220	222	231	227	229	226	224	225
27	221	218	220	226	222	224	232	227	231	227	219	224
28	221	219	220	226	222	223	234	231	232	228	214	223
29	223	219	221	224	222	223	233	231	232	228	216	225
30	225	220	223	223	220	221	233	230	231	227	223	225
31	---	---	---	222	220	221	232	230	231	---	---	---
MONTH	225	209	215	232	206	221	235	214	226	234	213	226
YEAR	235	206	222									

052484305 SEGUCHIE CREEK AT HOLT LAKE OUTLET, NEAR GARRISON, MN

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	227	218	223	223	221	222	---	---	---	---	---	---
2	223	217	221	224	223	224	---	---	---	---	---	---
3	225	219	222	224	222	224	---	---	---	---	---	---
4	224	218	223	224	220	222	---	---	---	---	---	---
5	227	217	223	225	217	221	---	---	---	---	---	---
6	229	226	227	224	217	221	---	---	---	265	---	---
7	229	222	226	226	221	223	---	---	---	267	265	266
8	229	222	225	226	221	222	---	---	---	268	267	267
9	229	226	227	224	218	221	---	---	---	268	267	268
10	229	222	225	223	217	219	---	---	---	267	266	266
11	228	226	227	222	220	221	---	---	---	266	265	266
12	233	228	231	221	220	221	---	---	---	265	264	265
13	231	226	229	222	220	221	---	---	---	264	263	264
14	226	223	225	222	220	221	---	---	---	---	---	---
15	226	223	225	222	219	220	---	---	---	---	---	---
16	227	223	225	221	219	220	---	---	---	---	---	---
17	226	222	225	221	219	220	---	---	---	---	---	---
18	228	226	227	222	220	221	---	---	---	---	---	---
19	230	227	229	222	219	221	---	---	---	---	---	---
20	230	228	228	223	219	221	---	---	---	---	---	---
21	230	229	230	---	---	---	---	---	---	---	---	---
22	230	228	229	---	---	---	---	---	---	---	---	---
23	230	215	225	---	---	---	---	---	---	---	---	---
24	219	216	217	---	---	---	---	---	---	---	---	---
25	221	218	220	---	---	---	---	---	---	---	---	---
26	221	220	221	---	---	---	---	---	---	---	---	---
27	222	221	222	---	---	---	---	---	---	---	---	---
28	224	222	223	---	---	---	---	---	---	---	---	---
29	224	216	221	---	---	---	---	---	---	---	---	---
30	221	216	219	---	---	---	---	---	---	---	---	---
31	223	219	221	---	---	---	---	---	---	---	---	---
MONTH	233	215	225	---	---	---	---	---	---	---	---	---
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	271	270	271	214	147	196	218	216	217
2	---	---	---	272	270	271	188	130	162	218	216	217
3	---	---	---	272	271	272	208	168	193	218	216	217
4	---	---	---	273	271	272	195	174	188	218	216	217
5	---	---	---	273	270	272	191	169	183	218	216	218
6	---	---	---	271	268	270	185	136	173	218	214	216
7	---	---	---	270	267	269	186	130	159	218	216	217
8	---	---	---	270	268	269	161	140	149	224	215	218
9	265	264	264	271	269	270	168	149	159	235	218	227
10	266	264	265	270	269	270	218	168	188	232	219	224
11	266	265	266	270	268	269	243	218	231	242	232	237
12	267	265	266	270	269	269	259	242	250	242	228	238
13	267	266	266	272	270	271	245	224	234	230	226	228
14	266	263	265	274	272	272	225	211	217	230	224	227
15	266	265	265	275	273	274	216	210	213	226	205	214
16	267	266	266	275	274	274	210	205	208	221	204	214
17	269	266	268	275	273	274	208	205	206	225	212	219
18	273	269	271	276	273	274	208	206	207	231	214	221
19	276	272	274	276	274	275	209	204	207	219	213	216
20	276	275	275	275	273	274	209	204	207	221	216	218
21	275	273	274	276	274	275	208	206	207	227	216	220
22	274	272	273	275	272	274	208	207	208	228	217	220
23	273	272	272	275	271	273	208	206	208	226	217	222
24	273	272	272	275	267	272	210	207	208	234	223	227
25	272	271	271	272	268	270	212	210	211	233	206	216
26	271	270	271	271	256	267	214	210	211	219	212	216
27	271	270	270	267	250	262	214	212	213	227	204	218
28	271	269	270	264	256	260	216	214	215	217	207	213
29	---	---	---	259	224	245	216	214	216	219	211	216
30	---	---	---	234	189	222	217	215	216	218	191	206
31	---	---	---	238	160	220	---	---	---	219	195	208
MONTH	---	---	---	276	160	267	259	130	201	242	191	219

052484305 SEGUCHIE CREEK AT HOLT LAKE OUTLET, NEAR GARRISON, MN

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	226	207	219	206	198	202	217	211	214	223	218	220
2	216	200	209	205	200	202	217	211	214	226	220	222
3	220	209	216	207	201	203	217	209	214	223	219	222
4	226	200	215	224	207	218	212	201	207	224	220	222
5	209	198	204	228	221	225	212	209	210	224	220	221
6	211	206	208	225	203	216	213	210	211	222	217	220
7	210	203	206	211	199	205	217	212	215	224	220	221
8	206	194	202	208	203	206	219	207	214	223	220	221
9	207	203	205	212	201	206	217	207	212	224	221	222
10	206	200	204	211	196	207	215	210	213	226	222	224
11	203	171	199	215	202	208	215	212	213	230	225	227
12	200	189	197	209	201	206	220	213	217	229	207	217
13	199	196	197	205	201	203	218	215	216	214	207	211
14	199	195	197	206	201	204	217	212	214	217	213	215
15	200	195	198	207	202	205	218	213	215	219	216	217
16	201	190	195	209	202	206	220	210	216	220	218	219
17	197	192	195	211	205	208	223	217	220	220	219	219
18	198	191	194	214	204	208	225	219	221	220	219	219
19	204	193	196	217	209	212	227	219	222	221	213	216
20	201	191	194	215	208	212	223	218	221	219	216	217
21	198	---	---	213	206	210	223	219	221	219	218	218
22	196	190	193	215	208	211	224	219	221	219	218	219
23	200	192	195	216	209	213	223	215	221	223	218	220
24	197	193	195	217	211	213	224	219	221	221	219	220
25	196	192	194	215	204	210	223	220	221	222	219	221
26	196	193	194	217	207	210	222	214	216	222	218	219
27	200	195	197	214	209	212	223	214	219	223	218	219
28	202	196	199	211	208	209	225	217	221	223	218	220
29	212	189	201	212	207	210	225	218	221	225	218	221
30	199	192	197	214	207	211	225	219	222	223	217	219
31	---	---	---	215	208	212	222	220	221	---	---	---
MONTH	226	171	201	228	196	209	227	201	217	230	207	220
YEAR	276	130	225									

052484305 SEGUCHIE CREEK AT HOLT LAKE OUTLET, NEAR GARRISON, MN

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	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	17.5	14.0	15.5
28	---	---	---	---	---	---	---	---	---	18.0	14.5	16.0
29	---	---	---	---	---	---	---	---	---	15.5	13.5	14.5
30	---	---	---	---	---	---	---	---	---	14.0	13.0	13.5
31	---	---	---	---	---	---	---	---	---	14.5	13.0	13.5
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
		JUNE			JULY			AUGUST			SEPTEMBER	
1	14.0	13.0	13.5	25.0	22.0	23.5	23.0	21.0	22.0	19.0	18.0	18.5
2	16.0	12.5	14.5	23.0	21.0	22.0	24.5	22.0	23.5	21.0	18.0	19.5
3	18.0	14.0	16.0	24.5	21.5	22.5	24.0	22.5	23.5	21.5	19.5	20.5
4	20.5	16.0	18.0	23.5	21.5	22.5	23.5	21.0	22.5	22.0	20.0	21.0
5	19.0	17.0	18.0	22.5	19.5	21.0	23.5	21.0	22.0	21.5	20.0	21.0
6	21.0	17.5	19.5	19.5	17.5	18.5	23.0	21.0	22.0	20.5	18.5	19.5
7	24.5	19.0	22.0	19.5	17.0	18.0	22.0	20.5	21.5	19.0	17.0	18.0
8	23.5	21.0	22.0	21.0	18.0	19.5	22.5	20.0	21.0	18.5	16.5	17.5
9	21.0	19.0	20.0	22.0	19.0	20.5	21.5	19.0	20.5	19.0	17.0	18.0
10	19.0	17.0	17.5	23.5	21.0	22.5	19.0	16.5	17.5	19.5	17.5	18.5
11	17.0	15.5	16.0	24.0	21.0	22.5	18.0	16.0	17.0	20.5	18.0	19.5
12	22.5	16.0	19.0	25.0	22.5	24.0	17.5	15.5	16.5	21.0	18.5	20.0
13	23.5	19.5	21.5	25.5	23.0	24.5	18.0	16.0	17.0	21.0	19.0	20.0
14	23.0	20.5	21.5	25.5	22.0	23.5	19.0	16.0	17.5	21.0	20.0	20.5
15	23.0	20.0	21.5	26.0	23.5	24.5	20.0	17.0	18.5	20.0	17.0	18.5
16	22.0	20.5	21.5	26.0	24.0	25.0	20.5	18.5	19.5	18.0	15.5	17.0
17	24.0	19.5	21.5	25.5	23.5	25.0	21.5	19.0	20.0	19.5	17.0	18.0
18	22.5	19.0	20.5	25.5	23.5	24.5	21.0	18.0	20.0	19.5	17.0	18.5
19	21.0	17.5	19.0	26.5	24.0	25.0	20.0	16.5	18.0	20.0	17.5	19.0
20	22.5	17.5	20.0	27.5	25.5	26.5	20.5	16.5	18.0	20.5	18.5	19.5
21	21.5	19.0	20.0	28.5	26.0	27.0	18.5	15.5	17.0	19.0	17.5	18.5
22	20.5	17.5	19.0	27.0	24.5	25.5	21.5	16.5	18.5	19.0	17.5	18.0
23	19.0	17.5	18.5	25.0	22.5	24.0	18.5	17.0	17.5	19.5	17.5	18.5
24	19.0	15.5	17.0	24.0	21.5	22.5	18.5	17.5	18.0	18.0	16.0	17.0
25	18.5	15.5	17.0	24.0	21.5	22.5	19.5	17.5	18.5	18.0	15.5	17.0
26	19.5	16.0	17.5	24.5	22.0	23.5	20.0	18.0	19.0	19.0	16.5	18.0
27	20.0	17.0	18.0	25.0	22.0	23.5	20.5	18.0	19.0	19.5	17.5	18.5
28	22.0	17.5	19.5	23.5	22.0	22.5	20.0	18.0	19.0	18.0	16.0	17.0
29	23.0	18.5	21.0	23.5	21.0	22.0	18.5	17.5	18.0	17.5	15.0	16.0
30	24.5	20.5	22.5	21.5	20.5	21.0	19.5	16.5	18.0	17.0	15.0	16.0
31	---	---	---	22.5	19.5	21.0	19.5	17.5	18.5	---	---	---
MONTH	24.5	12.5	19.1	28.5	17.0	22.9	24.5	15.5	19.3	22.0	15.0	18.6
YEAR	28.5	12.5	19.8									

052484305 SEGUCHIE CREEK AT HOLT LAKE OUTLET, NEAR GARRISON, MN

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	13.0	15.5	9.0	8.0	8.5	---	---	---	---	---	---
2	14.0	11.5	12.5	9.5	8.0	8.5	---	---	---	---	---	---
3	14.5	11.5	12.5	8.5	6.5	7.5	---	---	---	---	---	---
4	13.0	10.0	11.5	7.5	6.0	7.0	---	---	---	---	---	---
5	13.0	9.5	11.5	7.0	5.5	6.0	---	---	---	---	---	---
6	14.5	11.5	13.0	8.0	6.0	7.0	---	---	---	1.0	1.0	1.0
7	15.0	14.0	14.5	7.5	5.5	6.5	---	---	---	1.0	1.0	1.0
8	15.5	13.5	14.5	5.5	5.0	5.5	---	---	---	1.0	1.0	1.0
9	14.5	12.5	13.5	6.0	4.0	5.0	---	---	---	1.0	1.0	1.0
10	14.5	11.5	13.0	6.5	5.0	6.0	---	---	---	1.0	1.0	1.0
11	14.0	12.0	13.0	5.0	3.5	4.5	---	---	---	1.0	1.0	1.0
12	14.5	12.0	13.0	5.0	3.5	4.0	---	---	---	1.0	1.0	1.0
13	13.0	11.0	12.0	4.5	3.0	3.5	---	---	---	1.0	1.0	1.0
14	11.5	10.0	11.0	4.5	3.0	3.5	---	---	---	1.0	1.0	1.0
15	10.5	9.0	10.0	4.5	3.0	4.0	---	---	---	---	---	---
16	9.0	7.0	8.0	4.5	3.5	4.0	---	---	---	---	---	---
17	7.0	6.0	6.5	5.5	4.5	5.0	---	---	---	---	---	---
18	7.0	6.5	6.5	6.0	4.5	5.0	---	---	---	---	---	---
19	7.0	6.5	6.5	4.5	4.0	4.5	---	---	---	---	---	---
20	8.0	6.5	7.5	4.5	3.5	4.0	---	---	---	---	---	---
21	8.0	7.5	7.5	---	---	---	---	---	---	---	---	---
22	8.5	8.0	8.0	---	---	---	---	---	---	---	---	---
23	11.0	8.5	9.5	---	---	---	---	---	---	---	---	---
24	9.5	8.5	9.0	---	---	---	---	---	---	---	---	---
25	9.5	8.0	9.0	---	---	---	---	---	---	---	---	---
26	9.5	8.5	9.0	---	---	---	---	---	---	---	---	---
27	8.5	8.0	8.5	---	---	---	---	---	---	---	---	---
28	8.5	8.0	8.5	---	---	---	---	---	---	---	---	---
29	9.5	8.5	9.0	---	---	---	---	---	---	---	---	---
30	9.5	8.5	9.0	---	---	---	---	---	---	---	---	---
31	9.0	8.5	8.5	---	---	---	---	---	---	---	---	---
MONTH	16.5	6.0	10.4	---	---	---	---	---	---	---	---	---
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	1.0	0.5	0.5	6.0	3.5	4.5	7.5	5.5	6.5
2	---	---	---	1.0	0.5	0.5	6.5	3.0	4.5	7.0	5.0	6.0
3	---	---	---	1.0	0.5	0.5	7.5	4.5	6.0	10.0	5.5	7.5
4	---	---	---	1.0	0.5	0.5	7.5	5.0	6.0	12.5	7.5	10.0
5	---	---	---	1.0	0.5	0.5	8.0	5.5	6.5	12.0	9.0	10.5
6	---	---	---	1.0	0.5	1.0	7.0	5.0	6.0	11.5	9.5	10.5
7	---	---	---	1.5	0.5	1.0	9.0	5.0	6.5	12.5	9.5	11.0
8	---	---	---	1.5	1.0	1.0	8.5	4.5	6.5	15.5	10.0	12.5
9	1.0	0.5	1.0	2.0	1.0	1.5	9.5	5.0	7.0	13.0	11.0	12.0
10	1.0	0.5	1.0	1.5	1.0	1.0	7.5	6.0	6.5	14.5	12.5	13.5
11	1.0	0.5	1.0	1.5	1.0	1.0	7.0	5.5	6.5	13.5	11.5	13.0
12	1.0	0.5	1.0	1.5	1.0	1.5	6.5	5.0	5.5	11.5	8.5	9.5
13	1.0	0.5	1.0	1.5	1.0	1.5	8.5	4.5	6.0	10.5	9.0	9.5
14	1.0	0.5	1.0	1.5	1.0	1.5	9.0	5.0	7.0	12.0	9.0	10.5
15	1.0	0.5	1.0	1.5	1.0	1.5	8.0	6.0	7.0	13.0	9.5	11.0
16	1.0	0.5	1.0	1.5	1.5	1.5	9.5	7.0	8.0	14.5	10.5	12.5
17	1.0	0.5	1.0	1.5	1.5	1.5	10.0	7.5	8.5	14.5	11.0	12.5
18	1.0	0.5	1.0	1.5	1.5	1.5	13.5	8.0	11.0	13.0	12.0	12.0
19	1.0	0.5	0.5	2.0	1.5	1.5	12.5	11.0	11.5	14.5	12.0	13.0
20	0.5	0.5	0.5	2.0	1.5	1.5	14.0	11.0	12.0	14.5	12.5	13.0
21	1.0	0.5	0.5	2.0	1.5	1.5	13.0	10.5	12.0	15.5	13.0	14.0
22	1.0	0.5	1.0	2.0	1.5	1.5	11.5	10.0	11.0	14.5	13.0	13.5
23	1.0	0.5	1.0	2.5	1.5	1.5	12.0	8.5	10.5	16.5	12.5	14.5
24	1.0	0.5	1.0	2.5	1.5	2.0	12.5	9.0	10.5	17.0	13.5	15.5
25	1.0	0.5	0.5	4.0	1.5	2.5	11.0	9.5	10.5	16.0	13.5	15.0
26	1.0	0.5	0.5	4.0	2.0	3.0	9.5	8.5	9.0	15.0	12.5	14.0
27	0.5	0.5	0.5	4.0	2.0	3.0	8.5	6.5	7.5	15.0	13.5	14.0
28	0.5	0.5	0.5	4.5	2.5	3.5	7.5	6.0	7.0	14.5	13.5	14.0
29	---	---	---	5.0	3.0	4.0	9.0	7.0	8.0	18.5	13.0	15.5
30	---	---	---	3.5	2.0	3.0	8.0	7.0	7.5	19.5	15.5	17.5
31	---	---	---	5.5	3.0	4.0	---	---	---	20.5	16.0	18.0
MONTH	---	0.5	0.8	5.5	0.5	1.7	14.0	3.0	7.9	20.5	5.0	12.3

052484305 SEGUCHIE CREEK AT HOLT LAKE OUTLET, NEAR GARRISON, MN

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	18.0	17.0	17.5	21.5	18.0	20.0	26.5	23.5	25.0	20.5	18.0	19.5
2	20.0	16.5	18.0	23.0	19.5	21.5	26.5	25.0	26.0	20.0	17.0	19.0
3	19.0	17.0	18.0	23.5	21.0	22.5	27.0	25.0	26.5	19.5	17.5	18.0
4	18.0	17.5	17.5	23.5	21.0	22.5	26.5	23.5	25.0	19.5	17.5	18.5
5	20.5	17.0	18.5	22.5	21.0	21.5	25.0	21.5	23.5	19.5	19.0	19.5
6	22.5	18.0	20.0	23.0	20.0	21.5	25.0	21.5	23.5	21.5	19.0	20.0
7	22.5	19.5	21.0	23.0	20.5	22.0	25.0	22.5	24.0	21.0	19.5	20.5
8	20.5	17.0	19.0	23.0	21.5	22.5	26.5	24.0	25.5	21.0	19.0	20.0
9	22.5	18.5	20.5	25.0	22.0	23.5	26.0	24.0	25.0	20.5	19.5	20.0
10	21.5	20.0	21.0	25.5	23.5	24.5	25.0	22.0	24.0	22.0	19.5	21.0
11	21.0	19.0	20.5	26.5	24.0	25.5	23.5	22.0	23.0	22.5	20.5	21.5
12	22.5	19.0	20.5	26.0	24.5	25.0	24.0	21.0	22.5	22.0	20.5	21.0
13	21.5	20.0	20.5	26.5	23.5	25.5	23.0	20.0	21.5	20.5	19.0	19.5
14	20.0	19.0	19.5	27.0	24.0	26.0	22.0	19.0	21.0	20.0	17.5	19.0
15	22.0	18.5	20.5	27.0	25.0	26.0	22.5	19.0	21.0	20.5	18.0	19.0
16	23.5	19.5	21.5	28.0	26.0	27.0	23.5	20.5	22.0	20.5	18.0	19.5
17	24.0	20.0	22.0	28.0	26.0	27.0	23.5	21.5	22.5	19.5	18.5	19.0
18	24.5	20.5	22.5	26.0	22.0	24.0	22.5	21.0	21.5	20.0	17.5	19.0
19	24.5	21.5	23.0	23.5	20.5	22.0	22.0	20.5	21.5	20.0	19.0	19.5
20	24.0	22.5	23.0	24.5	22.5	23.5	22.5	19.5	21.0	21.0	18.0	19.5
21	24.5	22.0	23.5	25.5	22.5	24.0	21.0	19.0	20.5	20.5	19.0	20.0
22	25.5	22.5	24.5	25.0	23.0	24.0	20.5	19.0	19.5	20.0	18.0	19.0
23	26.5	24.0	25.5	24.5	23.5	24.0	20.5	18.0	19.5	19.0	16.5	17.5
24	26.5	24.0	25.5	25.0	23.5	24.0	21.0	18.5	20.0	17.5	16.5	17.0
25	26.0	23.0	24.5	24.5	22.0	23.5	21.0	19.5	20.5	17.0	16.0	16.5
26	24.5	23.0	24.0	22.5	20.0	21.5	22.0	20.0	21.0	18.0	15.0	16.5
27	25.0	23.0	24.0	23.0	19.0	21.0	22.0	19.5	21.0	18.5	16.0	17.5
28	25.5	23.0	24.5	23.0	20.5	21.5	21.5	19.5	21.0	18.0	14.0	16.0
29	24.0	21.0	22.0	23.0	20.0	21.5	22.0	19.5	21.0	14.5	12.5	13.5
30	21.0	19.0	20.5	23.5	21.0	22.5	22.0	20.0	21.5	16.5	13.0	14.5
31	---	---	---	24.5	22.5	23.5	21.5	20.0	20.5	---	---	---
MONTH	26.5	16.5	21.4	28.0	18.0	23.4	27.0	18.0	22.3	22.5	12.5	18.7
YEAR	28.0	0.5	12.7									

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Date	Time	Sample type	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unf lab, uS/cm 25 degC (90095)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)
OCT 2004												
13...	1150	Environmental	7.04	10	727	6.9	64	7.4	7.7	201	230	9.0
13...	1150	Composite (time)	--	--	--	--	--	--	--	--	--	--
NOV												
22...	1210	Environmental	7.00	8.0	726	12.1	89	7.8	7.4	218	223	5.0
JAN 2005												
06...	1015	Environmental	6.90	5.4	742	12.3	88	7.7	7.6	237	260	--
FEB												
09...	0930	Environmental	6.89	5.2	731	9.9	70	7.3	E7.5	248	256	--
MAR												
23...	1110	Environmental	6.86	4.4	732	10.1	73	7.3	7.8	259	269	.0
MAY												
04...	1010	Environmental	7.10	10	733	11.0	95	8.1	8.0	206	211	13.0
04...	1010	Bed material	7.10	10	--	--	--	--	--	--	--	13.0
04...	1011	Bed material	--	--	--	--	--	--	--	--	--	--
04...	1012	Bed material	--	--	--	--	--	--	--	--	--	--
04...	1013	Bed material	--	--	--	--	--	--	--	--	--	--
04...	1014	Bed material	--	--	--	--	--	--	--	--	--	--
04...	1015	Bed material	--	--	--	--	--	--	--	--	--	--
04...	1015	Replicate	7.10	10	--	--	--	--	8.0	206	--	13.0
04...	1016	Bed material	--	--	--	--	--	--	--	--	--	--
JUN												
21...	1245	Environmental	7.32	15	741	7.9	94	7.7	8.0	174	189	28.0
29...	1122	Environmental	7.03	5.1	--	--	--	8.0	--	--	196	--
29...	2039	Environmental	7.12	7.8	--	--	--	8.1	--	--	195	--
30...	1542	Environmental	7.18	9.9	--	--	--	8.1	--	--	196	--
JUL												
03...	0630	Environmental	7.11	7.4	--	--	--	8.1	--	--	199	--
12...	1446	Environmental	6.97	3.6	--	--	--	7.5	--	--	201	--
25...	1448	Environmental	6.84	1.6	--	--	--	7.8	--	--	204	--
25...	1539	Environmental	6.88	2.0	--	--	--	7.8	--	--	203	--
25...	1543	Environmental	6.89	2.2	--	--	--	7.8	--	--	203	--
25...	1651	Environmental	6.88	2.0	--	--	--	7.9	--	--	197	--
25...	1656	Environmental	6.88	2.0	--	--	--	7.8	--	--	197	--
26...	1445	Blank	--	--	--	--	--	--	7.6	<3	--	--
26...	1520	Environmental	6.86	5.2	732	4.2	48	7.1	7.7	196	206	--
AUG												
09...	0502	Environmental	--	--	--	--	--	--	--	--	--	--
09...	0748	Environmental	--	--	--	--	--	--	--	--	--	--
26...	0001	Environmental	--	--	--	--	--	--	--	--	--	--
26...	0310	Environmental	--	--	--	--	--	--	--	--	--	--
26...	0520	Environmental	--	--	--	--	--	--	--	--	--	--
SEP												
05...	2357	Environmental	--	--	--	--	--	--	--	--	--	--
13...	0935	Composite (time)	--	--	--	--	--	--	--	--	--	--
13...	0940	Environmental	--	--	--	--	--	--	--	--	--	--
13...	0940	Bed material	--	--	--	--	--	--	--	--	--	--
13...	0945	Environmental	7.17	13	726	4.9	53	7.3	--	--	208	16.0
15...	0940	Environmental	--	--	--	--	--	--	--	--	--	--
19...	0900	Environmental	--	--	--	--	--	--	--	--	--	--
25...	1122	Environmental	--	--	--	--	--	--	--	--	--	--

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WATER QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	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)	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)
OCT 2004													
13...	12.2	35.9	7.96	1.56	2.82	117	143	.0	1.37	E.1	6.99	1.0	136
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
22...	2.8	32.7	8.01	1.55	2.76	113	138	.0	1.35	.1	5.62	1.3	133
JAN 2005													
06...	1.2	39.7	9.06	1.66	3.12	126	154	.0	1.53	.1	6.74	1.4	158
FEB													
09...	.9	39.7	8.84	1.78	3.15	132	162	.0	1.61	.1	8.32	1.7	172
MAR													
23...	2.0	42.4	10.2	1.94	3.08	137	168	.0	1.58	.1	9.25	1.3	165
MAY													
04...	8.9	32.4	7.55	1.63	2.56	111	135	.0	1.41	E.1	6.93	1.0	136
04...	8.9	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	8.9	32.2	7.61	1.53	2.58	--	--	--	1.42	.1	6.85	1.1	138
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
21...	22.9	27.8	7.04	1.17	2.35	95	116	.0	.79	E.1	4.19	.7	129
29...	22.4	--	--	--	--	--	--	--	1.39	--	--	--	--
29...	21.7	--	--	--	--	--	--	--	1.35	--	--	--	--
30...	21.0	--	--	--	--	--	--	--	1.36	--	--	--	--
JUL													
03...	21.3	--	--	--	--	--	--	--	1.55	--	--	--	--
12...	25.7	--	--	--	--	--	--	--	1.33	--	--	--	--
25...	23.7	--	--	--	--	--	--	--	1.25	--	--	--	--
25...	23.4	--	--	--	--	--	--	--	1.27	--	--	--	--
25...	23.2	--	--	--	--	--	--	--	1.29	--	--	--	--
25...	22.8	--	--	--	--	--	--	--	1.29	--	--	--	--
25...	22.8	--	--	--	--	--	--	--	1.25	--	--	--	--
26...	--	E.01	<.008	<.16	<.20	--	--	--	<.20	<.1	.05	<.2	<10
26...	22.8	31.3	7.07	1.04	2.21	104	126	.0	1.17	E.1	10.5	1.0	128
AUG													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	19.7	--	--	--	--	107	130	.0	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--

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WATER QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

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)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Alum-inum, water, fltrd, ug/L (01106)	Anti-mony, water, fltrd, ug/L (01095)	Barium, water, fltrd, ug/L (01005)	Beryll-ium, water, fltrd, ug/L (01010)	Cadmium water, fltrd, ug/L (01025)	Chrom-ium, water, fltrd, ug/L (01030)
OCT 2004													
13...	.58	<.04	<.06	<.008	<.02	<.04	<.04	<2	<.20	26	<.06	<.04	<.8
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
22...	.55	<.04	<.06	<.008	<.02	<.04	<.04	<2	<.20	25	<.06	<.04	E.6
JAN 2005													
06...	.58	E.02	<.06	<.008	<.02	<.04	E.02	E1	<.20	25	<.06	<.04	<.8
FEB													
09...	.59	.07	E.05	<.008	<.02	<.04	<.04	<2	<.20	29	<.06	<.04	<.8
MAR													
23...	.55	<.04	.10	<.008	<.02	<.04	<.04	<2	<.20	28	<.06	<.04	<.8
MAY													
04...	.50	<.04	<.06	<.008	<.02	<.04	<.04	<2	<.20	23	<.06	<.04	<.8
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	.50	<.04	<.06	<.008	<.02	<.04	<.04	<2	<.20	23	<.06	<.04	<.8
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
21...	.55	<.04	<.06	<.008	<.02	<.04	<.04	2	<.20	23	<.06	<.04	<.8
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.10	<.04	<.06	<.008	<.02	<.04	<.04	<2	<.20	<.2	<.06	<.04	<.8
26...	.60	<.04	<.06	<.008	<.02	<.04	E.02	<2	<.20	28	<.06	<.04	2.0
AUG													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	.64	<.04	<.06	<.008	<.02	<.04	E.03	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--

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WATER QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)	Uranium natural water, fltrd, ug/L (22703)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Total sediment discharge, tons/d (80156)
OCT 2004													
13...	.098	.6	22	<.08	48.2	E.2	.77	<.2	E.4	.04	--	3	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
22...	.101	E.2	26	<.08	20.0	<.4	<.06	<.2	1.1	.05	--	--	--
JAN 2005													
06...	.113	.8	26	E.06	33.8	E.2	.93	<.2	1.8	.06	100	2	--
FEB													
09...	.122	E.3	29	<.08	49.8	<.4	.93	<.2	.8	.06	100	<1	--
MAR													
23...	.153	E.3	19	<.08	57.6	E.2	2.09	<.2	.6	.06	100	<1	--
MAY													
04...	.078	.6	20	<.08	11.7	<.4	.96	<.2	1.4	.05	100	1	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	13
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	.072	.8	21	<.08	10.1	<.4	.99	.2	1.8	.06	100	1	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
21...	.082	1.4	38	E.05	29.6	<.4	1.73	<.2	8.2	.06	100	1	--
29...	--	--	--	--	--	--	--	--	--	--	70	5	--
29...	--	--	--	--	--	--	--	--	--	--	44	5	--
30...	--	--	--	--	--	--	--	--	--	--	78	4	--
JUL													
03...	--	--	--	--	--	--	--	--	--	--	53	7	--
12...	--	--	--	--	--	--	--	--	--	--	73	5	--
25...	--	--	--	--	--	--	--	--	--	--	64	7	--
25...	--	--	--	--	--	--	--	--	--	--	78	5	--
25...	--	--	--	--	--	--	--	--	--	--	60	5	--
25...	--	--	--	--	--	--	--	--	--	--	80	4	--
25...	--	--	--	--	--	--	--	--	--	--	88	4	--
26...	<.014	E.2	<6	<.08	<.2	<.4	<.06	<.2	E.3	<.04	83	2	--
26...	.079	.5	85	<.08	39.4	<.4	1.12	<.2	1.0	E.02	88	2	--
AUG													
09...	--	--	--	--	--	--	--	--	--	--	100	3	--
09...	--	--	--	--	--	--	--	--	--	--	67	1	--
26...	--	--	--	--	--	--	--	--	--	--	100	1	--
26...	--	--	--	--	--	--	--	--	--	--	100	<1	--
26...	--	--	--	--	--	--	--	--	--	--	50	1	--
SEP													
05...	--	--	--	--	--	--	--	--	--	--	86	5	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	100	1	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	86	3	--
25...	--	--	--	--	--	--	--	--	--	--	100	<1	--

052484305 SEGUCHIE CREEK AT HOLT LAKE OUTLET, NEAR GARRISON, MN

Date	Bed sediment, dry svd sve dia percent <.063mm (80164)	Bed sediment, dry svd sve dia percent <.125mm (80165)	Bed sediment, dry svd sve dia percent <.25mm (80166)	Bed sediment, dry svd sve dia percent <.5 mm (80167)	Bed sediment, dry svd sve dia percent <1 mm (80168)	Bed sediment, dry svd sve dia percent <2 mm (80169)	Bed sediment, dry svd sve dia percent <4 mm (80170)	Bed sediment, dry svd sve dia percent <8 mm (80171)	Bed sediment, dry svd sve dia percent <16 mm (80172)	Bed sediment, dry svd sve dia percent <63mm (69046)	Bed sediment falldia dst wat percent <.002mm (80294)	Bed sediment, falldia dst wat percent <.004mm (80157)	Bed sediment falldia dst wat percent <.008mm (80293)
05284305 SEGUCHIE CREEK AT HOLT LAKE OUTLET, NEAR GARRISON (LAT 46 15 07N LONG 093 49 38W)													
OCT 2004													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 2005													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
04...	4	--	--	--	--	--	--	--	--	--	--	--	--
04...	4	--	--	--	--	--	--	--	--	--	--	--	--
04...	7	11	28	58	83	89	94	--	--	--	--	--	--
04...	8	17	52	89	95	98	--	--	--	--	--	--	--
04...	7	--	48	73	87	95	98	--	--	--	--	--	--
04...	6	11	51	82	96	98	99	--	--	--	--	--	--
04...	8	12	44	81	94	98	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	4	9	36	70	84	91	96	100	--	--	--	--	--
JUN													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	2	4	12	30	45	55	62	81	100	100	.0	1	1
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	6	11	28	56	72	80	87	92	100	--	1	2	3
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--

052484305 SEGUCHIE CREEK AT HOLT LAKE OUTLET, NEAR GARRISON, MN

WATER QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Bed sedi-ment, falldia dst wat percent <.016mm (80282)	Bed sedi-ment, falldia dst wat percent <.031mm (80283)	Bed sedi-ment, falldia dst wat percent <.063mm (80158)	Bed sedi-ment, falldia dst wat percent <.125mm (80159)	Bed sedi-ment, falldia dst wat percent <.25mm (80160)	Bed sedi-ment, falldia dst wat percent <.5 mm (80161)	Data base number
OCT 2004							
13...	--	--	--	--	--	--	01
13...	--	--	--	--	--	--	01
NOV							
22...	--	--	--	--	--	--	01
JAN 2005							
06...	--	--	--	--	--	--	01
FEB							
09...	--	--	--	--	--	--	01
MAR							
23...	--	--	--	--	--	--	01
MAY							
04...	--	4	--	--	--	--	01
04...	--	--	--	--	--	--	01
04...	--	6	5	4	4	3	01
04...	--	6	5	4	4	3	01
04...	--	6	5	4	3	3	01
04...	--	5	4	3	3	2	01
04...	--	7	6	5	4	4	01
04...	--	--	--	--	--	--	77
04...	--	4	3	2	2	1	01
JUN							
21...	--	--	--	--	--	--	01
29...	--	--	--	--	--	--	01
29...	--	--	--	--	--	--	01
30...	--	--	--	--	--	--	01
JUL							
03...	--	--	--	--	--	--	01
12...	--	--	--	--	--	--	01
25...	--	--	--	--	--	--	01
25...	--	--	--	--	--	--	01
25...	--	--	--	--	--	--	01
25...	--	--	--	--	--	--	01
25...	--	--	--	--	--	--	01
26...	--	--	--	--	--	--	77
26...	--	--	--	--	--	--	01
AUG							
09...	--	--	--	--	--	--	01
09...	--	--	--	--	--	--	01
26...	--	--	--	--	--	--	01
26...	--	--	--	--	--	--	01
26...	--	--	--	--	--	--	01
SEP							
05...	--	--	--	--	--	--	01
13...	--	--	--	--	--	--	01
13...	1	1	--	--	--	--	01
13...	--	--	--	--	--	--	01
13...	--	--	--	--	--	--	01
15...	3	5	--	--	--	--	01
19...	--	--	--	--	--	--	01
25...	--	--	--	--	--	--	01

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05284310 SEGUCHIE CREEK ABOVE MOUTH NEAR GARRISON, MN

LOCATION.--Lat 46°15'13", long 93°49'16", in NE¼SE¼NW¼ sec. 36, T.44 N.,R.28 W., Crow Wing County, Hydrologic Unit 07010207, on right bank,0.1 miles upstream from U.S. Highway 169 and 3 miles south of Garrison.

DRAINAGE AREA.--17.3 mi^2.

PERIOD OF RECORD.--May 2004 to current year.

GAGE.--Water-stage recorder.

REMARKS.--Records fair except those for estimated daily discharge, which are poor. Some natural regulation from Holt Lake and other lakes upstream.

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	2.9	1.2	e4.2
2	---	---	---	---	---	---	---	---	13	2.6	1.4	6.2
3	---	---	---	---	---	---	---	---	13	2.5	1.6	5.8
4	---	---	---	---	---	---	---	---	12	3.1	1.5	5.1
5	---	---	---	---	---	---	---	---	12	3.5	1.3	5.7
6	---	---	---	---	---	---	---	---	12	3.7	1.1	8.0
7	---	---	---	---	---	---	---	---	12	3.7	1.0	7.9
8	---	---	---	---	---	---	---	---	12	3.4	0.67	7.2
9	---	---	---	---	---	---	---	---	11	3.0	0.45	6.5
10	---	---	---	---	---	---	---	---	10	2.6	0.34	6.2
11	---	---	---	---	---	---	---	---	9.5	5.0	0.41	6.3
12	---	---	---	---	---	---	---	---	9.1	5.8	0.46	6.3
13	---	---	---	---	---	---	---	---	8.9	5.5	0.47	6.1
14	---	---	---	---	---	---	---	---	8.4	4.9	0.40	5.8
15	---	---	---	---	---	---	---	---	7.7	4.1	0.27	6.9
16	---	---	---	---	---	---	---	---	7.2	3.5	0.21	7.8
17	---	---	---	---	---	---	---	---	6.7	3.1	0.16	7.3
18	---	---	---	---	---	---	---	---	6.1	2.7	0.13	6.8
19	---	---	---	---	---	---	---	---	5.3	2.4	<0.10	6.4
20	---	---	---	---	---	---	---	---	4.6	2.2	<0.10	6.2
21	---	---	---	---	---	---	---	---	4.2	2.0	<0.10	7.2
22	---	---	---	---	---	---	---	---	3.8	1.9	<0.10	8.2
23	---	---	---	---	---	---	---	---	4.1	1.6	<0.10	8.1
24	---	---	---	---	---	---	---	---	4.3	1.4	<0.10	8.1
25	---	---	---	---	---	---	---	---	3.9	e1.0	<0.10	7.6
26	---	---	---	---	---	---	---	---	3.6	e0.75	<0.10	7.1
27	---	---	---	---	---	---	---	9.8	3.5	e0.52	<0.10	6.8
28	---	---	---	---	---	---	---	9.8	3.4	e0.60	<0.10	6.2
29	---	---	---	---	---	---	---	9.9	3.3	e0.85	<0.10	5.7
30	---	---	---	---	---	---	---	11	3.1	e1.2	<0.10	5.2
31	---	---	---	---	---	---	---	13	---	1.3	e1.5	---
TOTAL	---	---	---	---	---	---	---	---	231.7	83.32	15.77	198.9
MEAN	---	---	---	---	---	---	---	---	7.72	2.69	0.51	6.63
MAX	---	---	---	---	---	---	---	---	14	5.8	1.6	8.2
MIN	---	---	---	---	---	---	---	---	3.1	0.52	0.10	4.2
AC-FT	---	---	---	---	---	---	---	---	460	165	31	395

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

MEAN	---	---	---	---	---	---	---	---	7.72	2.69	0.51	6.63
MAX	---	---	---	---	---	---	---	---	7.72	2.69	0.51	6.63
(WY)	---	---	---	---	---	---	---	---	(2004)	(2004)	(2004)	(2004)
MIN	---	---	---	---	---	---	---	---	7.72	2.69	0.51	6.63
(WY)	---	---	---	---	---	---	---	---	(2004)	(2004)	(2004)	(2004)

05284310 SEGUCHIE CREEK ABOVE MOUTH NEAR GARRISON, MN—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	6.2	5.2	6.4	e3.9	e4.3	e5.5	19	12	18	13	4.2	5.6
2	7.0	3.4	6.4	e3.9	e4.4	e5.5	19	11	17	13	4.3	5.3
3	6.6	2.3	6.4	e3.9	e4.5	e5.5	19	11	17	12	4.3	5.2
4	6.3	1.8	5.8	e3.8	e4.6	e5.4	19	10	18	11	4.9	5.8
5	e6.1	5.6	5.8	e3.8	e4.7	e5.4	19	9.8	22	11	4.7	6.2
6	e6.1	26	5.6	e3.8	e4.8	e5.4	21	9.7	21	10	4.4	7.5
7	e6.1	26	5.6	e3.7	e4.9	e5.3	21	9.2	21	9.8	4.2	7.5
8	e6.1	22	5.5	e3.7	e4.9	e5.3	20	9.2	24	9.1	4.2	7.2
9	e5.5	19	5.5	e3.8	4.9	e5.3	20	9.4	24	8.5	4.6	6.9
10	e3.0	16	6.2	e3.8	e5.0	e5.4	20	11	24	7.9	4.0	6.8
11	e0.86	13	5.9	e3.8	e5.1	5.4	22	10	24	7.4	4.0	6.7
12	e0.50	11	6.2	e3.8	e5.1	e5.4	24	9.2	28	7.2	4.0	8.8
13	e0.80	10	5.5	e3.8	e5.1	e5.3	23	8.9	26	7.8	3.8	14
14	6.5	9.5	e5.1	e3.7	e5.2	e5.2	23	9.2	24	7.6	3.6	14
15	7.2	9.0	e5.0	e3.6	e5.2	e5.2	22	9.0	23	7.2	3.5	13
16	6.2	8.5	e4.8	e3.6	e5.3	e5.1	22	8.5	22	6.9	3.4	13
17	5.2	8.4	e4.7	e3.6	e5.4	e5.1	22	8.3	20	6.3	3.4	12
18	3.6	8.0	e4.7	e3.6	e5.4	e5.1	21	8.9	19	5.5	3.7	11
19	1.4	8.2	e4.6	e3.6	e5.5	e5.1	21	11	17	5.1	3.7	13
20	0.70	8.9	e4.5	e3.8	e5.6	e5.1	20	11	17	4.9	3.7	13
21	0.49	8.5	e4.4	e3.8	e5.6	e5.1	19	10	17	4.7	3.7	12
22	0.41	8.1	e4.4	e3.8	e5.6	e5.1	18	10	16	4.2	3.9	12
23	0.80	8.0	e4.3	e3.8	e5.6	e5.0	17	9.7	15	4.3	3.8	11
24	1.5	7.5	e4.2	e3.9	e5.6	e5.2	16	9.3	15	3.6	3.8	11
25	1.5	7.2	e4.2	e3.9	e5.6	e5.3	15	13	14	4.0	3.8	11
26	1.3	7.1	e4.2	e4.0	e5.6	e5.8	15	20	13	4.1	5.2	13
27	1.1	7.2	e4.1	e4.0	e5.6	6.7	14	19	12	3.9	5.8	12
28	1.1	6.9	e4.1	e4.1	e5.6	7.6	13	20	12	4.6	5.8	12
29	1.9	6.7	e4.1	e4.1	---	9.2	12	20	12	4.8	5.8	11
30	6.4	6.6	e4.0	e4.1	---	16	12	19	13	4.7	5.7	10
31	6.6	---	e4.0	e4.2	---	19	---	18	---	4.4	5.6	---
TOTAL	115.06	295.6	156.2	118.7	144.7	196.0	568	364.3	565	218.5	133.5	297.5
MEAN	3.71	9.85	5.04	3.83	5.17	6.32	18.9	11.8	18.8	7.05	4.31	9.92
MAX	7.2	26	6.4	4.2	5.6	19	24	20	28	13	5.8	14
MIN	0.41	1.8	4.0	3.6	4.3	5.0	12	8.3	12	3.6	3.4	5.2
AC-FT	228	586	310	235	287	389	1,130	723	1,120	433	265	590

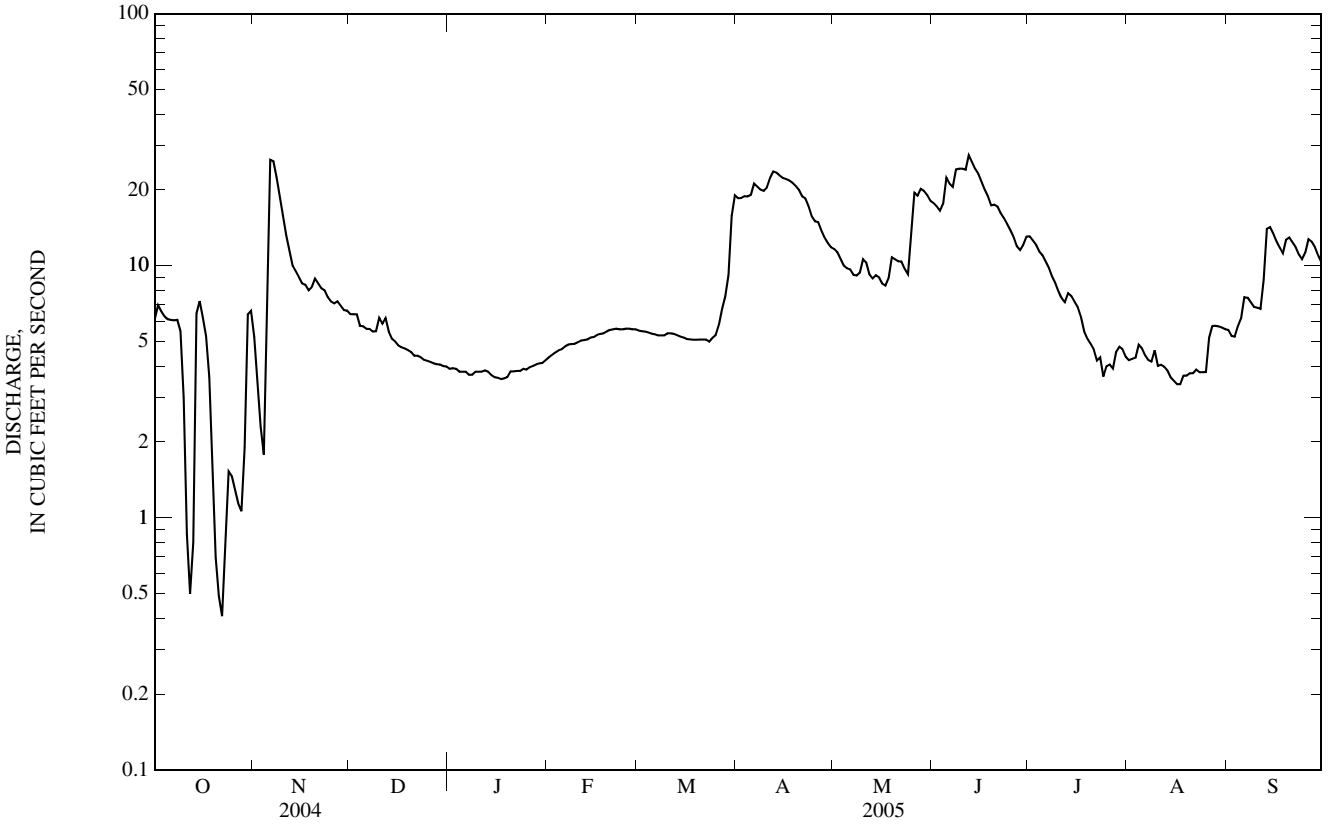
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2005, BY WATER YEAR (WY)

MEAN	3.71	9.85	5.04	3.83	5.17	6.32	18.9	11.8	13.3	4.87	2.41	8.27
MAX	3.71	9.85	5.04	3.83	5.17	6.32	18.9	11.8	18.8	7.05	4.31	9.92
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)
MIN	3.71	9.85	5.04	3.83	5.17	6.32	18.9	11.8	7.72	2.69	0.51	6.63
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2004)	(2004)	(2004)	(2004)

05284310 SEGUCHIE CREEK ABOVE MOUTH NEAR GARRISON, MN—Continued

SUMMARY STATISTICS	FOR 2005 WATER YEAR		WATER YEARS 2004 - 2005	
ANNUAL TOTAL	3,173.06			
ANNUAL MEAN	8.69		8.69	
HIGHEST ANNUAL MEAN			8.69	2005
LOWEST ANNUAL MEAN			8.69	2005
HIGHEST DAILY MEAN	28	Jun 12	28	Jun 12, 2005
LOWEST DAILY MEAN	0.41	Oct 22	<0.10	Aug 19-30, 2004
ANNUAL SEVEN-DAY MINIMUM	0.96	Oct 20	<0.10	Aug 19, 2004
MAXIMUM PEAK FLOW	28	Jun 11	28	Jun 11, 2005
MAXIMUM PEAK STAGE	17.15	Jun 11	17.15	Jun 11, 2005
INSTANTANEOUS LOW FLOW	0.39	Oct 22	<0.10	Aug 25, 2004
ANNUAL RUNOFF (AC-FT)	6,290		6,300	
10 PERCENT EXCEEDS	19		19	
50 PERCENT EXCEEDS	5.9		5.9	
90 PERCENT EXCEEDS	3.8		3.8	

e Estimated.



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05284310 SEGUCHIE CREEK ABOVE MOUTH NEAR GARRISON, MN—Continued

PERIOD OF RECORD.-- Water years 2004 to current year.

PERIOD OF DAILY RECORD:

SPECIFIC CONDUCTANCE.-- May 2004 to current year.

WATER TEMPERATURES.-- May 2004 to current year.

REMARKS.-- Records considered good. Conductance and water temperatures were obtained by continuous water-sensor monitors, and checked independently by U.S. Geological Survey personnel.

EXTREMES FOR PERIOD OF DAILY RECORD:

SPECIFIC CONDUCTANCE.-- Maximum recorded, 292 µS/cm, Aug. 30, 31, 2004; minimum recorded, 144 µS/cm, Apr. 8, 2005.

WATER TEMPERATURES.-- Maximum recorded, 29.0 C, July 21, 2004; minimum recorded, 0.0 C, many days most winters.

EXTREMES FOR CURRENT YEAR:

SPECIFIC CONDUCTANCE.-- Maximum recorded, 270 µS/cm, several days in March; minimum recorded, 144 µS/cm, Apr. 8.

WATER TEMPERATURES.-- Maximum recorded, 28.5 C, June 23 and July 17; minimum recorded, 0.0 C, many days during winter.

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	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	218	213	216
29	---	---	---	---	---	---	---	---	---	218	216	216
30	---	---	---	---	---	---	---	---	---	219	211	215
31	---	---	---	---	---	---	---	---	---	213	210	211
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

05284310 SEGUCHIE CREEK ABOVE MOUTH NEAR GARRISON, MN—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	213	210	212	231	224	227	227	222	225	291	222	238
2	215	210	212	232	223	227	228	222	226	225	222	224
3	217	213	215	230	218	226	226	221	223	228	224	226
4	217	211	215	226	217	222	225	220	223	231	224	229
5	219	210	215	223	217	220	226	221	224	231	210	222
6	218	212	215	220	214	218	226	222	224	211	208	209
7	220	213	216	217	213	215	227	221	224	216	210	214
8	223	217	220	217	213	215	237	227	233	220	216	218
9	218	211	216	222	216	220	244	235	240	223	220	221
10	216	210	213	226	220	224	---	---	---	225	223	224
11	216	211	214	226	187	199	---	---	---	226	223	224
12	215	211	212	206	190	202	---	---	---	226	223	225
13	219	214	216	213	206	211	---	---	---	229	226	227
14	220	213	216	219	212	216	---	---	---	231	228	230
15	217	211	215	223	217	221	---	---	---	231	215	224
16	218	211	215	226	220	224	---	---	---	218	215	217
17	217	210	214	226	221	224	---	---	---	222	218	221
18	218	211	214	226	222	224	259	249	254	225	222	224
19	215	212	214	227	222	226	259	248	255	228	225	227
20	218	213	216	233	225	230	263	250	259	230	227	229
21	223	217	220	236	228	232	264	251	260	228	221	224
22	223	215	220	236	227	231	266	249	257	222	221	221
23	220	213	217	230	225	227	263	254	258	224	221	223
24	217	212	215	228	223	226	269	257	263	223	222	222
25	217	213	215	229	225	227	275	262	269	224	223	223
26	218	214	216	230	226	228	287	258	273	226	224	224
27	221	216	218	231	226	229	287	266	281	227	226	227
28	221	214	218	230	226	229	286	264	276	227	226	226
29	223	217	220	230	227	229	283	274	278	227	225	226
30	227	220	224	227	224	225	292	272	282	227	225	226
31	---	---	---	225	222	223	292	278	286	---	---	---
MONTH	227	210	216	236	187	222	292	---	---	291	208	224
YEAR	292	187	227									

05284310 SEGUCHIE CREEK ABOVE MOUTH NEAR GARRISON, MN—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	226	218	222	210	208	209	231	229	230	254	250	252
2	220	218	219	210	206	208	233	230	231	252	248	249
3	221	219	220	218	207	212	236	231	234	256	252	254
4	222	220	221	216	210	213	231	229	230	255	252	253
5	224	221	222	218	212	214	234	230	233	---	---	---
6	227	223	224	218	216	217	233	230	231	---	---	---
7	228	226	227	221	217	218	230	229	230	---	---	---
8	229	227	228	220	218	219	232	229	230	---	---	---
9	230	227	228	220	218	219	229	227	228	---	---	---
10	234	229	230	220	218	219	228	226	227	---	---	---
11	244	233	237	221	219	220	230	228	229	---	---	---
12	255	243	246	222	221	221	234	229	230	---	---	---
13	261	255	258	224	221	222	243	234	239	---	---	---
14	255	222	227	224	221	223	246	243	244	---	---	---
15	224	222	223	222	220	221	243	238	241	---	---	---
16	223	222	223	226	221	223	241	238	239	---	---	---
17	224	222	223	223	220	221	246	241	244	---	---	---
18	225	222	223	224	220	222	249	241	244	---	---	---
19	226	223	224	222	219	221	256	249	254	---	---	---
20	234	225	228	222	218	219	252	248	250	---	---	---
21	242	234	236	222	220	221	248	246	247	---	---	---
22	256	242	248	222	221	222	250	246	248	---	---	---
23	256	230	243	224	221	222	252	249	251	---	---	---
24	230	198	217	226	222	224	255	252	254	---	---	---
25	200	176	187	228	226	226	255	252	253	---	---	---
26	189	180	185	227	226	227	255	252	254	---	---	---
27	195	188	191	226	225	226	254	249	252	---	---	---
28	201	189	196	227	226	227	250	247	249	---	---	---
29	208	198	204	230	227	228	249	247	248	---	---	---
30	202	191	197	231	228	229	247	245	247	---	---	---
31	208	200	205	---	---	---	250	244	246	---	---	---
MONTH	261	176	221	231	206	220	256	226	241	---	---	---
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	265	262	264	189	181	186	213	211	212
2	---	---	---	268	262	265	181	176	178	213	212	213
3	---	---	---	266	262	264	180	176	178	214	213	213
4	---	---	---	264	262	263	181	179	180	217	214	215
5	---	---	---	264	259	261	179	171	173	217	216	216
6	---	---	---	260	248	257	172	155	160	218	215	217
7	---	---	---	260	248	254	163	148	154	218	214	216
8	---	---	---	270	260	265	162	144	150	220	216	218
9	---	---	---	270	261	265	160	148	152	219	212	216
10	260	256	258	262	259	261	187	160	171	215	212	213
11	260	255	258	265	261	263	218	187	205	216	214	215
12	260	255	257	270	262	266	236	218	229	215	213	214
13	259	255	257	270	261	265	230	219	225	214	212	213
14	257	253	255	268	261	265	219	209	214	214	212	213
15	260	254	257	270	264	266	209	207	208	214	213	213
16	262	257	260	267	264	265	207	202	205	216	212	214
17	267	260	264	269	265	267	207	202	203	217	214	215
18	270	263	267	270	265	268	208	205	207	217	208	214
19	268	264	266	269	264	266	208	203	206	210	207	208
20	266	263	265	268	264	266	204	202	203	213	210	211
21	264	262	264	267	264	265	204	202	203	214	211	212
22	266	262	264	266	264	265	204	203	203	214	214	214
23	267	263	265	264	261	263	205	203	204	216	212	213
24	264	261	263	262	252	259	206	204	205	216	212	213
25	263	261	262	260	252	257	207	206	207	216	182	201
26	264	260	262	262	252	259	208	207	207	198	184	193
27	262	260	262	255	235	250	209	207	208	201	198	199
28	264	261	263	239	218	232	211	209	210	202	199	201
29	---	---	---	228	190	213	212	210	211	206	202	203
30	---	---	---	194	151	176	213	211	212	210	205	207
31	---	---	---	192	158	182	---	---	---	211	207	208
MONTH	---	---	---	270	151	255	236	144	195	220	182	211

05284310 SEGUCHIE CREEK ABOVE MOUTH NEAR GARRISON, MN—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	211	207	209	197	187	192	221	208	215	218	214	216
2	210	207	208	199	195	198	228	210	219	218	214	215
3	212	209	210	202	199	200	230	213	222	217	214	215
4	211	190	205	204	200	203	226	206	216	216	214	215
5	197	190	192	205	203	204	219	204	212	217	215	216
6	203	197	200	205	203	204	218	207	212	216	210	211
7	204	194	200	206	204	205	219	209	214	215	213	214
8	196	182	187	207	205	206	226	212	219	216	214	215
9	194	188	192	208	206	207	228	209	217	218	216	216
10	196	193	194	211	208	210	219	206	212	221	217	219
11	195	176	192	214	210	212	218	207	212	223	221	222
12	180	169	174	216	204	211	216	208	212	225	194	210
13	184	180	182	208	202	205	216	209	212	199	191	194
14	181	179	180	210	205	207	216	212	213	205	199	203
15	184	180	182	214	207	211	218	213	215	208	205	207
16	185	183	184	218	208	212	220	215	217	212	208	210
17	188	184	186	222	208	215	222	215	219	213	212	213
18	188	186	187	225	208	215	222	216	219	215	213	214
19	190	188	189	219	207	213	223	212	217	215	204	208
20	193	185	189	220	211	216	220	214	217	211	207	209
21	189	186	188	224	212	217	221	214	217	213	210	212
22	194	189	191	222	211	216	219	215	216	214	212	213
23	196	192	194	223	213	219	219	216	217	216	213	214
24	198	195	196	225	207	217	220	215	217	216	214	215
25	199	196	197	227	211	219	218	215	217	216	208	213
26	200	197	199	217	200	208	217	206	208	211	208	209
27	202	199	200	209	202	207	211	207	209	214	210	212
28	204	201	202	210	205	207	213	210	211	214	214	214
29	205	188	202	210	206	208	216	212	213	215	214	214
30	188	184	186	212	208	210	216	214	215	216	214	215
31	---	---	---	216	209	212	218	213	215	---	---	---
MONTH	212	169	193	227	187	209	230	204	215	225	191	212
YEAR	270	144	220									

05284310 SEGUCHIE CREEK ABOVE MOUTH NEAR GARRISON, MN—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
		FEBRUARY			MARCH			APRIL			MAY	
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	---	---	---	---	---	---	---	---	---	19.5	14.0	16.5
29	---	---	---	---	---	---	---	---	---	18.5	14.0	15.5
30	---	---	---	---	---	---	---	---	---	14.0	13.0	13.5
31	---	---	---	---	---	---	---	---	---	14.5	13.0	13.5
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
		JUNE			JULY			AUGUST			SEPTEMBER	
1	14.0	12.5	13.0	25.5	21.0	23.5	24.0	20.0	22.0	19.0	17.5	18.5
2	18.5	12.0	15.0	24.0	21.0	22.5	25.0	21.5	23.5	22.0	18.0	19.5
3	18.0	14.0	16.0	25.0	22.5	23.5	24.0	22.0	22.5	22.5	20.0	21.5
4	20.0	15.5	18.0	23.5	21.5	22.5	23.5	19.5	21.5	23.5	20.5	22.0
5	20.0	17.5	19.0	22.5	18.5	20.5	23.5	19.5	21.5	22.5	21.0	21.5
6	22.5	17.5	20.0	18.5	16.5	17.5	22.5	19.5	21.0	21.0	19.0	20.0
7	24.5	19.5	22.0	18.5	16.0	17.0	21.5	20.0	20.5	19.0	17.0	18.0
8	24.0	21.0	22.0	20.5	16.5	18.5	22.0	19.5	20.0	18.0	15.5	17.0
9	21.0	18.5	19.5	23.0	19.0	21.0	21.0	19.0	20.0	19.5	16.5	18.0
10	19.0	16.5	17.5	23.5	21.0	22.5	---	---	---	20.0	17.5	19.0
11	17.0	15.5	16.0	24.5	21.0	23.0	---	---	---	21.0	18.5	19.5
12	22.0	16.0	18.5	24.5	22.0	23.0	---	---	---	21.0	18.5	20.0
13	23.5	19.5	21.5	24.5	22.0	23.5	---	---	---	21.5	19.5	20.5
14	22.5	20.0	21.5	25.5	21.5	23.5	---	---	---	21.5	20.0	20.5
15	22.5	19.0	21.0	25.0	22.0	23.5	---	---	---	20.0	16.5	18.5
16	22.5	20.5	21.5	25.5	22.5	24.0	---	---	---	17.5	14.5	16.0
17	23.5	19.5	21.5	25.5	22.5	24.0	---	---	---	18.0	16.0	17.0
18	22.0	19.5	20.5	25.0	22.0	23.5	21.0	17.5	19.0	19.0	16.5	17.5
19	20.5	17.0	18.5	27.0	22.5	25.0	19.0	13.5	16.5	21.0	17.5	19.0
20	21.5	17.0	19.5	28.0	24.5	26.0	18.0	13.5	16.0	20.5	19.0	20.0
21	21.5	19.0	20.0	29.0	25.5	27.0	17.0	12.5	14.5	19.5	17.5	18.5
22	20.5	17.5	19.0	26.5	23.5	25.0	18.5	15.5	16.5	19.0	16.5	17.5
23	19.0	17.0	18.0	24.5	21.0	22.5	17.0	15.0	16.0	19.0	17.5	18.0
24	18.5	14.5	16.5	23.5	19.5	21.5	18.5	16.5	17.0	17.5	15.5	16.5
25	18.0	15.0	16.5	23.5	20.0	21.5	19.5	17.5	18.0	17.0	14.0	15.5
26	19.0	15.5	17.5	24.0	20.5	22.0	20.5	18.0	19.0	18.0	15.0	16.5
27	19.0	16.0	17.5	24.0	20.5	22.0	20.5	17.0	18.5	18.5	16.5	17.5
28	21.5	17.0	19.0	22.0	20.5	21.0	19.0	16.5	18.0	16.5	14.5	15.5
29	23.5	18.5	21.0	22.5	19.5	20.5	18.0	15.5	16.5	15.5	13.0	14.5
30	25.0	20.5	22.5	20.5	18.5	19.5	19.0	15.5	17.0	15.5	13.5	14.5
31	---	---	---	22.5	18.0	20.0	19.5	16.5	17.5	---	---	---
MONTH	25.0	12.0	19.0	29.0	16.0	22.3	---	---	---	23.5	13.0	18.3
YEAR	29.0	12.0	19.5									

05284310 SEGUCHIE CREEK ABOVE MOUTH NEAR GARRISON, MN—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	12.0	14.5	8.5	7.0	8.0	1.0	0.0	0.5	0.0	0.0	0.0
2	12.0	9.5	11.0	8.5	7.0	8.0	1.0	0.0	0.5	0.0	0.0	0.0
3	12.5	10.0	11.0	7.0	5.0	6.5	0.5	0.0	0.0	0.0	0.0	0.0
4	11.0	8.5	10.0	6.5	5.0	5.5	1.5	0.5	1.0	0.0	0.0	0.0
5	11.5	8.0	9.5	6.0	4.0	5.0	0.5	0.0	0.0	---	---	---
6	14.5	10.5	12.5	7.5	5.5	6.5	0.5	0.0	0.0	---	---	---
7	14.5	13.5	14.0	7.0	5.0	6.0	1.0	0.5	1.0	---	---	---
8	15.0	13.5	14.0	5.0	4.5	4.5	1.0	0.5	1.0	---	---	---
9	14.0	11.5	13.0	5.5	3.5	4.5	1.0	0.5	1.0	---	---	---
10	14.0	11.0	12.5	6.5	4.5	6.0	1.0	0.5	0.5	---	---	---
11	13.5	11.5	12.5	4.5	2.5	3.5	0.5	0.0	0.5	---	---	---
12	14.0	11.0	12.5	3.5	2.0	2.5	0.5	0.0	0.5	---	---	---
13	12.5	9.0	11.0	3.5	1.5	2.5	0.0	0.0	0.0	---	---	---
14	10.5	8.5	9.5	3.5	1.5	2.5	0.5	0.0	0.0	---	---	---
15	9.5	8.5	9.0	4.0	2.0	3.0	0.5	0.0	0.0	---	---	---
16	8.5	6.5	7.5	4.5	3.0	3.5	0.5	0.0	0.0	---	---	---
17	6.5	5.5	6.0	5.5	4.5	5.0	0.5	0.0	0.0	---	---	---
18	6.5	5.5	6.0	5.5	4.5	5.0	0.5	0.0	0.0	---	---	---
19	6.5	6.0	6.5	4.5	4.0	4.0	0.5	0.0	0.0	---	---	---
20	10.0	6.0	7.5	4.5	3.0	4.0	0.0	0.0	0.0	---	---	---
21	9.0	8.0	8.5	3.0	1.5	2.5	0.0	0.0	0.0	---	---	---
22	10.0	8.5	9.0	3.0	1.0	2.0	0.0	0.0	0.0	---	---	---
23	11.5	10.0	11.0	2.5	1.0	2.0	0.0	0.0	0.0	---	---	---
24	10.5	9.0	9.5	1.5	0.5	1.0	0.0	0.0	0.0	---	---	---
25	10.5	8.0	9.0	1.5	0.5	1.0	0.0	0.0	0.0	---	---	---
26	9.0	7.5	8.5	1.5	1.0	1.0	0.0	0.0	0.0	---	---	---
27	8.0	7.0	7.5	1.5	1.0	1.5	0.0	0.0	0.0	---	---	---
28	9.0	8.0	8.0	1.5	0.0	1.0	0.0	0.0	0.0	---	---	---
29	10.0	9.0	9.5	1.5	0.5	1.0	0.0	0.0	0.0	---	---	---
30	10.0	9.0	9.5	1.0	0.0	0.5	0.0	0.0	0.0	---	---	---
31	9.0	8.0	8.5	---	---	---	0.0	0.0	0.0	---	---	---
MONTH	15.5	5.5	10.0	8.5	0.0	3.6	1.5	0.0	0.2	---	0.0	0.0
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	0.0	0.0	0.0	6.5	2.5	4.0	8.5	6.0	7.0
2	---	---	---	0.0	0.0	0.0	6.5	2.5	4.5	8.0	5.0	6.5
3	---	---	---	0.0	0.0	0.0	8.5	3.5	5.5	11.5	4.5	8.0
4	---	---	---	0.0	0.0	0.0	8.0	4.5	6.0	14.0	7.0	10.5
5	---	---	---	0.5	0.0	0.0	8.0	5.0	6.5	14.0	10.0	12.0
6	---	---	---	1.0	0.0	0.5	6.5	5.0	5.5	17.0	10.5	13.5
7	---	---	---	1.5	0.0	0.5	9.5	4.0	6.5	14.5	10.5	12.5
8	---	---	---	1.0	0.0	0.5	9.5	5.0	7.0	17.5	11.5	14.5
9	0.0	0.0	0.0	1.5	0.0	0.5	10.5	5.5	8.0	16.5	13.0	14.0
10	0.0	0.0	0.0	0.5	0.0	0.5	9.0	6.5	7.5	15.0	13.0	14.0
11	0.0	0.0	0.0	1.0	0.0	0.5	7.5	5.5	6.5	14.5	11.5	13.0
12	0.0	0.0	0.0	1.0	0.0	0.5	6.5	5.5	6.0	11.5	8.5	9.5
13	0.0	0.0	0.0	1.5	0.0	0.5	9.5	4.0	6.5	10.5	8.0	9.5
14	0.0	0.0	0.0	1.0	0.0	0.5	10.0	5.0	7.5	13.0	9.0	10.5
15	0.5	0.0	0.0	1.0	0.0	0.5	8.5	6.5	7.5	14.0	9.5	11.5
16	0.0	0.0	0.0	1.0	0.0	0.5	10.0	6.5	8.0	15.5	10.0	13.0
17	0.0	0.0	0.0	1.5	0.0	1.0	12.0	7.5	9.5	16.0	12.0	14.0
18	0.0	0.0	0.0	1.5	0.0	0.5	14.5	8.5	11.5	15.0	12.5	13.5
19	0.0	0.0	0.0	2.0	0.0	1.0	14.0	12.0	13.0	15.5	12.5	13.5
20	0.0	0.0	0.0	2.5	0.5	1.5	15.0	11.0	13.0	15.5	13.0	14.0
21	0.0	0.0	0.0	3.0	0.5	2.0	14.5	10.0	12.5	16.5	13.5	15.0
22	0.0	0.0	0.0	3.5	0.5	2.0	12.5	9.5	10.5	16.0	13.5	14.5
23	0.0	0.0	0.0	4.0	1.5	2.5	12.5	7.5	10.0	19.5	12.5	15.5
24	0.0	0.0	0.0	4.5	2.0	3.0	14.0	8.5	11.0	18.5	14.5	17.0
25	0.0	0.0	0.0	4.5	1.0	3.0	12.0	10.0	11.0	17.5	13.5	15.5
26	0.0	0.0	0.0	5.0	1.5	3.5	10.5	8.5	9.5	15.5	12.5	14.0
27	0.0	0.0	0.0	5.0	2.0	4.0	9.0	7.0	7.5	15.0	13.0	14.0
28	0.0	0.0	0.0	5.5	3.0	4.5	8.0	5.5	7.0	14.5	13.0	13.5
29	---	---	---	7.0	3.0	5.0	10.0	6.5	8.0	19.0	12.5	15.5
30	---	---	---	5.5	1.5	3.0	9.0	7.0	8.0	21.0	15.0	18.0
31	---	---	---	6.0	1.5	3.5	---	---	---	21.5	16.5	19.0
MONTH	---	0.0	0.0	7.0	0.0	1.5	15.0	2.5	8.2	21.5	4.5	13.1

05284310 SEGUCHIE CREEK ABOVE MOUTH NEAR GARRISON, MN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	20.0	17.5	18.0	22.0	18.0	20.0	26.5	23.5	25.0	20.5	18.0	19.5
2	21.0	16.5	18.5	23.0	19.5	21.0	27.0	24.5	25.5	20.5	17.5	19.0
3	20.0	18.0	19.5	24.5	21.0	22.5	27.5	25.0	26.0	19.5	17.5	18.0
4	19.5	18.0	18.5	23.5	21.5	22.5	26.5	24.0	25.0	21.0	17.5	18.5
5	20.5	17.0	18.5	22.5	21.0	21.5	24.5	21.5	23.0	20.5	20.0	20.0
6	23.0	18.0	20.5	23.0	19.5	21.5	24.0	21.0	22.5	22.5	19.5	21.0
7	22.5	19.5	21.0	24.0	20.5	22.5	25.0	22.0	23.5	21.5	19.5	20.5
8	21.0	17.5	19.5	24.0	22.0	23.0	26.0	24.0	25.0	21.5	19.0	20.0
9	23.0	18.5	21.0	26.0	22.5	24.0	26.0	23.5	24.5	21.0	19.5	20.5
10	22.5	20.5	21.5	27.0	24.0	25.5	24.0	22.0	23.0	23.0	20.5	21.5
11	22.0	21.0	21.5	27.0	24.5	26.0	23.0	21.5	22.0	24.0	21.5	22.5
12	24.5	20.0	22.0	26.0	24.5	25.0	23.0	20.5	22.0	23.5	21.0	22.0
13	23.5	21.5	22.0	26.5	23.5	25.0	21.5	20.0	21.0	21.0	19.0	19.5
14	21.5	20.5	21.0	27.0	24.0	25.5	21.0	18.5	20.0	19.0	17.0	18.0
15	24.5	20.0	22.0	---	25.0	---	21.5	18.5	20.0	19.5	17.0	18.0
16	25.5	21.0	23.0	27.5	25.0	26.5	23.0	20.0	21.5	20.5	17.5	19.0
17	26.0	21.5	24.0	28.5	25.5	27.0	23.0	21.0	22.0	19.5	18.0	18.5
18	26.0	22.0	24.0	26.5	22.5	24.0	22.0	20.5	21.0	20.0	17.5	19.0
19	27.0	23.0	25.0	24.0	20.5	22.5	22.0	20.0	21.0	20.0	19.0	19.5
20	26.0	23.5	24.5	25.5	22.0	24.0	21.5	19.5	20.5	20.5	17.5	19.0
21	26.0	22.0	24.0	25.0	22.5	24.0	20.5	19.0	20.0	20.5	18.5	19.5
22	26.5	23.0	25.0	25.0	22.5	24.0	20.0	18.0	19.0	20.0	18.0	19.0
23	28.5	24.5	26.5	24.5	23.0	23.5	20.5	17.5	19.0	18.0	16.0	17.0
24	27.0	25.0	26.0	25.5	23.0	24.0	20.5	18.5	19.5	17.0	16.0	16.5
25	25.5	23.0	24.5	24.5	21.5	23.0	22.0	19.5	21.0	17.0	15.5	16.0
26	24.5	23.0	23.5	21.5	19.5	20.5	22.5	20.5	21.5	16.5	14.0	15.5
27	25.5	23.0	24.0	21.5	18.5	20.0	22.0	19.5	20.5	18.0	15.0	16.5
28	26.0	23.0	24.5	22.0	19.5	20.5	22.0	19.5	21.0	17.5	14.0	16.0
29	24.5	21.0	22.5	22.5	19.5	21.0	22.0	19.5	21.0	14.0	12.0	13.0
30	21.0	19.5	20.5	24.0	20.5	22.5	22.5	20.0	21.5	15.5	12.5	14.0
31	---	---	---	25.0	22.5	24.0	21.5	20.0	21.0	---	---	---
MONTH	28.5	16.5	22.2	28.5	18.0	23.2	27.5	17.5	21.9	24.0	12.0	18.6
YEAR	28.5	0.0	11.3									

Date	Time	Sample type	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unf lab, uS/cm 25 degC (90095)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)
OCT 2004												
13...	0940	Environmental	15.41	.51	727	1.8	16	7.0	7.6	228	266	8.0
13...	0940	Composite (time)	--	--	--	--	--	--	--	--	--	--
NOV												
22...	1050	Environmental	16.57	8.2	726	11.7	83	7.4	E7.2	206	222	3.0
JAN 2005												
05...	0830	Blank	--	--	--	--	--	--	E7.5	<3	--	--
05...	1230	Environmental	6.47	4.1	754	11.7	80	7.5	7.5	254	263	--
FEB												
09...	1140	Environmental	16.51	4.8	731	8.9	61	7.3	E7.5	255	259	--
MAR												
23...	0945	Environmental	16.46	5.0	732	9.5	67	7.2	7.7	259	268	-1.0
MAY												
04...	0800	Environmental	16.64	10	733	10.0	83	7.5	7.9	205	211	11.0
04...	0800	Bed material	16.64	10	--	--	--	--	--	--	--	11.0
04...	0801	Bed material	16.64	--	--	--	--	--	--	--	--	--
04...	0802	Bed material	16.64	--	--	--	--	--	--	--	--	--
04...	0803	Bed material	16.64	--	--	--	--	--	--	--	--	--
04...	0804	Bed material	16.64	--	--	--	--	--	--	--	--	--
04...	0805	Bed material	16.64	--	--	--	--	--	--	--	--	--
04...	0805	Replicate	16.64	10	--	--	--	--	7.8	206	--	11.0
04...	0806	Bed material	16.64	--	--	--	--	--	--	--	--	--
JUN												
23...	1010	Environmental	16.76	16	728	4.5	54	7.0	7.6	178	195	34.0
29...	1113	Environmental	16.70	13	--	--	--	8.2	--	--	201	--
29...	1116	Environmental	16.68	13	--	--	--	8.0	--	--	201	--
29...	2036	Environmental	16.65	12	--	--	--	8.3	--	--	200	--
JUL												
03...	0625	Environmental	4,115.00	12	--	--	--	8.4	--	--	198	--
12...	1444	Environmental	16.49	7.0	--	--	--	8.5	--	--	207	--
25...	1447	Environmental	16.35	3.9	--	--	--	8.5	--	--	212	--
25...	1540	Environmental	16.35	3.9	--	--	--	8.5	--	--	211	--
25...	1702	Environmental	16.39	4.6	--	--	--	8.4	--	--	205	--
26...	0920	Environmental	16.36	3.8	732	.8	9	6.7	7.5	200	210	--
AUG												
09...	0502	Environmental	--	--	--	--	--	--	--	--	--	--
09...	0605	Environmental	--	--	--	--	--	--	--	--	--	--
09...	0747	Environmental	--	--	--	--	--	--	--	--	--	--
25...	2359	Environmental	--	--	--	--	--	--	--	--	--	--
26...	0332	Environmental	--	--	--	--	--	--	--	--	--	--
26...	0532	Environmental	--	--	--	--	--	--	--	--	--	--
SEP												
05...	2349	Environmental	--	--	--	--	--	--	--	--	--	--
12...	0824	Environmental	--	--	--	--	--	--	--	--	--	--
12...	0832	Environmental	--	--	--	--	--	--	--	--	--	--
12...	0935	Environmental	--	--	--	--	--	--	--	--	--	--
12...	1258	Environmental	--	--	--	--	--	--	--	--	--	--
12...	1540	Environmental	--	--	--	--	--	--	--	--	--	--
12...	2209	Environmental	--	--	--	--	--	--	--	--	--	--
13...	1235	Composite (time)	--	--	--	--	--	--	--	--	--	--
13...	1240	Environmental	--	--	--	--	--	--	--	--	--	--
13...	1240	Bed material	--	--	--	--	--	--	--	--	--	--
13...	1245	Environmental	16.70	13	726	2.8	31	6.9	--	--	196	16.0
19...	0900	Environmental	--	--	--	--	--	--	--	--	--	--
25...	1819	Environmental	--	--	--	--	--	--	--	--	--	--

05284310 SEGUCHIE CREEK ABOVE MOUTH NEAR GARRISON, MN—Continued

WATER QUALITY DATA--Continued

Date	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)	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)
OCT 2004													
13...	10.9	42.5	10.1	2.01	3.89	133	162	.0	2.99	E.1	6.76	.7	155
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
22...	1.6	32.5	8.00	1.53	2.77	112	137	.0	1.42	.1	5.76	1.3	134
JAN 2005													
05...	--	<.02	<.008	<.16	<.20	--	--	--	<.20	<.1	<.04	<.2	<10
05...	.1	38.1	9.32	1.73	3.22	132	161	.0	1.53	.1	6.99	1.6	162
FEB													
09...	.1	40.9	9.47	1.75	3.12	130	159	.0	1.62	.1	8.54	1.7	166
MAR													
23...	1.3	42.8	10.1	1.93	3.06	135	165	.0	1.59	E.1	9.50	1.3	169
MAY													
04...	7.3	32.3	7.38	1.52	2.58	111	135	.0	1.41	E.1	6.78	1.1	134
04...	7.3	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	7.3	31.9	7.50	1.48	2.52	--	--	--	1.40	E.1	7.20	1.0	140
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
23...	25.1	27.9	7.20	1.02	2.35	97	118	.0	1.21	E.1	5.20	.8	121
29...	22.3	--	--	--	--	--	--	--	1.35	--	--	--	--
29...	22.2	--	--	--	--	--	--	--	1.36	--	--	--	--
29...	21.9	--	--	--	--	--	--	--	1.36	--	--	--	--
JUL													
03...	21.4	--	--	--	--	--	--	--	1.27	--	--	--	--
12...	25.6	--	--	--	--	--	--	--	1.33	--	--	--	--
25...	23.9	--	--	--	--	--	--	--	1.36	--	--	--	--
25...	22.9	--	--	--	--	--	--	--	1.37	--	--	--	--
25...	22.7	--	--	--	--	--	--	--	1.41	--	--	--	--
26...	20.5	30.9	7.01	1.22	2.24	108	132	.0	1.34	E.1	11.2	.8	141
AUG													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	19.3	--	--	--	--	99	121	.0	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--

05284310 SEGUCHIE CREEK ABOVE MOUTH NEAR GARRISON, MN—Continued

WATER QUALITY DATA--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)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Alum-inum, water, fltrd, ug/L (01106)	Anti-mony, water, fltrd, ug/L (01095)	Barium, water, fltrd, ug/L (01005)	Beryll-ium, water, fltrd, ug/L (01010)	Cadmium water, fltrd, ug/L (01025)	Chrom-ium, water, fltrd, ug/L (01030)
OCT 2004													
13...	.57	<.04	<.06	<.008	E.02	<.04	E.03	<2	<.20	32	<.06	<.04	<.8
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
22...	.52	<.04	<.06	<.008	<.02	<.04	<.04	M	<.20	24	<.06	<.04	<.8
JAN 2005													
05...	<.10	<.04	<.06	<.008	<.02	<.04	<.04	<2	<.20	<.2	<.06	<.04	<.8
05...	.59	E.03	<.06	<.008	<.02	<.04	E.02	<2	<.20	26	<.06	<.04	<.8
FEB													
09...	.61	.05	E.05	<.008	<.02	<.04	E.02	<2	<.20	28	<.06	<.04	<.8
MAR													
23...	.56	E.02	.10	<.008	<.02	<.04	<.04	M	<.20	28	<.06	<.04	<.8
MAY													
04...	.52	<.04	<.06	<.008	<.02	<.04	E.02	<2	<.20	22	<.06	<.04	<.8
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	.53	<.04	<.06	<.008	<.02	<.04	<.04	<2	<.20	24	<.06	<.04	<.8
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
23...	.70	<.04	<.06	<.008	<.02	<.04	.04	2	<.20	22	<.06	<.04	<.8
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	.65	<.04	<.06	<.008	<.02	<.04	.06	3	<.20	49	<.06	<.04	<.8
AUG													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
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13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	.73	.04	E.04	<.008	<.02	<.04	E.03	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--

05284310 SEGUCHIE CREEK ABOVE MOUTH NEAR GARRISON, MN—Continued

WATER QUALITY DATA--Continued

Date	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Mangan-ese, water, fltrd, ug/L (01056)	Molyb-denum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)	Uranium natural water, fltrd, ug/L (22703)	Suspnd. sedi-ment, falldia dst wat percent <.002mm (70337)	Suspnd. sedi-ment, falldia dst wat percent <.004mm (70338)	Suspnd. sedi-ment, falldia dst wat percent <.008mm (70339)
OCT 2004													
13...	.125	.5	57	<.08	129	E.2	.92	<.2	1.0	.04	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
22...	.096	E.3	30	<.08	19.9	<.4	<.06	<.2	.9	.05	--	--	--
JAN 2005													
05...	<.014	<.4	<6	<.08	<.2	<.4	<.06	<.2	<.6	<.04	--	--	--
05...	.134	.6	32	<.08	23.2	E.2	1.13	<.2	.7	.05	--	--	--
FEB													
09...	.115	.4	32	<.08	42.2	<.4	.86	<.2	.8	.06	--	--	--
MAR													
23...	.154	1.1	29	.09	77.6	E.2	2.24	<.2	2.1	.06	--	--	--
MAY													
04...	.104	E.4	30	<.08	24.5	<.4	.99	<.2	E.5	.05	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	.079	.9	29	<.08	11.7	<.4	1.00	<.2	2.4	.05	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
23...	.094	1.1	36	E.07	12.4	<.4	1.82	<.2	1.6	.04	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
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JUL													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	.161	2.9	88	E.05	961	<.4	1.40	<.2	33.5	<.04	--	--	--
AUG													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
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12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	.0	.0	.0
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--

05284310 SEGUCHIE CREEK ABOVE MOUTH NEAR GARRISON, MN—Continued

WATER QUALITY DATA--Continued

Date	Suspnd. sedi-ment, falldia dst wat percent <.016mm (70340)	Suspnd. sedi-ment, sieve diametr percent <.063mm (70331)	Suspnd. sedi-ment, sieve diametr percent <.125mm (70332)	Suspnd. sedi-ment, sieve diametr percent <.25mm (70333)	Suspnd. sedi-ment, sieve diametr percent <.5 mm (70334)	Suspnd. sedi-ment, sieve diametr percent <1 mm (70335)	Suspn sedi ment siev diame perce <2 m (7033	Suspnd. sedi-ment, sieve diametr percent <1 mm (70335)	Suspnd. sedi-ment, sieve diametr percent <2 mm (70336)	Sus-pended sedimnt sieve diametr percent <4mm (69314)	Sus-pended sedimnt sieve diametr percent <8mm (69309)	Sus-pended sedimnt sieve diametr percent <16mm (69304)	Sus-pended sedimnt sieve diametr percent <63mm (69294)	Sus-pended sedi-ment concen-tration mg/L (80154)	Bed sedi-ment, dry svd sve dia percent <.063mm (80164)
OCT 2004															
13...	--	--	--	--	--	--	--	--	--	--	--	--	--	2	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV															
22...	--	57	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 2005															
05...	--	--	--	--	--	--	--	--	--	--	--	--	--	<1	--
05...	--	100	--	--	--	--	--	--	--	--	--	--	--	<1	--
FEB															
09...	--	100	--	--	--	--	--	--	--	--	--	--	--	<1	--
MAR															
23...	--	43	--	--	--	--	--	--	--	--	--	--	--	2	--
MAY															
04...	--	50	--	--	--	--	--	--	--	--	--	--	--	1	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3
04...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
04...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
04...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2
04...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.0
04...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3
04...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3
JUN															
23...	--	75	--	--	--	--	--	--	--	--	--	--	--	1	--
29...	--	75	--	--	--	--	--	--	--	--	--	--	--	4	--
29...	--	100	--	--	--	--	--	--	--	--	--	--	--	2	--
29...	--	40	--	--	--	--	--	--	--	--	--	--	--	9	--
JUL															
03...	--	29	--	--	--	--	--	--	--	--	--	--	--	3	--
12...	--	100	--	--	--	--	--	--	--	--	--	--	--	3	--
25...	--	100	--	--	--	--	--	--	--	--	--	--	--	8	--
25...	--	100	--	--	--	--	--	--	--	--	--	--	--	6	--
25...	--	69	--	--	--	--	--	--	--	--	--	--	--	6	--
26...	--	25	--	--	--	--	--	--	--	--	--	--	--	7	--
AUG															
09...	--	75	--	--	--	--	--	--	--	--	--	--	--	10	--
09...	--	95	--	--	--	--	--	--	--	--	--	--	--	7	--
09...	--	73	--	--	--	--	--	--	--	--	--	--	--	7	--
25...	--	57	--	--	--	--	--	--	--	--	--	--	--	2	--
26...	--	83	--	--	--	--	--	--	--	--	--	--	--	2	--
26...	--	60	--	--	--	--	--	--	--	--	--	--	--	2	--
SEP															
05...	--	67	--	--	--	--	--	--	--	--	--	--	--	1	--
12...	--	50	--	--	--	--	--	--	--	--	--	--	--	1	--
12...	--	50	--	--	--	--	--	--	--	--	--	--	--	1	--
12...	--	60	--	--	--	--	--	--	--	--	--	--	--	2	--
12...	--	25	--	--	--	--	--	--	--	--	--	--	--	1	--
12...	--	60	--	--	--	--	--	--	--	--	--	--	--	3	--
12...	--	75	--	--	--	--	--	--	--	--	--	--	--	1	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	.0	.0	1	2	3	Environmental		Environmental		11	20	41	100	--	3
13...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	70	--	--	--	--	--	--	--	--	--	--	--	4	--
19...	--	100	--	--	--	--	--	--	--	--	--	--	--	1	--
25...	--	100	--	--	--	--	--	--	--	--	--	--	--	<1	--

05284310 SEGUCHIE CREEK ABOVE MOUTH NEAR GARRISON, MN—Continued

WATER QUALITY DATA--Continued

Date	Bed sediment, dry svd sve dia percent <.125mm (80165)	Bed sediment, dry svd sve dia percent <.25mm (80166)	Bed sediment, dry svd sve dia percent <.5 mm (80167)	Bed sediment, dry svd sve dia percent <1 mm (80168)	Bed sediment, dry svd sve dia percent <2 mm (80169)	Bed sediment, dry svd sve dia percent <4 mm (80170)	Bed sediment, dry svd sve dia percent <8 mm (80171)	Bed sediment, dry svd sve dia percent <16 mm (80172)	Bed sediment, dry svd sve dia percent <63mm (69046)	Bed sediment falldia dst wat percent <.002mm (80294)	Bed sediment, falldia dst wat percent <.004mm (80157)	Bed sediment falldia dst wat percent <.008mm (80293)	Bed sediment, falldia dst wat percent <.016mm (80282)
OCT 2004													
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NOV													
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JAN 2005													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	3	11	33	46	52	59	76	--	--	--	--	--	--
04...	2	8	19	26	28	32	41	--	--	--	--	--	--
04...	4	21	53	71	78	84	91	--	--	--	--	--	--
04...	3	24	66	87	93	96	100	--	--	--	--	--	--
04...	5	24	61	83	91	95	100	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	7	28	70	90	96	98	100	--	--	--	--	--	--
JUN													
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	5	23	69	88	91	92	93	100	100	1	1	1	2
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--

05284310 SEGUCHIE CREEK ABOVE MOUTH NEAR GARRISON, MN—Continued

WATER QUALITY DATA--Continued

Date	Bed sedi-ment, falldia dst wat percent <.031mm (80283)	Bed sedi-ment, falldia dst wat percent <.063mm (80158)	Bed sedi-ment, falldia dst wat percent <.125mm (80159)	Bed sedi-ment, falldia dst wat percent <.25mm (80160)	Bed sedi-ment, falldia dst wat percent <.5 mm (80161)	Data base number
05284310 SEGUCHIE CREEK ABOVE MOUTH NEAR GARRISON, MN (LAT 46 15 13N LONG 093 49 15W)						
OCT 2004						
13...	--	--	--	--	--	01
13...	--	--	--	--	--	01
NOV						
22...	--	--	--	--	--	01
JAN 2005						
05...	--	--	--	--	--	77
05...	--	--	--	--	--	01
FEB						
09...	--	--	--	--	--	01
MAR						
23...	--	--	--	--	--	01
MAY						
04...	--	--	--	--	--	01
04...	--	--	--	--	--	01
04...	1	1	.0	.0	.0	01
04...	1	.0	.0	.0	.0	01
04...	2	1	1	.0	.0	01
04...	2	2	1	1	1	01
04...	2	2	2	1	1	01
04...	--	--	--	--	--	77
04...	3	2	2	1	.0	01
JUN						
23...	--	--	--	--	--	01
29...	--	--	--	--	--	01
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29...	--	--	--	--	--	01
JUL						
03...	--	--	--	--	--	01
12...	--	--	--	--	--	01
25...	--	--	--	--	--	01
25...	--	--	--	--	--	01
25...	--	--	--	--	--	01
26...	--	--	--	--	--	01
AUG						
09...	--	--	--	--	--	01
09...	--	--	--	--	--	01
09...	--	--	--	--	--	01
25...	--	--	--	--	--	01
26...	--	--	--	--	--	01
26...	--	--	--	--	--	01
SEP						
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12...	--	--	--	--	--	01
12...	--	--	--	--	--	01
12...	--	--	--	--	--	01
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25...	--	--	--	--	--	01

05286000 RUM RIVER NEAR ST. FRANCIS, MN

LOCATION.--Lat 45°19'40", long 93°22'20", in SE$^1/_4$ sec. 19, T.33 N., R.24 W., Anoka County, Hydrologic Unit 07010207, on left bank at upstream side of County Highway 22 bridge, 4 mi south of St. Francis and 15.8 mi upstream from mouth.

DRAINAGE AREA.--1,360 mi^2 (approximately).

PERIOD OF RECORD.--May to November 1929, March 1930 to September 1931, April to November 1932, March 1933 to current year.

REVISED RECORDS.--WSP 1308: 1930(M), 1932(M).

GAGE.--Water-stage recorder. Datum of gage is 860.74 ft above sea level (NGVD of 1929, levels by Anoka County Highway Department). Prior to Nov. 9, 1933, nonrecording gage at site 50 ft downstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which poor. Occasional regulation from Ogechie (also controls Mille Lacs Lake) and Onamia Lakes.

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	729	1,210	e452	e195	e225	e263	1,910	887	1,900	1,010	434	449
2	699	1,280	e422	e195	e233	e261	2,010	846	2,030	947	425	413
3	668	1,320	421	e193	e245	e268	2,150	813	2,030	932	414	391
4	647	1,300	465	e190	e257	e273	2,490	786	1,880	960	407	396
5	635	1,220	e430	e191	e261	e284	2,870	749	1,640	967	396	392
6	630	1,110	445	e191	e261	e315	3,180	724	1,440	915	382	398
7	613	1,010	453	e191	e256	e369	3,230	704	1,330	862	368	393
8	583	919	444	e191	e252	e414	3,000	685	1,380	811	359	391
9	552	840	433	e194	e248	e414	2,680	687	1,600	770	358	393
10	518	781	438	e192	e246	e418	2,480	708	1,950	732	353	380
11	497	733	449	e188	e254	e407	2,490	733	2,290	696	348	364
12	483	686	450	e181	e265	e405	2,570	719	2,600	667	344	368
13	469	644	e302	e168	e273	e393	2,580	751	2,850	646	343	819
14	461	614	e280	e158	e277	e390	2,510	794	3,060	616	337	997
15	449	590	e298	e155	e281	e390	2,460	813	3,160	591	327	1,080
16	445	564	e282	e152	e276	e381	2,530	804	3,170	573	322	1,050
17	445	552	e248	e152	e273	e369	2,690	797	3,060	552	349	995
18	448	539	e227	e155	e271	e356	2,790	825	2,910	528	380	901
19	440	539	e208	e159	e271	e349	2,760	925	2,800	509	406	862
20	439	561	e190	e162	e271	e358	2,580	1,020	2,790	505	441	787
21	440	584	e170	e162	e271	e370	2,290	1,070	2,720	493	411	734
22	440	602	e160	e162	e273	e369	2,000	1,150	2,540	480	384	712
23	452	612	e157	e167	e276	e369	1,740	1,250	2,230	490	361	657
24	475	624	e155	e173	e277	e415	1,580	1,350	1,910	516	343	615
25	487	613	e163	e182	e274	e460	1,350	1,450	1,690	524	334	589
26	486	586	e170	e188	e272	568	1,250	1,480	1,540	509	402	586
27	477	548	e176	e190	e269	715	1,150	1,420	1,400	487	456	586
28	555	529	e184	e195	e265	902	1,060	1,350	1,290	480	492	595
29	743	517	e193	e199	---	1,110	990	1,380	1,180	480	534	609
30	945	495	e195	e205	---	1,470	934	1,520	1,090	462	528	604
31	1,110	---	e199	e216	---	1,790	---	1,720	---	445	492	---
TOTAL	17,460	22,722	9,259	5,592	7,373	15,615	66,304	30,910	63,460	20,155	12,230	18,506
MEAN	563	757	299	180	263	504	2,210	997	2,115	650	395	617
MAX	1,110	1,320	465	216	281	1,790	3,230	1,720	3,170	1,010	534	1,080
MIN	439	495	155	152	225	261	934	685	1,090	445	322	364
AC-FT	34,630	45,070	18,370	11,090	14,620	30,970	131,500	61,310	125,900	39,980	24,260	36,710
CFSM	0.41	0.56	0.22	0.13	0.19	0.37	1.63	0.73	1.56	0.48	0.29	0.45
IN.	0.48	0.62	0.25	0.15	0.20	0.43	1.81	0.85	1.74	0.55	0.33	0.51

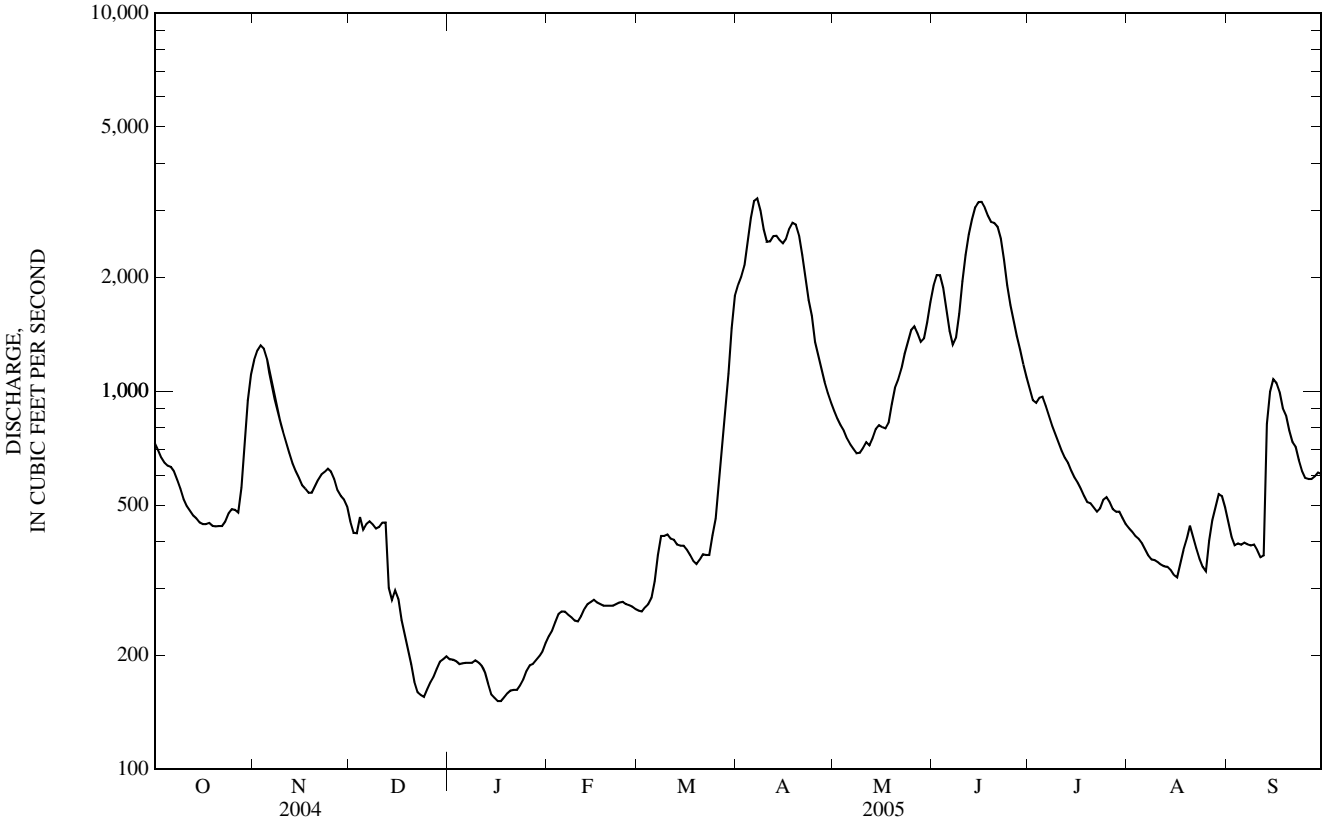
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2005, BY WATER YEAR (WY)

MEAN	466	449	326	245	248	611	1,584	1,125	904	663	425	446
MAX	2,300	1,715	1,051	660	813	2,699	4,269	3,899	3,400	2,532	2,251	2,362
(WY)	(1969)	(1972)	(1983)	(1987)	(1966)	(1966)	(1969)	(1986)	(1984)	(1954)	(1972)	(1986)
MIN	65.4	71.8	55.8	51.5	59.2	75.8	154	73.6	43.7	34.5	37.3	47.1
(WY)	(1934)	(1934)	(1934)	(1934)	(1934)	(1934)	(1934)	(1934)	(1934)	(1934)	(1934)	(1933)

05286000 RUM RIVER NEAR ST. FRANCIS, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1929 - 2005	
ANNUAL TOTAL	240,364		289,586			
ANNUAL MEAN	657		793		642	
HIGHEST ANNUAL MEAN					1,512	1986
LOWEST ANNUAL MEAN					66.1	1934
HIGHEST DAILY MEAN	2,990	Jun 12	3,230	Apr 7	10,000	Apr 13, 1969
LOWEST DAILY MEAN	155	Dec 24	152	Jan 16,17	30	Aug 3, 1934
ANNUAL SEVEN-DAY MINIMUM	164	Dec 21	156	Jan 14	31	Aug 1, 1934
MAXIMUM PEAK FLOW			3,270	Apr 7	a10,100	Apr 20, 1965
MAXIMUM PEAK STAGE			6.41	Apr 7	11.63	Apr 13, 1969
INSTANTANEOUS LOW FLOW			b152	Jan 16	29	Aug 18, 1934
ANNUAL RUNOFF (AC-FT)	476,800		574,400		464,800	
ANNUAL RUNOFF (CFSM)	0.483		0.583		0.472	
ANNUAL RUNOFF (INCHES)	6.57		7.92		6.41	
10 PERCENT EXCEEDS	1,240		1,970		1,410	
50 PERCENT EXCEEDS	493		505		381	
90 PERCENT EXCEEDS	198		195		119	

a Also occurred Apr. 13, 1969.
b Estimated daily-mean, backwater from ice. An upstream ice jam on Jan. 27 may have resulted in lower flows.
e Estimated.



05287890 ELM CREEK NEAR CHAMPLIN, MN

LOCATION.--Lat 45°09'48", long 93°26'11", in NE¼NW¼ sec. 35, T.120 N., R.22 W., Hennepin County, Hydrologic Unit 07010206, on left bank, 33 ft downstream from bridge on Elm Creek Road, 2.5 mi southwest of Champlin.

DRAINAGE AREA.--86.0 mi^2.

PERIOD OF RECORD.--October 1978 to current year.

REVISED RECORD.--WDR-MN-02-1: Maximum discharge; 1982, 85, 86, 94, 96, 97, and 99.

GAGE.--Water-stage recorder. Datum of gage is 850.70 ft above sea level (NGVD of 1929). Prior to March 16, 1979, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor.

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	19	115	e15	e4.0	1.6	e7.5	86	35	33	57	5.4	e4.1
2	20	115	e13	e3.9	1.7	e6.0	80	32	29	54	5.1	3.9
3	17	113	e13	e3.9	1.7	e7.0	76	29	25	53	5.0	e3.7
4	15	110	e12	e3.9	1.6	8.4	69	25	23	51	5.1	e5.7
5	12	105	12	e3.9	2.2	7.0	63	22	26	48	4.4	e7.4
6	9.6	99	11	e3.6	3.8	11	59	22	25	45	4.2	e9.2
7	7.6	93	11	e3.2	3.6	28	54	20	24	42	3.9	e10
8	7.2	88	11	e3.1	2.5	e31	50	19	33	39	4.0	e11
9	6.7	84	10	e3.0	2.9	e25	46	21	42	36	4.2	10
10	6.2	80	11	e2.6	e2.8	e28	44	24	54	32	4.3	9.9
11	6.2	76	11	e2.2	2.6	e32	44	24	65	29	3.9	8.8
12	5.8	72	e10	e2.2	2.2	e29	48	22	69	26	3.8	8.8
13	5.7	68	e9.4	e1.5	3.0	e26	48	27	73	23	3.4	15
14	5.5	65	e8.1	e1.3	8.8	e22	45	33	80	20	3.3	27
15	6.0	62	e7.8	e1.4	e17	e15	42	36	80	18	3.1	29
16	6.2	57	e7.4	e1.5	e19	12	44	35	76	16	3.4	25
17	6.0	48	e7.1	1.6	e17	e11	58	36	70	14	4.6	22
18	5.7	40	e7.4	1.9	e15	e8.1	66	45	64	12	4.1	18
19	5.6	35	e6.5	1.7	e14	7.9	75	64	58	11	4.1	e16
20	5.5	35	e6.3	1.6	e13	6.4	82	74	62	12	3.8	e15
21	5.2	32	e6.6	e3.0	e12	7.4	83	83	81	11	3.4	e15
22	5.3	30	e5.3	e2.2	e12	8.7	79	89	74	8.6	3.1	e50
23	6.9	29	e4.0	1.6	e11	11	72	87	66	9.0	3.0	85
24	7.2	26	e3.6	1.5	e10	13	65	78	62	9.6	2.9	86
25	7.2	23	e4.5	1.5	e9.3	15	58	70	59	8.7	4.6	89
26	27	22	e3.9	1.6	e8.6	15	54	64	57	9.0	7.4	91
27	37	21	e3.9	1.7	e7.9	18	50	59	55	8.4	6.9	89
28	58	e17	e3.9	1.8	e7.2	25	45	53	56	7.7	6.4	87
29	103	e16	e3.9	1.7	---	39	41	49	56	7.0	5.9	83
30	118	e15	e4.4	1.7	---	66	37	43	58	6.1	6.1	75
31	117	---	e4.1	1.8	---	90	---	38	---	5.6	5.0	---
TOTAL	670.3	1,791	248.1	72.1	214.0	636.4	1,763	1,358	1,635	728.7	137.8	1,009.5
MEAN	21.6	59.7	8.00	2.33	7.64	20.5	58.8	43.8	54.5	23.5	4.45	33.6
MAX	118	115	15	4.0	19	90	86	89	81	57	7.4	91
MIN	5.2	15	3.6	1.3	1.6	6.0	37	19	23	5.6	2.9	3.7
AC-FT	1,330	3,550	492	143	424	1,260	3,500	2,690	3,240	1,450	273	2,000
CFSM	0.25	0.69	0.09	0.03	0.09	0.24	0.68	0.51	0.63	0.27	0.05	0.39
IN.	0.29	0.77	0.11	0.03	0.09	0.28	0.76	0.59	0.71	0.32	0.06	0.44

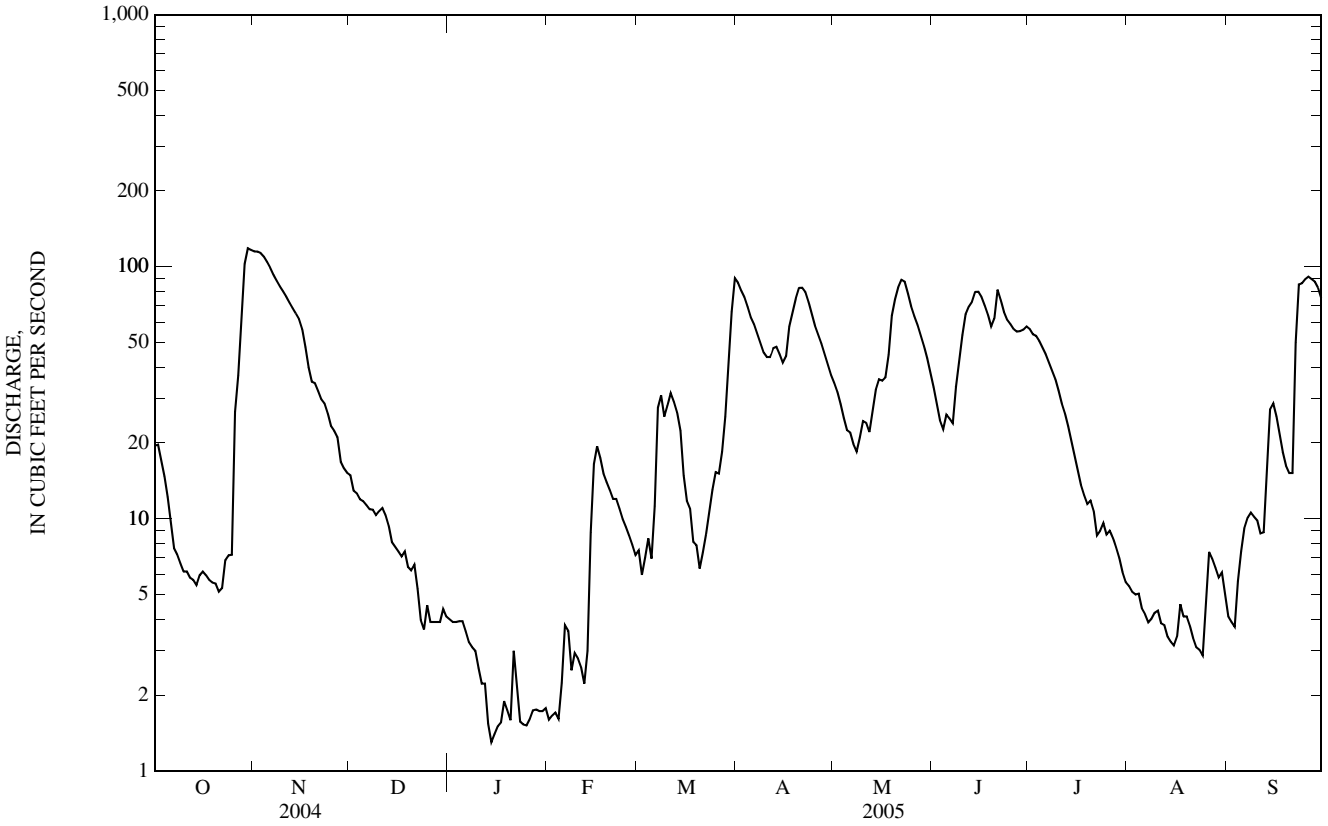
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2005, BY WATER YEAR (WY)

MEAN	30.2	22.6	11.0	5.07	9.30	60.4	103	70.9	54.6	41.9	30.9	29.0
MAX	240	67.4	41.3	22.0	99.1	185	414	203	196	157	151	170
(WY)	(1986)	(1994)	(1992)	(1992)	(1984)	(1985)	(2001)	(2002)	(2004)	(1993)	(2002)	(1991)
MIN	1.13	1.03	0.92	0.74	0.91	3.86	5.31	3.54	1.34	0.76	1.44	1.08
(WY)	(1990)	(1990)	(1990)	(1991)	(1990)	(2001)	(1987)	(2000)	(1988)	(1988)	(1989)	(1988)

05287890 ELM CREEK NEAR CHAMPLIN, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1979 - 2005	
ANNUAL TOTAL	13,870.51		10,263.9			
ANNUAL MEAN	37.9		28.1		39.1	
HIGHEST ANNUAL MEAN					82.2	2002
LOWEST ANNUAL MEAN					4.54	1988
HIGHEST DAILY MEAN	346	Jun 3	118	Oct 30	815	Apr 25, 2001
LOWEST DAILY MEAN	0.50	Jan 29	1.3	Jan 14	0.31	Jun 30, 1988
ANNUAL SEVEN-DAY MINIMUM	0.62	Jan 26	1.6	Jan 13	0.35	Jun 26, 1988
MAXIMUM PEAK FLOW			118	Oct 30	875	Apr 25, 2001
MAXIMUM PEAK STAGE			6.46	Oct 30	10.02	Apr 25, 2001
INSTANTANEOUS LOW FLOW			a1.3	Jan 14	0.29	Jul 9, 1989
ANNUAL RUNOFF (AC-FT)	27,510		20,360		28,350	
ANNUAL RUNOFF (CFSM)	0.441		0.327		0.455	
ANNUAL RUNOFF (INCHES)	6.00		4.44		6.18	
10 PERCENT EXCEEDS	106		75		108	
50 PERCENT EXCEEDS	12		15		12	
90 PERCENT EXCEEDS	0.80		3.1		1.9	

a Estimated, minimum daily, backwater from ice.
e Estimated.



05287890 ELM CREEK NEAR CHAMPLIN, MN—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1988 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	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, air, deg C (00020)	Temperature, water, deg C (00010)	Chloride, water, fltrd, mg/L (00940)	Residue total at 105 deg. C, suspended, mg/L (00530)
OCT 06...	1000	Environmental	9.0	746	8.8	80	7.7	515	--	11.1	47.7	<10
OCT 28-30	0434	Composite (time)	--	--	--	--	7.9	439	--	--	46.7	10
NOV 17...	0920	Environmental	50	744	11.2	88	7.8	497	6.0	5.0	49.6	13
DEC 15...	0930	Environmental	8.1	741	13.7	94	7.8	698	.0	.1	58.7	<10
JAN 20...	1045	Environmental	1.6	741	10.7	74	7.8	733	--	.1	18.6	20
FEB 07...	1105	Environmental	3.3	746	9.9	68	7.4	844	--	.1	137	<10
MAR 14...	1020	Environmental	24	744	6.4	44	7.2	658	--	.0	87.8	<10
31...	1120	Environmental	86	742	9.6	68	7.3	320	13.0	1.3	40.9	27
APR 16-19	1552	Composite (time)	--	--	--	--	7.9	530	--	--	63.6	25
22...	1005	Environmental	78	739	8.7	81	7.8	543	13.0	12.3	69.7	16
MAY 10...	1000	Environmental	26	738	7.9	79	7.7	601	17.5	15.2	69.5	<10
JUN 08-10	1147	Composite (time)	--	--	--	--	7.8	565	--	--	64.8	<10
JUN 10-13	1310	Composite (time)	--	--	--	--	7.8	554	--	--	62.2	25
JUN 20-21	1500	Composite (time)	--	--	--	--	7.6	458	--	--	46.9	208
JUL 12...	1010	Environmental	26	747	2.8	33	7.4	595	26.0	23.8	61.8	22
AUG 02...	1010	Environmental	5.2	742	3.4	40	7.3	604	27.0	23.0	55.1	11
AUG 26-26	0452	Composite (time)	--	--	--	--	8.1	568	--	--	54.5	15
SEP 08...	0930	Environmental	10	745	4.9	51	7.3	544	17.0	17.7	58.2	<10
SEP 22-25	1258	Composite (time)	--	--	--	--	7.7	448	--	--	52.4	<10

05287890 ELM CREEK NEAR CHAMPLIN, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Residue volatile, suspended, mg/L (00535)	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)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	COD, high level, water, unfltrd mg/L (00340)
OCT 06...	<10	1.1	.09	.14	.021	.11	.15	50
OCT 28-30	--	1.2	E.04	.42	.012	.11	.21	40
NOV 17...	<10	1.4	<.04	E.06	E.005	E.03	.13	40
DEC 15...	<10	.99	.08	.08	<.008	E.02	.07	30
JAN 20...	<10	.48	.26	.08	E.007	<.04	.04	20
FEB 07...	<10	1.9	.84	.44	.021	.24	.34	30
MAR 14...	<10	2.2	.84	.38	.036	.25	.34	50
31...	12	1.9	.52	.45	.013	.18	.32	40
APR 16-19	--	1.4	.05	.07	<.008	.08	.20	40
22...	<10	1.3	<.04	<.06	<.008	.08	.16	40
MAY 10...	<10	1.1	.07	.06	.010	.11	.17	40
JUN 08-10	--	1.3	.05	.20	.014	.17	.24	40
JUN 10-13	--	1.4	E.04	.21	.013	.20	.31	40
JUN 20-21	--	2.0	.09	.88	.016	.22	.51	60
JUL 12...	<10	3.0	1.13	<.06	.012	.19	.48	60
AUG 02...	<10	2.6	1.23	.19	.128	.29	.43	40
AUG 26-26	--	1.8	.23	.36	.089	.17	.36	40
SEP 08...	<10	1.3	.07	.36	.092	.13	.19	30
SEP 22-25	--	1.6	<.04	.27	.018	.16	.29	40

05288500 MISSISSIPPI RIVER NEAR ANOKA, MN

LOCATION.--Lat 45°07'36", long 93°17'48", in SW$^1/_4$ sec. 12, T.119 N., R.21 W., Hennepin County, Hydrologic Unit 07010206, on right bank 0.4 mi downstream from Coon Creek, 1.3 mi downstream from Coon Rapids dam at Coon Rapids, 6.5 mi downstream from Anoka, and at mile 864.8 upstream from Ohio River.

DRAINAGE AREA.--19,100 mi^2, approximately.

PERIOD OF RECORD.--June 1931 to current year. Prior to October 1931 published as "at Coon Rapids, near Anoka."

GAGE.--Water-stage recorder. Datum of gage is 804.53 ft above sea level (NGVD of 1929). Prior to June 14, 1932, at site 1.2 mi upstream at different datum.

REMARKS.--Records good except those for estimated days, which are fair. Flow slightly regulated by six reservoirs on headwaters; total usable capacity, 1,640,600 acre-ft. Diurnal regulation caused by Coon Rapids dam 1.3 mi. above 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	9,900	11,900	7,340	e5,830	e4,850	e4,790	17,600	15,200	20,200	16,700	6,100	4,150
2	9,840	12,100	6,600	e5,410	e4,950	e4,740	18,900	14,100	20,000	16,800	6,150	3,890
3	9,320	12,600	6,190	e5,210	e4,660	e4,640	20,600	13,200	19,400	16,500	5,680	3,790
4	9,490	12,800	6,740	e5,190	e4,910	e4,700	21,400	12,300	19,100	16,200	5,640	4,720
5	9,480	13,100	7,030	e5,160	e4,890	4,900	21,400	11,800	19,100	15,500	5,460	4,140
6	9,160	12,700	6,690	e4,650	e5,190	e4,860	22,600	11,200	19,200	14,900	5,240	4,650
7	9,220	12,600	6,430	e4,750	e4,910	e5,090	22,600	10,800	18,900	14,300	4,780	4,890
8	8,980	12,200	6,700	e5,170	e5,040	e5,620	21,400	10,400	19,800	13,700	4,890	4,730
9	8,730	11,800	6,530	e5,010	e5,180	e5,810	20,800	9,980	20,800	13,100	4,720	4,770
10	8,350	11,700	7,200	e4,660	e5,070	e6,040	19,900	9,920	22,300	12,200	4,870	4,410
11	8,060	11,300	7,260	e4,740	e5,140	e6,160	20,300	9,590	23,700	11,600	4,530	4,150
12	7,530	10,800	7,490	e4,850	e5,150	e6,020	21,400	9,300	25,000	10,800	4,550	4,790
13	7,400	10,400	e6,050	e4,400	e5,220	e5,790	22,900	9,520	26,700	10,500	4,590	7,220
14	7,410	9,940	e4,650	e3,800	e5,390	e5,880	24,300	9,840	27,700	10,000	4,220	8,230
15	7,240	10,100	e5,040	e4,000	e5,460	e6,060	24,700	10,100	29,100	9,110	4,100	8,820
16	7,220	9,690	e5,760	e4,140	e5,520	5,960	25,400	10,400	30,600	9,150	4,140	8,980
17	6,780	9,480	e5,910	e4,240	e5,470	5,600	25,700	9,910	31,000	8,400	4,050	9,170
18	6,950	9,660	e5,670	e4,700	e5,410	5,490	25,600	10,600	30,400	7,960	4,080	9,150
19	6,930	9,280	e4,980	e4,700	e5,520	5,410	25,600	11,400	29,200	7,650	4,510	9,390
20	7,180	9,150	e4,030	e4,790	e5,750	5,320	25,200	11,800	28,200	7,570	4,120	9,600
21	6,960	9,250	e3,620	e4,830	e5,650	5,370	24,700	11,800	27,400	7,510	4,000	9,410
22	6,960	9,250	e3,990	e4,770	e5,350	5,510	23,800	12,100	25,900	6,790	3,840	10,400
23	6,980	9,220	e4,080	e4,610	e5,110	5,660	22,700	12,800	24,500	7,160	3,720	9,220
24	7,330	9,330	e4,390	e4,650	e5,110	e6,200	21,600	12,700	23,700	7,100	3,360	8,500
25	7,150	9,410	e4,460	e5,290	e4,840	e6,400	20,300	13,100	22,400	6,770	2,920	8,340
26	7,560	8,730	e4,970	e4,970	e4,810	6,890	19,400	14,100	20,900	6,990	4,040	8,360
27	8,170	8,300	e5,340	e4,770	e4,940	7,480	18,600	15,300	19,600	7,070	5,090	8,170
28	8,990	8,320	e5,250	e4,590	e4,860	8,570	17,200	16,400	18,800	6,440	4,530	7,980
29	10,100	8,530	e5,390	e4,650	---	10,100	16,400	18,200	17,500	6,660	4,270	7,810
30	10,500	7,920	e5,480	e4,740	---	11,700	15,800	19,200	16,600	6,700	4,490	7,340
31	11,300	---	e5,700	e4,770	---	14,700	---	19,900	---	6,230	4,120	---
TOTAL	257,170	311,560	176,960	148,040	144,350	197,460	648,800	386,960	697,700	318,060	140,800	209,170
MEAN	8,296	10,390	5,708	4,775	5,155	6,370	21,630	12,480	23,260	10,260	4,542	6,972
MAX	11,300	13,100	7,490	5,830	5,750	14,700	25,700	19,900	31,000	16,800	6,150	10,400
MIN	6,780	7,920	3,620	3,800	4,660	4,640	15,800	9,300	16,600	6,230	2,920	3,790
AC-FT	510,100	618,000	351,000	293,600	286,300	391,700	1,287,000	767,500	1,384,000	630,900	279,300	414,900
CFSM	0.43	0.54	0.30	0.25	0.27	0.33	1.13	0.65	1.22	0.54	0.24	0.37
IN.	0.50	0.61	0.34	0.29	0.28	0.38	1.26	0.75	1.36	0.62	0.27	0.41

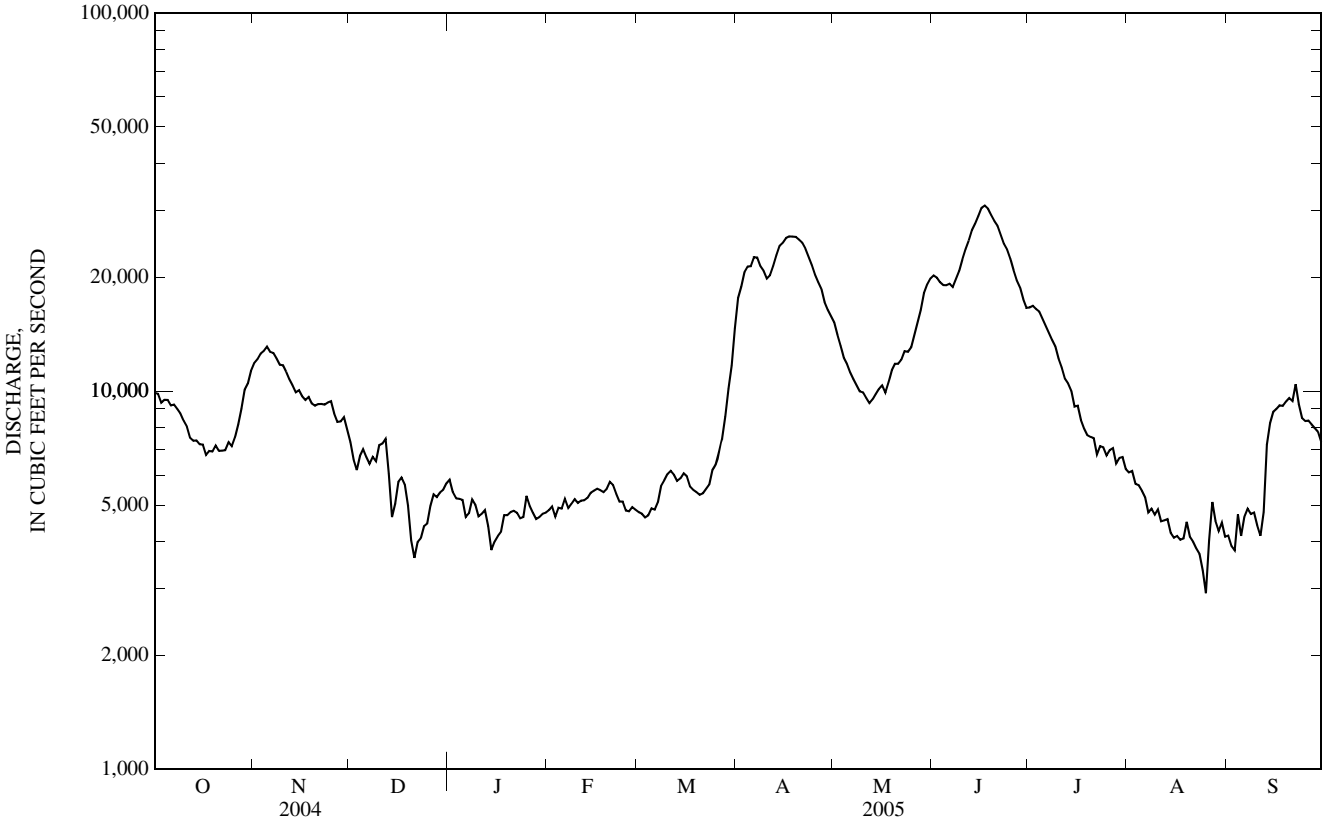
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2005, BY WATER YEAR (WY)

MEAN	6,505	6,433	4,948	4,300	4,208	7,295	17,720	14,990	11,790	9,071	6,133	5,902
MAX	21,250	22,800	10,800	8,304	9,948	23,410	43,690	39,760	29,910	27,240	22,490	23,570
(WY)	(1987)	(1972)	(1972)	(1986)	(1966)	(1966)	(1997)	(1986)	(1943)	(1993)	(1972)	(1986)
MIN	1,128	1,152	1,006	935	1,079	1,602	3,575	2,796	1,646	1,022	715	888
(WY)	(1937)	(1937)	(1935)	(1935)	(1933)	(1940)	(1959)	(1934)	(1934)	(1934)	(1934)	(1934)

05288500 MISSISSIPPI RIVER NEAR ANOKA, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1931 - 2005	
ANNUAL TOTAL	2,560,890		3,637,030			
ANNUAL MEAN	6,997		9,964		8,305	
HIGHEST ANNUAL MEAN					17,750	1986
LOWEST ANNUAL MEAN					1,603	1934
HIGHEST DAILY MEAN	19,000	Jun 6	31,000	Jun 17	90,300	Apr 17, 1965
LOWEST DAILY MEAN	2,040	Jan 19	2,920	Aug 25	602	Sep 10, 1934
ANNUAL SEVEN-DAY MINIMUM	2,320	Aug 29	3,710	Aug 20	646	Aug 26, 1934
MAXIMUM PEAK FLOW			31,100	Jun 17	91,000	Apr 17, 1965
MAXIMUM PEAK STAGE			9.54	Jun 17	19.53	Apr 17, 1965
INSTANTANEOUS LOW FLOW			a2,700	Mar 4	b529	Aug 29, 1976
ANNUAL RUNOFF (AC-FT)	5,080,000		7,214,000		6,017,000	
ANNUAL RUNOFF (CFSM)	0.366		0.522		0.435	
ANNUAL RUNOFF (INCHES)	4.99		7.08		5.91	
10 PERCENT EXCEEDS	12,100		20,800		17,900	
50 PERCENT EXCEEDS	6,580		7,410		5,800	
90 PERCENT EXCEEDS	2,660		4,570		2,240	

a Minimum recorded, result of regulation. May have been lower during periods of backwater from ice.
b Due in part to regulation.
e Estimated.



05288705 SHINGLE CREEK AT QUEEN AVE. IN MINNEAPOLIS, MN

LOCATION.-- Lat 45°03'00", long 93°18'36", in NE¼NW¼ sec. 11, T.118 N., R.21 W., Hennepin County, Hydrologic Unit 07010206, at bridge over Shingle Creek at intersection of Queen Avenue North and 52nd Avenue North in Minneapolis.

DRAINAGE AREA.-- 28.2 mi^2.

PERIOD OF RECORD.-- May 1996 to September 1999, May 2001 to current year.

GAGE.-- Water-stage recorder. Elevation of gage is 850 ft above sea level (from topographic map).

REMARKS.-- Records good to fair except those for estimated daily discharges, which are poor.

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	8.2	30	3.7	2.7	e0.54	8.0	32	6.3	6.0	36	1.3	4.6
2	8.7	21	3.4	2.5	e0.80	6.6	25	5.4	5.6	28	0.77	2.7
3	7.5	13	3.1	1.9	e1.2	8.2	17	4.5	4.5	28	1.1	6.3
4	4.7	9.8	3.1	1.8	e2.0	20	11	3.7	7.2	22	1.8	140
5	3.5	8.3	2.7	1.7	e2.0	35	11	3.5	10	15	e0.74	85
6	2.7	7.6	2.7	1.8	e2.0	42	11	4.1	9.2	13	e0.58	66
7	2.5	6.5	3.4	1.5	e3.1	43	12	3.5	15	13	e0.29	43
8	3.2	5.0	3.1	1.2	e5.0	43	10	6.4	46	13	e0.39	29
9	2.7	4.2	3.0	e1.0	e7.6	25	7.8	14	41	11	2.2	18
10	2.4	4.4	4.7	e0.82	e11	21	7.3	14	44	9.4	2.3	11
11	3.7	4.1	4.3	e0.68	e17	16	13	12	40	7.7	1.1	7.7
12	4.7	5.2	4.2	e0.58	e25	8.7	22	16	35	7.3	e0.78	13
13	8.6	5.3	2.6	e0.48	e39	9.6	19	26	33	8.2	e0.44	40
14	9.4	4.6	3.1	e0.40	63	4.0	13	24	36	6.4	e0.31	31
15	11	4.6	3.0	e0.41	60	3.2	10	21	30	6.7	e0.12	24
16	12	4.8	2.9	e0.41	56	2.9	31	16	24	5.6	1.7	15
17	11	5.7	2.7	e0.40	41	2.5	38	14	18	5.1	10	9.6
18	15	5.2	3.0	e0.41	35	2.3	33	26	14	5.0	5.5	6.9
19	12	10	2.2	e0.42	28	5.3	35	34	11	3.8	4.5	19
20	12	13	2.5	e0.44	27	3.6	37	33	27	8.4	2.2	16
21	11	12	2.8	e0.45	24	2.7	30	26	30	6.4	1.1	34
22	12	9.3	1.7	e0.47	20	3.0	22	20	26	5.1	0.98	101
23	17	7.3	1.5	e0.48	18	3.8	17	14	21	21	0.88	80
24	8.6	5.6	1.5	e0.49	17	4.7	16	12	15	14	1.1	68
25	7.3	5.2	2.1	e0.49	15	4.6	14	15	11	20	1.1	80
26	8.7	4.7	2.1	e0.48	15	4.8	16	19	8.7	23	48	66
27	7.1	6.3	2.1	e0.46	18	4.9	13	19	26	18	35	56
28	37	5.8	2.8	e0.48	14	5.0	11	15	58	19	31	51
29	54	4.9	2.2	e0.50	---	7.5	9.0	11	51	8.6	24	45
30	47	4.1	4.8	e0.52	---	30	7.2	8.2	44	3.8	15	39
31	41	---	4.3	e0.52	---	39	---	6.8	---	2.2	7.8	---
TOTAL	396.2	237.5	91.3	26.89	567.24	419.9	550.3	453.4	747.2	393.7	204.08	1,207.8
MEAN	12.8	7.92	2.95	0.87	20.3	13.5	18.3	14.6	24.9	12.7	6.58	40.3
MAX	54	30	4.8	2.7	63	43	38	34	58	36	48	140
MIN	2.4	4.1	1.5	0.40	0.54	2.3	7.2	3.5	4.5	2.2	0.12	2.7
AC-FT	786	471	181	53	1,130	833	1,090	899	1,480	781	405	2,400
CFSM	0.45	0.28	0.10	0.03	0.72	0.48	0.65	0.52	0.88	0.45	0.23	1.43
IN.	0.52	0.31	0.12	0.04	0.75	0.55	0.73	0.60	0.99	0.52	0.27	1.59

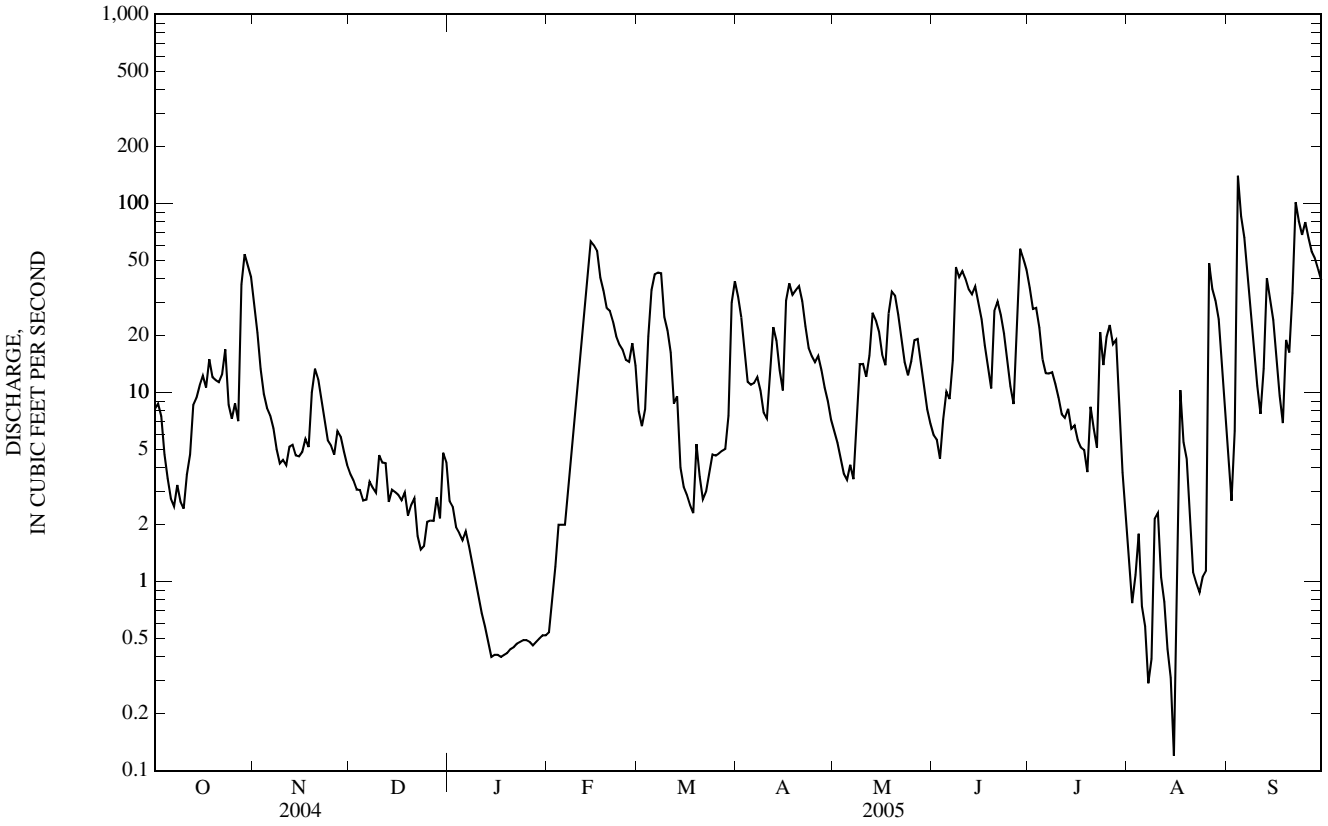
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2005, BY WATER YEAR (WY)

MEAN	12.3	10.9	5.62	2.93	7.77	15.3	24.8	29.6	32.7	26.8	18.0	16.2
MAX	33.1	28.2	9.21	7.25	20.3	24.3	32.1	56.6	55.4	58.5	56.2	40.3
(WY)	(2003)	(1997)	(1997)	(1997)	(2005)	(1997)	(1998)	(2002)	(2002)	(2002)	(2002)	(2005)
MIN	4.01	2.87	1.78	0.41	1.17	10.1	11.6	13.3	7.47	7.92	3.57	2.92
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(1997)	(1997)	(1996)	(2004)	(1996)

05288705 SHINGLE CREEK AT QUEEN AVE. IN MINNEAPOLIS, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1996 - 2005	
ANNUAL TOTAL	4,526.08		5,295.51			
ANNUAL MEAN	12.4		14.5		17.7	
HIGHEST ANNUAL MEAN					27.9	2002
LOWEST ANNUAL MEAN					11.1	2004
HIGHEST DAILY MEAN	94	Jun 9	140	Sep 4	230	Jun 25, 2003
LOWEST DAILY MEAN	0.26	Jan 30	e0.12	Aug 15	e0.12	Aug 15, 2005
ANNUAL SEVEN-DAY MINIMUM	0.29	Jan 7	0.41	Jan 14	0.14	Oct 8, 1996
MAXIMUM PEAK FLOW			291	Sep 4	291	Sep 4, 2005
MAXIMUM PEAK STAGE			13.26	Sep 4	14.21	Jun 25, 2003
INSTANTANEOUS LOW FLOW			<0.10	Aug 15	<0.10	Aug 15, 2005
ANNUAL RUNOFF (AC-FT)	8,980		10,500		12,790	
ANNUAL RUNOFF (CFSM)	0.439		0.514		0.626	
ANNUAL RUNOFF (INCHES)	5.97		6.99		8.51	
10 PERCENT EXCEEDS	37		37		47	
50 PERCENT EXCEEDS	5.6		8.2		8.6	
90 PERCENT EXCEEDS	0.40		1.1		1.8	

e Estimated.



05288705 SHINGLE CREEK AT QUEEN AVE IN MINNEAPOLIS, MN—Continued

MISSISSIPPI RIVER BASIN--Continued

05288705 SHINGLE CREEK AT QUEEN AVE IN MINNEAPOLIS, MN—Continued
(National Water-Quality Assessment Station)

PERIOD OF RECORD.-- Water years 1996 to current year.

PERIOD OF DAILY RECORD:

SPECIFIC CONDUCTANCE.-- May 1996 to September 1998. February 2004 to current year.

WATER TEMPERATURES.-- May 1996 to September 1998. February 2004 to current year.

INSTRUMENTATION.-- Water-quality monitor May 1996 to September 1998, and February 2004 to current year, which provides continuous recordings. Sensor is located at gage.

REVISED RECORD.-- WDR MN-96-1: Specific conductance.

REMARKS.-- Conductance and temperature at the sensor were compared independently with a calibrated meter bi-weekly to monthly. Variation of conductance was within 11% (correction applied). Variation of temperature was within 1.0 C (corrections applied). Records of water temperatures at sensor are represented within 0.5 C. Additional water-quality data for this site are available at: URL http://water.usgs.gov/mn/nwis/qw.

EXTREMES FOR PERIOD OF DAILY RECORD:

SPECIFIC CONDUCTANCE.-- Maximum, 5,730 µS/cm, Jan. 31, 2005; minimum, 65 µS/cm, Sep. 4, 2005.

WATER TEMPERATURES.-- Maximum, 29.0 C, July 21, 2004; minimum, 0.0 C on many days most winters.

EXTREMES FOR CURRENT YEAR:

SPECIFIC CONDUCTANCE.-- Maximum, 5,730 µS/cm, Jan. 31; minimum, 65 µS/cm, Sep. 4.

WATER TEMPERATURES.-- Maximum, 28.5 C, Aug. 1; minimum, 0.0 C, several days.

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	916	669	840	491	444	465	1,120	1,080	1,100	2,380	1,900	2,100
2	939	821	882	576	491	543	1,140	1,120	1,140	3,380	2,090	2,820
3	900	595	751	630	576	615	1,180	1,140	1,160	3,380	2,730	3,120
4	693	603	664	697	630	663	1,190	1,170	1,190	2,730	2,310	2,510
5	723	675	695	751	697	724	1,230	1,190	1,220	2,310	2,150	2,230
6	839	723	793	838	751	790	1,230	1,210	1,220	2,150	1,990	2,050
7	867	839	855	878	838	860	1,270	1,230	1,250	1,990	1,920	1,960
8	883	863	869	912	877	892	1,270	1,230	1,240	1,930	1,900	1,920
9	934	883	904	935	911	922	1,300	1,270	1,290	1,920	1,900	1,910
10	970	932	949	969	935	951	1,520	1,290	1,420	1,910	1,640	1,880
11	995	955	976	995	968	982	1,520	1,300	1,390	1,880	1,820	1,840
12	1,000	979	993	1,050	995	1,020	1,300	1,280	1,280	1,900	1,790	1,820
13	1,010	980	995	1,050	974	1,020	1,330	1,280	1,310	1,990	1,880	1,920
14	1,030	984	1,010	974	928	944	1,340	1,310	1,330	1,970	1,890	1,930
15	1,050	996	1,030	949	930	942	1,350	1,320	1,330	2,120	1,880	1,980
16	1,020	989	1,000	961	949	956	1,460	1,350	1,410	2,130	2,020	2,070
17	1,040	1,010	1,030	990	958	975	1,510	1,460	1,490	---	---	---
18	1,040	974	1,010	1,000	989	998	1,480	1,440	1,460	---	---	---
19	1,040	974	999	1,000	746	891	1,500	1,390	1,450	---	---	---
20	1,060	1,040	1,050	796	557	736	1,390	1,360	1,380	2,500	2,400	2,450
21	1,060	1,050	1,060	557	468	497	1,380	1,360	1,370	2,460	2,360	2,390
22	1,060	1,060	1,060	665	536	609	1,440	1,380	1,410	2,450	2,340	2,380
23	1,060	541	922	755	665	713	1,440	1,400	1,420	2,440	2,350	2,370
24	942	831	861	835	755	795	1,430	1,390	1,410	2,600	2,410	2,490
25	970	822	915	909	835	868	1,570	1,390	1,480	3,080	2,550	2,670
26	913	641	719	992	908	927	1,580	1,520	1,550	3,100	2,750	2,850
27	699	640	664	1,390	932	1,060	1,520	1,480	1,500	2,750	2,660	2,690
28	717	285	536	1,140	961	1,000	1,570	1,450	1,500	2,760	2,670	2,710
29	368	252	287	1,040	921	948	1,450	1,340	1,400	2,920	2,760	2,830
30	388	322	348	1,220	1,040	1,150	3,590	1,350	1,850	4,720	2,920	3,250
31	444	383	416	---	---	---	2,380	1,560	1,890	5,730	4,150	4,720
MONTH	1,060	252	841	1,390	444	849	3,590	1,080	1,380			

05288705 SHINGLE CREEK AT QUEEN AVE IN MINNEAPOLIS, MN—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	4,450	3,680	3,920	2,770	2,130	2,320	1,020	973	996	979	942	964
2	4,530	3,230	3,790	2,870	2,180	2,340	997	892	943	1,020	979	1,000
3	4,120	3,450	3,720	2,960	2,300	2,680	892	842	862	1,060	1,020	1,040
4	4,110	3,520	3,780	2,850	2,130	2,370	844	817	832	1,090	1,060	1,070
5	3,600	2,440	3,130	2,440	1,790	2,200	828	773	785	1,150	1,080	1,110
6	2,460	1,750	2,040	1,810	1,140	1,610	785	753	766	1,180	1,120	1,150
7	2,260	1,780	1,970	1,380	884	1,040	870	775	841	1,220	1,180	1,200
8	2,300	2,190	2,230	1,220	969	1,170	912	864	887	1,260	646	1,210
9	2,480	2,280	2,340	1,340	1,210	1,270	1,010	903	945	1,110	589	967
10	2,440	2,240	2,300	3,380	1,330	1,940	1,100	1,010	1,060	960	535	689
11	2,240	2,020	2,110	3,570	1,700	2,180	1,180	985	1,070	856	721	796
12	2,160	1,920	2,060	2,630	1,960	2,340	1,110	855	939	921	672	829
13	2,260	1,670	1,830	2,200	1,840	1,990	994	819	884	769	455	612
14	3,670	1,480	1,890	1,840	1,650	1,720	1,090	994	1,050	632	450	555
15	2,060	1,560	1,750	1,680	1,640	1,660	1,090	1,020	1,060	684	626	659
16	1,940	1,690	1,800	1,650	1,590	1,630	1,020	619	862	696	631	675
17	2,020	1,900	1,990	1,590	1,520	1,550	658	442	504	822	618	739
18	2,000	1,900	1,950	1,520	1,460	1,480	732	601	688	823	435	647
19	1,900	1,800	1,850	4,560	1,460	2,570	742	639	711	473	322	395
20	2,740	1,710	1,960	3,800	2,420	3,160	726	616	669	621	473	563
21	2,580	2,140	2,320	2,420	1,940	2,030	749	681	727	682	619	651
22	2,640	1,850	2,030	2,600	2,090	2,410	763	744	753	724	682	705
23	3,000	2,350	2,640	2,410	1,520	1,950	773	747	759	774	721	750
24	2,350	2,000	2,190	1,520	1,220	1,390	779	765	771	796	774	784
25	2,070	1,940	1,980	1,340	1,160	1,260	778	758	767	852	744	816
26	1,940	1,750	1,820	1,290	1,040	1,200	797	725	769	853	544	777
27	3,280	1,810	2,190	1,140	999	1,100	804	715	754	715	544	658
28	3,210	2,340	2,660	1,070	975	1,030	814	749	785	798	692	764
29	---	---	---	1,040	893	972	899	814	863	813	772	786
30	---	---	---	1,720	790	941	942	899	928	852	813	828
31	---	---	---	973	716	877	---	---	---	907	852	873
MONTH	4,530	1,480	2,370	4,560	716	1,750	1,180	442	841	1,260	322	815
		JUNE			JULY			AUGUST			SEPTEMBER	
1	923	891	903	506	439	467	712	657	685	271	240	256
2	1,000	923	953	585	506	541	778	712	752	308	269	287
3	1,020	996	1,010	635	507	592	845	761	803	311	236	295
4	1,030	803	972	678	547	600	915	762	798	338	65	186
5	1,000	727	927	658	580	617	938	796	881	291	168	239
6	727	660	674	829	658	714	1,050	936	998	319	255	299
7	808	463	731	1,050	829	923	1,110	1,050	1,080	375	306	345
8	773	294	458	1,100	958	1,060	1,120	965	1,080	444	375	409
9	452	310	392	1,140	1,100	1,120	1,020	796	924	549	442	496
10	474	402	439	1,160	1,100	1,140	1,050	796	944	649	549	607
11	512	395	447	1,200	1,150	1,170	1,050	1,030	1,040	764	648	696
12	551	436	500	1,240	1,160	1,190	1,030	1,010	1,020	833	593	777
13	604	390	570	1,230	1,210	1,220	1,060	1,030	1,050	807	299	428
14	592	433	526	1,300	1,140	1,240	1,110	1,060	1,080	456	308	388
15	612	512	569	1,350	1,230	1,290	1,120	1,100	1,110	514	456	480
16	671	612	636	1,240	1,200	1,230	1,110	794	1,060	586	514	551
17	710	671	691	1,280	1,240	1,260	794	448	659	672	586	632
18	753	710	730	1,280	1,230	1,260	724	559	680	771	672	724
19	804	753	781	1,290	1,260	1,270	559	441	465	801	523	744
20	835	242	688	1,290	900	1,090	546	469	503	769	470	553
21	548	380	435	1,140	1,080	1,110	602	545	571	624	148	527
22	502	406	466	1,140	1,040	1,090	643	575	613	257	148	212
23	564	502	538	1,060	259	795	689	628	657	305	257	284
24	634	560	604	651	552	617	744	686	703	361	304	331
25	685	633	662	653	187	548	784	744	761	365	307	350
26	743	685	714	600	439	518	802	110	362	403	347	375
27	769	315	693	575	363	516	139	103	119	460	403	433
28	457	306	357	627	547	583	164	139	149	503	458	473
29	387	315	353	649	515	574	191	164	175	524	484	498
30	439	387	412	605	557	578	210	189	198	578	522	549
31	---	---	---	657	605	631	240	210	225	---	---	---
MONTH	1,030	242	628	1,350	187	889	1,120	103	714	833	65	447
YEAR	5,730	65	1,150									

05288705 SHINGLE CREEK AT QUEEN AVE IN MINNEAPOLIS, MN—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	13.0	15.0	9.5	8.5	8.5	2.5	1.0	1.5	0.5	0.0	0.5
2	13.0	10.5	12.0	9.0	8.0	8.5	2.0	1.0	1.5	1.0	0.5	0.5
3	13.0	10.5	11.5	8.0	7.0	7.5	2.5	1.0	1.5	1.0	0.5	0.5
4	12.0	10.0	11.0	8.0	6.5	7.0	3.0	1.5	2.5	1.0	0.5	0.5
5	13.0	9.0	10.5	7.0	5.5	6.0	2.5	1.0	1.5	1.0	0.5	0.5
6	15.5	11.0	12.5	8.0	5.5	6.5	2.5	2.0	2.0	1.0	0.5	0.5
7	16.0	13.0	14.5	8.0	6.0	7.0	2.5	2.0	2.5	1.0	0.5	0.5
8	16.0	15.0	15.5	6.0	5.0	6.0	2.5	1.5	2.0	1.0	0.5	0.5
9	15.5	12.5	13.5	7.0	4.0	5.5	3.0	2.0	2.5	1.0	0.5	0.5
10	14.5	13.0	13.5	8.0	6.0	7.0	2.5	2.0	2.5	1.0	0.5	0.5
11	14.5	13.0	13.5	6.0	3.5	4.5	2.0	1.5	2.0	1.0	0.5	0.5
12	13.5	12.0	13.0	4.5	3.0	3.5	2.0	0.0	1.5	1.0	0.5	0.5
13	12.5	11.0	12.0	4.5	2.0	3.0	1.0	0.5	0.5	0.5	0.0	0.5
14	11.0	8.0	9.5	4.5	2.5	3.5	1.0	0.5	0.5	0.5	0.0	0.5
15	9.0	8.0	8.5	5.0	3.0	4.0	1.5	0.5	1.0	0.5	0.0	0.0
16	8.5	6.5	7.5	5.5	4.0	4.5	1.5	1.0	1.0	0.5	0.0	0.0
17	6.5	5.5	5.5	6.5	5.0	6.0	1.5	0.5	1.0	---	---	---
18	7.5	5.5	6.5	7.5	6.5	7.0	1.5	0.5	1.0	---	---	---
19	8.0	7.5	8.0	7.0	6.5	6.5	1.0	0.5	1.0	0.5	0.0	0.0
20	9.0	8.0	8.5	6.5	5.0	6.0	1.0	0.5	1.0	0.5	0.0	0.5
21	9.0	8.5	8.5	5.0	3.5	4.0	1.0	0.5	0.5	0.5	0.0	0.5
22	10.5	9.0	9.5	4.0	3.0	3.5	1.0	0.5	1.0	0.5	0.0	0.0
23	13.5	10.5	12.0	3.5	2.5	3.0	1.5	1.0	1.0	0.5	0.0	0.5
24	12.0	10.0	11.0	3.0	1.5	2.0	1.5	1.0	1.0	0.5	0.0	0.5
25	12.0	10.0	11.0	2.5	1.5	2.0	1.0	0.5	1.0	0.5	0.0	0.0
26	10.0	9.5	10.0	2.5	2.0	2.5	1.0	0.5	0.5	0.5	0.0	0.0
27	9.5	9.0	9.0	2.5	1.5	2.0	1.0	0.5	1.0	0.5	0.0	0.5
28	10.5	9.0	10.0	2.5	0.5	1.5	1.0	0.5	0.5	0.5	0.0	0.0
29	13.5	10.5	12.0	2.0	1.0	1.5	1.0	0.5	1.0	0.5	0.0	0.5
30	13.0	11.0	12.0	2.5	1.0	1.5	1.0	0.5	1.0	1.0	0.0	0.5
31	11.0	9.5	10.0	---	---	---	1.0	0.0	0.5	0.0	0.0	0.0
MONTH	16.5	5.5	10.9	9.5	0.5	4.7	3.0	0.0	1.3	1.0	0.0	0.4
		FEBRUARY			MARCH			APRIL			MAY	
1	0.0	0.0	0.0	1.0	0.0	0.0	6.5	4.0	5.5	9.0	7.5	8.5
2	0.0	0.0	0.0	1.0	0.0	0.0	8.0	4.0	6.0	8.0	6.0	7.0
3	0.0	0.0	0.0	1.0	0.0	0.5	10.0	7.5	9.0	11.5	5.5	8.0
4	0.0	0.0	0.0	1.5	0.0	0.5	13.0	9.5	11.5	15.0	8.0	11.0
5	0.0	0.0	0.0	1.0	0.0	0.5	15.0	11.5	13.5	17.0	11.0	13.5
6	0.0	0.0	0.0	1.5	0.0	0.5	14.0	11.5	12.5	19.0	13.0	16.0
7	0.0	0.0	0.0	0.5	0.0	0.0	13.0	9.5	11.5	18.0	14.5	16.0
8	0.0	0.0	0.0	0.5	0.0	0.0	15.5	11.5	13.5	19.0	15.5	17.0
9	0.0	0.0	0.0	0.5	0.0	0.0	16.0	11.5	14.0	18.5	17.0	18.0
10	0.0	0.0	0.0	0.5	0.0	0.0	15.5	14.0	14.5	18.0	16.5	17.5
11	0.5	0.0	0.0	0.5	0.0	0.0	15.5	14.0	15.0	17.0	14.0	16.0
12	1.0	0.0	0.0	0.5	0.0	0.0	14.5	11.0	12.5	14.0	8.5	11.0
13	0.5	0.0	0.0	1.0	0.0	0.0	13.0	9.0	11.5	10.0	7.5	8.5
14	0.5	0.0	0.0	0.5	0.0	0.0	15.0	11.5	13.5	11.5	9.0	10.0
15	0.0	0.0	0.0	1.5	0.0	0.5	16.0	12.5	14.5	12.5	9.5	11.0
16	0.0	0.0	0.0	2.0	0.0	0.5	15.0	12.5	13.5	13.0	11.5	12.5
17	0.0	0.0	0.0	2.0	0.0	0.5	16.5	11.5	13.5	14.0	12.0	13.0
18	0.0	0.0	0.0	0.5	0.0	0.0	19.0	14.5	16.5	14.5	14.0	14.0
19	0.5	0.0	0.0	1.5	0.0	0.5	18.5	16.0	16.5	16.0	14.0	15.0
20	0.0	0.0	0.0	2.5	0.0	1.0	17.0	13.0	15.0	17.5	14.5	15.5
21	0.5	0.0	0.0	3.5	0.0	1.0	16.0	12.5	14.0	17.5	15.5	17.0
22	0.5	0.0	0.0	3.5	0.0	1.5	15.5	11.0	13.0	18.0	16.0	17.0
23	0.5	0.0	0.0	4.0	0.0	1.5	11.0	8.0	10.0	19.0	16.5	17.5
24	0.0	0.0	0.0	3.0	0.5	1.5	12.5	9.0	11.0	21.0	17.5	19.5
25	0.5	0.0	0.0	4.0	0.0	1.5	12.0	10.0	11.5	20.0	16.0	18.5
26	0.5	0.0	0.0	4.5	0.0	2.0	10.0	9.0	9.5	17.5	14.5	16.0
27	0.5	0.0	0.5	4.5	0.5	2.5	9.5	7.5	8.5	17.5	15.5	16.5
28	0.5	0.0	0.0	6.0	1.5	3.5	9.5	6.5	8.0	16.0	14.5	15.0
29	---	---	---	6.5	3.0	4.5	10.5	8.0	9.5	18.0	14.5	16.0
30	---	---	---	7.5	4.0	5.5	10.0	8.5	9.0	20.5	16.0	18.0
31	---	---	---	7.5	3.0	5.5	---	---	---	22.0	17.5	20.0
MONTH	1.0	0.0	0.0	7.5	0.0	1.1	19.0	4.0	11.9	22.0	5.5	14.5

05288705 SHINGLE CREEK AT QUEEN AVE IN MINNEAPOLIS, MN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	21.0	20.0	20.5	23.0	19.0	21.0	28.5	24.0	26.5	22.5	19.5	21.0
2	22.5	19.0	20.5	23.5	21.5	22.5	28.5	26.5	27.5	22.0	18.0	20.0
3	20.5	19.0	20.0	23.5	21.5	22.5	27.5	26.0	26.5	21.0	18.5	19.0
4	20.5	18.5	19.5	24.0	21.5	22.5	26.0	22.5	24.0	19.0	11.5	17.0
5	21.5	19.5	20.5	23.5	22.0	22.5	23.5	20.5	22.0	21.5	18.0	19.5
6	23.5	20.0	21.5	25.0	21.0	23.0	22.5	20.0	21.5	23.0	20.0	21.0
7	26.0	21.0	23.5	23.5	21.0	21.5	24.0	20.5	22.0	22.5	19.5	20.5
8	24.5	19.5	22.0	22.0	19.5	20.5	26.0	23.0	24.0	21.5	18.5	20.0
9	24.0	20.0	22.0	21.5	19.0	20.0	26.0	24.0	25.5	22.0	20.0	21.0
10	23.5	20.5	22.0	22.5	19.0	20.0	25.5	22.5	24.0	24.5	21.0	22.5
11	23.5	21.5	22.5	22.0	18.5	20.0	23.5	21.0	21.5	25.0	22.5	23.5
12	25.0	20.5	23.0	21.5	18.0	19.5	22.5	20.0	21.5	24.0	23.0	23.5
13	25.0	22.0	23.0	20.0	17.5	18.5	21.5	19.0	19.5	23.0	20.0	21.5
14	22.5	20.5	21.5	22.5	16.0	18.5	20.0	17.5	18.5	20.5	17.5	19.5
15	22.5	19.5	21.0	18.5	15.5	16.5	21.0	17.5	19.0	20.5	18.0	19.5
16	23.5	20.5	22.0	18.5	15.5	17.0	23.0	19.0	20.5	20.5	18.5	19.5
17	24.5	22.0	23.5	18.0	15.5	16.5	24.5	22.0	23.0	20.0	18.5	19.5
18	26.0	22.5	24.5	17.0	14.0	15.5	23.0	22.0	22.5	22.0	18.5	20.0
19	26.5	23.0	25.0	16.0	13.0	14.0	23.5	22.0	22.5	22.0	20.0	21.0
20	25.5	22.0	24.0	24.5	14.5	20.0	24.0	21.0	22.5	21.5	19.5	20.5
21	26.5	21.0	23.5	22.5	19.0	21.0	23.0	19.5	21.0	23.0	20.0	21.0
22	27.5	24.0	26.0	21.5	19.0	20.0	21.0	19.0	19.5	21.0	18.5	20.0
23	28.0	25.5	27.0	24.5	18.5	21.5	21.0	18.5	19.5	19.0	17.0	18.0
24	27.5	25.5	26.5	23.5	22.0	23.0	21.0	19.0	20.0	17.5	16.0	16.5
25	26.0	23.5	25.0	25.5	21.5	22.5	23.0	20.0	21.0	17.5	17.0	17.5
26	26.5	24.0	25.0	24.0	20.5	21.5	22.5	20.5	21.5	18.5	16.0	17.0
27	26.0	23.0	25.0	23.0	19.0	20.5	22.5	19.5	21.0	18.5	15.5	17.0
28	23.5	22.0	23.0	23.5	20.5	22.0	22.0	19.5	21.0	18.0	14.0	16.0
29	23.5	22.0	22.5	25.0	21.0	23.0	23.0	20.5	22.0	14.5	12.0	13.5
30	23.0	21.0	22.0	27.5	23.0	25.0	23.5	21.5	22.5	16.0	12.5	14.0
31	---	---	---	28.0	23.5	25.5	22.5	21.0	22.0	---	---	---
MONTH	28.0	18.5	22.9	28.0	13.0	20.6	28.5	17.5	22.1	25.0	11.5	19.3
YEAR	28.5	0.0	10.9									

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Sample type	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	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, air, deg C (00020)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)
NOV 16...	0945	Environmental	9.33	4.8	745	8.9	69	7.6	952	8.0	4.0	210
JAN 25...	1340	Environmental	9.45	.49	730	7.6	53	7.6	2,780	8.0	.3	280
MAR 15...	1025	Environmental	9.25	2.8	746	9.8	69	7.5	1,680	--	.6	217
MAY 11...	0900	Environmental	9.56	13	746	4.7	47	7.3	778	10.5	15.6	133
JUL 15...	1010	Environmental	9.42	6.9	746	4.6	47	6.9	1,340	27.0	16.0	305
AUG 16...	1000	Environmental	--	--	--	--	--	--	--	--	--	--
SEP 09...	0925	Environmental	9.68	18	743	3.2	35	7.1	495	19.0	20.2	120

05288705 SHINGLE CREEK AT QUEEN AVE IN MINNEAPOLIS, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	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)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, wat unf by analysis, mg/L (62855)	Biomass periphyton, ashfree drymass g/m2 (49954)	Periphyton biomass ash weight, g/m2 (00572)	Periphyton biomass dry weight, g/m2 (00573)
NOV 16...	256	.0	135	56.5	.20	.44	.024	E.005	.083	1.38	--	--	--
JAN 25...	342	.0	663	46.9	.74	.38	.019	.007	.043	1.68	--	--	--
MAR 15...	265	.0	337	334	.67	.41	.012	E.005	.125	1.91	--	--	--
MAY 11...	163	.0	144	25.6	.35	.30	.035	.006	.150	1.70	--	--	--
JUL 15...	372	.0	163	149	.67	.27	.020	<.006	.052	1.38	--	--	--
AUG 16...	--	--	--	--	--	--	--	--	--	--	8.6	100	108.3
SEP 09...	147	.0	55.5	36.9	.29	.23	.043	.025	.166	1.31	--	--	--

Date	Pheophytin a, periphyton, mg/m2 (62359)	Chlorophyll a periphyton, chromofluoro, mg/m2 (70957)	1-Naphthol, water, fltrd 0.7u GF ug/L (49295)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	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)	3,5-Dichloroaniline water, fltrd, ug/L (61627)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-Endosulfan, water, fltrd, ug/L (34362)
NOV 16...	--	--	<.09	<.006	<.005	<.006	<.004	<.004	--	<.006	<.006	<.005	--
JAN 25...	--	--	<.09	<.006	<.005	<.006	<.004	<.004	--	<.006	<.006	<.005	--
MAR 15...	--	--	<.09	<.006	<.005	<.006	<.004	<.004	--	<.006	<.010	<.005	--
MAY 11...	--	--	<.09	<.006	<.005	E.091	<.004	--	--	E.017	.380	.012	--
JUL 15...	--	--	<.09	<.006	<.005	E.008	<.004	<.004	<.004	<.006	<.006	<.005	<.005
AUG 16...	2.6	4.4	--	--	--	--	--	--	--	--	--	--	--
SEP 09...	--	--	<.09	<.006	<.005	E.024	<.004	E.009	<.004	E.015	<.006	<.005	<.005

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	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)	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)	cis-Propiconazole, water, fltrd, ug/L (79846)	Cyanazine, water, fltrd, ug/L (04041)	Cyfluthrin, water, fltrd, ug/L (61585)	lambda-Cyhalothrin, water, fltrd, ug/L (61595)
NOV 16...	.015	<.07	<.050	<.010	<.041	--	<.06	<.005	<.006	--	--	<.008	--
JAN 25...	<.007	<.07	<.050	<.010	<.041	--	<.06	<.005	<.006	--	--	<.008	--
MAR 15...	.021	<.07	<.050	<.010	<.041	--	<.06	<.005	<.006	--	--	<.027	--
MAY 11...	.487	<.07	<.050	<.010	E.055	--	<.06	<.005	<.006	--	--	<.027	--
JUL 15...	.014	<.07	<.050	<.010	<.041	<.020	<.06	<.005	<.006	<.008	<.018	<.027	<.009
AUG 16...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 09...	.040	<.07	<.050	<.010	<.041	<.020	<.06	<.005	<.006	<.008	<.018	<.027	<.009

05288705 SHINGLE CREEK AT QUEEN AVE IN MINNEAPOLIS, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	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)	Dicrotophos, water fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)	Dimethoate, water, fltrd 0.7u GF ug/L (82662)	Disulfoton sulfone water, fltrd, ug/L (61640)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	Endosulfan sulfate water, fltrd, ug/L (61590)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethion monoxon water, fltrd, ug/L (61644)
NOV 16...	<.009	<.003	<.012	<.01	<.005	<.08	<.009	<.006	--	--	--	--	<.0020
JAN 25...	<.009	<.003	<.012	<.01	<.005	<.08	<.009	<.006	--	--	--	--	<.0020
MAR 15...	<.009	<.003	<.012	<.01	.008	<.08	<.009	<.006	--	--	--	--	<.0020
MAY 11...	<.009	E.002	E.004	<.01	.058	<.08	<.009	<.006	--	--	--	--	<.0020
JUL 15...	<.009	<.003	<.012	<.01	<.005	<.08	<.009	<.006	<.01	<.02	<.014	<.004	<.002
AUG 16...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 09...	<.009	<.003	E.004	<.01	<.010	<.08	<.009	<.006	<.01	<.02	<.014	<.004	<.002

Date	Ethion, water, fltrd, ug/L (82346)	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)	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 oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	Hexazinone, water, fltrd, ug/L (04025)	Iprodione, water, fltrd, ug/L (61593)
NOV 16...	<.004	--	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.003	<.013	<.387
JAN 25...	<.004	--	<.049	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.003	<.013	<.387
MAR 15...	<.004	--	<.049	<.04	<.03	<.029	<.013	<.024	<.016	--	<.003	<.013	<.538
MAY 11...	<.004	--	<.049	<.04	<.03	<.029	<.013	<.024	<.016	--	<.003	<.013	<.538
JUL 15...	<.004	<.005	<.049	<.04	<.03	<.029	<.013	<.024	<.016	--	<.003	<.013	<.538
AUG 16...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 09...	<.004	<.005	<.049	<.04	<.03	<.029	E.005	<.024	<.016	--	<.003	<.013	<.538

Date	Isofenphos, water, fltrd, ug/L (61594)	Malaoxon, water, fltrd, ug/L (61652)	Malathion, water, fltrd, ug/L (39532)	Metalaxyl, water, fltrd, ug/L (61596)	Methiathion 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)	Molinate, water, fltrd 0.7u GF ug/L (82671)	Myclobutanil water, fltrd, ug/L (61599)	Oxyfluorfen, water, fltrd, ug/L (61600)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)
NOV 16...	<.003	<.030	<.027	<.005	<.006	<.03	<.015	<.010	<.006	--	<.008	--	<.022
JAN 25...	<.003	<.030	<.027	<.005	<.006	<.03	<.015	<.006	<.006	--	<.008	--	<.022
MAR 15...	<.003	<.030	<.027	<.005	<.006	<.03	<.015	.035	<.006	--	<.008	--	<.022
MAY 11...	<.003	<.050	<.027	<.005	<.006	<.03	<.015	.097	<.006	--	<.008	--	<.022
JUL 15...	<.003	<.030	<.027	<.005	<.006	<.03	<.015	E.004	<.006	<.003	<.008	<.007	<.022
AUG 16...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 09...	<.003	<.030	E.013	<.005	<.006	<.03	<.015	<.025	<.006	<.003	<.008	<.007	<.022

05288705 SHINGLE CREEK AT QUEEN AVE IN MINNEAPOLIS, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—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)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Simazine, water, fltrd, ug/L (04035)	Tebuconazole, water, fltrd, ug/L (62852)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Tefluthrin, water, fltrd, ug/L (61606)
NOV													
16...	<.10	<.011	<.05	<.008	.03	<.005	<.004	--	--	<.005	--	<.02	--
JAN													
25...	<.10	<.011	<.05	<.008	.03	<.005	<.004	--	--	<.005	--	.09	--
MAR													
15...	<.10	<.011	<.05	<.008	.02	<.005	<.004	--	--	<.005	--	<.02	--
MAY													
11...	<.10	<.011	<.05	<.008	.02	<.005	<.004	--	--	<.005	--	<.02	--
JUL													
15...	<.10	<.011	<.05	<.008	.02	<.005	<.004	<.011	<.02	<.005	<.01	<.02	<.008
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
09...	<.10	<.011	--	--	.04	<.005	<.004	<.011	<.02	<.010	--	<.02	<.008

Date	Terbufos oxon sulfone water, fltrd, ug/L (61674)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Terbuthylazine, water, fltrd, ug/L (04022)	Thiobencarb water fltrd 0.7u GF ug/L (82681)	trans-Propiconazole, water, fltrd, ug/L (79847)	Tribuphos, water, fltrd, ug/L (61610)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)	Dichlorvos, water fltrd, ug/L (38775)	Suspended sediment concentration mg/L (80154)
NOV									
16...	<.07	<.02	<.01	--	--	--	<.009	<.01	16
JAN									
25...	<.07	<.02	<.01	--	--	--	<.009	<.01	--
MAR									
15...	<.07	<.02	<.01	--	--	--	<.009	<.01	--
MAY									
11...	<.07	<.02	<.01	--	--	--	<.009	<.01	--
JUL									
15...	<.07	<.02	<.01	<.010	<.01	<.004	<.009	<.01	203
AUG									
16...	--	--	--	--	--	--	--	--	--
SEP									
09...	<.07	<.02	<.01	<.010	<.03	<.015	<.009	<.01	9

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05291000 WHETSTONE RIVER NEAR BIG STONE CITY, SD

LOCATION.--Lat 45°17'30", long 96°29'14", in SE¼NW¼ sec. 18, T.121 N., R.46 W., Grant County, Hydrologic Unit 07020001, on right bank 20 ft downstream from former highway bridge site, 1.5 mi west of Big Stone City, S.D., and 4.5 mi upstream from Big Stone Lake.

DRAINAGE AREA.--398 mi^2.

PERIOD OF RECORD.--March 1910 to November 1912 (no winter records), and March 1931 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 895: Drainage area. WSP 1308: 1932(M), 1935(M).

GAGE.--Water-stage recorder. Datum of gage is 996.96 ft in sea level (NGVD of 1912). Mar. 8, 1910 to Nov. 30, 1912, nonrecording gage 2 mi downstream at different datum. Mar. 18, 1931 to May 3, 1939, nonrecording gage, at site 20 ft upstream at present datum. May 4, 1939 to Nov. 8, 1952, water-stage recorder at site 80 ft down-stream at present datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 26 ft in June 1919, present site and datum, from information by local resident, discharge 29,000 ft^3/s, from dam break.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 230 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jun 15	0000	*3,430	*10.44

No other peak greater than base discharge.

Minimum discharge, 4.7 ft^3/s, Sept. 24, gage height, 0.95 ft.

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	17	79	21	e12	e5.1	e9.8	49	23	34	88	12	6.4
2	29	74	20	e11	e4.1	e9.3	42	22	30	73	12	5.7
3	30	64	19	e11	e4.5	e9.4	37	21	27	61	15	6.4
4	32	53	19	e11	e4.1	e11	33	20	27	52	16	6.5
5	32	45	19	e9.6	e6.1	e12	31	19	32	38	15	6.2
6	27	39	18	e8.7	e9.1	e15	30	18	34	34	13	7.2
7	24	35	20	e8.1	e6.3	e22	29	19	39	31	11	7.2
8	20	31	20	e7.7	e6.0	e22	28	20	75	31	10	8.0
9	16	28	19	e6.7	e5.7	e21	27	24	88	30	9.7	7.1
10	14	27	19	e6.2	e5.4	e19	28	27	217	28	9.0	6.3
11	11	26	20	e6.0	e6.3	e18	38	27	278	26	9.9	5.4
12	10	25	16	e6.4	e7.5	e19	58	33	296	37	10	5.9
13	9.5	23	e10	e6.2	e8.8	e19	87	46	312	37	11	15
14	11	22	e15	e5.5	e16	e19	98	53	1,690	27	9.7	16
15	9.8	22	e18	e3.6	e20	e19	86	62	2,350	23	9.0	12
16	9.4	21	e18	e2.8	e15	e19	75	72	976	21	8.7	9.4
17	11	21	e17	e2.1	e15	e19	66	75	594	19	8.6	8.3
18	11	21	e17	e1.9	e15	e18	58	68	415	17	9.6	7.7
19	9.8	23	e14	e2.1	e15	e18	51	58	298	17	9.8	8.1
20	9.5	24	e13	e2.8	e14	e17	46	50	233	17	11	7.2
21	9.8	24	e14	e3.6	e14	e17	41	46	187	17	15	6.8
22	11	24	e11	e3.4	e14	e19	37	41	154	18	17	6.2
23	14	23	e8.9	e4.0	e13	e25	35	35	131	17	17	5.5
24	22	23	e6.8	e4.9	e12	e31	32	29	122	17	13	5.2
25	34	23	e7.2	e7.2	e12	e32	29	34	113	18	11	6.4
26	33	20	e8.1	e6.9	e11	e31	29	39	106	16	11	6.5
27	38	23	e8.1	e4.9	e10	e32	27	35	97	16	9.1	6.6
28	38	24	e8.4	e5.2	e9.9	e35	25	36	95	16	8.9	6.8
29	42	22	e9.7	e4.6	---	40	24	38	95	16	8.0	6.1
30	49	23	e12	e4.6	---	49	23	39	92	15	7.3	5.6
31	83	---	e11	e4.9	---	50	---	37	---	14	6.8	---
TOTAL	716.8	932	457.2	185.6	284.9	696.5	1,299	1,166	9,237	887	344.1	223.7
MEAN	23.1	31.1	14.7	5.99	10.2	22.5	43.3	37.6	308	28.6	11.1	7.46
MAX	83	79	21	12	20	50	98	75	2,350	88	17	16
MIN	9.4	20	6.8	1.9	4.1	9.3	23	18	27	14	6.8	5.2
AC-FT	1,420	1,850	907	368	565	1,380	2,580	2,310	18,320	1,760	683	444
CFSM	0.06	0.08	0.04	0.02	0.03	0.06	0.11	0.09	0.77	0.07	0.03	0.02
IN.	0.07	0.09	0.04	0.02	0.03	0.07	0.12	0.11	0.86	0.08	0.03	0.02

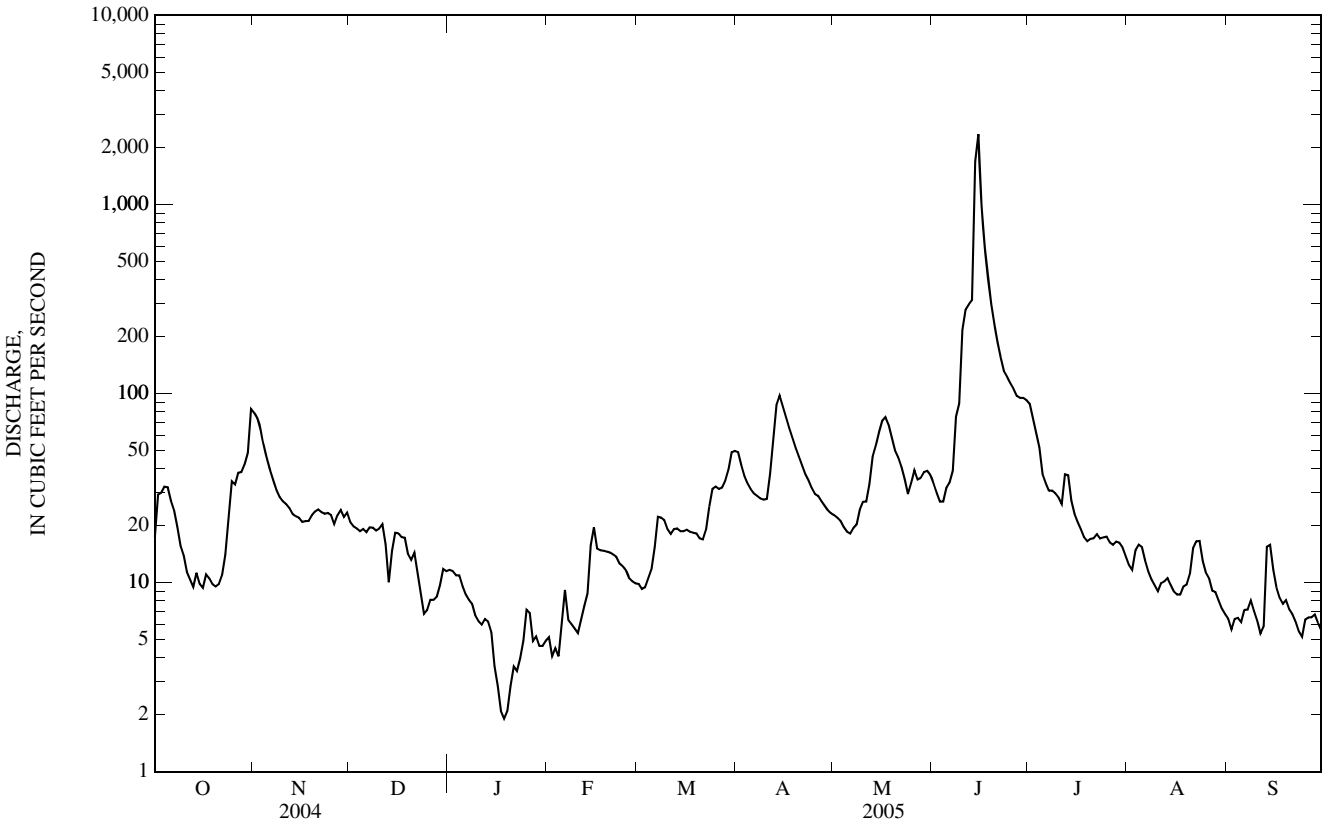
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 2005, BY WATER YEAR (WY)

MEAN	14.6	14.9	10.0	6.57	15.0	151	217	91.2	80.9	55.8	19.1	10.3
MAX	280	122	56.0	36.3	168	612	1,677	491	478	885	327	77.0
(WY)	(1996)	(1996)	(1999)	(1994)	(1998)	(1978)	(1997)	(1972)	(1984)	(1993)	(1991)	(1995)
MIN	0.60	0.40	0.20	0.00	0.00	2.85	3.63	0.77	1.42	0.04	0.00	0.36
(WY)	(1932)	(1935)	(1935)	(1934)	(1934)	(1969)	(1934)	(1934)	(1936)	(1934)	(1934)	(1935)

05291000 WHETSTONE RIVER NEAR BIG STONE CITY, SD—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1910 - 2005	
ANNUAL TOTAL	5,493.7		16,429.8			
ANNUAL MEAN	15.0		45.0		a58.8	
HIGHEST ANNUAL MEAN					232	1997
LOWEST ANNUAL MEAN					1.52	1934
HIGHEST DAILY MEAN	83	Oct 31	2,350	Jun 15	8,090	Apr 8, 2001
LOWEST DAILY MEAN	1.7	Feb 17	1.9	Jan 18	b0.00	Sep 13, 1931
ANNUAL SEVEN-DAY MINIMUM	1.8	Feb 11	2.7	Jan 16	0.00	Jul 31, 1933
MAXIMUM PEAK FLOW			3,430	Jun 15	9,930	Apr 8, 2001
MAXIMUM PEAK STAGE			10.44	Jun 15	15.93	Apr 8, 2001
INSTANTANEOUS LOW FLOW			c1.9	Jan 18	b0.00	Sep 13, 1931
ANNUAL RUNOFF (AC-FT)	10,900		32,590		42,590	
ANNUAL RUNOFF (CFSM)	0.038		0.113		0.148	
ANNUAL RUNOFF (INCHES)	0.51		1.54		2.01	
10 PERCENT EXCEEDS	30		65		108	
50 PERCENT EXCEEDS	12		19		9.0	
90 PERCENT EXCEEDS	2.6		6.3		1.5	

a Median of annual mean discharges is 44 ft^3/s.
b Many days, several years.
c Minimum daily, backwater from ice.
e Estimated.



05292000 MINNESOTA RIVER AT ORTONVILLE, MN

LOCATION.--Lat 45°17'44", long 96°26'38", in NE¼NW¼ sec. 16, T.121 N., R.46 W., Big Stone County, Hydrologic Unit 07020001, on left bank 400 ft downstream from bridge on U.S. Highway 12 and 1,300 ft downstream from dam at outlet of Big Stone Lake, at Ortonville.

DRAINAGE AREA.--1,160 mi^2 (approximately).

PERIOD OF RECORD.--February 1938 to current year.

REVISED RECORDS.--WSP 895: 1939. WSP 1508: 1942 (yearly mean).

GAGE.--Water-stage recorder. Datum of gage is 956.38 ft above sea level (NGVD of 1929). Prior to Mar. 31, 1939, nonrecording gage on downstream side of dam 1,300 ft upstream at datum 1.31 ft higher.

REMARKS.--Records good. Affected by regulation of Big Stone Lake.

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	217	167	65	51	37	21	21	82	182	576	36	33
2	316	225	65	54	37	21	21	79	95	496	36	82
3	326	220	64	51	39	21	21	76	83	682	36	128
4	201	224	66	51	29	21	21	58	167	734	35	127
5	105	224	63	48	22	22	22	45	330	717	34	128
6	105	223	61	41	21	22	22	46	321	647	34	131
7	105	223	64	41	21	e22	21	46	441	604	33	131
8	106	192	62	39	21	22	21	48	724	637	33	130
9	104	192	63	40	21	22	21	49	736	611	30	129
10	103	225	65	39	21	21	21	50	778	577	28	126
11	103	212	62	38	21	21	23	49	793	616	28	128
12	104	184	e64	43	21	22	19	48	889	662	27	131
13	107	145	e64	46	21	22	33	49	1,080	651	25	118
14	104	127	63	40	21	22	78	50	1,970	623	25	111
15	108	128	62	37	21	22	79	48	2,570	625	26	111
16	106	99	62	37	21	22	78	46	2,440	546	31	111
17	103	77	62	34	21	21	78	46	2,180	510	32	110
18	101	75	62	32	21	21	91	57	1,850	539	35	112
19	102	73	62	34	21	21	108	74	1,660	298	37	114
20	102	74	62	34	21	22	104	70	1,550	132	37	148
21	100	70	62	38	21	21	101	68	1,370	37	38	170
22	102	70	61	48	21	22	102	71	1,160	37	38	165
23	106	71	60	37	21	22	92	132	1,060	37	37	159
24	103	68	57	41	21	22	89	171	1,040	37	37	160
25	103	68	57	41	21	21	92	191	783	38	38	162
26	102	68	54	41	21	22	86	264	592	38	39	160
27	102	69	51	35	21	22	82	260	733	37	38	159
28	103	65	51	37	21	22	79	256	664	37	38	164
29	104	65	48	43	---	22	79	255	e572	37	38	157
30	109	65	51	41	---	22	80	253	786	37	38	172
31	104	---	52	40	---	21	---	249	---	36	36	---
TOTAL	3,866	3,988	1,867	1,272	647	670	1,785	3,286	29,599	11,891	1,053	3,967
MEAN	125	133	60.2	41.0	23.1	21.6	59.5	106	987	384	34.0	132
MAX	326	225	66	54	39	22	108	264	2,570	734	39	172
MIN	100	65	48	32	21	21	19	45	83	36	25	33
AC-FT	7,670	7,910	3,700	2,520	1,280	1,330	3,540	6,520	58,710	23,590	2,090	7,870
CFSM	0.11	0.11	0.05	0.04	0.02	0.02	0.05	0.09	0.85	0.33	0.03	0.11
IN.	0.12	0.13	0.06	0.04	0.02	0.02	0.06	0.11	0.95	0.38	0.03	0.13

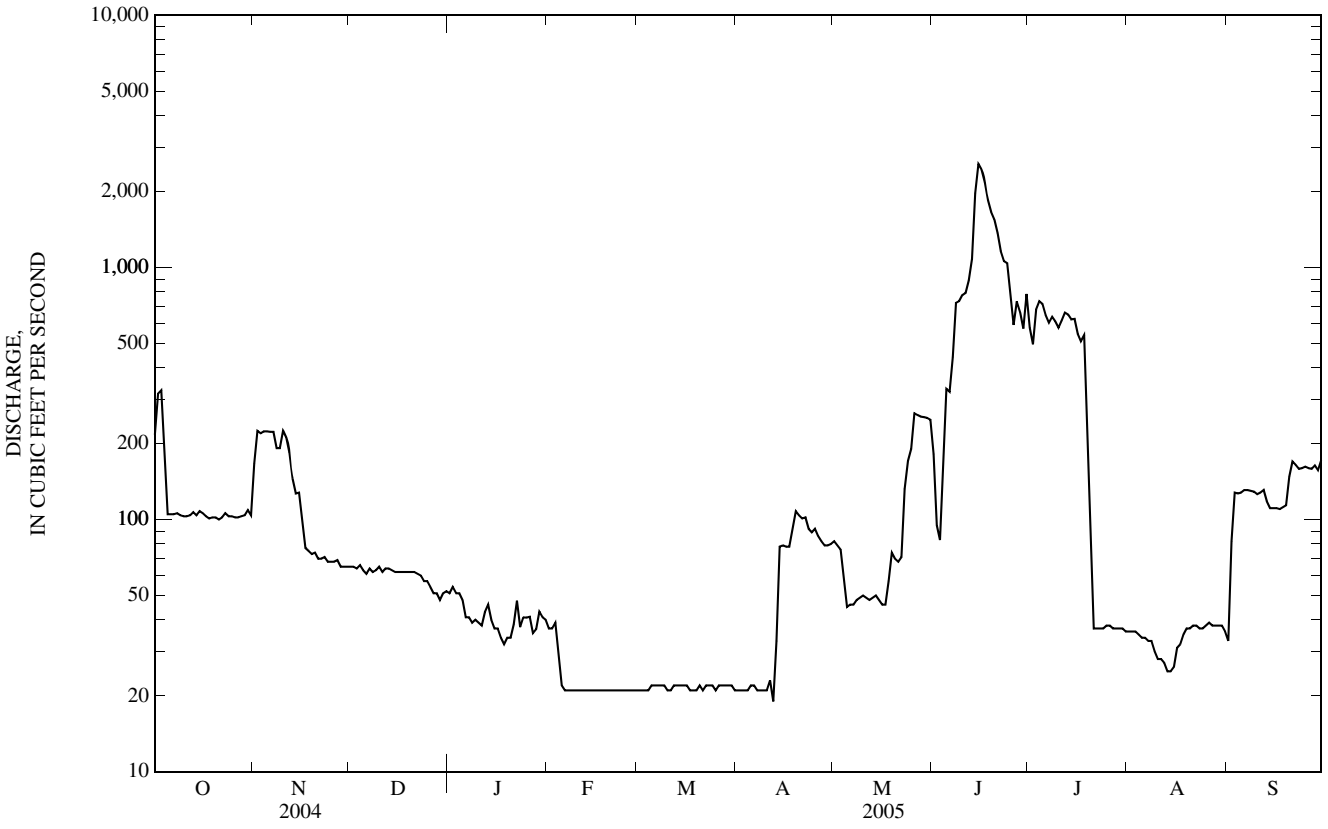
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2005, BY WATER YEAR (WY)

MEAN	32.6	25.9	23.2	22.8	33.8	193	506	270	199	154	72.5	35.6
MAX	441	269	194	164	273	1,519	4,109	904	1,034	1,781	1,299	250
(WY)	(1996)	(1996)	(1943)	(1943)	(1998)	(1994)	(1997)	(2001)	(1962)	(1993)	(1993)	(1942)
MIN	0.20	0.20	0.20	0.17	0.16	1.14	1.27	0.91	1.30	1.11	0.25	0.18
(WY)	(1939)	(1939)	(1939)	(1940)	(1940)	(1941)	(1941)	(1941)	(1977)	(1977)	(1959)	(1988)

05292000 MINNESOTA RIVER AT ORTONVILLE, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1938 - 2005	
ANNUAL TOTAL	15,956.2		63,891			
ANNUAL MEAN	43.6		175		a132	
HIGHEST ANNUAL MEAN					514	1997
LOWEST ANNUAL MEAN					2.39	1977
HIGHEST DAILY MEAN	326	Oct 3	2,570	Jun 15	5,010	Apr 10, 1997
LOWEST DAILY MEAN	1.7	Apr 23	19	Apr 12	0.00	Dec 13, 1940
ANNUAL SEVEN-DAY MINIMUM	2.1	Apr 19	21	Feb 6	0.08	Sep 12, 1988
MAXIMUM PEAK FLOW			b2,600	Jun 15	5,070	Apr 10, 1997
MAXIMUM PEAK STAGE			8.76	Jun 15	12.92	Apr 13, 1952
INSTANTANEOUS LOW FLOW			c8.5	Apr 13	0.00	Dec 13, 1940
ANNUAL RUNOFF (AC-FT)	31,650		126,700		95,650	
ANNUAL RUNOFF (CFSM)	0.038		0.151		0.114	
ANNUAL RUNOFF (INCHES)	0.51		2.05		1.55	
10 PERCENT EXCEEDS	106		574		340	
50 PERCENT EXCEEDS	15		63		22	
90 PERCENT EXCEEDS	5.6		21		1.2	

a Median of annual mean discharges is 88 ft^3/s.
b Due in part to regulation.
c Due to regulation.
e Estimated.



05293000 YELLOW BANK RIVER NEAR ODESSA, MN

LOCATION.--Lat 45°13'37", long 96°21'12", in SW¼SW¼ sec. 6, T. 120 N., R. 45 W., Lac qui Parle County, Hydrologic Unit 07020001, on left bank 1,200 ft upstream from highway bridge, 2.5 mi southwest of Odessa, and 4.5 mi upstream from mouth.

DRAINAGE AREA.--459 mi^2.

PERIOD OF RECORD.--October 1939 to September 1999, October 1999 to March 2001 (peak flow only), April 2001 to current year.

REVISED RECORDS.--WSP 1388: 1947(M), 1950. WDR MN-95-1: Sept. 5 (Q). WRIR 97-4249: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 953.34 ft above sea level (U.S. Army Corps of Engineers benchmark, NGVD of 1929). Prior to Aug. 28, 1940, nonrecording gage at site 150 ft upstream at same datum.

REMARKS.--Records good to fair except those for estimated daily discharges, which are poor.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jun 15	2000	*1,320	*7.74	No other peak greater than base discharge.			

Minimum discharge, 1.5 ft^3/s, Jan. 18, (estimated daily).

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	25	132	26	e9.3	e6.7	e9.5	60	31	46	30	6.1	e2.8
2	24	124	27	e9.2	e7.0	e9.1	53	30	43	27	5.6	e1.9
3	26	100	25	e8.7	e7.3	e8.9	48	28	40	26	7.6	e2.7
4	29	81	25	e8.2	e7.3	e9.6	45	28	38	23	7.2	e2.7
5	38	69	23	e7.2	e8.8	e11	41	26	38	21	6.7	e2.5
6	39	61	26	e6.5	e12	e13	39	25	42	19	6.2	e3.2
7	38	54	24	e6.0	e7.4	e13	37	26	67	17	5.5	e3.4
8	33	48	23	e5.0	e6.8	e14	36	30	70	18	4.9	e4.3
9	27	43	22	e5.0	e6.6	e13	36	47	111	16	5.3	e3.4
10	24	40	23	e4.7	e6.5	e11	34	36	188	14	4.2	e2.6
11	21	36	e21	e4.8	e7.1	e12	43	37	215	13	5.0	e1.9
12	18	33	e21	e4.7	e7.7	e11	63	39	303	14	4.8	e2.3
13	17	32	e8.0	e4.6	e9.2	e12	89	48	352	12	4.7	e6.9
14	16	30	e13	e3.9	e17	e11	112	58	532	11	4.5	e5.7
15	14	29	e16	e2.5	e19	e10	117	69	1,120	10	4.4	e5.0
16	14	28	e15	e1.9	e15	e10	108	79	990	9.7	4.1	e4.4
17	13	27	e15	e1.7	e15	e10	95	83	629	8.5	4.0	e4.3
18	13	26	e15	e1.5	e14	e9.3	84	100	424	7.5	4.8	e3.8
19	13	26	e12	e1.8	e14	e8.3	75	107	298	6.9	5.4	e4.2
20	12	26	e11	e2.8	e15	e9.3	68	111	222	7.5	5.1	e3.4
21	13	27	e12	e3.1	e14	e10	65	95	175	7.4	4.8	e3.1
22	13	27	e8.6	e3.1	e13	e15	56	80	142	6.8	5.3	e2.3
23	14	29	e6.0	e3.4	e12	e22	51	69	113	6.6	6.0	e1.9
24	15	29	e4.2	e4.4	e11	e33	48	63	89	5.9	6.0	e1.7
25	14	31	e4.4	e6.3	e11	e43	44	59	73	6.6	6.1	e2.9
26	15	29	e5.4	e6.0	e11	e45	40	59	62	7.5	11	e3.0
27	14	28	e5.7	e5.7	e10	e44	39	58	53	6.6	e8.3	e3.1
28	23	29	e6.0	e5.5	e9.7	46	37	56	45	6.2	e6.3	e3.4
29	39	26	e7.0	e5.4	---	50	34	55	40	6.5	e5.1	e2.7
30	70	26	e9.6	e5.9	---	60	32	52	34	6.1	e3.9	e1.9
31	117	---	e8.8	e6.1	---	65	---	49	---	6.2	e3.3	---
TOTAL	801	1,326	468.7	154.9	301.1	648.0	1,729	1,733	6,594	383.5	172.2	97.4
MEAN	25.8	44.2	15.1	5.00	10.8	20.9	57.6	55.9	220	12.4	5.55	3.25
MAX	117	132	27	9.3	19	65	117	111	1,120	30	11	6.9
MIN	12	26	4.2	1.5	6.5	8.3	32	25	34	5.9	3.3	1.7
AC-FT	1,590	2,630	930	307	597	1,290	3,430	3,440	13,080	761	342	193
CFSM	0.06	0.10	0.03	0.01	0.02	0.05	0.13	0.12	0.48	0.03	0.01	0.01
IN.	0.06	0.11	0.04	0.01	0.02	0.05	0.14	0.14	0.53	0.03	0.01	0.01

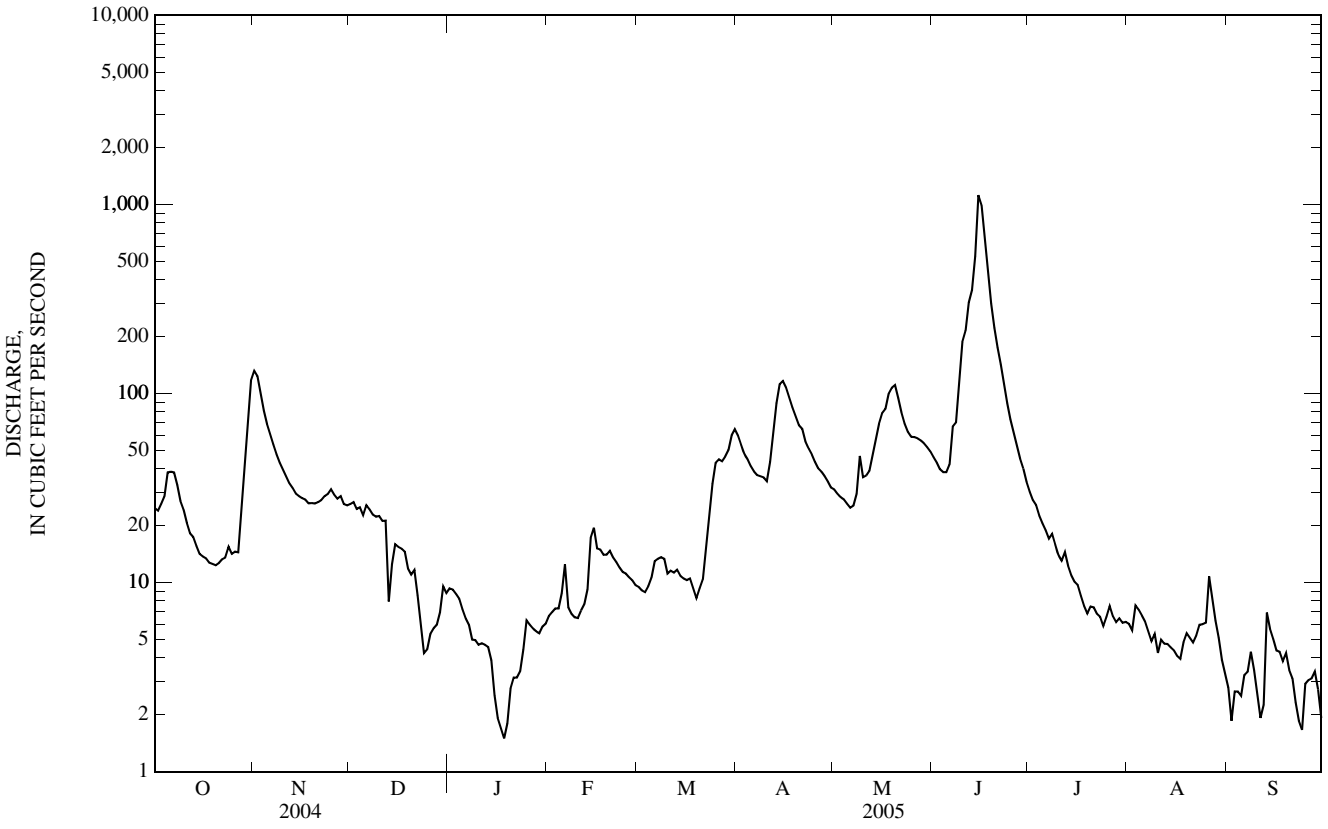
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2005, BY WATER YEAR (WY)

MEAN	24.8	24.6	13.0	7.79	17.1	167	256	107	105	62.3	28.5	16.5
MAX	588	256	86.3	68.0	147	693	1,614	652	577	741	281	273
(WY)	(1996)	(1996)	(1996)	(1994)	(1998)	(1996)	(1997)	(1972)	(1992)	(1993)	(1991)	(1985)
MIN	0.31	0.44	0.32	0.09	0.00	1.59	9.13	2.94	1.83	0.27	0.09	0.08
(WY)	(1941)	(1977)	(1977)	(1977)	(1977)	(1965)	(1981)	(1981)	(1976)	(1976)	(1976)	(1976)

05293000 YELLOW BANK RIVER NEAR ODESSA, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1940 - 2005	
ANNUAL TOTAL	7,125.7		14,408.8			
ANNUAL MEAN	19.5		39.5		a69.3	
HIGHEST ANNUAL MEAN					237	1996
LOWEST ANNUAL MEAN					3.98	1981
HIGHEST DAILY MEAN	132	Nov 1	1,120	Jun 15	6,640	Apr 9, 1969
LOWEST DAILY MEAN	1.1	Feb 10	1.5	Jan 18	b0.00	Jan 26, 1940
ANNUAL SEVEN-DAY MINIMUM	1.1	Feb 10	2.2	Jan 15	0.00	Jan 26, 1940
MAXIMUM PEAK FLOW			1,320	Jun 15	6,970	Apr 9, 1969
MAXIMUM PEAK STAGE			7.74	Jun 15	19.07	Apr 9, 1969
INSTANTANEOUS LOW FLOW			c1.5	Jan 18	b0.00	Jan 26, 1940
ANNUAL RUNOFF (AC-FT)	14,130		28,580		50,180	
ANNUAL RUNOFF (CFSM)	0.042		0.086		0.151	
ANNUAL RUNOFF (INCHES)	0.58		1.17		2.05	
10 PERCENT EXCEEDS	45		71		145	
50 PERCENT EXCEEDS	13		14		11	
90 PERCENT EXCEEDS	1.5		4.1		1.1	

a Median of annual mean discharges is 50 ft^3/s.
b Many days, several years.
c Estimated daily-mean discharge, backwater from ice.
e Estimated.



05294000 POMME DE TERRE RIVER AT APPLETON, MN

LOCATION.--Lat 45°12'10", long 96°01'20", in SW¼NW¼ sec. 14, T.120 N., R.43 W., Swift County, Hydrologic Unit 07020002, on left bank 400 ft upstream from bridge on U.S. Highway 59 and State Highway 119 at Appleton and 8 mi upstream from mouth.

DRAINAGE AREA.--864 mi^2.

PERIOD OF RECORD.--March 1931 to September 1935 (no winter records), October 1935 to September 1999, June 2003 to current year. Peak flows available for water years 2000-2002. Prior to October 1953, published as "near Appleton."

REVISED RECORDS.--WSP 1308: 1931(M), 1937(M).

GAGE.--Water-stage recorder. Datum of gage is 978.00 ft above sea level (NGVD of 1929). Prior to Dec. 22, 1952, nonrecording gage at site 4 mi upstream at datum 25.17 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow affected by lakes above station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 230 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct 4	0700	445	6.50	Apr 14	0800	598	6.79
Oct 30	1000	277	5.83	May 27	0500	346	5.97
Apr 1	1900	319	5.86	Jun 17	0700	*1,400	*8.46

Minimum discharge, 40 ft^3/s, Dec. 14, gage height, 3.96 ft.

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	333	272	195	e126	e125	e141	319	301	288	450	e202	150
2	370	264	191	e126	e127	e140	310	292	280	425	e195	147
3	426	261	205	e124	e128	e139	298	285	271	409	e188	148
4	436	259	222	e123	e127	e140	288	278	270	397	191	150
5	431	256	221	e121	e132	e145	283	267	293	385	181	151
6	433	255	210	e121	e136	e157	284	260	314	374	175	158
7	436	252	213	e120	e132	e167	285	263	316	362	172	180
8	429	255	213	e120	e135	e175	277	264	457	349	170	176
9	419	258	222	e119	e132	e180	270	262	624	345	169	169
10	396	255	205	e117	e132	e190	266	266	765	333	167	161
11	368	249	201	e117	e131	e193	310	265	854	328	164	154
12	338	246	196	e117	e132	e195	431	262	923	349	163	156
13	318	239	96	e117	e133	e198	542	270	991	320	164	168
14	305	234	72	e117	e144	e194	594	284	1,130	308	163	194
15	290	231	185	e115	e147	e192	583	291	1,210	297	161	191
16	279	230	235	e117	e139	e190	573	298	1,320	282	159	179
17	270	229	225	e115	e139	e189	571	294	1,380	265	155	171
18	257	228	204	e117	e141	e188	569	286	1,340	252	164	172
19	242	231	e179	e115	e138	e186	550	287	1,270	e234	176	178
20	232	235	e162	e117	e143	e190	523	294	1,210	e234	176	177
21	227	237	e153	e116	e138	e193	502	301	1,130	e224	173	172
22	226	235	e146	e118	e141	e197	474	304	1,060	e221	168	164
23	227	231	e140	e119	e141	e200	446	301	971	e208	160	160
24	233	227	e134	e123	e139	e216	421	298	873	e215	153	157
25	237	225	e130	e123	e140	e219	398	294	782	e211	145	158
26	234	221	e128	e122	e139	e222	376	326	698	e211	180	164
27	231	219	e126	e125	e138	e223	361	343	623	e205	197	166
28	246	215	e125	e125	e140	e229	344	330	556	e202	179	161
29	265	207	e126	e123	---	e250	327	319	504	e205	169	158
30	273	184	e126	e125	---	287	311	308	471	e202	163	156
31	273	---	e126	e125	---	309	---	298	---	e192	156	---
TOTAL	9,680	7,140	5,312	3,725	3,809	6,034	12,086	8,991	23,174	8,994	5,298	4,946
MEAN	312	238	171	120	136	195	403	290	772	290	171	165
MAX	436	272	235	126	147	309	594	343	1,380	450	202	194
MIN	226	184	72	115	125	139	266	260	270	192	145	147
AC-FT	19,200	14,160	10,540	7,390	7,560	11,970	23,970	17,830	45,970	17,840	10,510	9,810
CFSM	0.35	0.26	0.19	0.13	0.15	0.22	0.45	0.32	0.85	0.32	0.19	0.18

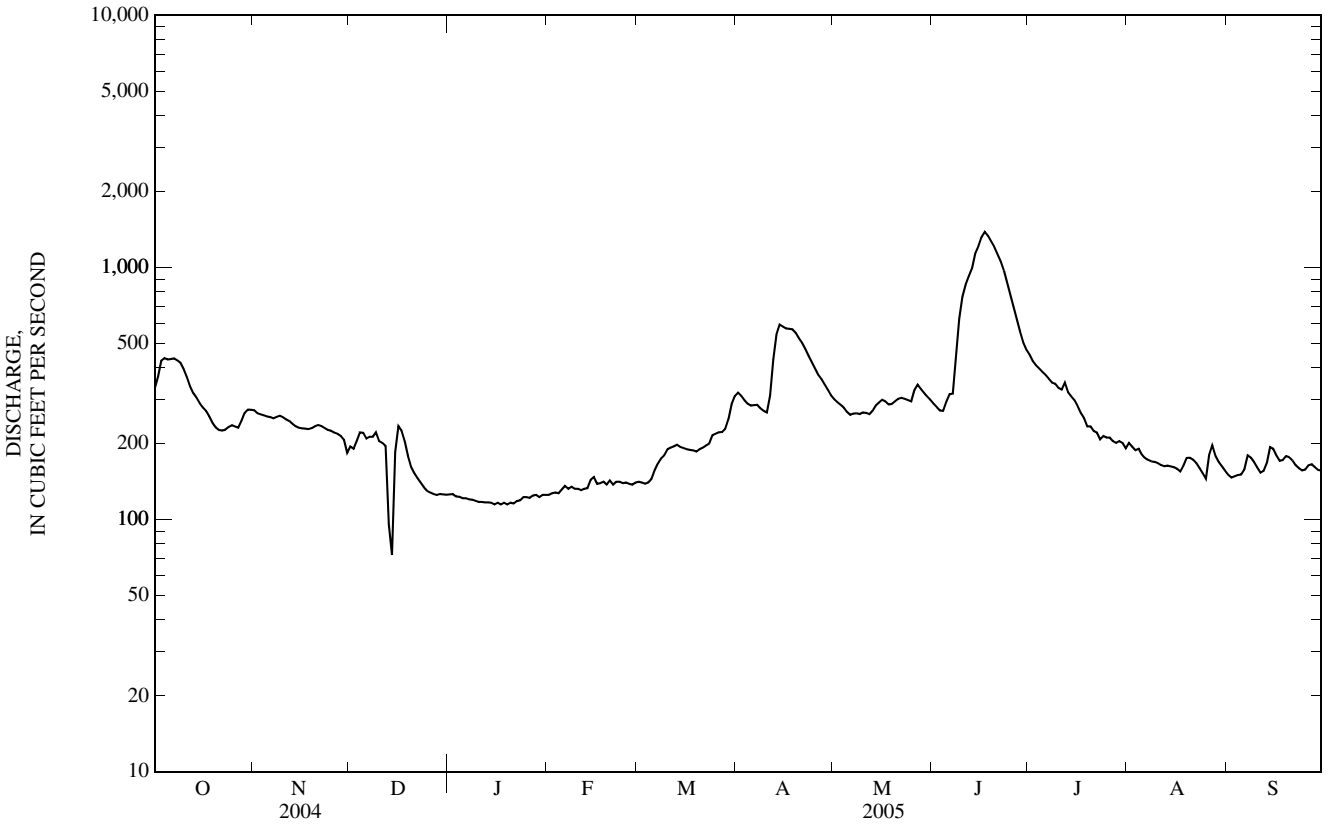
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2005, BY WATER YEAR (WY)

MEAN	71.9	68.2	46.4	29.9	31.0	164	403	214	177	153	82.3	60.9
MAX	550	402	182	141	163	675	3,087	846	772	1,382	752	331
(WY)	(1996)	(1996)	(1987)	(1987)	(1998)	(1995)	(1997)	(1969)	(2005)	(1993)	(1993)	(1986)
MIN	0.00	3.52	1.00	0.00	0.00	2.04	20.9	8.09	2.17	0.45	0.10	0.05
(WY)	(1989)	(1989)	(1937)	(1937)	(1936)	(1969)	(1934)	(1934)	(1933)	(1988)	(1988)	(1988)

05294000 POMME DE TERRE RIVER AT APPLETON, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1931 - 2005	
ANNUAL TOTAL	55,744.7		99,189			
ANNUAL MEAN	152		272		a132	
HIGHEST ANNUAL MEAN					420	1997
LOWEST ANNUAL MEAN					21.1	1977
HIGHEST DAILY MEAN	436	Oct 4	1,380	Jun 17	6,760	Apr 6, 1997
LOWEST DAILY MEAN	7.9	Feb 11	b72	Dec 14	c0.00	Aug 3, 1934
ANNUAL SEVEN-DAY MINIMUM	8.0	Feb 7	116	Jan 15	0.00	Feb 1, 1936
MAXIMUM PEAK FLOW			1,400	Jun 17	d8,890	Apr 7, 1997
MAXIMUM PEAK STAGE			8.46	Jun 17	d18.13	Apr 7, 1997
INSTANTANEOUS LOW FLOW			b40	Dec 14	c0.00	Aug 3, 1934
ANNUAL RUNOFF (AC-FT)	110,600		196,700		95,770	
ANNUAL RUNOFF (CFSM)	0.168		0.300		0.146	
10 PERCENT EXCEEDS	274		436		306	
50 PERCENT EXCEEDS	140		219		56	
90 PERCENT EXCEEDS	14		126		8.6	

a Median of annual mean discharges is 100 ft^3/s.
b Result of freezeup.
c Many days, several years.
d Due in part to dam failure; from highwater mark.
e Estimated.



05300000 LAC QUI PARLE RIVER NEAR LAC QUI PARLE, MN

LOCATION.--Lat 44°59'43", long 95°55'10", in SW¼SW¼ sec. 27, T.118 N., R.42 W., Lac qui Parle County, Hydrologic Unit 07020003, on left bank 20 ft downstream from highway bridge and 0.5 mi southwest of village of Lac qui Parle.

DRAINAGE AREA.--960 mi^2.

PERIOD OF RECORD.--April 1910 to November 1914; March 1931 to September 1999 (winter records incomplete prior to 1934), October 1999 to March 2001 (peak flow only), April 2001 to current year. Published as "at Lac qui Parle," 1910-14.

REVISED RECORDS.--WSP 1308: 1912(M), 1935(M).

GAGE.--Water-stage recorder. Datum of gage is 946.98 ft above sea level (NGVD of 1929, Minnesota Department of Transportation benchmark). Apr. 27, 1910 to Nov. 15, 1914, nonrecording gage at site 2 mi downstream at different datum. Mar. 17, 1931 to Mar. 9, 1937, nonrecording gage at site 40 ft upstream at present datum. Prior to July 26, 1998, gage datum 5.00 ft higher at present location.

REMARKS.--Records good except those for estimated daily discharges, which are poor.

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	97	545	128	e28	e14	e32	178	167	268	194	22	6.2
2	90	506	135	e23	e14	e31	163	158	248	180	21	6.0
3	82	458	134	e21	e15	e30	152	150	235	171	18	8.1
4	85	383	118	e18	e15	e31	142	144	232	156	17	8.2
5	91	331	140	e17	e17	e33	137	138	256	144	14	7.4
6	92	305	106	e14	e25	e35	132	133	270	132	13	10
7	91	286	115	e13	e19	e35	129	135	309	122	12	9.9
8	86	266	108	e13	e18	e36	123	136	373	115	12	11
9	81	245	107	e13	e18	e36	120	147	436	113	10	10
10	76	225	107	e12	e18	e33	122	151	527	105	9.2	9.1
11	69	209	104	e11	e19	e32	159	166	606	100	8.7	7.5
12	64	195	100	e11	e19	e34	252	192	673	97	8.2	8.8
13	58	183	e83	e9.7	e20	e34	469	264	807	92	7.8	13
14	54	172	e96	e10	e37	e33	642	351	1,370	85	8.5	22
15	53	164	e92	e8.5	e42	e32	668	500	1,230	81	8.2	27
16	55	158	e88	e7.5	e39	e30	603	526	1,200	77	8.5	26
17	54	152	e85	e6.7	e37	e29	519	534	1,100	75	8.3	22
18	53	147	e77	e6.6	e37	e28	454	515	983	65	8.9	21
19	51	149	e64	e7.5	e36	e29	410	467	847	57	11	30
20	50	145	e67	e7.6	e36	e30	372	431	719	57	11	26
21	49	142	e64	e8.6	e36	e34	340	395	622	54	9.3	20
22	48	145	e58	e8.7	e35	e40	310	349	552	46	8.5	19
23	48	146	e51	e8.9	e34	e52	283	317	494	41	7.9	16
24	48	144	e45	e11	e33	e63	264	303	430	37	7.6	16
25	43	139	e42	e13	e33	e74	241	302	374	36	7.0	19
26	42	128	e41	e13	e32	e87	220	307	329	38	8.0	29
27	43	131	e37	e12	e32	e103	206	331	292	34	8.5	21
28	98	134	e34	e12	e32	e120	196	357	261	30	10	20
29	195	116	e33	e12	---	e146	185	347	236	28	8.2	20
30	261	115	e32	e13	---	e165	175	323	221	27	8.5	19
31	556	---	e28	e13	---	e200	---	295	---	25	7.6	---
TOTAL	2,863	6,564	2,519	383.3	762	1,727	8,366	9,031	16,500	2,614	328.4	488.2
MEAN	92.4	219	81.3	12.4	27.2	55.7	279	291	550	84.3	10.6	16.3
MAX	556	545	140	28	42	200	668	534	1,370	194	22	30
MIN	42	115	28	6.6	14	28	120	133	221	25	7.0	6.0
AC-FT	5,680	13,020	5,000	760	1,510	3,430	16,590	17,910	32,730	5,180	651	968
CFSM	0.10	0.23	0.08	0.01	0.03	0.06	0.29	0.30	0.57	0.09	0.01	0.02
IN.	0.11	0.25	0.10	0.01	0.03	0.07	0.32	0.35	0.64	0.10	0.01	0.02

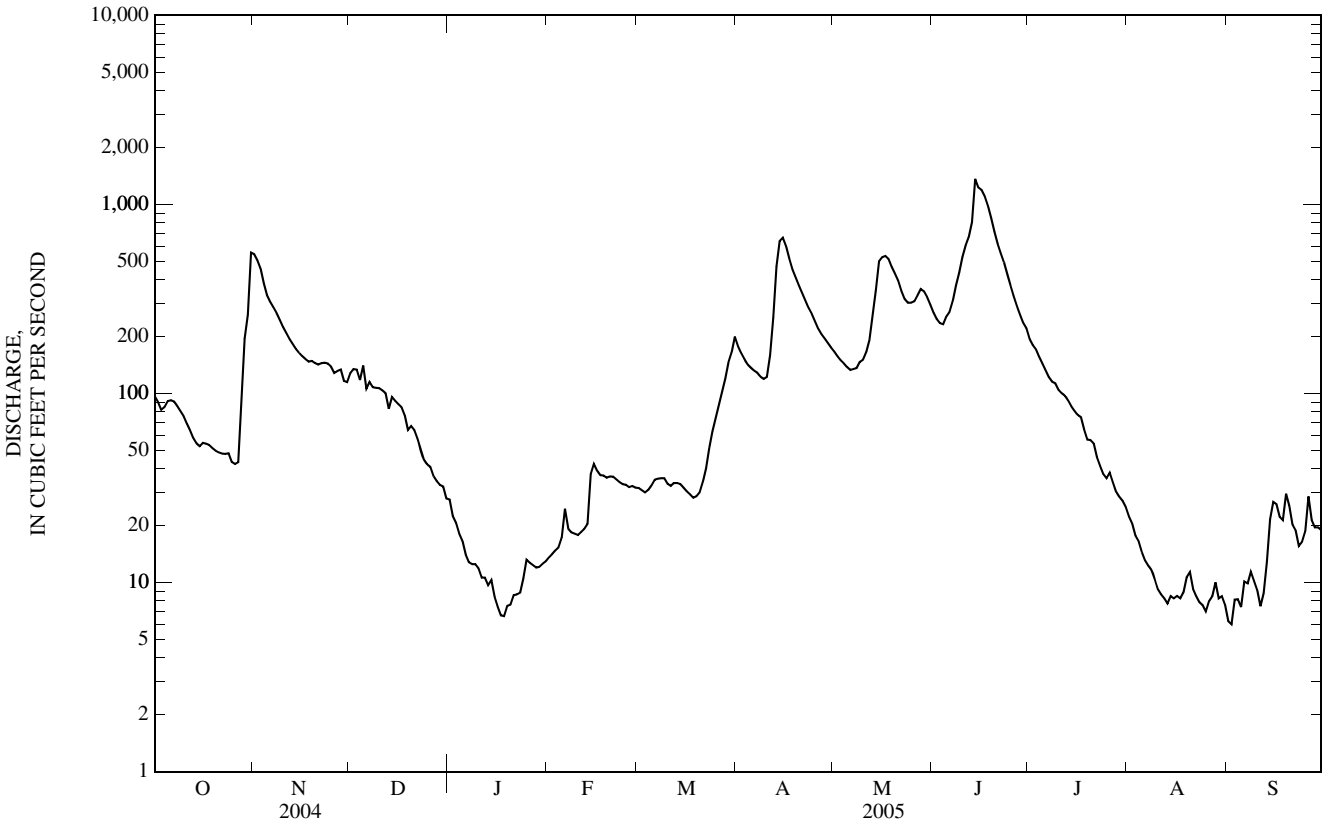
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 2005, BY WATER YEAR (WY)

MEAN	42.9	50.0	26.8	11.8	22.9	289	591	251	272	137	73.7	37.3
MAX	629	378	149	88.1	244	1,634	5,354	1,264	1,762	1,613	765	535
(WY)	(1996)	(1996)	(1996)	(1994)	(1998)	(1985)	(1997)	(1995)	(1984)	(1993)	(1953)	(1985)
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
(WY)	(1932)	(1932)	(1932)	(1932)	(1934)	(1934)	(1934)	(1934)	(1934)	(1934)	(1931)	(1931)

05300000 LAC QUI PARLE RIVER NEAR LAC QUI PARLE, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1910 - 2005	
ANNUAL TOTAL	23,672.3		52,145.9			
ANNUAL MEAN	64.7		143		a157	
HIGHEST ANNUAL MEAN					625	1993
LOWEST ANNUAL MEAN					0.00	1934
HIGHEST DAILY MEAN	556	Oct 31	1,370	Jun 14	16,000	Apr 10, 1969
LOWEST DAILY MEAN	1.1	Feb 15	6.0	Sep 2	b0.00	Jul 15, 1931
ANNUAL SEVEN-DAY MINIMUM	1.2	Feb 9	7.4	Aug 30	0.00	Jul 15, 1931
MAXIMUM PEAK FLOW			1,430	Jun 14	17,100	Apr 10, 1969
MAXIMUM PEAK STAGE			10.43	Jun 14	c24.37	Apr 9, 1965
INSTANTANEOUS LOW FLOW			5.7	Sep 1	b0.00	Jul 15, 1931
ANNUAL RUNOFF (AC-FT)	46,950		103,400		113,700	
ANNUAL RUNOFF (CFSM)	0.067		0.149		0.164	
ANNUAL RUNOFF (INCHES)	0.92		2.02		2.22	
10 PERCENT EXCEEDS	145		373		360	
50 PERCENT EXCEEDS	43		64		24	
90 PERCENT EXCEEDS	1.6		9.5		0.60	

a Median of annual mean discharges is 120 ft^3/s.
b Many days, several years.
c From highwater mark, backwater from ice. Datum then in use.
e Estimated.



05301000 MINNESOTA RIVER NEAR LAC QUI PARLE, MN

LOCATION.--Lat 45°01'17", long 95°52'05", in NW¼NE¼ sec.24, T.118 N., R.42 W., Chippewa County, Hydrologic Unit 07020004, on left bank 200 ft downstream from highway bridge and dam, 2.4 mi northeast of city of Lac Qui Parle, and 3.5 mi west of city of Watson.

DRAINAGE AREA.--4,050 mi^2 (approximately).

PERIOD OF RECORD.--October 1942 to September 1994, October 1998 to present.

REVISED RECORDS.--WDR MN-91-2; 1979

GAGE.--Water-stage recorder. Datum of gage is 900.00 ft above sea level (NGVD or 1929, levels by U.S. Army Corps of Engineers). Prior to Nov. 10, 1944, at datum 0.20 ft. lower.

REMARKS.--Records good except those for estimated daily discharges, which are fair to poor. Part of flow from 2,050 mi^2, of Chippewa River basin at most times diverted into Minnesota River above station. Some regulation by Big Stone Lake since Apr. 17, 1937, Lac qui Parle since Jan. 1938, Marsh Lake since Nov. 1, 1939, and Odessa Dam since May 1974.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 1997 reached a discharge of approximately 43,000 ft^3/s, combination of measured flow through dam and indirect computation of flow over dam; peak stage occurred Apr. 7, 1997 (from Corps of Engineers).

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	564	1,620	527	257	221	500	1,110	1,080	1,200	3,490	591	749
2	551	1,400	444	256	202	632	1,010	1,120	1,200	3,500	298	698
3	560	1,260	446	328	213	630	1,000	1,170	1,200	3,490	296	699
4	595	1,250	453	468	249	623	959	1,150	1,200	3,440	298	699
5	645	1,220	459	523	275	623	706	993	1,210	3,330	319	698
6	644	1,180	514	532	273	622	556	814	1,370	3,080	358	800
7	642	1,180	652	520	276	611	695	876	1,550	2,850	357	914
8	646	1,180	828	466	302	616	919	877	1,700	2,710	451	807
9	645	1,170	898	456	319	654	956	1,010	2,330	2,580	590	691
10	644	1,170	862	359	319	696	953	1,220	2,490	2,530	506	563
11	644	1,170	812	216	318	696	984	1,270	2,520	2,520	384	380
12	643	1,070	e794	156	318	696	1,290	1,230	2,540	2,570	379	256
13	661	948	e776	e156	318	697	2,000	1,240	2,500	2,520	378	356
14	650	893	e744	e158	354	695	2,580	1,380	2,570	2,510	378	515
15	639	851	e678	161	458	696	2,740	1,370	2,590	2,540	377	595
16	591	802	678	160	482	693	2,690	1,510	2,620	2,600	377	599
17	562	803	696	161	481	693	2,410	1,740	3,110	2,510	298	601
18	538	843	e678	184	451	629	2,090	1,840	3,440	2,490	261	601
19	509	912	e705	202	427	516	1,850	1,950	3,470	2,470	275	560
20	475	969	e757	202	426	515	1,920	1,930	3,520	2,400	276	505
21	413	965	e840	204	425	517	1,910	1,870	3,530	2,080	276	504
22	372	964	e809	e207	424	514	1,870	1,490	3,510	1,580	301	503
23	396	e977	e734	215	426	515	1,760	1,180	3,530	1,000	318	451
24	384	932	e640	272	423	524	1,670	1,100	3,550	967	317	380
25	503	883	577	400	422	607	1,480	1,170	3,540	1,020	316	381
26	598	878	445	380	428	653	1,210	1,490	3,510	1,230	601	383
27	618	883	421	357	419	655	1,140	1,790	3,490	1,410	1,100	386
28	947	873	318	325	416	776	1,130	1,780	3,490	1,370	1,170	391
29	1,660	813	214	294	---	1,000	1,110	1,700	3,560	1,210	1,330	391
30	1,810	626	234	279	---	1,090	1,070	1,440	3,570	1,080	1,260	391
31	1,740	---	252	250	---	1,160	---	1,260	---	936	879	---
TOTAL	21,489	30,685	18,885	9,104	10,065	20,744	43,768	42,040	79,610	70,013	15,315	16,447
MEAN	693	1,023	609	294	359	669	1,459	1,356	2,654	2,258	494	548
MAX	1,810	1,620	898	532	482	1,160	2,740	1,950	3,570	3,500	1,330	914
MIN	372	626	214	156	202	500	556	814	1,200	936	261	256
AC-FT	42,620	60,860	37,460	18,060	19,960	41,150	86,810	83,390	157,900	138,900	30,380	32,620
CFSM	0.17	0.25	0.15	0.07	0.09	0.17	0.36	0.33	0.66	0.56	0.12	0.14
IN.	0.20	0.28	0.17	0.08	0.09	0.19	0.40	0.39	0.73	0.64	0.14	0.15

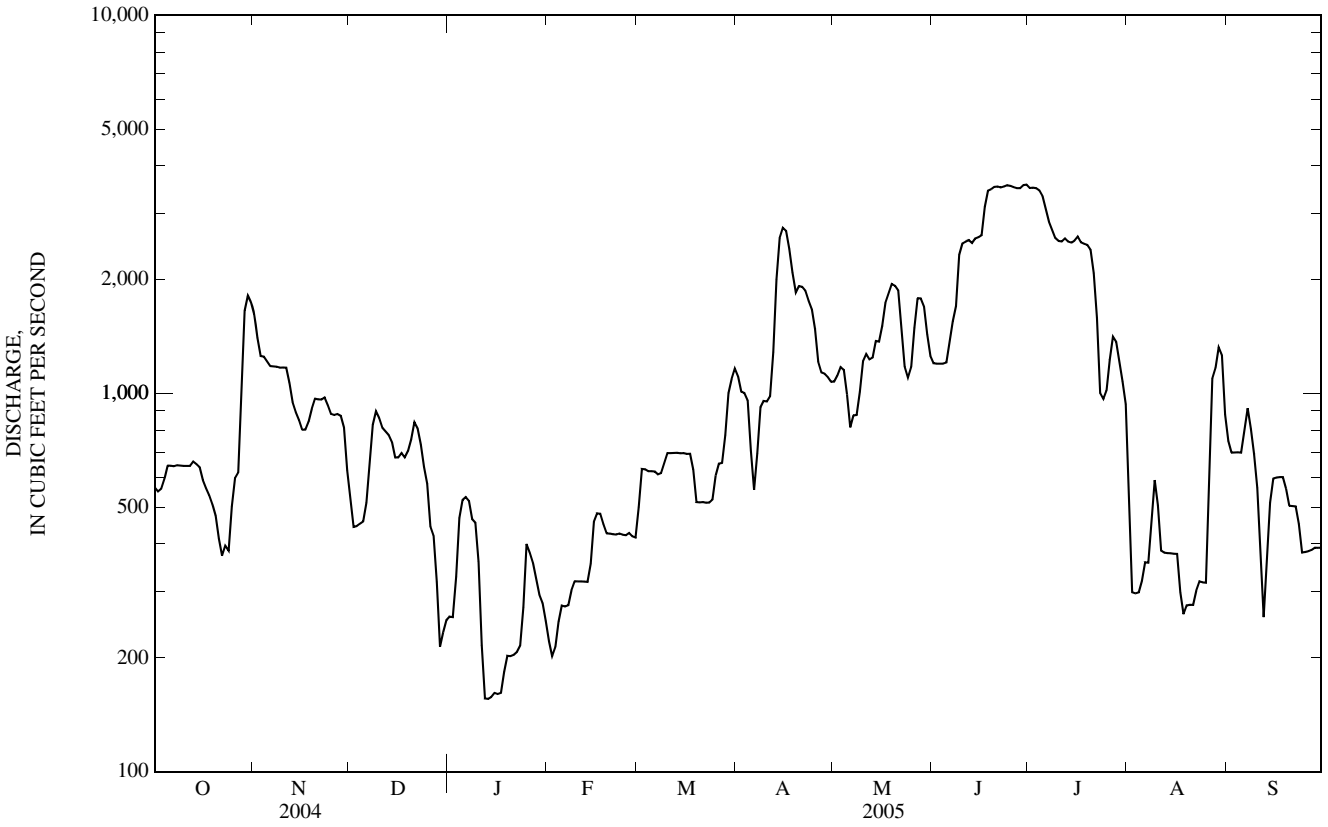
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2005, BY WATER YEAR (WY)

MEAN	277	298	237	159	193	834	2,659	1,428	1,192	1,007	523	267
MAX	2,924	2,327	1,204	574	644	4,599	14,580	5,837	4,229	7,024	6,012	2,402
(WY)	(1987)	(1985)	(1985)	(1987)	(1999)	(1994)	(2001)	(2001)	(1984)	(1993)	(1993)	(1986)
MIN	4.16	0.46	0.17	0.19	0.09	46.5	151	122	29.5	14.7	11.8	5.59
(WY)	(1977)	(1977)	(1977)	(1977)	(1977)	(1956)	(1961)	(1959)	(1988)	(1988)	(1974)	(1967)

05301000 MINNESOTA RIVER NEAR LAC QUI PARLE, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1943 - 2005	
ANNUAL TOTAL	182,990		378,165			
ANNUAL MEAN	500		1,036		757	
HIGHEST ANNUAL MEAN					2,507	1986
LOWEST ANNUAL MEAN					75.7	1959
HIGHEST DAILY MEAN	2,360	Jun 16	3,570	Jun 30	29,800	Apr 14, 2001
LOWEST DAILY MEAN	46	Sep 14	156	Jan 12	a0.00	Oct 19, 1951
ANNUAL SEVEN-DAY MINIMUM	46	Sep 14	162	Jan 12	0.00	Oct 19, 1951
MAXIMUM PEAK FLOW			b3,610	Jun 29	30,100	Apr 14, 2001
MAXIMUM PEAK STAGE			b31.42	Jun 29	40.05	Apr 14, 2001
INSTANTANEOUS LOW FLOW			c151	Jan 13	a0.00	Oct 19, 1951
ANNUAL RUNOFF (AC-FT)	363,000		750,100		548,100	
ANNUAL RUNOFF (CFSM)	0.123		0.256		0.187	
ANNUAL RUNOFF (INCHES)	1.68		3.47		2.54	
10 PERCENT EXCEEDS	978		2,520		1,810	
50 PERCENT EXCEEDS	418		697		240	
90 PERCENT EXCEEDS	99		298		28	

a Many days, several years.
b Due in part to regulation.
c Minimum observed, due in part to regulation and freezeup.
e Estimated.



05304500 CHIPPEWA RIVER NEAR MILAN, MN

LOCATION.--Lat 45°06'30", long 95°47'55", in NE¼NE¼ sec. 21, T.119 N., R.41 W., Chippewa County, Hydrologic Unit 07020005, on right bank 20 ft downstream from bridge on State Highway 40, 2.0 mi upstream from small tributary, and 5.5 mi east of Milan.

DRAINAGE AREA.--1,880 mi^2.

PERIOD OF RECORD.--March 1937 to current year.

REVISED RECORDS.--WSP 1145: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 959.69 ft above sea level (NGVD of 1929). Prior to June 15, 1942, nonrecording gage on bridge 800 ft downstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow may be influenced by regulation from several small lakes upstream from gage.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct 30	2100	700	2.76	Jul 13	0200	1,050	3.44
Apr 13	1000	1,990	5.01	Aug 28	0100	1,860	4.81
May 27	0800	1,100	3.53	Sep 14	1700	887	3.14
Jun 15	0400	*2,950	*6.38				

Minimum discharge, 108 ft^3/s, Dec. 13, (result of freezeup, daily value ice-effected).

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	352	623	e307	e137	e143	e167	719	920	884	1,040	463	1,280
2	350	593	e310	e138	e143	e169	709	886	840	990	437	1,160
3	377	561	e319	e134	e144	e167	674	856	807	965	418	1,050
4	390	534	e329	e136	e144	e177	655	827	785	942	408	961
5	386	513	e332	e133	e147	e187	641	805	798	914	386	865
6	369	495	e326	e133	e163	e190	687	785	900	889	367	776
7	356	479	e332	e131	e155	e206	710	772	1,360	862	353	702
8	346	456	e326	e131	e159	e209	661	790	2,450	847	338	678
9	338	438	e324	e129	e154	e216	647	815	2,750	825	328	644
10	328	432	e303	e129	e155	e219	649	816	2,520	797	315	615
11	323	413	e283	e127	e156	e232	741	806	2,240	773	306	583
12	316	406	e275	e127	e159	e225	1,470	795	2,310	945	298	578
13	311	393	e165	e127	e162	e232	1,950	846	2,390	1,030	292	736
14	306	379	e138	e129	e173	e229	1,720	912	2,880	983	281	867
15	301	372	e242	e128	e178	e225	1,560	912	2,900	924	272	847
16	294	371	e272	e126	e172	e219	1,490	884	2,620	836	263	778
17	288	370	e260	e126	e168	e222	1,460	872	2,300	763	255	728
18	290	368	e233	e129	e170	e216	1,450	874	2,050	715	281	692
19	297	369	e202	e126	e169	e222	1,420	949	1,840	679	290	675
20	296	383	e191	e127	e173	e213	1,430	972	1,680	646	283	668
21	288	404	e178	e127	e169	e219	1,420	937	1,740	627	272	662
22	291	408	e169	e129	e171	e235	1,370	913	1,700	602	259	643
23	294	409	e161	e134	e172	e245	1,300	877	1,580	578	248	618
24	306	399	e158	e133	e170	e271	1,240	825	1,480	580	237	595
25	312	393	e153	e136	e169	e307	1,180	819	1,380	582	227	587
26	316	363	e150	e139	e169	e357	1,130	988	1,300	569	538	595
27	311	366	e142	e140	e169	e425	1,080	1,090	1,230	565	1,700	607
28	352	370	e137	e141	e169	e510	1,040	1,050	1,160	554	1,800	603
29	467	e302	e137	e142	---	e608	992	1,010	1,110	535	1,600	588
30	668	e301	e137	e144	---	e701	957	967	1,070	515	1,460	571
31	672	---	e137	e144	---	728	---	930	---	495	1,380	---
TOTAL	10,891	12,663	7,128	4,112	4,545	8,748	33,152	27,500	51,054	23,567	16,355	21,952
MEAN	351	422	230	133	162	282	1,105	887	1,702	760	528	732
MAX	672	623	332	144	178	728	1,950	1,090	2,900	1,040	1,800	1,280
MIN	288	301	137	126	143	167	641	772	785	495	227	571
AC-FT	21,600	25,120	14,140	8,160	9,020	17,350	65,760	54,550	101,300	46,750	32,440	43,540
CFSM	0.19	0.22	0.12	0.07	0.09	0.15	0.59	0.47	0.91	0.40	0.28	0.39
IN.	0.22	0.25	0.14	0.08	0.09	0.17	0.66	0.54	1.01	0.47	0.32	0.43

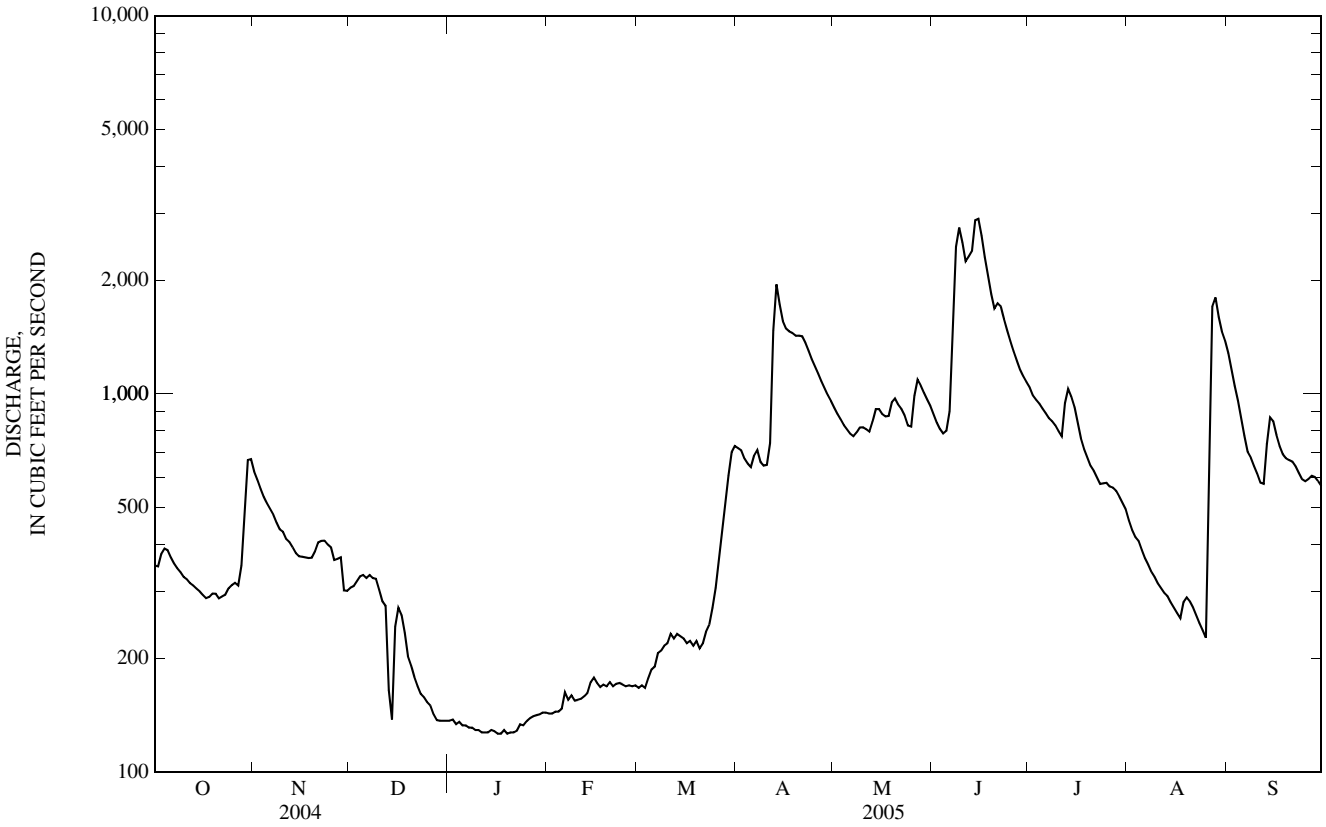
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2005, BY WATER YEAR (WY)

MEAN	236	204	129	76.1	79.9	396	1,110	706	621	491	284	229
MAX	1,996	1,318	655	425	432	2,141	6,606	2,462	2,248	2,507	2,183	2,273
(WY)	(1985)	(1985)	(1985)	(1987)	(1998)	(1985)	(1997)	(1986)	(1984)	(1995)	(1993)	(1986)
MIN	5.51	8.67	4.77	0.09	0.00	2.92	90.9	81.6	36.8	15.1	6.19	3.50
(WY)	(1977)	(1977)	(1977)	(1940)	(1940)	(1965)	(1959)	(1939)	(1940)	(1940)	(1976)	(1976)

05304500 CHIPPEWA RIVER NEAR MILAN, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1938 - 2005	
ANNUAL TOTAL	115,727		221,667			
ANNUAL MEAN	316		607		a381	
HIGHEST ANNUAL MEAN					1,307	1986
LOWEST ANNUAL MEAN					45.4	1940
HIGHEST DAILY MEAN	2,100	Jun 10	2,900	Jun 15	13,400	Apr 6, 1997
LOWEST DAILY MEAN	40	Jan 31	126	Jan 16,17,19	b0.00	Jan 4, 1940
ANNUAL SEVEN-DAY MINIMUM	41	Jan 30	127	Jan 15	0.00	Jan 4, 1940
MAXIMUM PEAK FLOW			2,950	Jun 15	14,400	Apr 6, 1997
MAXIMUM PEAK STAGE			6.38	Jun 15	c18.03	Apr 6, 1997
INSTANTANEOUS LOW FLOW			d108	Dec 13	b0.00	Jan 4, 1940
ANNUAL RUNOFF (AC-FT)	229,500		439,700		275,800	
ANNUAL RUNOFF (CFSM)	0.168		0.323		0.203	
ANNUAL RUNOFF (INCHES)	2.29		4.39		2.75	
10 PERCENT EXCEEDS	568		1,300		992	
50 PERCENT EXCEEDS	272		408		155	
90 PERCENT EXCEEDS	53		143		18	

a Median of annual mean discharges is 330 ft^3/s.
b Many days in 1940.
c From highwater mark.
d Result of freeze-up. May have been lower due to backwater from ice.
e Estimated.



05311000 MINNESOTA RIVER AT MONTEVIDEO, MN

LOCATION.--Lat 44°56'00", long 95°44'00", in NW¼NW¼ sec. 19, T.117 N., R.40 W., Yellow Medicine County, Hydrologic Unit 07020004, on right bank 20 ft upstream from bridge on U.S. Highway 212, at Montevideo, and 480 ft downstream from Chippewa River.

DRAINAGE AREA.--6,180 mi^2 (approximately).

PERIOD OF RECORD.--July 1909 to September 1917, October 1917 to September 1929 (no winter records), October 1929 to current year. Prior to October 1939, published as "near Montevideo." Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 1035: 1919(M). WSP 1085: 1935-36. WSP 1508: 1912, 1925(M), 1929(M), WDR MN-2000-1; 1995, 1996.

GAGE.--Water-stage recorder. Datum of gage is 909.12 ft above sea level (NGVD of 1929). July 22, 1909 to Feb. 4, 1932, nonrecording gage at bridge 600 ft downstream at present datum. Feb. 5, 1932 to Nov. 26, 1934, nonrecording gage at bridge 100 ft downstream at present datum.

REMARKS.--Records good except those for estimated daily discharge, which are fair to poor. Flow regulated by Big Stone Lake since Apr. 17, 1937, Lac qui Parle since Jan. 1938, and Marsh Lake since Nov. 1, 1939.

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	785	2,230	768	e510	e304	e483	1,540	1,590	1,720	4,250	1,030	1,420
2	792	2,000	674	e508	e285	e650	1,420	1,600	1,690	4,170	636	1,290
3	780	1,730	643	e538	e294	e707	1,380	1,690	1,660	4,140	579	1,230
4	793	1,660	656	e645	e327	e699	1,370	1,680	1,640	4,110	579	1,210
5	843	1,630	631	e739	e353	e699	1,200	1,520	1,650	4,070	571	1,190
6	855	1,550	658	e743	e356	e702	951	1,220	1,720	3,950	610	1,210
7	853	1,530	750	e711	e359	e691	946	1,240	2,070	3,740	622	1,340
8	831	1,510	917	e668	e375	e696	1,240	1,250	2,300	3,560	618	1,240
9	814	1,490	1,060	e656	e392	e694	1,310	1,300	2,900	3,390	720	1,050
10	806	1,480	1,070	e573	e401	773	1,320	1,620	3,300	3,240	739	990
11	805	1,470	992	e427	e399	779	1,400	1,760	3,370	3,170	619	816
12	807	1,430	988	e299	e401	780	1,740	1,760	3,410	3,220	585	606
13	814	1,240	938	e220	e398	779	2,500	1,720	3,450	3,220	579	612
14	827	1,170	e935	e216	e437	778	3,100	1,870	3,550	3,190	577	855
15	817	1,130	e923	e219	e531	784	3,290	1,890	3,610	3,160	573	987
16	787	1,060	891	e219	e557	780	3,360	1,910	3,540	3,170	545	998
17	749	1,050	780	e217	e559	778	3,350	2,230	3,600	3,150	524	952
18	737	1,060	821	e244	e529	769	3,160	2,360	3,820	3,090	428	940
19	702	1,130	e871	e256	e508	648	2,850	2,490	4,010	3,060	422	951
20	688	1,210	e944	e258	e508	614	2,800	2,510	4,110	3,060	414	872
21	641	1,220	e1,020	e259	e503	616	2,760	2,490	4,190	2,900	411	853
22	590	1,220	e1,030	e265	e500	621	2,720	2,280	4,260	2,450	416	848
23	590	1,250	e993	e298	e497	627	2,590	1,860	4,290	1,560	468	840
24	596	1,240	e892	e350	e498	631	2,500	1,640	4,320	1,300	471	770
25	610	1,170	e788	e475	e488	670	2,300	1,640	4,350	1,270	468	777
26	744	1,150	e673	e455	e494	747	1,980	1,870	4,340	1,410	526	769
27	764	1,150	e632	e440	e484	756	1,770	2,330	4,300	1,650	1,200	703
28	1,140	1,140	e516	e403	e483	786	1,720	2,410	4,270	1,680	1,610	695
29	2,170	1,090	e449	e381	---	1,050	1,690	2,380	4,240	1,550	1,850	737
30	2,380	882	e494	e362	---	1,250	1,610	2,140	4,270	1,370	1,990	743
31	2,360	---	e504	e328	---	1,420	---	1,880	---	1,290	1,660	---
TOTAL	28,470	40,272	24,901	12,882	12,220	23,457	61,867	58,130	99,950	88,540	23,040	28,494
MEAN	918	1,342	803	416	436	757	2,062	1,875	3,332	2,856	743	950
MAX	2,380	2,230	1,070	743	559	1,420	3,360	2,510	4,350	4,250	1,990	1,420
MIN	590	882	449	216	285	483	946	1,220	1,640	1,270	411	606
AC-FT	56,470	79,880	49,390	25,550	24,240	46,530	122,700	115,300	198,300	175,600	45,700	56,520
CFSM	0.15	0.22	0.13	0.07	0.07	0.12	0.33	0.30	0.54	0.46	0.12	0.15
IN.	0.17	0.24	0.15	0.08	0.07	0.14	0.37	0.35	0.60	0.53	0.14	0.17

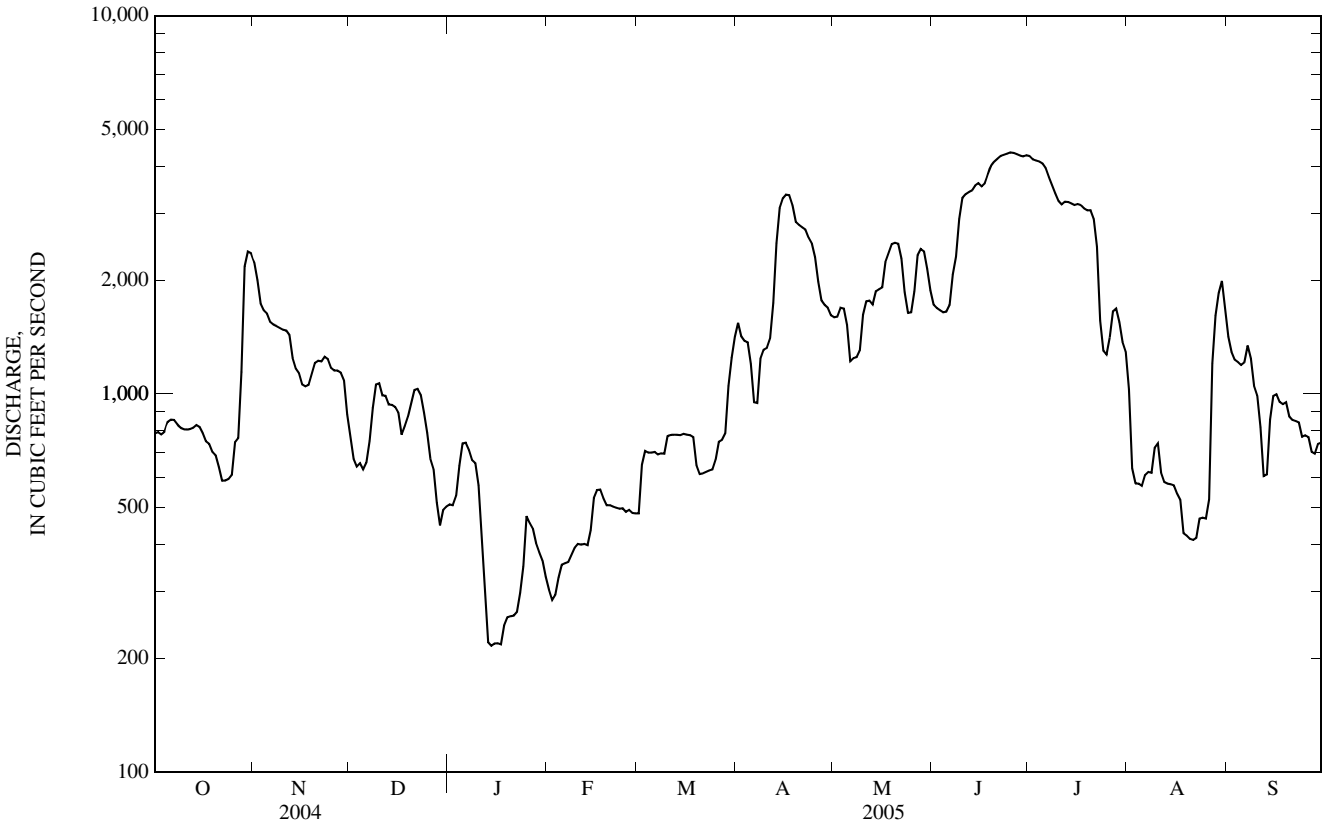
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 2005, BY WATER YEAR (WY)

MEAN	366	394	291	185	212	938	2,895	1,649	1,367	1,169	591	348
MAX	3,675	3,797	1,572	760	864	5,363	22,320	7,315	5,088	7,853	7,084	2,613
(WY)	(1996)	(1996)	(1996)	(1987)	(1998)	(1994)	(1997)	(1986)	(1984)	(1993)	(1993)	(1986)
MIN	0.76	1.61	2.35	1.57	1.06	5.06	7.82	3.13	1.40	1.89	0.60	0.57
(WY)	(1934)	(1935)	(1935)	(1934)	(1937)	(1934)	(1934)	(1934)	(1934)	(1933)	(1933)	(1933)

05311000 MINNESOTA RIVER AT MONTEVIDEO, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1909 - 2005	
ANNUAL TOTAL	255,212		502,223			
ANNUAL MEAN	697		1,376		a913	
HIGHEST ANNUAL MEAN					3,166	1997
LOWEST ANNUAL MEAN					4.43	1934
HIGHEST DAILY MEAN	3,010	Jun 16	b4,350	Jun 25	46,800	Apr 7, 1997
LOWEST DAILY MEAN	94	Feb 2	216	Jan 14	c0.00	Aug 14, 1933
ANNUAL SEVEN-DAY MINIMUM	96	Jan 30	227	Jan 13	0.00	Jul 5, 1934
MAXIMUM PEAK FLOW			4,400	Jun 25	47,500	Apr 6, 1997
MAXIMUM PEAK STAGE			12.72	Jun 25	23.90	Apr 6, 1997
INSTANTANEOUS LOW FLOW			b,d216	Jan 14	c0.00	Aug 14, 1933
ANNUAL RUNOFF (AC-FT)	506,200		996,200		661,700	
ANNUAL RUNOFF (CFSM)	0.113		0.223		0.148	
ANNUAL RUNOFF (INCHES)	1.54		3.02		2.01	
10 PERCENT EXCEEDS	1,400		3,200		2,320	
50 PERCENT EXCEEDS	624		951		290	
90 PERCENT EXCEEDS	138		433		34	

a Median of annual mean discharges is 680 ft^3/s.
b Due in part to regulation.
c Many days in 1933, 34, and 36.
d Estimated daily-mean discharge, backwater from ice.
e Estimated.



05313500 YELLOW MEDICINE RIVER NEAR GRANITE FALLS, MN

LOCATION.--Lat 44°43'18", long 95°31'07", in NW¼SW¼ sec. 35, T.115 N., R.39 W., Yellow Medicine County, Hydrologic Unit 07020004, on right bank 50 ft downstream from highway bridge, 6 mi upstream from mouth, and 8 mi south of town of Granite Falls.

DRAINAGE AREA.--664 mi^2.

PERIOD OF RECORD.--March 1931 to September 1935 (no winter records), October 1935 to September 1938, October 1939 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 1508: 1931, 1934(M), 1937(M), 1946(M), 1950(M).

GAGE.--Water-stage recorder. Datum of gage is 960.64 ft above sea level (NGVD of 1929). Mar. 16, 1931 to June 13, 1938, nonrecording gage, on bridge 50 ft upstream at present datum. Oct. 12, 1939 to Nov. 30, 1952, nonrecording gage 500 ft downstream at present datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair to poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1919 reached a stage of 17.5 ft, from information by local residents, discharge, 25,200 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 260 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr 14	1200	697	4.42	Jun 16	0600	*933	*4.84
May 15	0700	527	4.07				

Minimum discharge, 6.3 ft^3/s, Jan. 19, (estimated daily-mean discharge).

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	74	135	56	e17	e10	e17	e141	147	246	182	18	11
2	67	129	65	e17	e10	e18	138	140	231	162	17	9.8
3	61	119	64	e16	e11	e17	122	133	224	150	16	8.8
4	61	112	67	e16	e12	e18	110	126	219	137	15	8.2
5	60	108	53	e15	e13	e19	101	120	234	127	14	7.3
6	58	108	59	e14	e14	e21	94	114	357	112	42	9.2
7	54	108	66	e13	e13	e21	92	116	642	100	44	10
8	50	106	62	e13	e12	e22	90	124	682	97	31	12
9	46	104	55	e13	e12	e22	87	138	654	96	25	12
10	45	103	63	e13	e12	e19	88	161	615	e90	20	11
11	44	103	48	e12	e13	e18	116	170	584	e83	18	10
12	39	96	e46	e12	e13	e20	259	220	568	e77	16	25
13	37	89	e31	e11	e14	e19	543	355	559	71	15	41
14	35	86	e35	e11	e20	e19	687	475	563	74	14	33
15	37	82	e39	e9.3	e22	e18	656	524	720	78	13	44
16	37	79	e39	e7.7	e23	e18	561	501	908	68	13	66
17	36	77	e38	e7.0	e23	e18	490	479	806	61	13	59
18	39	74	e38	e6.5	e22	e17	448	475	694	53	15	47
19	39	75	e30	e6.3	e22	e19	417	456	603	48	15	43
20	37	75	e27	e7.0	e23	e17	380	403	527	46	14	36
21	39	73	e28	e7.0	e22	e16	339	362	465	41	17	67
22	38	77	e25	e7.0	e21	e17	303	326	419	37	22	91
23	37	80	e22	e7.4	e20	e20	270	303	378	33	18	78
24	38	77	e19	e7.7	e19	e26	242	282	345	31	15	73
25	39	65	e18	e10	e19	e37	223	278	308	29	13	70
26	41	76	e18	e9.7	e19	e50	204	307	279	27	14	62
27	40	79	e19	e9.2	e19	e63	188	318	252	25	14	69
28	51	55	e18	e8.1	e18	e77	176	322	233	27	13	98
29	55	58	e17	e8.4	---	e99	164	321	217	26	12	94
30	62	58	e17	e9.4	---	e123	155	294	201	23	12	84
31	117	---	e17	e9.9	---	e134	---	267	---	20	12	---
TOTAL	1,513	2,666	1,199	330.6	471	1,039	7,884	8,757	13,733	2,231	550	1,289.3
MEAN	48.8	88.9	38.7	10.7	16.8	33.5	263	282	458	72.0	17.7	43.0
MAX	117	135	67	17	23	134	687	524	908	182	44	98
MIN	35	55	17	6.3	10	16	87	114	201	20	12	7.3
AC-FT	3,000	5,290	2,380	656	934	2,060	15,640	17,370	27,240	4,430	1,090	2,560
CFSM	0.07	0.13	0.06	0.02	0.03	0.05	0.40	0.43	0.69	0.11	0.03	0.06
IN.	0.08	0.15	0.07	0.02	0.03	0.06	0.44	0.49	0.77	0.12	0.03	0.07

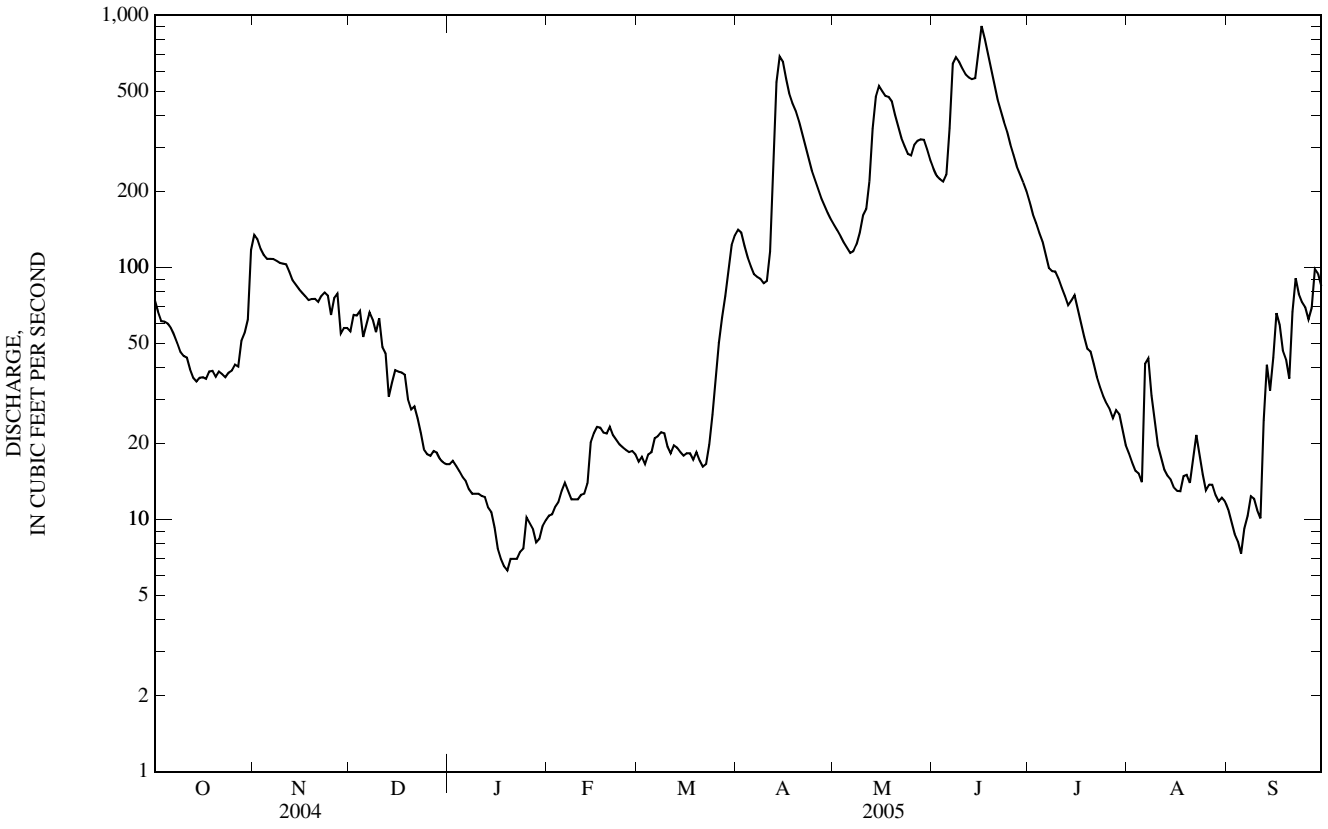
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2005, BY WATER YEAR (WY)

MEAN	41.8	45.8	29.4	14.1	19.2	212	511	211	278	135	66.2	41.4
MAX	561	392	256	88.3	149	933	3,302	1,087	2,484	1,600	510	1,005
(WY)	(1996)	(1996)	(1996)	(1996)	(1998)	(1986)	(1969)	(1944)	(1984)	(1993)	(1953)	(1986)
MIN	1.41	1.60	1.39	0.90	0.13	3.67	2.58	1.18	1.18	0.34	0.38	0.47
(WY)	(1937)	(1938)	(1936)	(1948)	(1959)	(1975)	(1934)	(1934)	(1934)	(1933)	(1934)	(1976)

05313500 YELLOW MEDICINE RIVER NEAR GRANITE FALLS, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1931 - 2005	
ANNUAL TOTAL	35,689.7		41,662.9			
ANNUAL MEAN	97.5		114		a142	
HIGHEST ANNUAL MEAN					566	1993
LOWEST ANNUAL MEAN					8.32	1959
HIGHEST DAILY MEAN	1,110	Jun 1	908	Jun 16	16,400	Apr 10, 1969
LOWEST DAILY MEAN	1.8	Jan 25	c6.3	Jan 19	b0.00	Jul 26, 1931
ANNUAL SEVEN-DAY MINIMUM	1.9	Jan 23	6.9	Jan 17	0.00	Jan 21, 1948
MAXIMUM PEAK FLOW			933	Jun 16	17,200	Apr 10, 1969
MAXIMUM PEAK STAGE			4.84	Jun 16	14.90	Apr 10, 1969
INSTANTANEOUS LOW FLOW			c6.3	Jan 19	b0.00	Jul 26, 1931
ANNUAL RUNOFF (AC-FT)	70,790		82,640		102,800	
ANNUAL RUNOFF (CFSM)	0.147		0.172		0.214	
ANNUAL RUNOFF (INCHES)	2.00		2.33		2.90	
10 PERCENT EXCEEDS	248		341		330	
50 PERCENT EXCEEDS	46		46		23	
90 PERCENT EXCEEDS	3.7		12		2.8	

a Median of annual mean discharges is 87 ft^3/s.
b Many days, several years.
c Estimated daily-mean discharge, backwater from ice.
e Estimated



05315000 REDWOOD RIVER NEAR MARSHALL, MN

LOCATION.--Lat 44°25'49", long 95°50'43", in SW¼SE¼ sec. 12, T.111 N., R.42 W., Lyon County, Hydrologic Unit 07020006, on right bank 1.7 mi upstream from Redwood River diversion structure on southwest edge of town of Marshall, MN. Prior to Apr. 10, 1980, at site 5 mi downstream.

DRAINAGE AREA.--259 mi^2.

PERIOD OF RECORD.--March 1940 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WDR MN-89-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,188.23 ft above sea level (NGVD of 1929). March 1940 to April 9, 1980, nonrecording gage 5.0 mi downstream from present site at datum 43.35 ft lower (crest-stage gage added June 12, 1968). From March 1964 to April 1980, nonrecording gage and crest-stage gage on diversion channel 1.5 mi downstream at datum 1,100.00 ft above sea level.

REMARKS.--Records good except those for estimated daily discharge, which are poor. Water diverted at medium and high stages into diversion channel 3.4 mi below station. Diversion began Mar. 18, 1964. Unknown amount of natural diversion into Cottonwood River basin occurs at extremely high stages 0.8 mi below 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	e11	17	9.9	e8.0	e9.2	e8.9	26	49	42	71	12	14
2	e15	17	9.5	e8.1	e9.6	e8.8	22	49	40	63	11	15
3	e14	16	9.3	e7.7	e9.9	e8.7	21	44	40	63	11	14
4	e14	15	10	e6.8	e9.9	e8.8	20	42	45	60	16	13
5	e13	15	10	e6.4	e11	e9.4	20	40	49	54	14	13
6	e12	14	12	e6.0	e14	e11	20	42	53	50	12	13
7	e12	14	11	e5.3	e12	e12	20	43	58	44	11	17
8	e11	14	11	e5.3	e10	e12	20	42	86	55	10	27
9	e11	14	12	e5.1	e9.5	e11	19	45	99	57	12	24
10	e11	14	12	e5.0	e9.8	e10	20	48	97	50	11	19
11	e10	14	12	e5.2	e9.9	e9.8	77	50	103	46	12	17
12	e10	14	11	e4.9	e11	e9.8	154	60	100	44	13	25
13	e10	13	10	e4.5	e12	e10	168	86	111	38	13	66
14	e10	13	10	e4.4	e13	e9.7	155	96	136	34	14	54
15	e10	13	10	e3.7	e15	e9.6	132	90	148	31	15	41
16	e10	13	11	e3.1	e13	e9.6	129	80	145	27	15	31
17	e10	12	10	e2.6	e13	e9.5	143	77	121	25	14	24
18	e10	11	9.9	e2.3	e12	e9.5	144	73	105	24	19	20
19	e9.9	12	e6.9	e2.7	e12	e9.4	135	75	93	21	17	30
20	e9.9	13	e6.6	e3.6	e13	e9.5	123	71	85	20	16	36
21	10	11	e7.4	e3.8	e12	e9.4	114	70	120	18	12	33
22	13	11	e6.1	e4.3	e11	e9.5	104	67	131	17	13	27
23	19	12	e5.2	e4.5	e10	e11	89	64	132	16	15	24
24	19	12	e4.7	e6.6	e9.5	e14	84	58	133	14	15	25
25	19	10	e5.2	e8.9	e9.3	e23	83	58	153	15	15	88
26	18	11	e6.0	e8.7	e9.2	e26	77	59	133	19	14	170
27	18	11	e6.6	e8.2	e9.3	e33	71	57	113	18	15	159
28	19	9.6	e7.5	e7.8	e9.2	e49	59	55	96	19	15	145
29	19	11	e8.4	e7.8	---	55	55	51	86	18	15	128
30	18	e11	e8.9	e8.0	---	48	51	47	82	16	15	115
31	18	---	e8.4	e8.7	---	33	---	43	---	13	15	---
TOTAL	413.8	387.6	278.5	178.0	308.3	507.9	2,355	1,831	2,935	1,060	427	1,427
MEAN	13.3	12.9	8.98	5.74	11.0	16.4	78.5	59.1	97.8	34.2	13.8	47.6
MAX	19	17	12	8.9	15	55	168	96	153	71	19	170
MIN	9.9	9.6	4.7	2.3	9.2	8.7	19	40	40	13	10	13
AC-FT	821	769	552	353	612	1,010	4,670	3,630	5,820	2,100	847	2,830
CFSM	0.05	0.05	0.03	0.02	0.04	0.06	0.30	0.23	0.38	0.13	0.05	0.18
IN.	0.06	0.06	0.04	0.03	0.04	0.07	0.34	0.26	0.42	0.15	0.06	0.20

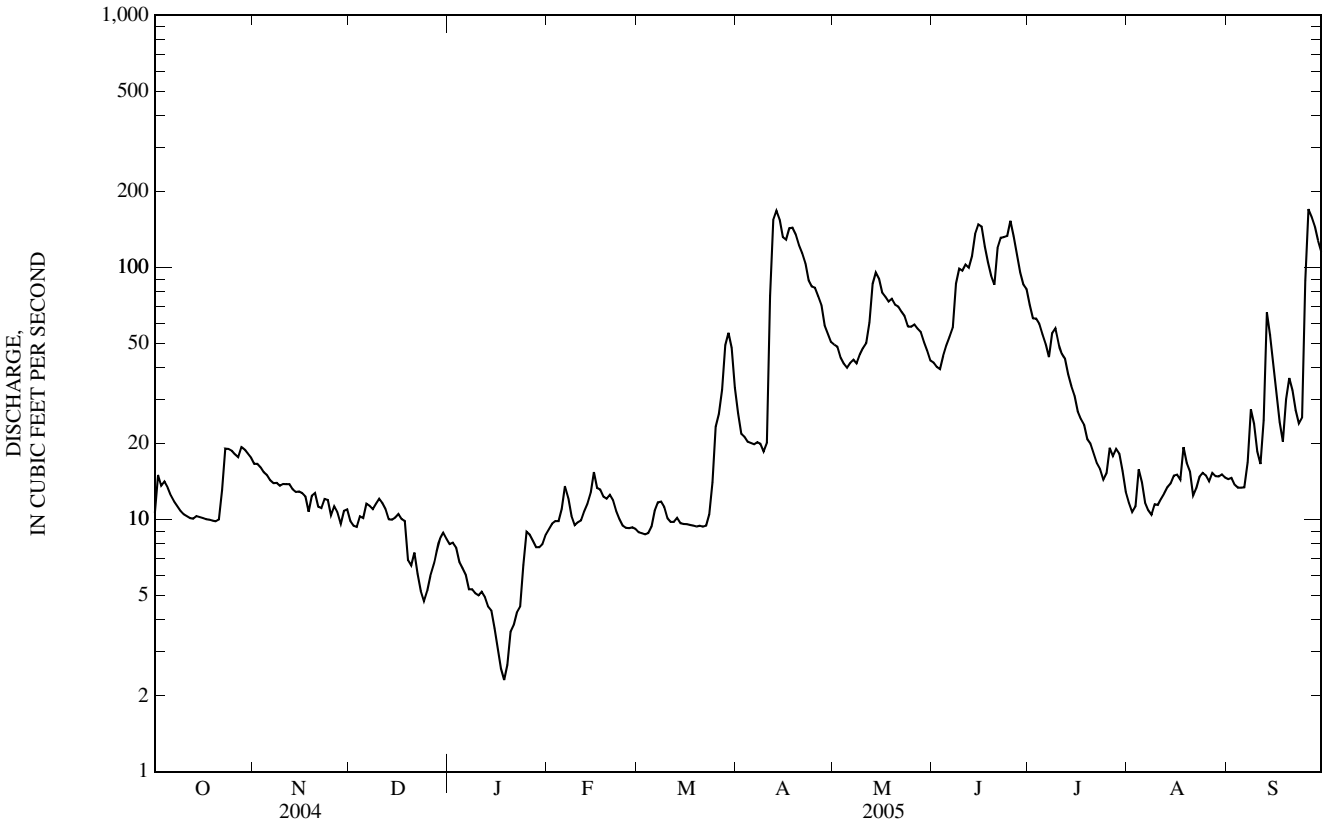
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2005, BY WATER YEAR (WY)

MEAN	26.8	26.8	16.0	9.12	16.1	117	238	126	124	68.7	33.2	25.2
MAX	310	202	115	59.4	101	571	1,252	1,205	936	1,161	610	292
(WY)	(1996)	(1996)	(1999)	(1994)	(1983)	(1983)	(2001)	(1993)	(1993)	(1993)	(1993)	(1986)
MIN	0.03	0.58	0.87	0.00	0.09	2.70	7.36	3.90	0.83	0.06	0.04	0.01
(WY)	(1977)	(1977)	(1977)	(1977)	(1979)	(1965)	(1990)	(1981)	(1976)	(1976)	(1941)	(1941)

05315000 REDWOOD RIVER NEAR MARSHALL, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1940 - 2005	
ANNUAL TOTAL	20,498.2		12,109.1			
ANNUAL MEAN	56.0		33.2		a69.5	
HIGHEST ANNUAL MEAN					421	1993
LOWEST ANNUAL MEAN					5.13	1981
HIGHEST DAILY MEAN	1,500	Jun 18	170	Sep 26	5,300	May 9, 1993
LOWEST DAILY MEAN	3.3	Feb 4	2.3	Jan 18	b0.00	Jul 28, 1940
ANNUAL SEVEN-DAY MINIMUM	3.4	Jan 30	3.1	Jan 15	0.00	Jul 28, 1940
MAXIMUM PEAK FLOW			177	Sep 26	6,380	May 9, 1993
MAXIMUM PEAK STAGE			9.29	Sep 26	17.00	May 9, 1993
INSTANTANEOUS LOW FLOW			c2.3	Jan 18	b0.00	Jul 28, 1940
ANNUAL RUNOFF (AC-FT)	40,660		24,020		50,320	
ANNUAL RUNOFF (CFSM)	0.216		0.128		0.268	
ANNUAL RUNOFF (INCHES)	2.94		1.74		3.64	
10 PERCENT EXCEEDS	107		91		165	
50 PERCENT EXCEEDS	14		14		13	
90 PERCENT EXCEEDS	4.6		8.1		2.1	

a Median of annual mean discharges is 44 ft^3/s.
b Many days, several years.
c Estimated daily-mean discharge, backwater from ice.
e Estimated.



05316500 REDWOOD RIVER NEAR REDWOOD FALLS, MN

LOCATION.--Lat 44°31'25', long 95°10'20", in SE¼NE¼ sec. 9, T.112 N., R.36 W., Redwood County, Hydrologic Unit 07020006, on right bank 4 ft upstream from highway bridge, 3 mi west of town of Redwood Falls, and 8.5 mi upstream from mouth.

DRAINAGE AREA.--629 mi^2.

PERIOD OF RECORD.--July 1909 to September 1914 (no winter records except 1911-12). August 1930 to September 1935 (no winter records), October 1935 to current year.

REVISED RECORDS.--WDR MN-89-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 972.33 ft above sea level (NGVD of 1929). July 1909 to September 1914, nonrecording gage at bridge 20 ft downstream at datum 0.22 ft lower. August 1930 to Oct. 25, 1949, nonrecording gage, at bridge 20 ft downstream at present datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair to poor. Natural discharge affected by unknown amount of interbasin flow between Yellow Medicine, Redwood, and Cottonwood River Basins during extreme floods.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr 13	0800	*677	*3.80	May 18	0100	652	3.76
May 13	1500	471	3.40	Jun 11	0000	511	3.50

Minimum discharge, 5.4 ft^3/s, Dec. 5, gage height, 1.43 ft (result of freezeup).

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	63	69	47	e28	e24	e30	e128	152	216	183	29	10
2	59	65	50	e28	e24	e30	e84	146	210	161	30	9.5
3	67	62	44	e27	e25	e30	e66	139	207	152	30	8.8
4	62	62	52	e27	e27	e31	75	133	214	139	38	8.7
5	57	62	39	e25	e29	e32	73	126	237	125	64	8.5
6	56	63	53	e24	e33	e35	72	120	251	113	51	12
7	55	61	50	e21	e36	e36	69	123	253	104	39	16
8	53	57	52	e21	e37	e38	69	176	280	102	31	21
9	50	54	56	e19	e36	e39	69	188	336	122	26	56
10	49	57	56	e18	e35	e39	73	202	448	136	22	60
11	48	54	54	e18	e35	e37	102	207	493	121	21	38
12	48	51	e54	e17	e35	e37	412	238	447	107	20	43
13	46	51	e49	e16	e36	e36	664	428	415	98	19	162
14	47	52	e43	e14	e39	e35	598	431	448	88	17	302
15	46	51	e50	e12	e43	e35	511	400	487	74	16	251
16	51	52	e51	e11	e45	e35	445	359	457	59	16	185
17	46	53	e50	e10	e40	e35	438	470	428	52	17	143
18	47	52	e49	e11	e41	e34	422	616	381	45	20	113
19	48	56	e45	e12	e36	e35	391	496	331	41	21	105
20	47	58	e39	e14	e36	e35	351	421	290	40	36	159
21	47	62	e38	e14	e35	e35	313	381	266	38	28	151
22	47	60	e38	e17	e33	e34	285	357	255	37	22	138
23	54	61	e31	e19	e33	e35	260	325	276	35	18	115
24	56	56	e25	e20	e33	e38	244	301	264	32	15	103
25	55	48	e25	e22	e32	e48	230	284	263	35	14	111
26	e57	58	e25	e22	e33	e60	218	282	256	41	21	227
27	e57	54	e25	e22	e32	e92	201	275	247	59	24	297
28	e64	44	e28	e21	e31	e114	185	264	224	45	20	281
29	79	48	e29	e22	---	e185	171	253	202	37	17	257
30	95	36	e30	e22	---	e188	159	238	196	32	13	238
31	79	---	e30	e23	---	e179	---	224	---	29	11	---
TOTAL	1,735	1,669	1,307	597	954	1,702	7,378	8,755	9,278	2,482	766	3,629.5
MEAN	56.0	55.6	42.2	19.3	34.1	54.9	246	282	309	80.1	24.7	121
MAX	95	69	56	28	45	188	664	616	493	183	64	302
MIN	46	36	25	10	24	30	66	120	196	29	11	8.5
AC-FT	3,440	3,310	2,590	1,180	1,890	3,380	14,630	17,370	18,400	4,920	1,520	7,200
CFSM	0.09	0.09	0.07	0.03	0.05	0.09	0.39	0.45	0.49	0.13	0.04	0.19
IN.	0.10	0.10	0.08	0.04	0.06	0.10	0.44	0.52	0.55	0.15	0.05	0.21

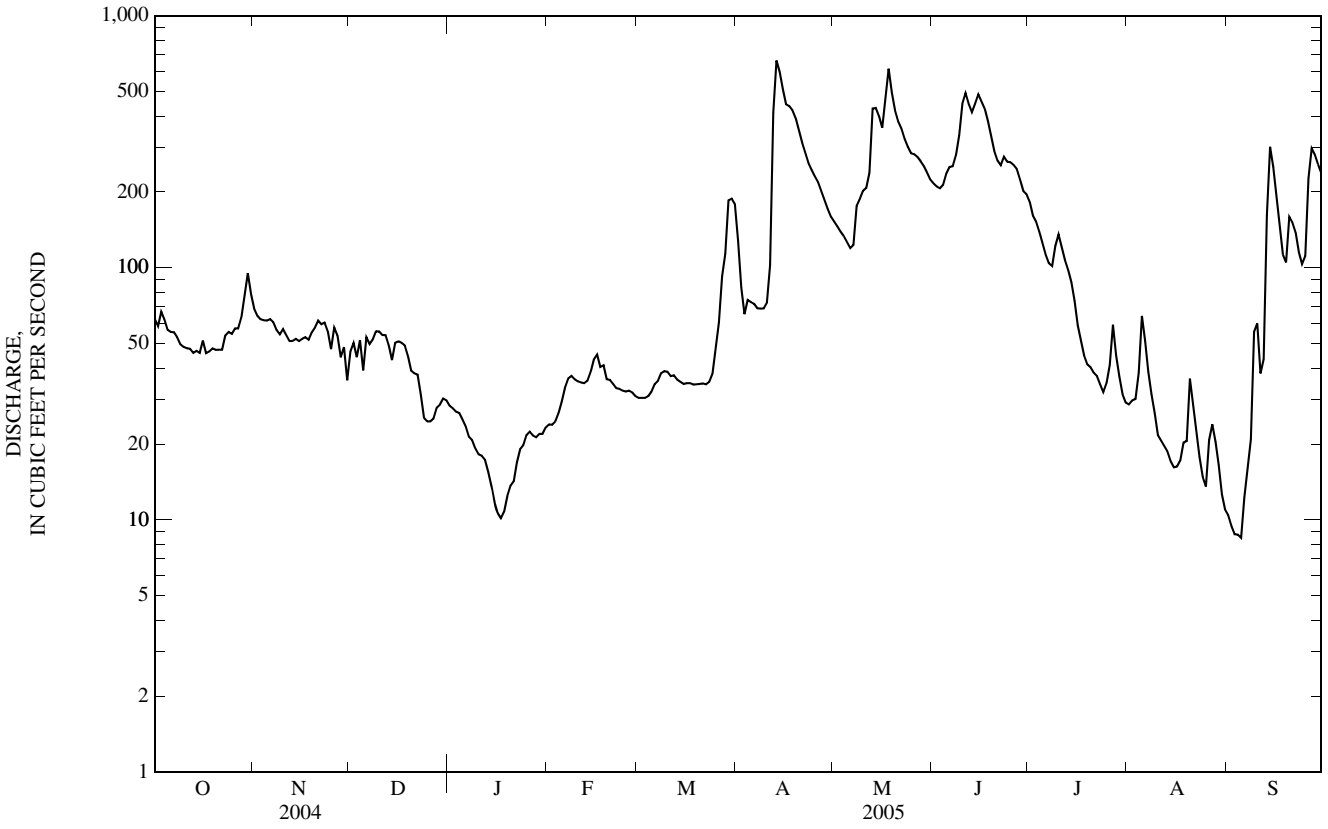
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 2005, BY WATER YEAR (WY)

MEAN	55.5	60.2	38.4	18.8	24.5	233	457	238	273	150	76.8	51.3
MAX	509	541	245	110	167	1,289	2,880	1,530	2,724	1,994	934	673
(WY)	(1996)	(1980)	(1983)	(2002)	(1983)	(1983)	(1969)	(1993)	(1993)	(1993)	(1993)	(1986)
MIN	0.84	0.96	0.46	0.19	0.20	1.54	14.6	2.75	1.01	0.44	0.51	0.31
(WY)	(1937)	(1936)	(1936)	(1940)	(1937)	(1965)	(1934)	(1934)	(1934)	(1934)	(1934)	(1976)

05316500 REDWOOD RIVER NEAR REDWOOD FALLS, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1909 - 2005	
ANNUAL TOTAL	60,033.7		40,252.5			
ANNUAL MEAN	164		110		a153	
HIGHEST ANNUAL MEAN					789	1993
LOWEST ANNUAL MEAN					10.8	1959
HIGHEST DAILY MEAN	2,870	May 30	664	Apr 13	13,200	Apr 9, 1969
LOWEST DAILY MEAN	7.6	Jan 29	8.5	Sep 5	b0.00	Jan 17, 1940
ANNUAL SEVEN-DAY MINIMUM	8.0	Jan 25	9.8	Aug 31	0.01	Jan 25, 1940
MAXIMUM PEAK FLOW			677	Apr 13	19,700	Jun 18, 1957
MAXIMUM PEAK STAGE			3.80	Apr 13	c18.01	Mar 29, 1997
INSTANTANEOUS LOW FLOW			d5.4	Dec 5	b0.00	Jan 17, 1940
ANNUAL RUNOFF (AC-FT)	119,100		79,840		110,900	
ANNUAL RUNOFF (CFSM)	0.261		0.175		0.243	
ANNUAL RUNOFF (INCHES)	3.55		2.38		3.31	
10 PERCENT EXCEEDS	323		287		364	
50 PERCENT EXCEEDS	54		52		35	
90 PERCENT EXCEEDS	10		20		2.9	

a Median of annual mean discharges is 110 ft^3/s.
b Many days in 1940 and 1959.
c Backwater from ice.
d Result of freezeup.
e Estimated.



05316580 MINNESOTA RIVER AT MORTON, MN

LOCATION.--Lat 44°32'46', long 94°59'46", in NE¼SE¼ sec. 36, T.113 N., R.35 W., Redwood County, Hydrologic Unit 07020007, on right bank 10 ft downstream from highway bridge, ½ mi southwest of town of Morton, and 203 mi upstream from mouth.

DRAINAGE AREA.--8,970 mi^2.

PERIOD OF RECORD.--October 2000 to current year.

GAGE.--Water-stage recorder.

REMARKS.--Records good except those for estimated daily discharges, which are fair to poor. Some regulation from Big Stone Lake, Marsh Lake, and Lac qui Parle.

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	e1,170	4,490	e1,280	e787	e436	e739	e5,310	2,520	3,240	5,280	1,690	1,930
2	e1,210	3,880	e1,160	e770	e425	e802	e5,290	2,440	3,000	5,190	e1,300	1,650
3	e1,260	e3,420	e1,100	e746	e404	e973	e4,900	2,380	2,870	5,150	e1,100	1,490
4	e1,290	e3,030	e1,080	e772	e431	e1,060	e4,640	2,410	2,840	5,070	e891	1,400
5	e1,300	e2,750	e1,060	e855	e468	e1,080	e4,340	2,420	2,910	4,940	e776	1,370
6	e1,260	2,560	e1,010	e945	e490	e1,070	e3,950	2,330	3,130	4,840	e823	1,380
7	e1,310	2,420	e1,030	e942	e516	e1,110	e3,590	2,110	3,550	4,710	e823	1,380
8	e1,340	2,300	1,100	e918	e522	e1,200	e3,310	2,060	5,100	4,570	e812	1,480
9	e1,340	2,240	1,230	e901	e522	e1,230	e3,050	2,180	6,500	4,410	e846	1,490
10	e1,310	2,190	1,390	e860	e533	e1,210	e3,210	2,250	7,340	4,220	834	1,360
11	e1,190	e2,130	1,460	e754	e560	e1,190	e3,690	2,490	7,680	4,070	926	1,220
12	e1,270	e2,090	1,390	e656	e560	e1,160	e4,340	2,780	7,630	3,910	904	1,160
13	e1,330	e1,920	e1,300	e492	e614	e1,130	e5,000	3,410	7,450	3,950	795	1,590
14	e1,320	e1,820	e1,300	e425	e721	e1,110	e5,670	3,820	7,460	4,050	721	1,820
15	e1,340	e1,750	e1,270	e420	e883	e1,050	e5,980	3,890	7,470	3,950	721	2,080
16	e1,220	1,680	e1,260	e431	e1,060	e1,130	5,910	3,810	7,460	3,820	714	1,970
17	e1,150	1,610	e1,200	e436	e1,210	e1,150	5,760	3,810	7,290	3,720	702	1,770
18	e1,050	1,560	e1,160	e442	e1,200	e1,150	5,630	4,430	6,880	3,640	719	1,590
19	e1,010	1,630	e1,170	e463	e1,100	e1,150	5,380	4,730	6,480	3,530	689	1,490
20	e995	1,700	e1,190	e458	e1,010	e1,210	4,940	4,800	6,230	3,480	614	1,510
21	e934	1,740	e1,260	e468	e919	e1,260	4,570	4,620	6,130	3,480	590	1,510
22	e912	1,770	e1,250	e474	e838	e1,310	4,340	4,430	6,080	3,360	559	1,420
23	e897	1,750	e1,180	e480	e811	e1,330	4,130	4,100	6,060	3,030	571	e1,390
24	e858	e1,720	e1,100	e479	e775	e1,280	3,960	3,580	6,000	2,350	591	e1,390
25	e852	e1,690	e1,050	e549	e784	e1,380	3,770	3,230	5,880	1,910	556	e1,460
26	e839	1,670	e990	e574	e766	e2,000	3,540	3,190	5,750	1,840	573	e1,480
27	886	1,640	e907	e597	e748	e2,920	3,190	3,410	5,660	1,820	653	e1,480
28	1,020	1,620	e917	e554	e721	e4,050	2,860	3,810	5,570	1,990	916	1,510
29	1,580	e1,600	e778	e522	---	e5,130	2,700	3,910	5,460	2,080	1,660	1,440
30	3,790	e1,520	e738	e500	---	e5,230	2,620	3,810	5,380	2,000	1,920	1,400
31	5,020	---	e795	e463	---	e5,290	---	3,560	---	1,830	2,080	---
TOTAL	42,253	63,890	35,105	19,133	20,027	53,084	129,570	102,720	170,480	112,190	28,069	45,610
MEAN	1,363	2,130	1,132	617	715	1,712	4,319	3,314	5,683	3,619	905	1,520
MAX	5,020	4,490	1,460	945	1,210	5,290	5,980	4,800	7,680	5,280	2,080	2,080
MIN	839	1,520	738	420	404	739	2,620	2,060	2,840	1,820	556	1,160
AC-FT	83,810	126,700	69,630	37,950	39,720	105,300	257,000	203,700	338,100	222,500	55,670	90,470
CFSM	0.15	0.24	0.13	0.07	0.08	0.19	0.48	0.37	0.63	0.40	0.10	0.17
IN.	0.18	0.26	0.15	0.08	0.08	0.22	0.54	0.43	0.71	0.47	0.12	0.19

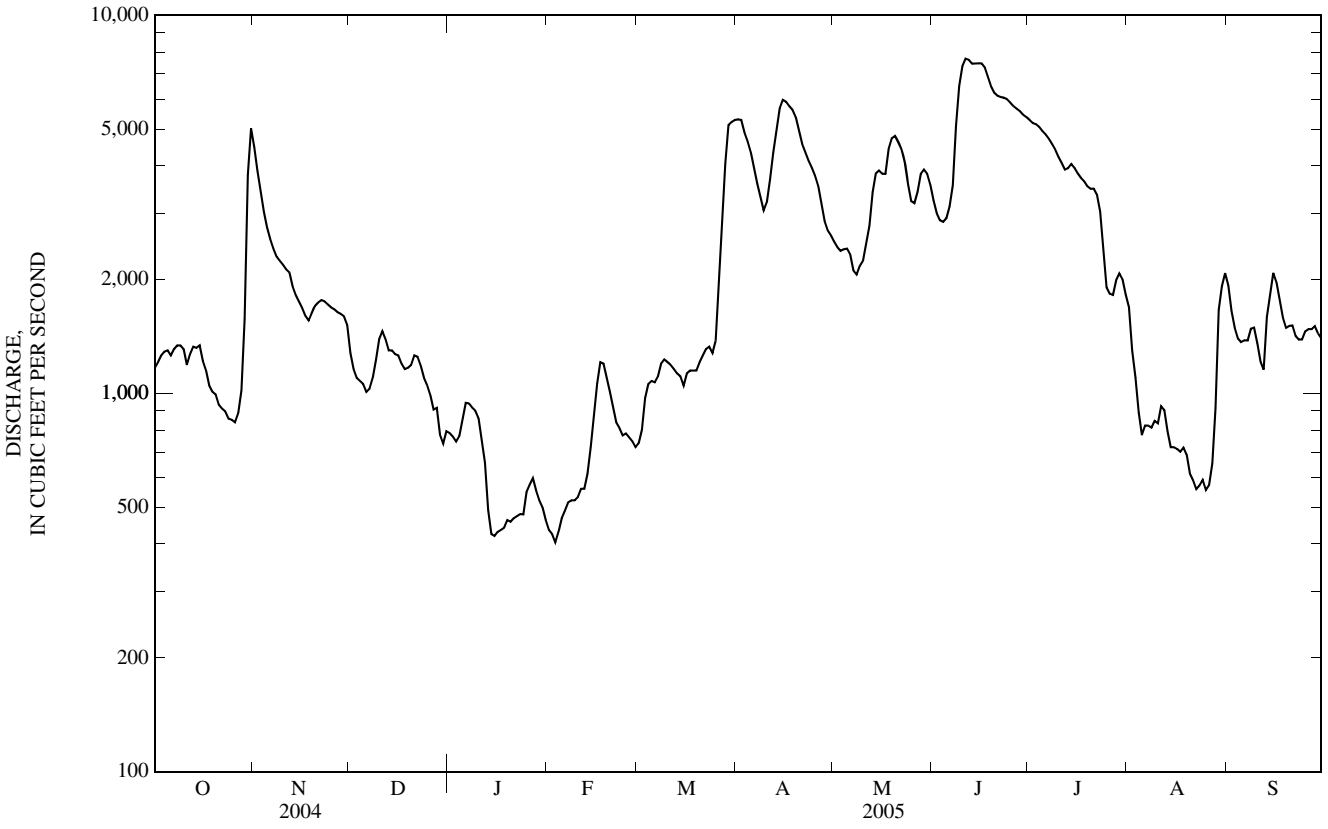
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2005, BY WATER YEAR (WY)

MEAN	588	821	606	411	465	1,272	7,766	4,702	4,367	2,458	926	727
MAX	1,363	2,130	1,132	661	806	1,712	26,720	11,780	6,049	3,619	1,385	1,520
(WY)	(2005)	(2005)	(2005)	(2002)	(2002)	(2005)	(2001)	(2001)	(2001)	(2005)	(2002)	(2005)
MIN	98.2	231	178	148	188	555	740	1,349	2,150	1,399	622	235
(WY)	(2001)	(2004)	(2004)	(2004)	(2004)	(2001)	(2004)	(2004)	(2003)	(2002)	(2004)	(2003)

05316580 MINNESOTA RIVER AT MORTON, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2001 - 2005	
ANNUAL TOTAL	503,193		822,131			
ANNUAL MEAN	1,375		2,252		2,090	
HIGHEST ANNUAL MEAN					4,252	2001
LOWEST ANNUAL MEAN					1,036	2004
HIGHEST DAILY MEAN	9,580	May 31	7,680	Jun 11	45,400	Apr 15, 2001
LOWEST DAILY MEAN	131	Jan 30	404	Feb 3	a81	Oct 6, 2000
ANNUAL SEVEN-DAY MINIMUM	135	Jan 29	439	Jan 14	86	Oct 5, 2000
MAXIMUM PEAK FLOW			7,730	Jun 11	45,400	Apr 15, 2001
MAXIMUM PEAK STAGE			19.73	Jun 11	b29.26	Apr 16, 2001
INSTANTANEOUS LOW FLOW			c404	Feb 3	a80	Oct 6, 2000
ANNUAL RUNOFF (AC-FT)	998,100		1,631,000		1,514,000	
ANNUAL RUNOFF (CFSM)	0.153		0.251		0.233	
ANNUAL RUNOFF (INCHES)	2.09		3.41		3.17	
10 PERCENT EXCEEDS	2,560		5,110		4,710	
50 PERCENT EXCEEDS	950		1,460		884	
90 PERCENT EXCEEDS	159		595		214	

a Due in part to regulation.
b Maximum recorded, peak stage was less than 30.0 feet.
c Minimum daily. Occurred during falling stage. Due in part to regulation.
e Estimated.



05317000 COTTONWOOD RIVER NEAR NEW ULM, MN

LOCATION.--Lat 44°17'29", long 94°26'24", in SW¼NE¼ sec. 33, T.110 N., R.30 W., Brown County, Hydrologic Unit 07020008, on left bank 600 ft upstream from highway bridge, 1.8 mi south of New Ulm, and 3.2 mi upstream from mouth.

DRAINAGE AREA.--1,300 mi^2.

PERIOD OF RECORD.--July 1909 to December 1913, March 1931 to March 1938, August 1938 to current year (winter records incomplete prior to 1936).

REVISED RECORDS.--WSP 355: 1912.

GAGE.--Water-stage recorder. Datum of gage is 796.83 ft above sea level (NGVD of 1929). July 1, 1909 to Dec. 13, 1913, nonrecording gage at site 2.7 mi upstream at different datum. Mar. 15, 1931 to Mar. 31, 1938, nonrecording gage 2.2 mi upstream at datum 11.41 ft higher. Aug. 23, 1938 to June 25, 1948, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair to poor.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,100 ft^3/s and maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Apr 18	0000	1,600	7.36	2200	1,560	7.30
May 14	1200	2,400	8.55	1100	1,200	6.63
May 19	2200	*2,840	*9.10			

Minimum discharge, 19 ft^3/s, Jan. 17, (estimated daily).

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	360	186	97	e67	e45	e76	446	471	678	389	329	74
2	333	185	118	e67	e48	e75	384	443	654	373	294	66
3	311	180	161	e64	e51	e75	339	421	631	364	269	60
4	293	172	188	e61	e53	e75	303	406	648	358	258	55
5	283	168	158	e54	e61	e76	280	406	967	342	215	51
6	271	165	169	e50	e71	e82	264	441	1,250	332	202	63
7	266	164	167	e47	e76	e94	251	434	1,020	324	234	92
8	259	161	162	e44	e76	e113	240	728	1,040	313	218	106
9	253	158	147	e42	e75	e131	232	1,180	1,140	308	197	105
10	240	154	146	e40	e75	e132	253	1,500	1,180	308	179	107
11	230	154	142	e40	e76	e129	318	1,520	1,260	305	161	146
12	222	152	144	e40	e79	e123	667	1,500	1,480	305	144	180
13	216	145	77	e40	e85	e116	932	1,970	1,500	297	132	208
14	208	139	e44	e34	e107	e109	1,400	2,370	1,360	280	119	473
15	206	138	e75	e27	e129	e102	1,400	2,200	1,360	270	112	706
16	199	139	e98	e22	e142	e91	1,310	1,840	1,310	262	105	679
17	194	140	e99	e19	e149	e83	1,520	1,560	1,170	240	98	526
18	189	139	e95	e19	e149	e75	1,580	1,770	1,050	211	118	411
19	186	156	e82	e21	e138	e74	1,470	2,640	941	189	112	530
20	181	167	e77	e23	e128	e78	1,290	2,630	849	176	107	743
21	181	162	e75	e25	e116	e79	1,110	2,080	785	167	104	719
22	181	166	e63	e28	e107	e104	972	1,690	703	155	136	613
23	194	170	e48	e30	e100	e141	869	1,450	654	141	122	512
24	191	170	e39	e34	e94	e192	776	1,260	615	133	104	435
25	187	163	e41	e40	e89	e242	707	1,130	570	159	94	457
26	182	164	e45	e42	e84	e299	658	1,040	524	182	109	599
27	178	164	e48	e42	e80	354	608	959	492	205	99	875
28	176	161	e50	e42	e78	399	570	885	468	413	92	1,170
29	185	146	e55	e42	---	551	528	821	438	472	101	1,070
30	187	131	e63	e43	---	634	498	766	417	419	95	946
31	187	---	e65	e43	---	527	---	713	---	370	84	---
TOTAL	6,929	4,759	3,038	1,232	2,561	5,431	22,175	39,224	27,154	8,762	4,743	12,777
MEAN	224	159	98.0	39.7	91.5	175	739	1,265	905	283	153	426
MAX	360	186	188	67	149	634	1,580	2,640	1,500	472	329	1,170
MIN	176	131	39	19	45	74	232	406	417	133	84	51
AC-FT	13,740	9,440	6,030	2,440	5,080	10,770	43,980	77,800	53,860	17,380	9,410	25,340
CFSM	0.17	0.12	0.08	0.03	0.07	0.13	0.57	0.97	0.70	0.22	0.12	0.33
IN.	0.20	0.14	0.09	0.04	0.07	0.16	0.63	1.12	0.78	0.25	0.14	0.37

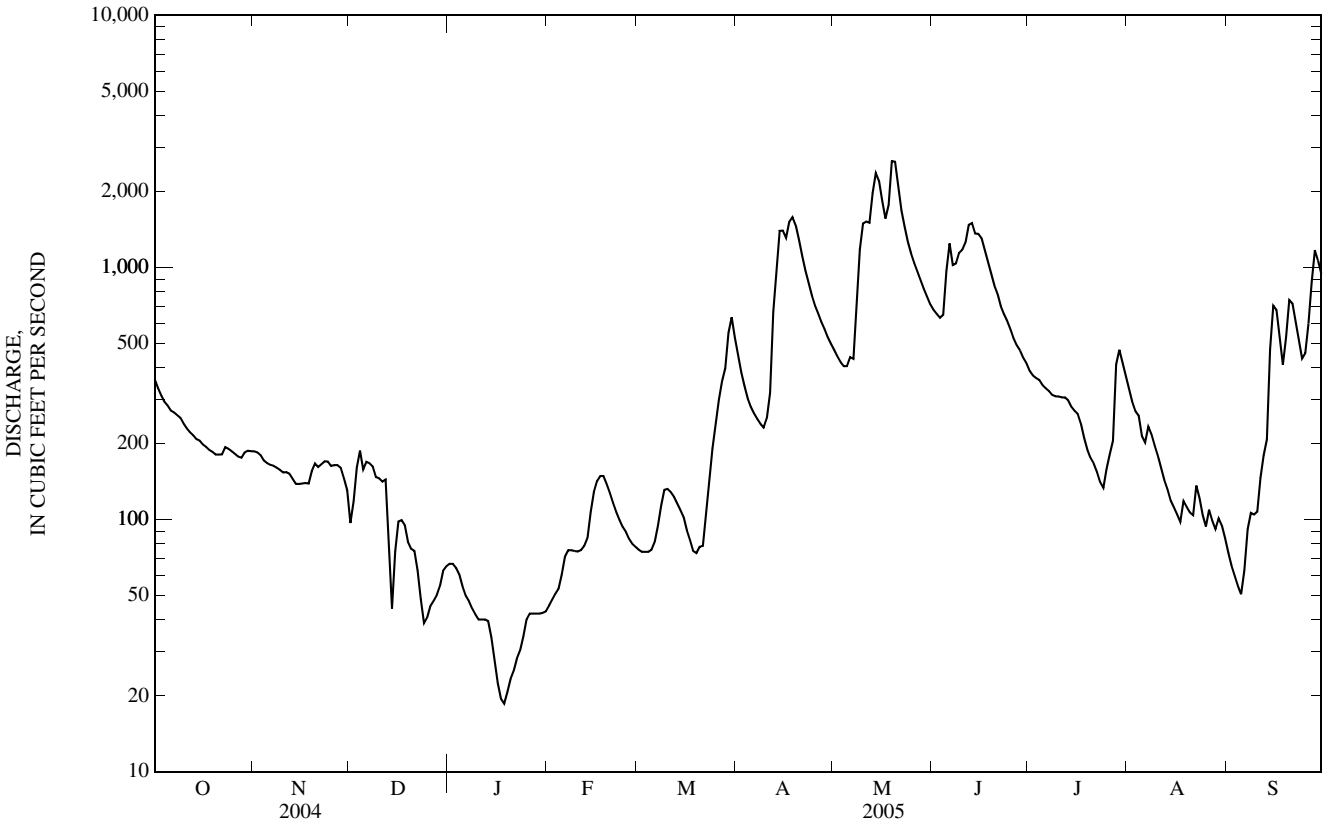
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 2005, BY WATER YEAR (WY)

MEAN	171	158	109	57.7	99.2	628	1,059	610	659	373	188	154
MAX	3,208	1,099	572	282	628	3,350	7,075	3,497	5,831	3,815	1,791	2,438
(WY)	(1969)	(1980)	(1980)	(1992)	(1983)	(1997)	(1969)	(1993)	(1993)	(1993)	(1993)	(1986)
MIN	4.57	7.97	5.77	1.61	1.47	13.9	40.0	7.57	8.58	4.37	1.05	3.28
(WY)	(1934)	(1940)	(1936)	(1940)	(1940)	(1965)	(1959)	(1934)	(1911)	(1934)	(1934)	(1933)

05317000 COTTONWOOD RIVER NEAR NEW ULM, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1909 - 2005	
ANNUAL TOTAL	153,162		138,786			
ANNUAL MEAN	418		380		a381	
HIGHEST ANNUAL MEAN					1,796	1993
LOWEST ANNUAL MEAN					41.1	1940
HIGHEST DAILY MEAN	6,290	Jun 1	2,640	May 19	27,100	Apr 9, 1969
LOWEST DAILY MEAN	19	Jan 29	19	Jan 17,18	0.60	Aug 1, 1934
ANNUAL SEVEN-DAY MINIMUM	20	Jan 27	22	Jan 15	0.64	Feb 1, 1940
MAXIMUM PEAK FLOW			2,840	May 19	28,700	Apr 10, 1969
MAXIMUM PEAK STAGE			9.10	May 19	20.86	Apr 8, 1965
INSTANTANEOUS LOW FLOW			b19	Jan 17	c0.50	Nov 27, 1952
ANNUAL RUNOFF (AC-FT)	303,800		275,300		275,900	
ANNUAL RUNOFF (CFSM)	0.322		0.292		0.293	
ANNUAL RUNOFF (INCHES)	4.38		3.97		3.98	
10 PERCENT EXCEEDS	927		1,090		918	
50 PERCENT EXCEEDS	166		181		99	
90 PERCENT EXCEEDS	24		51		14	

a Median of annual mean discharges is 260 ft^3/s.
b Estimated daily-mean discharge.
c Minimum observed.
e Estimated.



05317200 LITTLE COTTONWOOD RIVER NEAR COURTLAND, MN

LOCATION.--Lat 44°14'47", long 94°20'19", in SW¼NE¼ sec.17, T.109 N., R.29 W., Blue Earth County, Hydrologic Unit 07020007, on right bank 30 ft downstream from bridge on State Highway 68, 0.7 mi above mouth, 1.5 mi south of Courtland.

DRAINAGE AREA.--170 mi^2.

PERIOD OF RECORD.--October 1973 to current year. September 1969 to September 1973, operated as a low-flow station only.

REVISED RECORD.--Unpublished: 1977 discharges < 0.1 cfs.

GAGE.--Water-stage recorder. Datum of gage is 788.25 ft above sea level (NGVD of 1929).

REMARKS.--Records good to fair.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr 12	1900	419	5.99	May 13	1400	*556	*6.59
Apr 17	1400	369	5.77	Jun 9	1100	223	4.91

Minimum discharge, 2.5 ft^3/s, Sept. 5, 6, gage height, 2.65 ft.

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	52	27	26	12	10	18	121	74	102	57	19	3.4
2	49	28	25	12	11	18	99	69	99	53	18	3.2
3	46	29	23	11	11	17	79	65	96	53	15	3.0
4	44	31	26	11	12	18	72	59	99	51	16	3.1
5	42	30	22	9.7	14	19	67	56	152	50	14	2.7
6	38	31	24	8.9	21	22	65	72	157	54	13	3.3
7	37	30	24	8.5	15	22	62	83	166	52	13	7.5
8	35	28	22	7.9	15	22	61	104	192	54	12	22
9	33	28	22	7.5	14	22	60	134	215	53	14	21
10	33	28	21	7.2	14	20	58	181	200	50	14	18
11	31	27	20	7.1	15	19	78	224	183	45	11	20
12	30	27	20	7.1	15	20	309	311	179	46	10	31
13	29	26	10	7.1	17	20	384	521	171	43	8.0	40
14	28	26	15	6.2	25	19	319	529	147	40	7.0	44
15	29	26	18	5.0	28	19	291	483	131	37	6.8	38
16	29	28	18	4.1	23	19	292	449	120	34	6.4	37
17	29	27	17	3.4	23	19	353	431	118	31	5.6	39
18	29	27	17	3.2	22	19	323	410	110	28	12	36
19	28	29	14	3.8	22	19	285	386	95	25	10	40
20	28	30	13	4.4	23	17	261	345	86	23	11	34
21	28	32	14	4.9	22	17	228	312	105	22	8.0	31
22	28	32	11	5.0	21	17	193	293	91	19	7.5	29
23	30	34	8.7	5.3	20	19	163	259	81	16	6.4	25
24	30	34	6.7	7.1	19	24	140	216	71	13	6.0	23
25	30	29	7.1	9.9	19	31	124	185	66	14	5.0	28
26	31	32	7.9	9.4	19	42	112	169	60	21	6.5	34
27	31	31	8.2	8.7	19	55	103	153	57	20	6.1	44
28	30	28	8.7	8.6	18	66	93	139	56	22	5.2	55
29	30	27	9.7	8.8	---	87	87	125	54	26	4.8	68
30	29	22	12	9.3	---	109	80	116	59	24	4.3	68
31	28	---	11	9.6	---	124	---	107	---	22	3.9	---
TOTAL	1,024	864	502.0	233.7	507	979	4,962	7,060	3,518	1,098	299.5	851.2
MEAN	33.0	28.8	16.2	7.54	18.1	31.6	165	228	117	35.4	9.66	28.4
MAX	52	34	26	12	28	124	384	529	215	57	19	68
MIN	28	22	6.7	3.2	10	17	58	56	54	13	3.9	2.7
AC-FT	2,030	1,710	996	464	1,010	1,940	9,840	14,000	6,980	2,180	594	1,690
CFSM	0.19	0.17	0.10	0.04	0.11	0.19	0.97	1.34	0.69	0.21	0.06	0.17
IN.	0.22	0.19	0.11	0.05	0.11	0.21	1.09	1.54	0.77	0.24	0.07	0.19

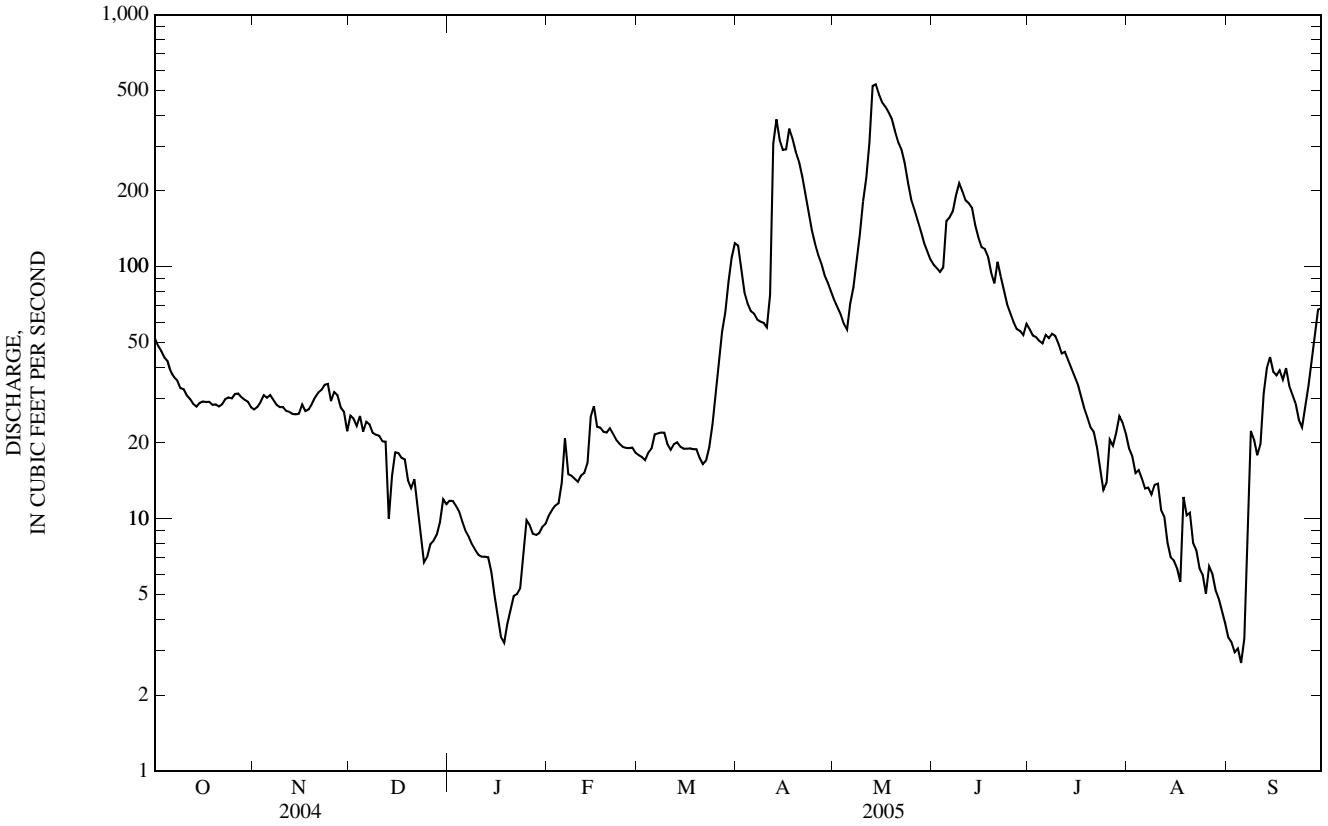
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2005, BY WATER YEAR (WY)

MEAN	37.1	42.4	25.9	14.1	21.3	113	181	124	139	85.7	47.5	37.5
MAX	163	134	118	80.1	105	392	980	418	750	553	248	262
(WY)	(1987)	(1983)	(1992)	(1992)	(1983)	(1997)	(2001)	(1993)	(1993)	(1993)	(1993)	(1986)
MIN	0.75	0.70	0.21	0.15	0.38	5.79	9.64	4.17	2.39	0.63	0.81	0.54
(WY)	(1976)	(1977)	(1977)	(1977)	(1977)	(1975)	(1990)	(1981)	(1976)	(1988)	(1976)	(1976)

05317200 LITTLE COTTONWOOD RIVER NEAR COURTLAND, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1974 - 2005	
ANNUAL TOTAL	15,018.9		21,898.4			
ANNUAL MEAN	41.0		60.0		72.5	
HIGHEST ANNUAL MEAN					239	1993
LOWEST ANNUAL MEAN					9.18	1989
HIGHEST DAILY MEAN	380	Jun 10	529	May 14	2,850	Jun 20, 1993
LOWEST DAILY MEAN	1.2	Jan 24	2.7	Sep 5	0.10	Sep 11, 1977
ANNUAL SEVEN-DAY MINIMUM	1.3	Jan 23	3.2	Aug 31	0.12	Sep 11, 1977
MAXIMUM PEAK FLOW			556	May 13	a3,520	Jun 20, 1993
MAXIMUM PEAK STAGE			6.59	May 13	b11.60	Apr 4, 1997
INSTANTANEOUS LOW FLOW			2.5	Sep 5	<0.10	Sep 17, 1977
ANNUAL RUNOFF (AC-FT)	29,790		43,440		52,490	
ANNUAL RUNOFF (CFSM)	0.241		0.353		0.426	
ANNUAL RUNOFF (INCHES)	3.29		4.79		5.79	
10 PERCENT EXCEEDS	85		159		187	
50 PERCENT EXCEEDS	27		28		26	
90 PERCENT EXCEEDS	2.8		7.4		1.7	

a Gage-height, 10.45 ft.
b Backwater from the Minnesota River.



05319500 WATONWAN RIVER NEAR GARDEN CITY, MN

LOCATION.--Lat 44°02'47", long 94°11'43", in SW¼NE¼ sec. 28, T.107 N., R.28 W., Blue Earth County, Hydrologic Unit 07020010, on left bank 25 ft downstream from bridge on County Highway 13, 1.5 miles west of Garden City, 7.3 mi upstream from mouth, and 9.2 mi downstream from Perch Creek.

DRAINAGE AREA.--851 mi^2.

PERIOD OF RECORD.--March 1940 to September 1945, September 1976 to current year. 1953, 1960, 1961, and 1969 (one or more discharge measurements each year).

REVISED RECORDS.--WDR MN-78-2: 1977. WRIR 97-4249: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 905.05 ft above sea level (NGVD of 1929). Prior to September 30, 1945, nonrecording gage at site 200 ft upstream and at datum 0.17 ft higher.

REMARKS.--Records good except those for estimated daily discharge, which are fair to poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 7, 1965, reached a stage of 18.89 ft at datum 0.17 ft higher, from floodmarks, discharge, 19,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr 15	0100	2,220	5.56	Aug 21	1400	1,370	4.13
May 16	0800	3,100	6.84	Sep 29	0700	*5,450	*9.75
Jun 10	1100	1,270	3.93				

Minimum discharge, 25 ft^3/s, Jan. 18, (estimated, daily-mean discharge).

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	825	266	e225	e87	e60	e77	954	490	657	358	117	260
2	726	262	e216	e88	e63	e76	750	467	622	336	102	223
3	661	252	e212	e85	e67	e76	603	446	596	325	89	192
4	610	246	212	e79	e73	e76	521	418	579	357	84	166
5	557	245	217	e72	e83	e78	485	396	702	372	82	146
6	520	238	198	e66	e92	e86	471	403	1,090	338	72	147
7	488	235	200	e61	e93	e99	476	452	1,100	306	68	151
8	474	224	198	e59	e90	e115	480	597	1,110	279	61	170
9	463	214	194	e55	e90	e115	475	1,090	1,190	287	64	220
10	445	214	194	e54	e89	e126	455	1,360	1,260	278	63	304
11	424	221	190	e52	e89	e112	492	1,530	1,260	261	57	323
12	403	212	186	e51	e91	e98	1,100	1,770	1,230	248	56	321
13	390	207	e148	e51	e99	e88	1,880	2,280	1,190	253	55	306
14	392	193	e69	e46	e116	e104	2,150	2,800	1,100	229	51	287
15	381	189	e101	e39	e136	e100	2,190	2,980	1,030	205	47	263
16	374	193	e124	e32	e149	e95	2,030	3,040	943	181	45	255
17	351	194	e126	e27	e152	e87	1,900	2,760	863	160	45	248
18	333	190	e121	e25	e150	e79	1,890	2,350	793	152	167	232
19	318	198	e109	e28	e137	e78	1,830	1,970	677	137	779	225
20	307	222	e101	e30	e127	e81	1,680	1,680	639	125	1,180	240
21	296	254	e98	e33	e116	e83	1,500	1,510	870	130	1,340	229
22	291	263	e85	e36	e107	e85	1,320	1,360	894	195	1,230	217
23	294	271	e71	e41	e99	e89	1,150	1,270	810	186	994	209
24	298	269	e51	e47	e93	e98	974	1,180	684	151	711	213
25	286	254	e53	e54	e89	e116	853	1,060	578	136	513	1,160
26	280	245	e58	e55	e84	e148	783	1,010	513	152	458	2,510
27	270	251	e60	e55	e81	e194	715	976	463	204	409	4,020
28	261	246	e66	e55	e80	e417	635	935	425	193	352	5,030
29	260	228	e73	e55	---	e793	572	865	394	174	343	5,330
30	276	e216	e87	e55	---	1,090	527	785	365	158	340	4,570
31	282	---	e84	e57	---	1,110	---	715	---	138	306	---
TOTAL	12,536	6,912	4,127	1,630	2,795	6,069	31,841	40,945	24,627	7,004	10,280	28,167
MEAN	404	230	133	52.6	99.8	196	1,061	1,321	821	226	332	939
MAX	825	271	225	88	152	1,110	2,190	3,040	1,260	372	1,340	5,330
MIN	260	189	51	25	60	76	455	396	365	125	45	146
AC-FT	24,870	13,710	8,190	3,230	5,540	12,040	63,160	81,210	48,850	13,890	20,390	55,870
CFSM	0.48	0.27	0.16	0.06	0.12	0.23	1.25	1.55	0.96	0.27	0.39	1.10
IN.	0.55	0.30	0.18	0.07	0.12	0.27	1.39	1.79	1.08	0.31	0.45	1.23

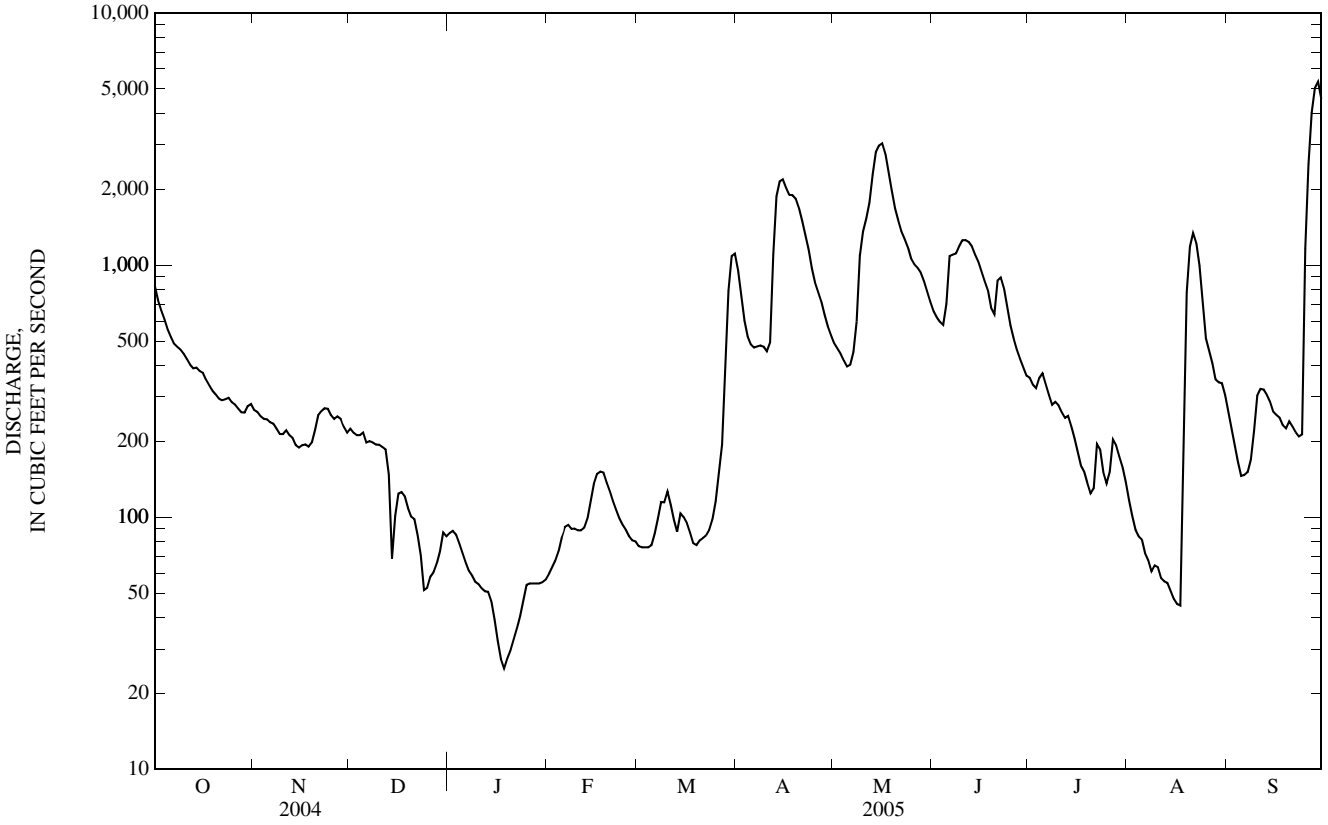
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2005, BY WATER YEAR (WY)

MEAN	184	220	133	65.4	98.8	530	922	641	854	470	235	215
MAX	686	826	530	319	626	2,105	4,411	2,025	4,494	2,389	1,095	939
(WY)	(1993)	(1993)	(1992)	(1992)	(1983)	(1992)	(2001)	(1993)	(1993)	(1993)	(1979)	(2005)
MIN	5.37	7.69	3.76	2.70	2.39	19.3	33.7	16.1	17.3	8.27	6.56	3.63
(WY)	(1990)	(1977)	(1990)	(1977)	(1977)	(1940)	(1990)	(1940)	(1989)	(1940)	(1989)	(1976)

05319500 WATONWAN RIVER NEAR GARDEN CITY, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1940 - 2005	
ANNUAL TOTAL	120,915.3		176,933			
ANNUAL MEAN	330		485		391	
HIGHEST ANNUAL MEAN					1,330	1993
LOWEST ANNUAL MEAN					43.7	1989
HIGHEST DAILY MEAN	3,090	Jun 10	5,330	Sep 29	13,400	Jun 20, 1993
LOWEST DAILY MEAN	8.6	Jan 30	25	Jan 18	1.8	Dec 24, 25 1989
ANNUAL SEVEN-DAY MINIMUM	8.7	Jan 28	30	Jan 16	1.9	Jan 20, 1977
MAXIMUM PEAK FLOW			5,450	Sep 29	13,900	Jun 20, 1993
MAXIMUM PEAK STAGE			9.75	Sep 29	15.91	Jun 20, 1993
INSTANTANEOUS LOW FLOW			a25	Jan 18	b1.8	Dec 24, 1989
ANNUAL RUNOFF (AC-FT)	239,800		350,900		282,900	
ANNUAL RUNOFF (CFSM)	0.388		0.570		0.459	
ANNUAL RUNOFF (INCHES)	5.29		7.73		6.23	
10 PERCENT EXCEEDS	880		1,180		1,050	
50 PERCENT EXCEEDS	190		235		140	
90 PERCENT EXCEEDS	9.9		61		14	

a Estimated daily-mean discharge.
b Minimum daily-mean discharge, backwater from ice.
e Estimated.



05320000 BLUE EARTH RIVER NEAR RAPIDAN, MN

LOCATION.--Lat 44°05'44", long 94°06'33", in SE¼SE¼ sec. 6, T.107 N., R.27 W., Blue Earth County, Hydrologic Unit 07020009, on left bank 0.2 mi downstream from power plant (reactivated in 1984) operated by Rapidan Redevelopment Limited Partnership, 2 mi west of Rapidan, 3.5 mi downstream from Watonwan River, and 7.8 mi upstream from Le Sueur River.

DRAINAGE AREA.--2,410 mi^2.

PERIOD OF RECORD.--July 1909 to November 1910 published as "at Rapidan Mills" (no winter records), October 1939 to September 1945, July 1949 to current year. Annual maximums only, 1912 to 1939.

REVISED RECORDS.-- WSP 1508: 1910.

GAGE.--Water-stage recorder. Datum of gage is 807.83 ft above sea level (NGVD of 1929). July 20, 1909 to Apr. 28, 1910, nonrecording gage at site 0.2 mi upstream at different datum. Apr. 29 to Nov. 12, 1910, nonrecording gage at site 800 ft upstream at different datum. Oct. 4 to Nov. 14, 1939, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharge, which are fair.

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	4,820	1,170	834	450	180	530	2,990	1,780	3,210	1,450	604	533
2	4,340	1,120	841	440	199	496	2,940	1,770	2,970	1,480	532	433
3	4,070	1,120	958	408	194	476	2,970	1,560	2,790	1,310	494	378
4	3,980	1,040	1,030	412	231	422	2,580	1,520	2,660	1,270	386	298
5	3,770	1,060	876	473	295	438	2,310	1,410	2,540	1,300	331	288
6	3,360	1,070	748	e529	326	516	2,200	1,370	2,940	1,590	289	254
7	3,050	1,060	838	e405	374	527	2,130	1,410	2,960	1,500	265	239
8	2,880	1,050	831	e384	384	526	1,980	1,540	2,940	1,270	232	307
9	2,890	1,010	787	363	444	487	1,960	2,350	3,020	1,160	184	285
10	3,010	933	824	351	422	469	1,840	3,150	3,400	1,020	202	418
11	2,700	915	847	343	406	475	1,770	3,940	3,520	936	245	510
12	2,550	926	800	296	404	470	2,520	4,630	3,490	877	260	510
13	2,390	911	671	264	388	406	4,550	6,640	3,500	824	221	543
14	2,270	860	456	304	490	382	5,850	9,170	3,470	732	196	515
15	2,160	764	340	266	674	377	6,310	9,670	3,150	700	194	451
16	2,040	772	439	239	1,050	396	6,450	10,100	2,950	684	226	454
17	1,990	819	571	224	1,290	435	5,870	9,930	2,600	592	198	418
18	1,800	765	e780	202	1,340	408	5,260	8,970	2,430	488	652	392
19	1,740	836	e633	156	1,240	301	4,990	7,840	2,250	469	1,340	361
20	1,680	853	e433	169	e917	230	4,650	6,930	2,040	457	1,940	347
21	1,590	898	e468	253	e863	400	4,210	6,470	2,530	444	1,870	347
22	1,510	1,010	e468	194	e808	465	3,950	6,310	2,920	489	1,780	314
23	1,490	1,070	e466	176	e690	425	3,580	6,040	2,700	540	1,470	263
24	1,460	1,050	e464	165	e817	435	3,220	5,760	2,460	449	1,210	263
25	1,440	1,040	467	164	e668	531	3,020	5,620	2,130	430	1,040	2,140
26	1,360	1,030	464	161	e620	609	2,750	5,020	1,980	437	952	7,290
27	1,250	977	462	154	613	639	2,560	4,630	1,800	524	843	9,490
28	1,230	973	460	183	564	1,420	2,320	4,270	1,690	808	728	10,200
29	1,200	980	483	195	---	2,140	2,080	4,040	1,590	1,130	643	10,400
30	1,190	872	540	202	---	3,130	1,970	3,780	1,530	944	603	9,380
31	1,210	---	495	171	---	3,240	---	3,480	---	773	585	---
TOTAL	72,420	28,954	19,774	8,696	16,891	22,201	101,780	151,100	80,160	27,077	20,715	58,021
MEAN	2,336	965	638	281	603	716	3,393	4,874	2,672	873	668	1,934
MAX	4,820	1,170	1,030	529	1,340	3,240	6,450	10,100	3,520	1,590	1,940	10,400
MIN	1,190	764	340	154	180	230	1,770	1,370	1,530	430	184	239
AC-FT	143,600	57,430	39,220	17,250	33,500	44,040	201,900	299,700	159,000	53,710	41,090	115,100
CFSM	0.96	0.40	0.26	0.12	0.25	0.29	1.40	2.01	1.10	0.36	0.27	0.80
IN.	1.11	0.44	0.30	0.13	0.26	0.34	1.56	2.31	1.23	0.41	0.32	0.89

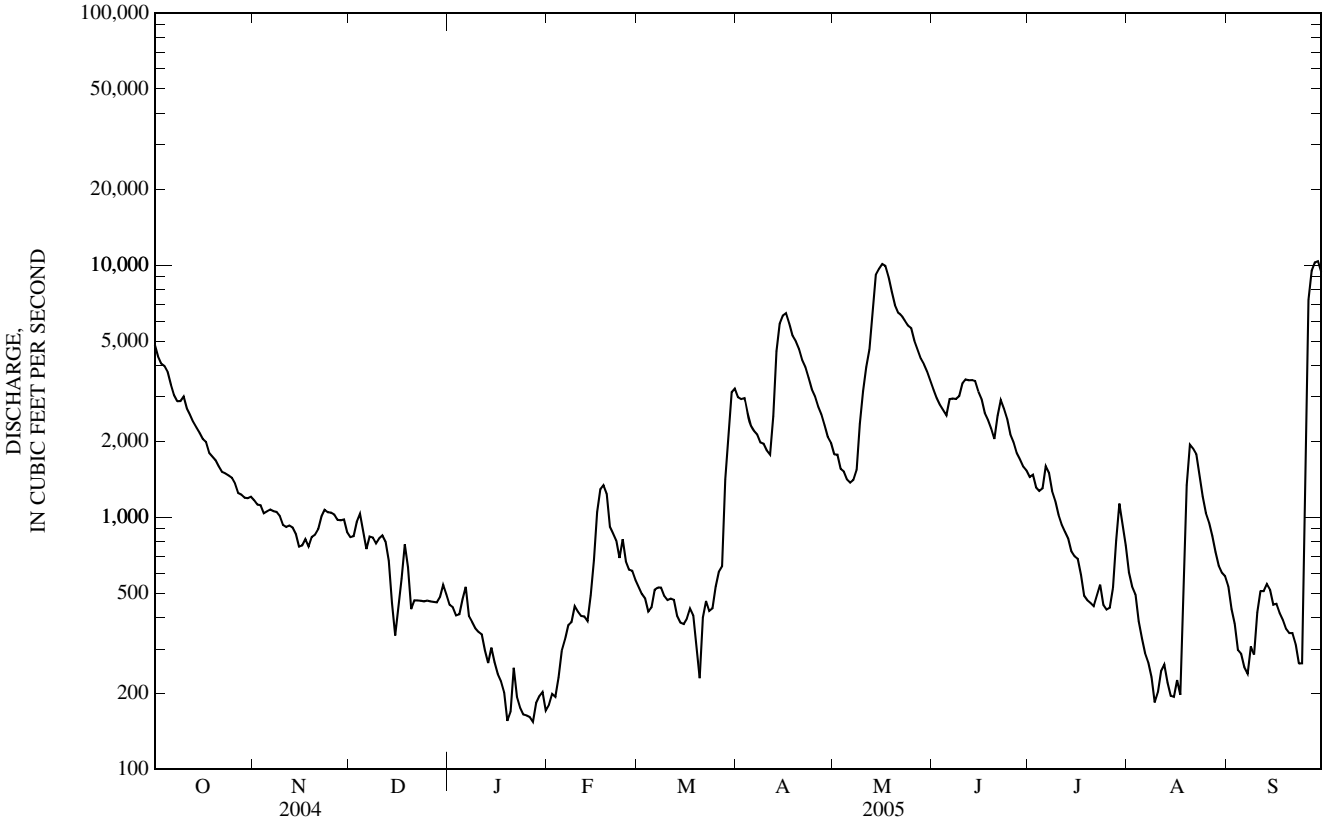
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 2005, BY WATER YEAR (WY)

MEAN	577	555	348	200	262	1,339	2,728	1,850	2,230	1,368	684	577
MAX	5,121	2,878	1,724	1,093	1,793	6,277	13,230	5,775	11,700	8,540	5,541	4,313
(WY)	(1969)	(1993)	(1992)	(1992)	(1983)	(1983)	(1965)	(1991)	(1993)	(1993)	(1979)	(1993)
MIN	22.5	26.7	16.0	14.8	14.2	92.4	142	53.4	110	30.9	37.7	22.1
(WY)	(1940)	(1940)	(1956)	(1977)	(1959)	(1968)	(1977)	(1940)	(1976)	(1940)	(1976)	(1976)

05320000 BLUE EARTH RIVER NEAR RAPIDAN, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1909 - 2005	
ANNUAL TOTAL	504,351		607,789			
ANNUAL MEAN	1,378		1,665		1,076	
HIGHEST ANNUAL MEAN					4,518	1993
LOWEST ANNUAL MEAN					105	1940
HIGHEST DAILY MEAN	11,700	Sep 20	10,400	Sep 29	42,500	Apr 9, 1965
LOWEST DAILY MEAN	24	Feb 24	154	Jan 27	7.4	Oct 28, 1955
ANNUAL SEVEN-DAY MINIMUM	25	Feb 20	171	Jan 22	8.1	Oct 24, 1955
MAXIMUM PEAK FLOW			a10,600	Sep 29	43,100	Apr 9, 1965
MAXIMUM PEAK STAGE			9.02	Sep 29	b21.36	Apr 9, 1965
INSTANTANEOUS LOW FLOW			a45	Oct 26	6.9	Oct 12, 1955
ANNUAL RUNOFF (AC-FT)	1,000,000		1,206,000		779,600	
ANNUAL RUNOFF (CFSM)	0.567		0.685		0.443	
ANNUAL RUNOFF (INCHES)	7.72		9.30		6.02	
10 PERCENT EXCEEDS	4,010		3,960		2,910	
50 PERCENT EXCEEDS	726		877		371	
90 PERCENT EXCEEDS	37		265		46	

a Due in part to regulation.
b From floodmark.
e Estimated.



05320270 LITTLE COBB RIVER NEAR BEAUFORD, MN

LOCATION.--Lat 43°59'48", long 93°54'30", in SE¼SE¼ sec. 11, T.106 N., R.26 W., Blue Earth County, Hydrologic Unit 07020011, on left bank at downstream end of bridge on County Road No. 16, 1.6 mi upstream from mouth, 2.6 mi east of Beauford, and 5.3 mi northeast of Mapleton.

DRAINAGE AREA.--130 mi^2.

PERIOD OF RECORD.--April 1996 to September 30, 1999, June 2001 to current year.

REVISED RECORDS.-- WDR MN-99-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 980 ft above sea level (from topographic map).

REMARKS.--Records good to fair except those for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum gage height observed, 12.17 ft, on April 5, 2001, discharge 2,220 ft^3/s (from highwater mark).

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	174	48	36	e13	e3.2	e26	380	102	147	156	6.6	1.8
2	159	44	34	e13	e3.2	e25	412	93	132	161	5.2	1.7
3	143	43	33	e12	e3.3	e25	447	84	119	170	4.4	e1.2
4	128	42	31	e11	e4.0	e26	417	76	104	172	3.5	e1.3
5	115	41	30	e9.8	e14	e27	351	72	97	151	3.3	e1.00
6	104	40	29	e8.6	e32	e27	298	71	89	125	2.3	e1.4
7	94	38	28	e7.9	e34	e30	259	71	78	103	1.7	e2.1
8	138	37	30	e7.4	e33	e30	226	73	96	86	1.4	2.2
9	162	37	30	e7.0	e32	e28	199	86	136	76	1.7	1.6
10	147	39	30	e6.8	e30	e27	176	101	147	67	4.1	1.2
11	134	37	30	e6.7	e30	e28	162	111	155	57	7.4	e1.1
12	123	34	29	e6.3	e38	e28	276	139	158	47	7.7	e2.1
13	116	32	17	e5.7	e47	e26	319	381	157	39	7.2	e4.6
14	111	31	17	e4.9	e50	e26	330	592	149	33	5.1	e3.8
15	103	31	21	e4.5	e47	e26	365	713	138	e27	3.6	e3.6
16	97	30	24	e4.3	e44	e27	386	723	124	23	2.7	e3.4
17	89	30	24	e3.9	e38	e27	373	662	109	19	2.0	e3.1
18	82	29	25	e3.8	e31	e28	347	581	96	18	3.7	e2.9
19	78	29	e20	e3.7	e26	e27	330	511	86	16	3.2	e2.4
20	75	32	e18	e3.7	e26	e27	316	450	78	14	3.0	1.9
21	72	36	e20	e3.6	e27	e28	297	406	75	15	2.3	2.0
22	70	37	e18	e3.5	e26	e29	276	371	77	23	1.7	1.8
23	69	37	e16	e3.4	e26	e30	251	337	86	22	1.4	1.7
24	68	36	e14	e3.4	e25	e31	222	304	83	18	1.0	2.4
25	64	35	e15	e3.3	e25	e40	196	271	78	15	0.93	107
26	59	35	e15	e3.2	e25	e64	176	248	74	15	2.7	236
27	55	37	e16	e3.1	e27	e90	160	229	72	13	4.9	277
28	54	35	e16	e3.0	e27	e140	140	213	79	12	5.7	351
29	55	32	e16	e3.0	---	e210	122	197	106	11	4.2	503
30	56	29	e16	e3.1	---	e300	111	179	130	9.3	3.8	571
31	53	---	e15	e3.1	---	352	---	160	---	7.9	2.5	---
TOTAL	3,047	1,073	713	179.7	773.7	1,855	8,320	8,607	3,255	1,721.2	110.93	2,097.30
MEAN	98.3	35.8	23.0	5.80	27.6	59.8	277	278	108	55.5	3.58	69.9
MAX	174	48	36	13	50	352	447	723	158	172	7.7	571
MIN	53	29	14	3.0	3.2	25	111	71	72	7.9	0.93	1.0
AC-FT	6,040	2,130	1,410	356	1,530	3,680	16,500	17,070	6,460	3,410	220	4,160
CFSM	0.76	0.28	0.18	0.04	0.21	0.46	2.13	2.14	0.83	0.43	0.03	0.54
IN.	0.87	0.31	0.20	0.05	0.22	0.53	2.38	2.46	0.93	0.49	0.03	0.60

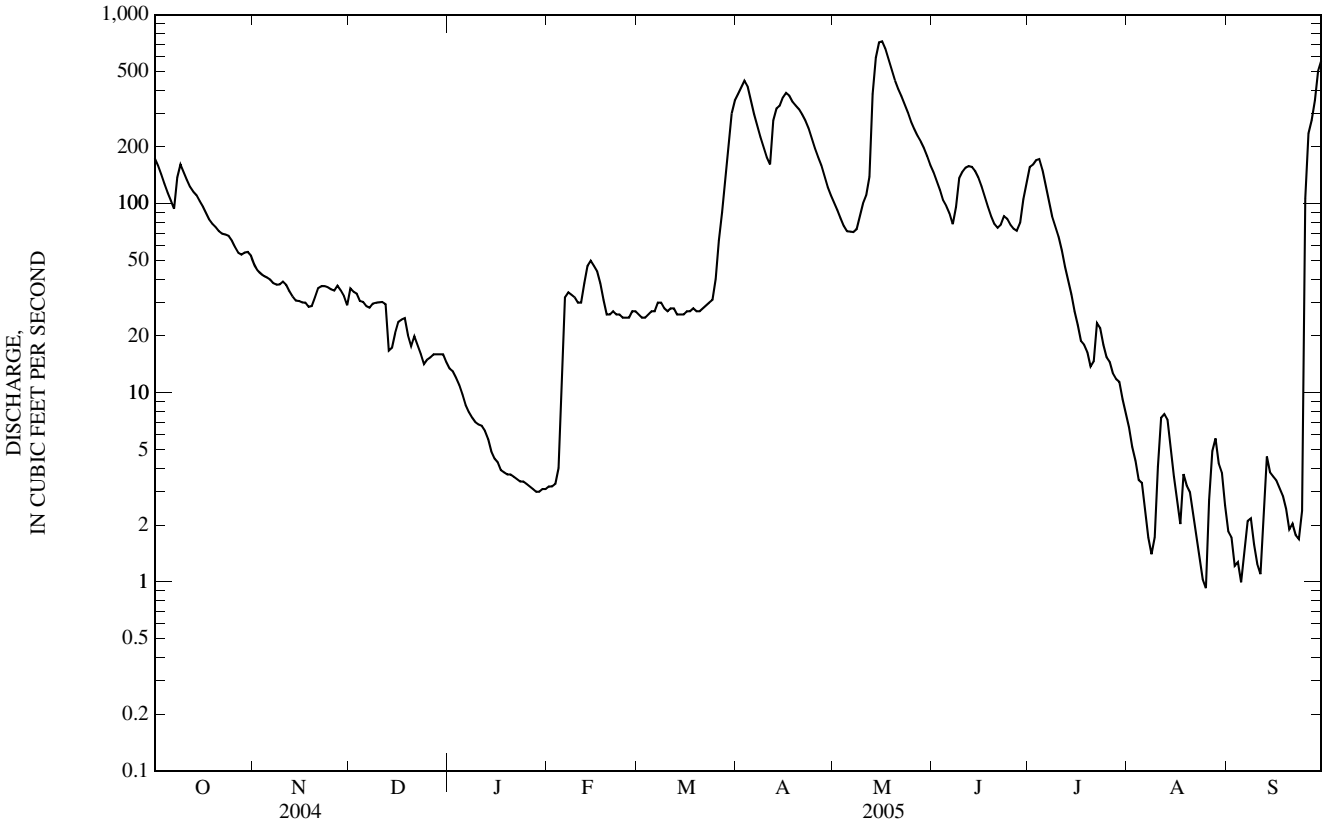
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2005, BY WATER YEAR (WY)

MEAN	34.7	25.6	14.0	5.11	24.1	83.9	173	152	138	72.0	25.2	51.5
MAX	128	89.7	54.0	18.2	58.2	278	410	341	217	150	71.0	361
(WY)	(2003)	(1997)	(1997)	(1997)	(1999)	(1997)	(1999)	(1999)	(1999)	(1999)	(2004)	(2004)
MIN	0.00	0.00	0.00	0.00	0.15	12.5	9.69	40.6	65.9	23.8	0.88	0.00
(WY)	(2002)	(2004)	(2004)	(2004)	(2004)	(2002)	(2004)	(2002)	(2003)	(2002)	(2003)	(2003)

05320270 LITTLE COBB RIVER NEAR BEAUFORD, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1996 - 2005	
ANNUAL TOTAL	30,009.31		31,752.83			
ANNUAL MEAN	82.0		87.0		71.0	
HIGHEST ANNUAL MEAN					114	1999
LOWEST ANNUAL MEAN					25.3	2002
HIGHEST DAILY MEAN	1,510	Sep 18	723	May 16	1,510	Sep 18, 2004
LOWEST DAILY MEAN	0.00	Jan 1	0.93	Aug 25	a0.00	Sep 6, 1998
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	1.5	Sep 1	0.00	Sep 12, 1998
MAXIMUM PEAK FLOW			738	May 15	1,630	Sep 18, 2004
MAXIMUM PEAK STAGE			10.51	May 15	11.93	Sep 18, 2004
INSTANTANEOUS LOW FLOW			0.76	Aug 25	a0.00	Sep 5, 1998
ANNUAL RUNOFF (AC-FT)	59,520		62,980		51,410	
ANNUAL RUNOFF (CFSM)	0.631		0.669		0.546	
ANNUAL RUNOFF (INCHES)	8.59		9.09		7.42	
10 PERCENT EXCEEDS	187		264		188	
50 PERCENT EXCEEDS	32		32		24	
90 PERCENT EXCEEDS	0.00		3.1		0.00	

a Many days, several years.
e Estimated.



05320270 LITTLE COBB RIVER NEAR BEAUFORD, MN—Continued

PERIOD OF RECORD.-- Water years 1996 to current year.

PERIOD OF DAILY RECORD:

SPECIFIC CONDUCTANCE.-- April 1996 to September 1998, and June to September, 2005.

pH.-- June to September, 2005.

WATER TEMPERATURES.-- April 1996 to September 1998, and June to September, 2005.

DISSOLVED OXYGEN.-- June to September, 2005.

TURBIDITY.-- June to September, 2005.

REMARKS.-- Records represent water temperatures at sensor within 0.5 C. Parameters monitored were compared independently with a calibrated meter weekly to bi-weekly. Corrections were applied based on USGS standard procedures.

EXTREMES FOR PERIOD OF DAILY RECORD:

SPECIFIC CONDUCTANCE.-- Maximum, 1,270 µS/cm, July 14, 1997; minimum, 249 µS/cm, Aug. 10, 1996.

pH.-- Maximum recorded, 8.7, July 29, 30, and Aug. 16, 2005; minimum recorded, 7.8, July 11, 2005.

WATER TEMPERATURES.-- Maximum, 30.0 C, July 16 and 24, 2005; minimum, 0.0 C on many days most winters.

DISSOLVED OXYGEN.-- Maximum, 11.7 mg/L, Aug. 17, 2005; minimum, 3.2 mg/L, Aug. 9, 2005.

TURBIDITY.-- Maximum, 180 FNU, July 3, 2005; minimum, 12 FNU, Aug. 25, 2005.

EXTREMES FOR CURRENT YEAR:

SPECIFIC CONDUCTANCE.-- Maximum observed, 674 µS/cm, June 10; minimum, 405 µS/cm, Aug. 18.

pH.-- Maximum recorded, 8.7, July 29, 30 and Aug. 16; minimum recorded, 7.8 µS/cm, July 11.

WATER TEMPERATURES.-- Maximum observed, 30.0 C, July 16 and 24; minimum observed, 17.5 C, Aug. 23 and 24.

DISSOLVED OXYGEN.-- Maximum, 11.7 mg/L, Aug. 17; minimum, 3.2 mg/L, Aug. 9.

TURBIDITY.-- Maximum, 180 FNU, July 3; minimum, 12 FNU, Aug. 25.

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
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	599	581	588	534	490	510	563	520	548
2	---	---	---	600	587	594	526	487	513	565	556	561
3	---	---	---	607	584	592	536	486	517	572	557	564
4	---	---	---	602	583	590	530	499	511	573	567	570
5	---	---	---	584	568	578	536	510	523	---	---	---
6	---	---	---	580	556	565	526	508	515	---	---	---
7	---	---	---	611	574	590	525	513	520	---	---	---
8	630	595	613	626	576	608	534	522	528	---	---	---
9	638	616	628	580	562	571	525	455	510	---	---	---
10	674	629	652	562	549	555	503	465	485	---	---	---
11	667	632	647	558	532	544	515	457	495	---	---	---
12	651	619	636	555	541	548	465	430	446	---	---	---
13	659	631	645	548	544	546	474	440	461	---	---	---
14	660	622	639	552	542	547	468	424	446	---	---	---
15	638	609	621	---	---	---	481	425	455	---	---	---
16	634	610	624	554	544	547	508	481	494	---	---	---
17	640	621	634	545	525	539	522	498	511	---	---	---
18	633	613	619	536	523	531	522	405	432	---	---	---
19	643	603	626	536	515	526	502	426	479	---	---	---
20	605	584	594	525	---	---	506	489	499	---	---	---
21	620	599	611	529	509	515	525	506	514	---	---	---
22	620	607	614	520	492	505	528	512	519	---	---	---
23	641	605	619	525	485	508	536	525	530	---	---	---
24	622	601	610	560	524	552	544	526	532	---	---	---
25	620	607	612	546	490	529	546	537	541	---	---	---
26	613	607	610	523	493	514	544	433	486	---	---	---
27	619	557	600	531	522	526	505	445	491	---	---	---
28	573	543	558	537	525	533	508	476	491	---	---	---
29	597	566	587	549	527	536	513	485	498	---	---	---
30	621	588	602	562	534	551	529	492	515	---	---	---
31	---	---	---	550	512	533	520	492	503	---	---	---
MONTH	---	---	---	626	485	550	546	405	499	---	---	---

05320270 LITTLE COBB RIVER NEAR BEAUFORD, MN—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	8.1	8.0	8.1	8.6	8.3	8.4	8.3	8.1	8.2
2	---	---	---	8.2	8.1	8.1	8.5	8.3	8.4	8.2	8.0	8.1
3	---	---	---	8.1	8.0	8.1	8.5	8.5	8.4	8.2	8.0	8.1
4	---	---	---	8.1	8.0	8.0	8.5	8.3	8.4	8.2	8.0	8.1
5	---	---	---	8.1	8.0	8.1	8.5	8.3	8.4	---	---	---
6	---	---	---	8.2	8.0	8.1	8.6	8.4	8.5	---	---	---
7	---	---	---	8.2	8.0	8.1	8.6	8.3	8.4	---	---	---
8	8.2	8.0	8.1	8.1	8.0	8.1	8.4	8.1	8.3	---	---	---
9	8.1	8.0	8.0	8.1	7.9	8.0	8.3	8.1	8.1	---	---	---
10	8.1	8.1	8.1	7.9	7.9	7.9	8.3	8.0	8.2	---	---	---
11	8.2	8.1	8.1	8.2	7.8	8.0	8.4	8.2	8.2	---	---	---
12	8.2	8.1	8.2	8.1	8.0	8.0	8.5	8.1	8.2	---	---	---
13	8.2	8.2	8.2	8.0	7.9	8.0	8.6	8.3	8.5	---	---	---
14	8.3	8.1	8.2	8.0	7.9	8.0	8.6	8.2	8.3	---	---	---
15	8.2	8.2	8.2	---	---	7.9	8.6	8.4	8.5	---	---	---
16	8.3	8.2	8.2	8.0	7.9	8.0	8.7	8.4	8.6	---	---	---
17	8.2	8.2	8.2	8.1	7.9	8.0	8.7	8.6	8.6	---	---	---
18	8.2	8.1	8.2	8.1	7.9	7.9	8.6	8.4	8.5	---	---	---
19	8.2	8.1	8.2	8.1	7.9	8.0	8.6	8.5	8.6	---	---	---
20	8.3	8.0	8.1	8.4	7.9	8.1	8.5	8.3	8.4	---	---	---
21	8.3	8.1	8.1	8.4	8.1	8.2	8.4	8.3	8.3	---	---	---
22	8.3	8.1	8.2	8.4	8.0	8.2	8.5	8.3	8.3	---	---	---
23	8.3	8.1	8.2	8.2	7.9	8.1	8.5	8.2	8.4	---	---	---
24	8.2	8.1	8.2	8.3	8.0	8.1	8.6	8.3	8.4	---	---	---
25	8.2	8.1	8.1	8.2	8.0	8.2	8.4	8.1	8.3	---	---	---
26	8.3	8.1	8.1	8.3	8.0	8.1	8.2	8.0	8.1	---	---	---
27	8.4	8.1	8.2	8.6	8.1	8.4	8.3	8.1	8.2	---	---	---
28	8.4	8.1	8.2	8.6	8.3	8.5	8.3	8.2	8.2	---	---	---
29	8.1	8.1	8.1	8.7	8.4	8.5	8.3	8.1	8.2	---	---	---
30	8.1	8.0	8.1	8.7	8.5	8.6	8.3	8.3	8.3	---	---	---
31	---	---	---	8.7	8.4	8.6	8.3	8.2	8.2	---	---	---
MONTH	---	---	---	8.7	7.8	8.1	8.7	8.1	8.4	---	---	---

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	21.0	19.5	20.0	27.5	23.0	25.0	20.5	18.0	19.0
2	---	---	---	21.5	19.5	20.5	27.5	25.0	26.5	19.5	17.5	18.5
3	---	---	---	21.5	20.5	21.0	27.0	---	---	19.5	17.5	18.5
4	---	---	---	22.0	20.0	21.0	26.5	23.5	24.5	21.0	18.5	19.5
5	---	---	---	22.5	20.5	21.5	23.5	21.0	22.5	---	---	---
6	---	---	---	23.5	21.0	22.0	23.0	20.5	22.0	---	---	---
7	---	---	---	24.5	21.5	23.0	24.0	20.5	22.5	---	---	---
8	24.0	20.5	22.0	24.0	22.5	23.0	24.0	22.5	23.5	---	---	---
9	21.5	19.0	20.0	26.0	22.0	24.0	25.0	23.5	24.0	---	---	---
10	21.0	19.5	20.0	27.5	23.5	25.5	24.5	22.5	23.5	---	---	---
11	21.5	20.0	20.5	28.0	24.5	26.0	24.0	22.5	23.0	---	---	---
12	22.0	19.5	20.5	28.0	24.0	26.0	24.0	21.5	22.5	---	---	---
13	22.5	20.5	21.0	28.0	24.5	26.0	24.0	20.5	21.5	---	---	---
14	21.0	20.0	20.5	29.0	25.0	27.0	21.5	18.5	20.0	---	---	---
15	20.0	---	---	---	25.5	---	21.0	19.0	20.0	---	---	---
16	21.5	18.0	19.5	30.0	26.0	28.0	22.5	20.0	21.5	---	---	---
17	23.5	19.0	21.0	29.0	26.0	27.5	22.5	21.0	22.0	---	---	---
18	25.0	20.5	22.5	27.5	24.0	26.0	23.0	21.0	22.0	---	---	---
19	25.0	21.0	23.0	27.0	22.0	24.5	24.0	21.5	22.5	---	---	---
20	25.0	22.0	23.5	28.0	23.5	25.5	23.5	22.0	23.0	---	---	---
21	25.5	21.5	23.5	29.0	25.0	27.0	22.5	20.5	21.5	---	---	---
22	26.5	22.5	24.5	29.5	25.5	27.5	21.0	18.5	19.5	---	---	---
23	28.0	24.5	26.0	29.5	26.5	28.0	19.5	17.5	18.5	---	---	---
24	26.0	24.0	25.0	30.0	26.5	28.5	20.0	17.5	19.0	---	---	---
25	24.0	22.5	23.0	29.0	25.5	27.0	22.0	19.0	20.0	---	---	---
26	25.5	22.5	23.5	25.5	22.0	23.0	22.5	21.0	21.5	---	---	---
27	26.0	23.5	24.5	23.5	19.0	21.0	22.5	19.5	21.0	---	---	---
28	25.5	23.5	24.0	24.0	20.0	21.5	22.5	19.5	21.0	---	---	---
29	24.0	22.0	23.0	24.5	21.0	22.5	22.5	20.0	21.5	---	---	---
30	23.0	20.5	21.5	26.0	23.0	24.0	22.0	20.0	21.5	---	---	---
31	---	---	---	26.0	23.5	25.0	21.5	20.0	20.5	---	---	---
MONTH	---	---	---	30.0	19.0	24.4	27.5	17.5	21.9	---	---	---

05320270 LITTLE COBB RIVER NEAR BEAUFORD, MN—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
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	8.5	7.9	8.2	9.5	5.4	7.1	---	---	---
2	---	---	---	9.1	8.1	8.6	8.7	4.6	6.2	---	---	---
3	---	---	---	8.6	8.0	8.3	7.3	4.2	5.8	---	---	---
4	---	---	---	9.3	3.7	6.9	7.9	4.0	5.5	---	---	---
5	---	---	---	9.2	8.0	8.5	8.5	5.3	6.6	---	---	---
6	---	---	---	8.4	7.1	7.8	9.1	5.3	6.8	---	---	---
7	---	---	---	8.9	6.9	7.7	9.7	4.9	6.8	---	---	---
8	7.0	6.1	6.6	8.3	7.0	7.6	6.6	3.3	4.9	---	---	---
9	7.5	6.7	7.1	8.7	7.0	7.6	6.2	3.2	4.7	---	---	---
10	7.5	7.0	7.2	8.5	6.6	7.3	8.5	4.0	6.4	---	---	---
11	7.7	7.1	7.4	7.2	6.3	6.6	8.4	6.2	7.4	---	---	---
12	8.2	7.1	7.6	6.9	5.9	6.3	10.7	7.6	8.8	---	---	---
13	8.0	7.1	7.5	6.7	6.0	6.3	11.1	7.7	9.2	---	---	---
14	8.3	7.2	7.8	6.4	5.8	6.1	10.5	8.1	9.2	---	---	---
15	8.6	7.4	8.1	---	5.7	---	10.4	7.7	9.0	---	---	---
16	9.2	7.9	8.5	6.5	5.6	6.0	---	---	---	---	---	---
17	9.0	7.8	8.3	7.1	5.8	6.3	11.7	---	---	---	---	---
18	8.5	7.5	8.0	7.4	5.9	6.6	9.7	6.9	8.2	---	---	---
19	8.7	7.2	7.9	8.8	6.8	7.6	10.6	5.9	8.2	---	---	---
20	8.5	6.8	7.4	8.3	6.3	7.2	9.6	5.8	7.6	---	---	---
21	8.7	6.6	7.5	8.2	5.7	6.7	10.2	5.3	7.0	---	---	---
22	8.6	6.6	7.5	9.1	5.7	7.1	---	---	---	---	---	---
23	8.9	6.4	7.3	7.3	5.6	6.2	---	---	---	---	---	---
24	7.6	6.1	6.8	7.9	5.2	6.4	---	---	---	---	---	---
25	8.2	6.6	7.2	7.9	5.5	6.5	---	---	---	---	---	---
26	9.1	6.8	7.7	9.6	6.1	7.6	---	---	---	---	---	---
27	8.8	6.5	7.4	9.6	7.3	8.2	---	---	---	---	---	---
28	8.6	6.4	7.3	9.9	6.9	8.2	---	---	---	---	---	---
29	7.6	7.1	7.3	10.9	7.1	8.7	---	---	---	---	---	---
30	8.1	7.3	7.7	10.9	6.7	8.4	---	---	---	---	---	---
31	---	---	---	10.1	6.3	7.7	---	---	---	---	---	---
MONTH	---	---	---	10.9	3.7	7.3	---	---	---	---	---	---

TURBIDITY, WATER, MONOCHROME NEAR INFRA-RED LED LIGHT, 780-900 NM, DETECTION ANGLE 90 +/ -2.5 DEGREES, FNU
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	84	64	72	43	15	23	35	22	27
2	---	---	---	66	54	60	24	14	18	39	22	27
3	---	---	---	180	49	65	31	---	---	36	23	27
4	---	---	---	67	55	60	30	18	24	35	20	27
5	---	---	---	86	52	63	27	19	23	---	---	---
6	---	---	---	97	61	73	36	23	27	---	---	---
7	---	---	---	77	54	66	35	20	25	---	---	---
8	89	46	73	74	48	62	110	19	27	---	---	---
9	79	61	72	84	49	64	72	20	33	---	---	---
10	61	55	57	100	46	67	72	27	39	---	---	---
11	59	53	56	110	54	67	37	28	32	---	---	---
12	60	51	54	92	49	62	45	30	36	---	---	---
13	61	50	53	67	46	56	40	30	35	---	---	---
14	66	48	53	62	42	49	50	33	39	---	---	---
15	56	44	48	56	33	42	39	27	33	---	---	---
16	47	42	45	70	39	44	40	28	31	---	---	---
17	45	40	43	160	32	46	68	22	30	---	---	---
18	46	40	43	73	32	41	63	25	40	---	---	---
19	48	38	45	85	26	34	34	22	26	---	---	---
20	71	36	45	49	22	29	---	---	---	---	---	---
21	45	34	41	52	21	28	---	---	---	---	---	---
22	49	32	40	55	23	34	---	---	---	---	---	---
23	47	31	39	110	40	67	---	---	---	---	---	---
24	54	28	43	92	50	71	24	13	20	---	---	---
25	62	38	48	110	43	59	25	12	18	---	---	---
26	53	41	46	140	34	55	90	13	43	---	---	---
27	57	38	44	97	20	33	38	23	28	---	---	---
28	70	36	50	43	18	23	62	26	32	---	---	---
29	71	61	67	33	21	25	62	27	30	---	---	---
30	98	58	71	71	18	23	47	28	32	---	---	---
31	---	---	---	29	16	22	36	26	31	---	---	---
MONTH	---	---	---	180	16	50	110	12	30	---	---	---

05320270 LITTLE COBB RIVER NEAR BEAUFORD, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Sample type	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	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, air, deg C (00020)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)
OCT												
07...	1000	Environmental	6.03	93	740	10.9	102	8.2	654	--	12.4	260
21...	1347	Bed material	--	--	--	--	--	--	--	--	--	--
DEC												
16...	1020	Environmental	5.17	24	742	12.4	85	8.1	827	1.0	.0	309
FEB												
03...	1030	Environmental	4.74	3.3	743	--	--	7.3	970	6.0	.0	382
APR												
21...	0945	Environmental	8.13	290	740	9.3	88	7.8	660	15.0	12.8	240
JUN												
15...	0940	Environmental	6.45	141	736	7.8	84	8.2	626	16.5	19.4	220
AUG												
03...	1015	Environmental	4.76	4.5	735	5.1	63	8.3	528	26.0	25.6	225
17...	1000	Environmental	--	--	--	--	--	--	--	--	--	--
SEP												
07...	1035	Environmental	4.81	1.8	744	3.2	35	7.7	535	16.0	19.7	--
07...	1040	Environmental	--	--	--	--	--	--	--	--	--	--

Date	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	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)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, wat unf by anal ysis, mg/L (62855)	Biomass periphyton, ashfree drymass g/m2 (49954)	Periphyton biomass ash weight, g/m2 (00572)	Periphyton biomass dry weight, g/m2 (00573)
OCT													
07...	317	.0	14.4	30.4	E.03	9.59	.029	.049	.169	10.9	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
16...	377	.0	22.8	43.6	.06	13.7	.038	.051	.075	14.6	--	--	--
FEB													
03...	466	.0	41.2	53.2	.20	11.4	.075	.112	.135	12.8	--	--	--
APR													
21...	293	.0	17.1	29.0	E.02	14.0	.045	.020	E.106	14.2	--	--	--
JUN													
15...	269	.0	15.8	21.0	E.02	13.9	.050	<.006	.174	15.1	--	--	--
AUG													
03...	260	7	16.3	22.4	.11	.39	.010	.049	.23	2.46	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	17.3	110	131.1
SEP													
07...	--	--	19.4	25.9	.16	.06	E.005	.193	.32	1.75	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Pheophytin a, periphyton, mg/m2 (62359)	Pheophytin a, phytoplankton, ug/L (62360)	Chlorophyll a periphyton, chromofluoro, mg/m2 (70957)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	1-Naphthol, water, fltrd 0.7u GF ug/L (49295)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	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)	3,5-Dichloroaniline water, fltrd, ug/L (61627)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	Acetochlor, water, fltrd, ug/L (49260)
OCT													
07...	--	--	--	--	--	<.006	--	E.034	--	--	--	--	.014
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
16...	--	--	--	--	<.09	<.006	<.005	E.025	<.004	<.004	--	<.006	.010
FEB													
03...	--	--	--	--	<.09	<.006	<.005	E.014	<.004	<.004	--	<.006	<.006
APR													
21...	--	--	--	--	<.09	<.006	<.005	E.025	<.004	<.004	--	<.006	.047
JUN													
15...	--	23.4	--	45.9	<.09	<.006	<.005	E.031	<.004	<.004	<.004	<.006	.122
AUG													
03...	--	29.2	--	61.2	<.09	<.006	<.010	E.027	<.004	<.004	<.004	<.006	.011
17...	1.8	--	1.5	--	--	--	--	--	--	--	--	--	--
SEP													
07...	--	18.6	--	24.1	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	<.09	<.006	<.005	E.009	<.004	<.004	<.004	<.006	.009

05320270 LITTLE COBB RIVER NEAR BEAUFORD, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Ala-chlor, water, fltrd, ug/L (46342)	alpha-Endo-sulfan, water, fltrd, ug/L (34362)	alpha-HCH, water, fltrd, ug/L (34253)	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)	Butyl-ate, water, fltrd, ug/L (04028)	Car-baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo-furan, water, fltrd 0.7u GF ug/L (82674)	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)
OCT													
07...	<.005	--	<.005	.085	--	<.050	<.010	<.004	<.041	<.020	--	<.005	<.006
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
16...	<.005	--	--	.039	<.07	<.050	<.010	--	<.041	--	<.06	<.005	<.006
FEB													
03...	<.005	--	--	.027	<.07	<.050	<.010	--	<.041	--	<.06	<.005	<.006
APR													
21...	.007	--	--	.040	<.07	<.050	<.010	--	<.041	--	<.06	<.005	<.006
JUN													
15...	<.005	<.005	--	.226	<.07	<.050	<.010	--	<.041	<.020	<.06	<.005	<.006
AUG													
03...	<.005	<.005	--	.116	<.07	<.050	<.010	--	<.041	<.020	<.06	.022	<.006
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	<.005	<.005	--	.051	<.07	<.050	<.010	--	<.041	<.020	<.06	E.005	<.006

Date	cis-Propi-cona-zole, water, fltrd, ug/L (79846)	Cyana-zine, water, fltrd, ug/L (04041)	Cyflu-thrin, water, fltrd, ug/L (61585)	lambda-Cyhalo-thrin, water, fltrd, ug/L (61595)	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)	Dicro-tophos, water fltrd, ug/L (38454)	Diel-drin, water, fltrd, ug/L (39381)	Dimeth-oate, water, fltrd 0.7u GF ug/L (82662)	Disulf-oton sulfone water, fltrd, ug/L (61640)
OCT													
07...	--	<.018	--	--	--	<.003	<.012	--	<.005	--	<.009	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
16...	--	--	<.008	--	<.009	<.003	<.012	<.01	<.005	<.08	<.009	<.006	--
FEB													
03...	--	--	<.008	--	<.009	<.003	<.012	<.01	<.005	<.08	<.009	<.006	--
APR													
21...	--	--	<.027	--	<.009	<.003	<.012	<.01	<.005	<.08	<.009	<.006	--
JUN													
15...	<.008	<.018	<.027	<.009	<.009	<.003	<.012	<.01	<.005	<.08	<.009	<.006	.01
AUG													
03...	<.008	<.018	<.027	<.009	<.009	<.003	<.012	<.01	<.005	<.08	<.009	<.006	<.01
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	<.008	<.018	<.027	<.009	<.009	<.003	<.012	<.01	<.005	<.08	<.009	<.006	<.01

Date	Disul-foton, water, fltrd 0.7u GF ug/L (82677)	Endo-sulfan sulfate water, fltrd, ug/L (61590)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal-flur-alin, water, fltrd 0.7u GF ug/L (82663)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Etho-prop, water, fltrd 0.7u GF ug/L (82672)	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)
OCT													
07...	<.02	--	<.004	<.009	--	--	<.005	--	--	--	<.029	<.013	<.024
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
16...	--	--	--	--	<.0020	<.004	--	<.049	<.04	<.03	<.029	<.013	<.024
FEB													
03...	--	--	--	--	<.0020	<.004	--	<.049	--	<.03	<.029	<.013	<.024
APR													
21...	--	--	--	--	<.0020	<.004	--	<.049	<.04	<.03	<.029	<.013	<.024
JUN													
15...	<.02	<.014	<.004	--	<.002	<.004	<.005	<.049	<.04	<.03	<.029	<.013	<.024
AUG													
03...	<.02	<.014	<.004	--	<.002	<.004	<.005	<.049	<.04	<.03	<.029	<.013	<.024
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	<.02	<.014	<.004	--	<.002	<.004	<.005	<.049	<.04	<.03	<.029	<.013	<.024

05320270 LITTLE COBB RIVER NEAR BEAUFORD, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	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)	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)	Metalaxyl, water, fltrd, ug/L (61596)	Methialthion water, fltrd, ug/L (61598)	Methyl paraoxon, water, fltrd, ug/L (61664)
OCT													
07...	<.016	--	<.003	--	--	--	<.004	<.035	--	<.027	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
16...	<.016	<.003	<.003	<.013	<.387	<.003	--	--	<.030	<.027	<.005	<.006	<.03
FEB													
03...	<.016	<.003	<.003	<.013	<.387	<.003	--	--	<.030	<.027	<.005	<.006	<.03
APR													
21...	<.016	--	<.003	<.013	<.538	<.003	--	--	<.030	<.027	<.005	<.006	<.03
JUN													
15...	<.016	--	<.003	<.013	<.538	<.003	--	--	<.030	<.027	<.005	<.006	<.03
AUG													
03...	<.016	--	<.003	<.013	<.538	<.003	--	--	<.030	<.027	<.010	<.006	<.03
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	<.016	--	<.003	<.013	<.538	<.003	--	--	<.030	<.027	<.005	<.006	<.03

Date	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)	Myclobutanil water, fltrd, ug/L (61599)	Napropamide, water, fltrd 0.7u GF ug/L (82684)	Oxyfluorfen, water, fltrd, ug/L (61600)	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 oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)
OCT													
07...	<.015	.042	<.006	<.003	--	<.007	--	<.003	<.010	<.004	<.022	--	<.011
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
16...	<.015	.036	<.006	--	<.008	--	--	--	--	--	<.022	<.10	<.011
FEB													
03...	<.015	.033	<.006	--	<.008	--	--	--	--	--	<.022	<.10	<.011
APR													
21...	<.015	.047	<.006	--	<.008	--	--	--	--	--	<.022	<.10	<.011
JUN													
15...	<.015	.045	<.006	<.003	<.008	--	<.007	--	--	--	<.022	<.10	<.011
AUG													
03...	<.015	.022	<.006	<.005	<.008	--	<.007	--	--	--	<.022	<.10	<.011
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	<.015	.025	<.006	<.003	<.008	--	<.007	--	--	--	<.022	<.10	<.011

Date	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, 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)	Tebuconazole, water, fltrd, ug/L (62852)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Tefluthrin, water, fltrd, ug/L (61606)	Terbacil, water, fltrd 0.7u GF ug/L (82665)
OCT													
07...	--	--	<.01	--	<.004	<.025	<.011	<.02	<.005	--	<.02	--	<.034
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
16...	<.05	<.008	<.01	<.005	<.004	--	--	--	<.005	--	<.02	--	--
FEB													
03...	<.05	<.008	<.01	<.005	<.004	--	--	--	<.005	--	<.02	--	--
APR													
21...	<.05	<.008	E.01	<.005	<.004	--	--	--	<.015	--	<.02	--	--
JUN													
15...	--	--	<.01	<.005	<.004	--	<.011	<.02	<.005	<.01	<.02	<.008	--
AUG													
03...	<.05	<.008	<.01	<.005	<.010	--	<.011	<.02	<.010	<.01	<.02	<.008	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	E.01	<.005	<.004	--	<.011	<.02	<.005	--	<.02	<.008	--

05320270 LITTLE COBB RIVER NEAR BEAUFORD, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—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)	Thiobencarb water fltrd 0.7u GF ug/L (82681)	trans-Propiconazole, water, fltrd, ug/L (79847)	Triallate, water, fltrd 0.7u GF ug/L (82678)	Tribuphos, water, fltrd, ug/L (61610)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)	Dichlorvos, water fltrd, ug/L (38775)	Suspended sediment concentration mg/L (80154)	Bed sediment, dry svd sve dia percent <.063mm (80164)	Bed sediment, dry svd sve dia percent <.125mm (80165)	Bed sediment, dry svd sve dia percent <.25mm (80166)
OCT													
07...	--	<.02	--	<.010	--	<.006	--	<.009	--	54	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	14	24	47
DEC													
16...	<.07	<.02	<.01	--	--	--	--	<.009	<.01	118	--	--	--
FEB													
03...	<.07	<.02	<.01	--	--	--	--	<.009	<.01	--	--	--	--
APR													
21...	<.07	<.02	<.01	--	--	--	--	<.009	<.01	--	--	--	--
JUN													
15...	<.07	<.02	<.01	<.010	<.01	--	<.015	<.009	<.01	--	--	--	--
AUG													
03...	<.07	<.02	<.01	<.010	<.01	--	<.015	<.009	<.01	29	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
07...	--	--	--	--	--	--	--	--	--	33	--	--	--
07...	<.07	<.02	<.01	<.010	<.01	--	<.015	<.009	<.01	--	--	--	--

Date	Bed sediment, dry svd sve dia percent <.5 mm (80167)	Bed sediment, dry svd sve dia percent <1 mm (80168)	Bed sediment, dry svd sve dia percent <2 mm (80169)
OCT			
07...	--	--	--
21...	79	96	100
DEC			
16...	--	--	--
FEB			
03...	--	--	--
APR			
21...	--	--	--
JUN			
15...	--	--	--
AUG			
03...	--	--	--
17...	--	--	--
SEP			
07...	--	--	--
07...	--	--	--

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05320500 LE SUEUR RIVER NEAR RAPIDAN, MN

LOCATION.--Lat 44°06'40", long 94°02'28", in SW$^1/_4$ sec. 35, T.108 N., R.27 W., Blue Earth County, Hydrologic Unit 07020011, on right bank 600 ft downstream from highway bridge, 1.8 mi northeast of Rapidan, and 2.3 mi upstream from mouth.

DRAINAGE AREA.--1,110 mi^2.

PERIOD OF RECORD.--October 1939 to September 1945, July 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is 775.76 ft above sea level (NGVD of 1929). Prior to Nov. 15, 1939, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for estimated daily discharges, which are fair to poor.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr 2	2000	3,600	5.95	May 14	2000	*7,370	*9.01
Apr 14	1900	3,880	6.21	Sep 28	1100	6,540	8.41

Minimum discharge, 21 ft^3/s, Dec. 14, gage height, 0.97 ft, (result of freezeup).

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	1,090	428	246	e156	e117	e165	3,230	791	1,240	892	123	101
2	1,020	445	335	e159	e119	e161	3,460	742	1,150	816	106	83
3	1,070	432	298	e152	e122	e160	3,260	688	1,070	740	94	71
4	1,070	433	348	e139	e132	e165	2,780	652	1,000	774	84	64
5	1,040	426	318	e126	e150	e175	2,390	625	944	678	72	60
6	976	411	303	e117	e164	e204	1,990	623	854	587	63	61
7	915	395	288	e109	e166	e250	1,730	624	759	509	56	70
8	992	381	287	e104	e163	e300	1,520	657	938	442	52	82
9	1,340	346	297	e99	e159	e315	1,360	1,050	1,240	387	53	75
10	1,270	326	309	e96	e158	e330	1,190	1,270	1,390	346	62	70
11	1,110	306	317	e93	e158	e323	1,120	1,320	1,400	307	92	67
12	1,000	301	300	e91	e162	e305	2,410	1,590	1,290	275	172	73
13	925	293	250	e89	e176	e305	3,460	5,120	1,210	247	132	81
14	834	276	e71	e88	e212	e293	3,770	7,080	1,130	223	112	74
15	799	265	e176	e87	e265	e267	3,570	6,750	1,050	203	93	68
16	757	263	e220	e87	e312	e243	3,160	5,680	949	184	79	62
17	715	268	e225	e87	e334	e217	3,190	4,730	857	165	68	57
18	668	275	e214	e86	e327	e191	2,950	4,050	786	163	164	53
19	628	288	e195	e86	e304	e172	2,650	3,720	703	150	274	60
20	595	315	e181	e88	e280	e160	2,450	3,450	651	155	361	53
21	568	339	e177	e94	e255	e156	2,220	3,290	780	166	312	46
22	548	359	e154	e103	e239	e158	2,040	3,060	915	179	228	42
23	534	373	e127	e113	e223	e164	1,790	2,750	1,000	191	157	39
24	490	370	e95	e115	e209	e178	1,550	2,490	889	184	117	40
25	477	358	e94	e116	e196	e230	1,410	2,210	773	178	96	1,520
26	452	341	e102	e116	e186	e360	1,290	2,010	692	176	128	3,530
27	431	344	e108	e117	e177	e667	1,180	1,760	639	151	135	5,560
28	425	338	e117	e117	e171	e1,660	1,050	1,690	619	207	153	6,340
29	411	316	e134	e117	---	e2,310	958	1,600	694	215	205	6,310
30	416	267	e147	e117	---	e2,680	860	1,480	698	180	164	5,860
31	413	---	e151	e117	---	3,040	---	1,330	---	148	128	---
TOTAL	23,979	10,278	6,584	3,381	5,636	16,304	65,988	74,882	28,310	10,218	4,135	30,672
MEAN	774	343	212	109	201	526	2,200	2,416	944	330	133	1,022
MAX	1,340	445	348	159	334	3,040	3,770	7,080	1,400	892	361	6,340
MIN	411	263	71	86	117	156	860	623	619	148	52	39
AC-FT	47,560	20,390	13,060	6,710	11,180	32,340	130,900	148,500	56,150	20,270	8,200	60,840
CFSM	0.70	0.31	0.19	0.10	0.18	0.47	1.98	2.18	0.85	0.30	0.12	0.92
IN.	0.80	0.34	0.22	0.11	0.19	0.55	2.21	2.51	0.95	0.34	0.14	1.03

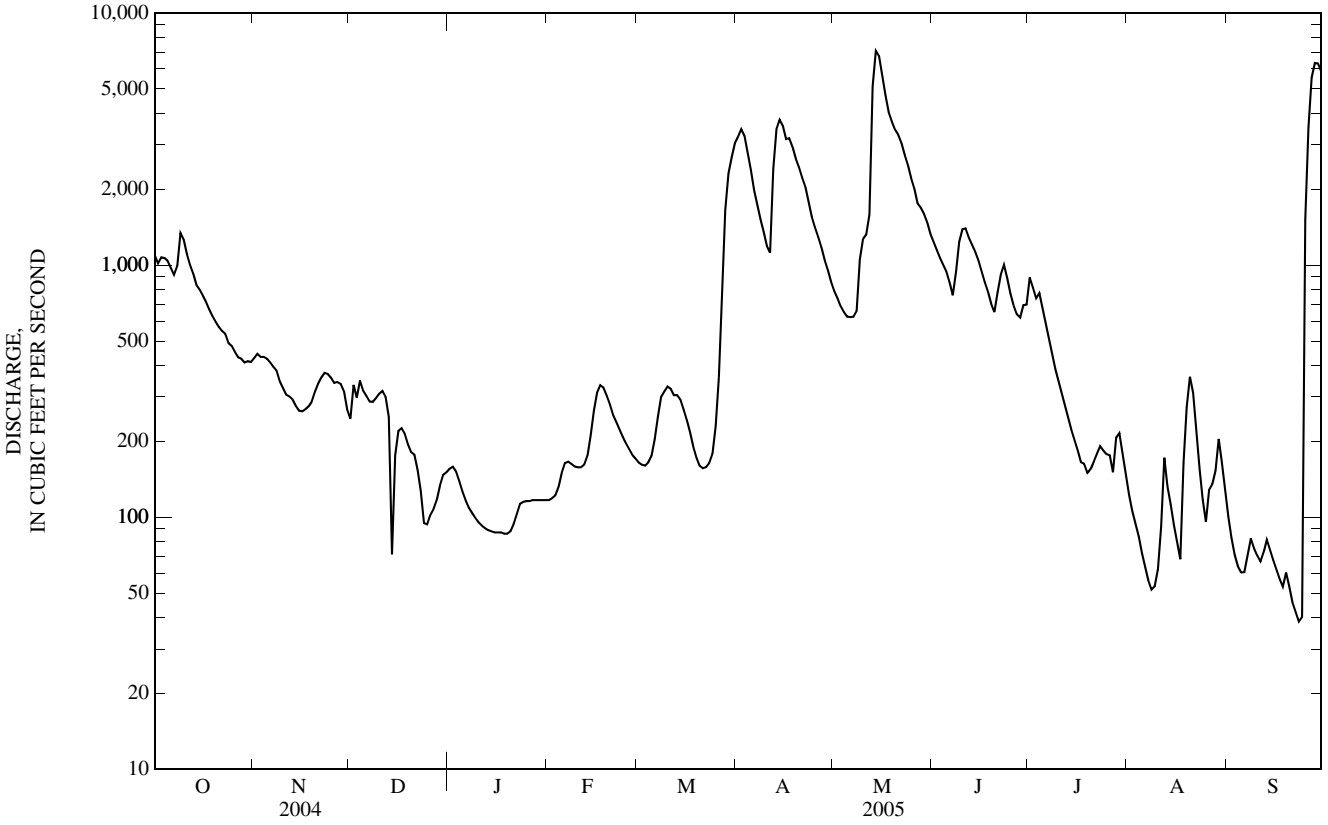
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2005, BY WATER YEAR (WY)

MEAN	328	267	148	82.4	137	766	1,413	1,000	1,087	653	405	288
MAX	3,300	1,561	698	493	1,299	3,465	6,563	3,706	3,913	2,760	3,656	2,754
(WY)	(1969)	(1993)	(1992)	(1992)	(1984)	(1983)	(1965)	(1960)	(1993)	(1993)	(1993)	(2004)
MIN	7.41	11.1	5.04	2.96	1.68	33.0	48.3	18.8	40.4	20.6	8.20	7.55
(WY)	(1990)	(1956)	(1959)	(1957)	(1959)	(1964)	(1957)	(1940)	(1950)	(1988)	(1989)	(1976)

05320500 LE SUEUR RIVER NEAR RAPIDAN, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1940 - 2005	
ANNUAL TOTAL	282,535.7		280,367			
ANNUAL MEAN	772		768		549	
HIGHEST ANNUAL MEAN					2,035	1993
LOWEST ANNUAL MEAN					51.4	1977
HIGHEST DAILY MEAN	10,800	Sep 18	7,080	May 14	23,400	Apr 8, 1965
LOWEST DAILY MEAN	8.9	Jan 30	39	Sep 23	1.6	Feb 9, 1959
ANNUAL SEVEN-DAY MINIMUM	9.6	Jan 28	48	Sep 18	1.6	Feb 9, 1959
MAXIMUM PEAK FLOW			7,370	May 14	24,700	Apr 8, 1965
MAXIMUM PEAK STAGE			9.01	May 14	a22.72	May 22, 1960
INSTANTANEOUS LOW FLOW			b21	Dec 14	1.6	Feb 9, 1959
ANNUAL RUNOFF (AC-FT)	560,400		556,100		398,100	
ANNUAL RUNOFF (CFSM)	0.695		0.692		0.495	
ANNUAL RUNOFF (INCHES)	9.47		9.40		6.73	
10 PERCENT EXCEEDS	1,850		2,110		1,520	
50 PERCENT EXCEEDS	304		303		158	
90 PERCENT EXCEEDS	13		87		18	

a From highwater mark.
b Result of freezeup.
e Estimated.



05325000 MINNESOTA RIVER AT MANKATO, MN

LOCATION(REVISED).--Lat 44°10"08", long 94°00'11", in SE¼SW¼ sec. 7, T. 108 N., R. 26 W., Blue Earth County, Hydrologic Unit 07020007, on right bank 300 ft downstream from Memorial bridge in Mankato, 2.0 mi downstream from Blue Earth River and at mile 106.2 upstream from Mississippi River.

DRAINAGE AREA.--14,900 mi^2 (approximately).

PERIOD OF RECORD.--May 1903 to current year (no winter records 1904, 1906-10, 1918-29). Monthly discharge only for some periods, published in WSP 1308. Published as "near Mankato": 1903-21.

REVISED RECORDS.--WSP 875: 1917. WSP 955: Drainage area. WSP 1085: 1929. WSP 1238: 1903, 1908, 1919. WSP 1508: 1916(M), 1918(M), 1926(M), 1928, 1930, 1932(M), 1938(M). WDR-MN-76-1: 1881(M).

GAGE.--Water-stage recorder. Datum of gage is 747.92 ft above sea level (NGVD of 1929). Prior to Oct. 19, 1921, nonrecording gage, at site 1.8 mi upstream at datum 6.4 ft higher. Mar. 15, 1922 to Nov. 30, 1924, nonrecording gage, and Dec. 1, 1924 to May 24, 1971, recorder at site 0.2 mi upstream at present datum. May 25, 1971 to Aug. 14, 1977, recorder at site 0.5 mi upstream at present datum. Aug. 14, 1977 to July 27, 1978, nonrecording gage; and from July 28, 1978 to Sept. 30, 1993, recording gage at site 0.7 mi upstream of present site.

REMARKS.--Records good except those for estimated daily discharges, which are fair to poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage, 29.9 ft, Apr. 26, 1881, near present site and datum, from floodmark (estimated discharge, 110,000 ft^3/s).

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	8,070	5,860	3,070	e1,410	e825	e1,700	9,130	6,560	9,860	9,050	3,140	2,670
2	7,420	6,330	3,090	e1,400	e870	e1,650	9,250	6,260	9,280	8,770	2,870	2,650
3	6,850	6,260	2,970	e1,340	e921	e1,610	9,210	5,910	8,710	8,460	2,630	2,480
4	6,790	5,890	3,190	e1,250	e990	e1,600	8,350	5,590	8,270	8,330	2,460	2,180
5	6,540	5,310	3,100	e1,170	e1,100	e1,600	7,560	5,420	8,210	8,050	2,080	2,010
6	6,100	4,960	2,810	e1,130	e1,180	e1,740	6,980	5,490	9,410	8,100	1,740	1,940
7	5,760	4,710	2,840	e1,130	e1,220	e2,130	6,500	5,690	9,780	7,910	1,580	1,960
8	5,580	4,480	2,760	e1,160	e1,220	e2,410	5,970	5,820	10,100	7,430	1,560	2,100
9	5,890	4,280	2,710	e1,200	e1,150	e2,420	5,490	7,200	10,900	7,160	1,510	2,040
10	5,970	4,100	2,750	e1,230	e1,100	e2,470	5,140	8,680	12,000	6,830	1,510	2,100
11	5,570	3,960	2,850	e1,250	e1,100	e2,480	5,280	9,900	12,900	6,460	1,530	2,250
12	5,240	3,890	3,030	e1,250	e1,120	e2,460	7,770	11,100	13,400	6,180	1,640	2,200
13	5,010	3,820	2,840	e1,210	e1,170	e2,440	12,600	16,800	14,100	5,880	1,580	2,310
14	4,760	3,700	2,060	e1,060	e1,320	e2,300	15,400	22,400	14,500	5,620	1,510	2,430
15	4,620	3,570	e1,470	e917	e1,630	e2,180	16,400	23,800	14,400	5,460	1,410	3,150
16	4,460	3,370	e1,610	e821	e2,130	e2,050	16,700	23,400	14,200	5,410	1,350	3,480
17	4,310	3,380	e1,810	e723	e2,700	e2,100	16,900	22,400	13,600	5,190	1,280	3,440
18	4,130	3,260	e1,890	e638	e2,850	e1,790	16,600	20,500	13,200	4,910	1,810	3,140
19	3,990	3,330	e1,810	e624	e2,800	e1,710	16,300	19,400	12,600	4,670	2,540	2,950
20	3,870	3,370	e1,700	e600	e2,700	e1,850	15,800	18,800	12,200	4,570	3,210	2,910
21	3,720	3,360	e1,530	e620	e2,600	e1,930	14,900	18,300	12,500	4,460	3,150	2,910
22	3,630	3,480	e1,420	e610	e2,450	e2,070	14,200	17,700	12,800	4,380	2,970	2,850
23	3,580	3,670	e1,340	e587	e2,230	e2,070	13,100	16,900	12,400	4,420	2,610	2,640
24	3,540	3,660	e1,260	e578	e2,080	e2,180	11,800	15,900	11,700	4,170	2,230	2,470
25	3,470	3,630	e1,220	e593	e1,970	e2,490	10,900	15,000	10,900	3,820	2,070	4,750
26	3,330	3,630	e1,220	e635	e1,850	e2,820	10,000	13,800	10,300	3,320	2,170	11,600
27	3,210	3,620	e1,220	e678	e1,810	e3,470	9,280	12,300	9,880	3,000	1,970	16,900
28	3,110	3,490	e1,240	e715	e1,750	5,300	8,450	11,500	9,570	3,120	1,760	19,600
29	3,130	3,470	e1,260	e758	---	7,160	7,690	11,100	9,330	3,770	1,800	20,200
30	3,260	3,270	e1,290	e771	---	8,790	7,060	10,900	9,080	3,700	1,890	19,000
31	4,350	---	e1,380	e795	---	9,010	---	10,400	---	3,490	2,400	---
TOTAL	149,260	123,110	64,740	28,853	46,836	87,980	320,710	404,920	340,080	176,090	63,960	153,310
MEAN	4,815	4,104	2,088	931	1,673	2,838	10,690	13,060	11,340	5,680	2,063	5,110
MAX	8,070	6,330	3,190	1,410	2,850	9,010	16,900	23,800	14,500	9,050	3,210	20,200
MIN	3,110	3,260	1,220	578	825	1,600	5,140	5,420	8,210	3,000	1,280	1,940
AC-FT	296,100	244,200	128,400	57,230	92,900	174,500	636,100	803,200	674,500	349,300	126,900	304,100
CFSM	0.32	0.28	0.14	0.06	0.11	0.19	0.72	0.88	0.76	0.38	0.14	0.34
IN.	0.37	0.31	0.16	0.07	0.12	0.22	0.80	1.01	0.85	0.44	0.16	0.38

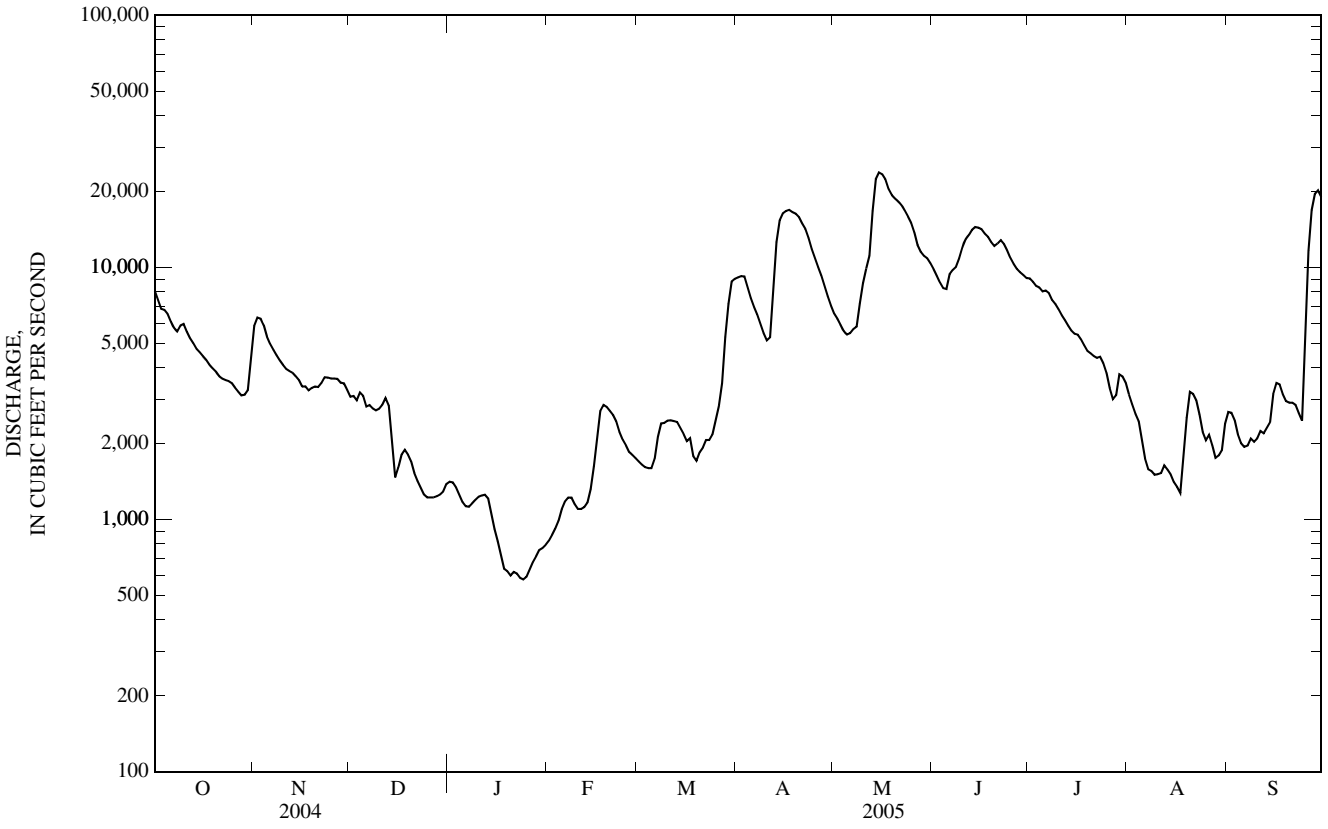
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 2005, BY WATER YEAR (WY)

MEAN	1,654	1,590	1,054	654	804	4,422	9,691	6,117	6,466	4,633	2,365	1,716
MAX	14,600	8,569	4,770	3,009	4,505	18,230	52,910	25,740	34,230	33,130	23,520	11,070
(WY)	(1969)	(1996)	(1983)	(1992)	(1983)	(1983)	(2001)	(2001)	(1993)	(1993)	(1993)	(1993)
MIN	66.1	83.5	80.9	61.5	58.4	132	609	101	194	58.3	37.4	56.6
(WY)	(1934)	(1934)	(1934)	(1940)	(1940)	(1934)	(1931)	(1934)	(1934)	(1934)	(1934)	(1934)

05325000 MINNESOTA RIVER AT MANKATO, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1903 - 2005	
ANNUAL TOTAL	1,571,589		1,959,849			
ANNUAL MEAN	4,294		5,369		a3,592	
HIGHEST ANNUAL MEAN					14,890	1993
LOWEST ANNUAL MEAN					136	1934
HIGHEST DAILY MEAN	23,400	Jun 15	23,800	May 15	92,700	Apr 10, 1965
LOWEST DAILY MEAN	190	Jan 31	b578	Jan 24	31	Aug 3, 1934
ANNUAL SEVEN-DAY MINIMUM	194	Jan 29	602	Jan 19	33	Jul 29, 1934
MAXIMUM PEAK FLOW			23,900	May 15	94,100	Apr 10, 1965
MAXIMUM PEAK STAGE			15.48	May 15	30.11	Jun 21, 1993
INSTANTANEOUS LOW FLOW			b578	Jan 24	c26	Aug 4, 1934
ANNUAL RUNOFF (AC-FT)	3,117,000		3,887,000		2,602,000	
ANNUAL RUNOFF (CFSM)	0.288		0.360		0.241	
ANNUAL RUNOFF (INCHES)	3.92		4.89		3.28	
10 PERCENT EXCEEDS	11,200		12,800		9,670	
50 PERCENT EXCEEDS	2,730		3,370		1,310	
90 PERCENT EXCEEDS	240		1,220		185	

a Median of annual mean discharges is 2,900 ft^3/s.
b Estimated, minimum daily, result of freezeup.
c Minimum observed.
e Estimated.



05325000 MINNESOTA RIVER AT MANKATO, MN—Continued

PERIOD OF RECORD.-- Water years 1963-66, 1968 to current year.

PERIOD OF DAILY RECORD:

WATER TEMPERATURES.-- October 1967 to September 30, 1981, October 1982 to current year (fragmentary records).

SPECIFIC CONDUCTANCE.-- October 1971 to June 1976, October, 2002 to current year.

SUSPENDED-SEDIMENT DISCHARGE.-- October 1967 to current year.

REMARKS.--Specific conductances and water temperatures were obtained by the observer at the time of sediment sampling, and monthly by U.S. Geological Survey personnel. Sediment samples were collected generally from two to five three times per week by an observer from Oct. 1 Dec. 8 and from to Apr. 1 to Sep. 30. In general, daily concentrations and loads for the open-water period are considered fair to poor. During the winter period, when fewer samples are collected, daily sediment concentrations and loads are based primarily on concentrations of sediment in samples that were collected monthly, and on trends of daily water-discharge records. Sediment records for the winter period are considered poor.

EXTREMES FOR PERIOD OF DAILY RECORD:

SPECIFIC CONDUCTANCE.-- Maximum observed, 1,040 µS/cm, Jan. 7, 2004; minimum observed, 369 µS/cm, Sep. 18, 2004.

WATER TEMPERATURES.-- Maximum observed, 31.5 C, Aug. 6, 2001; minimum observed, 0.0 C on many days most winters.

SEDIMENT CONCENTRATIONS.-- Maximum daily mean, 2,850 mg/L, Aug. 7, 1968; minimum daily mean, 9 mg/L, Jan. 15-19, 1991.

SEDIMENT LOADS.-- Maximum daily, 414,000 tons, June 21, 1993; minimum daily, 5.2 tons, Nov. 6, 1976.

EXTREMES FOR CURRENT YEAR:

SPECIFIC CONDUCTANCE.-- Maximum observed, 926 µS/cm, June 18; minimum observed, 462 µS/cm, Mar. 29.

WATER TEMPERATURES.-- Maximum observed, 28.0 C, July 11; minimum observed, 0.0 C, Jan. 5 and Feb. 8 (assumed to be 0.0 C, many days during winter).

SEDIMENT CONCENTRATIONS.-- Maximum daily mean, 1,550 mg/L, Sep. 26; minimum daily mean, 55 mg/L, Dec. 15.

SEDIMENT LOADS.-- Maximum daily, 48,500 tons, Sep. 26; minimum daily, 218 tons, Dec. 15.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	683	719	722	---	---	---	563	---	---	---	819	---
2	685	---	673	---	---	---	---	683	714	---	---	---
3	---	---	678	---	---	---	618	---	---	---	821	---
4	701	---	---	---	---	---	---	---	---	---	---	---
5	---	741	---	---	---	---	626	736	---	844	796	---
6	688	776	---	---	---	---	633	715	---	809	---	---
7	---	---	---	---	---	---	639	---	---	---	---	---
8	---	---	670	---	---	---	---	---	---	---	800	---
9	---	---	---	---	---	---	626	712	---	---	---	702
10	701	724	---	---	---	---	---	755	---	---	---	---
11	---	832	---	---	---	---	646	---	---	817	---	---
12	671	---	---	---	---	---	630	---	---	---	747	713
13	752	740	---	---	---	---	676	---	---	---	---	---
14	---	---	---	---	---	---	680	---	---	842	---	---
15	---	742	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	711	713	874	---	757	717
17	736	---	---	---	---	---	---	724	---	---	---	---
18	737	658	---	---	---	---	---	---	926	854	---	---
19	---	757	---	---	---	---	---	---	---	---	---	774
20	741	---	---	---	---	---	737	---	---	---	544	---
21	---	737	---	---	---	---	---	---	865	---	---	---
22	699	---	---	---	---	---	---	---	---	---	577	---
23	---	705	---	---	---	---	---	683	835	---	---	844
24	592	---	---	---	---	---	686	---	802	---	---	---
25	620	---	---	---	---	---	677	689	---	---	---	---
26	---	677	---	---	---	---	---	687	---	---	---	397
27	711	---	---	---	---	---	662	---	813	796	---	---
28	---	671	---	---	---	520	---	---	789	---	---	438
29	---	---	---	---	---	462	---	---	---	---	805	---
30	666	---	---	---	---	---	---	713	---	---	---	---
31	---	---	---	---	---	585	---	---	---	---	---	---

05325000 MINNESOTA RIVER AT MANKATO, MN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.0	9.0	1.0	---	---	---	10.0	---	---	---	27.0	---
2	16.0	---	1.0	---	---	---	---	10.0	18.0	---	---	---
3	---	---	1.0	---	---	---	9.0	---	---	---	27.0	---
4	15.0	---	---	---	---	---	---	---	---	---	---	---
5	---	10.0	---	0.0	---	---	10.0	13.0	---	25.0	27.0	---
6	14.0	11.0	---	---	---	---	10.0	14.0	20.5	25.0	---	---
7	---	---	---	---	---	---	13.0	---	---	---	---	---
8	---	---	2.0	---	0.0	---	---	---	---	---	26.0	---
9	---	---	---	---	---	---	15.0	18.0	---	---	---	23.0
10	15.0	11.0	---	---	---	---	---	15.0	---	---	---	---
11	---	8.0	---	---	---	---	14.0	---	---	28.0	---	---
12	11.0	---	---	---	---	---	12.0	---	---	---	26.0	24.0
13	10.0	8.0	---	---	---	---	14.0	---	---	---	---	---
14	---	---	---	---	---	---	15.0	---	---	27.0	---	---
15	---	5.0	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	2.0	14.0	10.0	20.0	---	26.0	20.0
17	7.0	---	---	---	---	---	---	13.0	---	---	---	---
18	10.0	7.0	---	---	---	---	---	---	22.0	24.0	---	---
19	---	6.0	---	---	---	---	13.5	---	---	---	---	20.0
20	11.0	---	---	---	---	---	14.0	---	---	---	24.0	---
21	---	5.0	---	---	---	---	---	---	25.0	---	---	---
22	11.0	5.0	---	---	---	---	---	---	---	---	22.0	---
23	---	3.0	---	---	---	---	---	17.0	23.0	---	---	20.0
24	10.0	---	---	---	---	---	11.0	---	25.0	---	17.5	---
25	11.0	---	---	---	---	---	12.0	15.0	---	---	---	---
26	---	3.0	---	---	---	---	---	16.0	---	---	---	18.0
27	11.0	---	---	---	---	---	10.0	---	25.0	23.0	---	18.5
28	---	2.0	---	---	---	10.0	---	---	25.0	---	---	19.0
29	---	---	---	---	---	9.0	---	---	---	---	23.0	---
30	10.0	---	---	---	---	---	---	16.0	---	---	---	---
31	---	---	---	---	---	9.0	---	---	---	---	---	---

05325000 MINNESOTA RIVER AT MANKATO, MN—Continued

SUSPENDED-SEDIMENT
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

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	234	5,100	479	7,580	146	1,210	297	1,130	155	345	239	1,100
2	226	4,530	506	8,650	148	1,230	281	1,060	151	355	224	998
3	238	4,400	429	7,250	162	1,300	253	915	145	361	212	922
4	273	5,000	320	5,090	173	1,490	236	796	141	377	206	890
5	291	5,140	244	3,500	147	1,230	223	704	138	410	205	886
6	295	4,860	224	3,000	126	956	217	662	137	436	212	996
7	285	4,430	209	2,660	109	836	207	632	141	464	220	1,270
8	283	4,260	193	2,330	94	700	203	636	145	478	219	1,430
9	267	4,250	182	2,100	95	695	200	648	148	460	208	1,360
10	225	3,630	180	1,990	94	698	198	658	165	490	179	1,190
11	227	3,410	170	1,820	85	654	197	665	178	529	159	1,060
12	214	3,030	168	1,760	69	564	193	651	179	541	144	956
13	198	2,680	164	1,690	59	452	189	617	204	644	130	856
14	160	2,060	156	1,560	58	323	185	529	298	1,060	122	758
15	136	1,700	147	1,420	55	218	181	448	375	1,650	106	624
16	130	1,570	144	1,310	118	513	172	381	426	2,450	92	509
17	117	1,360	136	1,240	271	1,320	170	332	485	3,540	97	550
18	120	1,340	127	1,120	360	1,840	166	286	499	3,840	98	474
19	123	1,330	118	1,060	401	1,960	163	275	487	3,680	95	439
20	97	1,010	100	910	429	1,970	162	262	453	3,300	98	490
21	110	1,100	89	807	438	1,810	161	270	406	2,850	105	547
22	152	1,490	98	921	429	1,640	169	278	354	2,340	116	648
23	184	1,780	149	1,480	405	1,470	178	282	322	1,940	129	721
24	191	1,830	172	1,700	390	1,330	181	282	297	1,670	139	818
25	192	1,800	168	1,650	369	1,220	180	288	283	1,510	192	1,290
26	191	1,720	167	1,640	352	1,160	175	300	270	1,350	315	2,400
27	216	1,870	168	1,640	329	1,080	174	319	256	1,250	574	5,380
28	233	1,960	167	1,570	319	1,070	170	328	249	1,180	914	13,100
29	251	2,120	166	1,560	313	1,060	165	338	---	---	1,330	25,700
30	311	2,740	152	1,340	307	1,070	164	341	---	---	1,200	28,500
31	394	4,630	---	---	302	1,130	159	341	---	---	830	20,200
TOTAL	---	88,130	---	72,348	---	34,199	---	15,654	---	39,500	---	117,062

05325000 MINNESOTA RIVER AT MANKATO, MN—Continued

SUSPENDED-SEDIMENT—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

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	835	20,600	251	4,450	349	9,290	227	5,550	197	1,670	232	1,670
2	844	21,100	235	3,970	338	8,470	217	5,140	178	1,380	219	1,570
3	688	17,100	224	3,570	324	7,620	208	4,750	165	1,170	192	1,290
4	551	12,400	190	2,870	307	6,860	205	4,610	159	1,060	162	954
5	494	10,100	190	2,780	299	6,630	206	4,480	153	859	149	809
6	452	8,520	204	3,020	324	8,230	207	4,530	138	648	175	917
7	420	7,370	233	3,580	335	8,850	219	4,680	118	503	180	953
8	408	6,580	260	4,090	340	9,270	251	5,040	107	451	188	1,070
9	413	6,120	280	5,440	354	10,400	269	5,200	113	461	170	936
10	557	7,730	316	7,410	372	12,100	273	5,030	126	514	158	896
11	1,020	14,500	471	12,600	439	15,300	271	4,730	138	570	138	838
12	1,040	21,800	721	21,600	572	20,700	270	4,510	131	580	111	659
13	991	33,700	899	40,800	660	25,100	257	4,080	124	529	144	898
14	1,030	42,800	1,030	62,300	657	25,700	249	3,780	110	448	235	1,540
15	1,080	47,800	1,050	67,500	584	22,700	244	3,600	87	331	271	2,300
16	1,050	47,300	890	56,200	430	16,500	236	3,450	86	313	260	2,440
17	812	37,100	767	46,400	365	13,400	228	3,190	100	346	238	2,210
18	513	23,000	707	39,100	355	12,700	227	3,010	230	1,120	188	1,590
19	409	18,000	671	35,100	313	10,600	223	2,810	313	2,150	166	1,320
20	393	16,800	632	32,100	288	9,490	226	2,790	300	2,600	162	1,270
21	441	17,700	607	30,000	278	9,380	227	2,730	250	2,130	157	1,230
22	482	18,500	574	27,400	293	10,100	233	2,760	155	1,240	157	1,210
23	477	16,900	551	25,100	340	11,400	231	2,760	116	817	169	1,200
24	434	13,800	529	22,700	366	11,600	227	2,560	78	470	179	1,190
25	396	11,700	499	20,200	344	10,100	219	2,260	88	492	654	10,200
26	358	9,670	474	17,700	297	8,260	211	1,890	189	1,110	1,550	48,500
27	336	8,420	451	15,000	266	7,100	207	1,680	204	1,090	1,060	46,700
28	317	7,230	438	13,600	257	6,640	204	1,720	180	855	684	36,200
29	289	6,000	415	12,400	245	6,170	226	2,300	185	899	699	38,100
30	276	5,260	396	11,700	231	5,660	230	2,300	207	1,060	628	32,200
31	---	---	370	10,400	---	---	214	2,020	232	1,500	---	---
TOTAL	---	535,600	---	661,080	---	346,320	---	109,940	---	29,366	---	242,860
YEAR	2,292,059											

05327000 HIGH ISLAND CREEK NEAR HENDERSON, MN

LOCATION.--Lat 44°34'19", long 93°55'18", in NE¼NW¼ sec. 26, T.113 N., R.26 W., Sibley County, Hydrologic Unit 07020012, on left bank 20 ft downstream from bridge on County Road 6, 1.6 mi upstream from mouth, and 3.1 mi north of Henderson.

DRAINAGE AREA.--238 mi^2.

PERIOD OF RECORD.--October 1973 to current year. May 1970 to September 1973, operated as a low-flow station only.

REVISED RECORDS.--WDR-MN-80-2: 1974-75, 1977-79, WRD MN-98: 1993.

GAGE.--Water-stage recorder. Datum of gage is 728.56 ft above sea level (NGVD of 1929).

REMARKS.--Records good except those for estimated daily discharges, which are fair to poor.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 370 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr 18	1315	*628	*5.70	Jun 30	1445	477	5.10
Jun 17	0415	609	5.63				

Minimum discharge, 1.5 ft^3/s, Sept. 3, gage height, 2.13 ft.

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	54	39	32	e7.8	2.9	e12	e110	107	164	340	16	2.2
2	47	42	32	e7.9	3.1	e12	e91	98	147	249	15	1.9
3	44	41	28	e7.3	3.3	e12	77	89	133	220	13	1.8
4	41	41	26	e6.3	3.6	12	62	82	134	191	12	3.8
5	38	40	23	e5.8	e5.0	13	52	76	139	162	11	6.5
6	34	39	25	5.2	e6.8	e23	46	74	157	140	10	5.1
7	32	37	25	4.5	e6.9	e27	48	77	189	118	8.9	7.1
8	32	35	24	3.6	e6.9	e29	47	83	342	97	8.3	11
9	31	34	24	3.4	e6.9	e29	42	98	388	83	8.0	11
10	29	32	24	e3.2	e7.3	e29	42	131	357	72	7.4	12
11	28	31	24	3.1	e7.8	e29	80	131	390	64	7.9	11
12	26	30	e23	3.3	8.1	e29	418	140	434	57	7.8	9.9
13	24	28	e16	e3.2	e9.4	e29	421	291	473	51	6.2	45
14	22	27	e21	e3.0	e11	e28	385	275	525	46	5.3	80
15	22	27	e22	e2.6	e14	e27	402	230	559	41.0	4.6	147
16	46	27	e21	e2.3	e15	e26	445	214	585	36	4.2	195
17	39	26	e20	e2.0	e15	e24	503	205	602	33	4.2	215
18	30	26	e19	e1.9	e15	20	588	247	599	29	5.7	212
19	27	28	e17	e2.0	e15	e20	531	328	588	26	6.0	192
20	24	29	e16	e2.0	e15	e19	450	285	569	29	5.2	155
21	22	31	e14	e2.1	e14	e19	391	286	514	26	3.7	121
22	20	33	e11	e2.2	e14	e21	332	302	421	24	3.1	90
23	18	34	e8.9	e2.2	e14	e25	283	297	347	22	2.6	70
24	17	48	e7.5	e2.3	e14	e30	243	281	340	20	2.4	60
25	17	40	e7.1	e2.4	e13	e36	213	266	335	22	2.1	84
26	21	35	e6.9	e2.4	e13	e46	190	251	289	28	5.4	86
27	23	35	e6.7	e2.5	e13	e56	172	235	257	24	9.6	104
28	25	30	e6.7	2.5	e13	e70	155	224	294	22	4.7	125
29	29	29	e6.7	2.7	---	e91	138	214	268	21	3.5	132
30	30	32	e7.1	2.8	---	e109	121	199	425	19	2.7	134
31	33	---	e7.4	2.8	---	e114	---	181	---	17	2.3	---
TOTAL	925	1,006	552.0	107.3	286.0	1,066	7,078	5,997	10,964	2,329.0	208.8	2,330.3
MEAN	29.8	33.5	17.8	3.46	10.2	34.4	236	193	365	75.1	6.74	77.7
MAX	54	48	32	7.9	15	114	588	328	602	340	16	215
MIN	17	26	6.7	1.9	2.9	12	42	74	133	17	2.1	1.8
AC-FT	1,830	2,000	1,090	213	567	2,110	14,040	11,900	21,750	4,620	414	4,620
CFSM	0.13	0.14	0.08	0.01	0.04	0.15	1.00	0.82	1.54	0.32	0.03	0.33
IN.	0.15	0.16	0.09	0.02	0.04	0.17	1.11	0.94	1.72	0.37	0.03	0.37

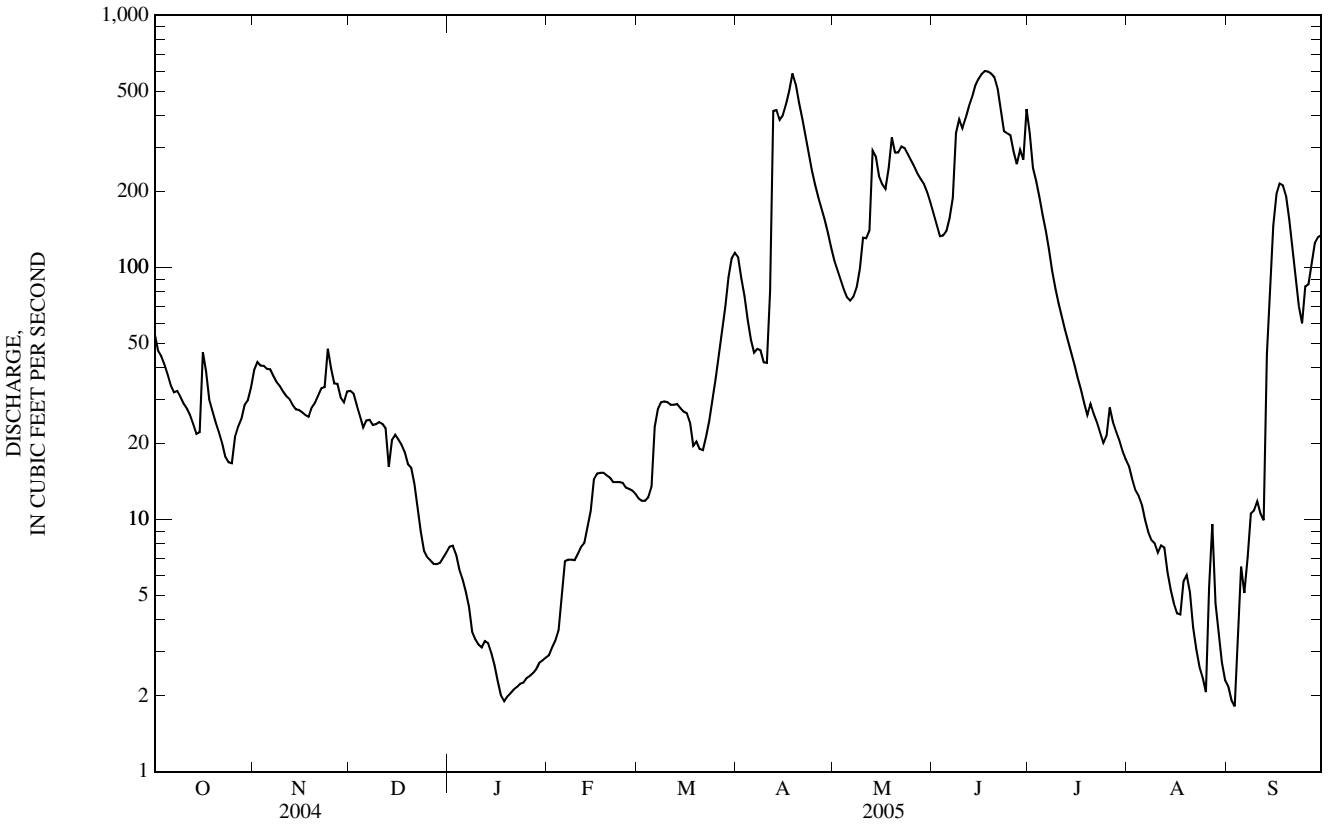
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2005, BY WATER YEAR (WY)

MEAN	65.5	54.9	30.5	13.4	20.9	144	258	163	192	124	74.3	88.0
MAX	298	219	111	72.5	121	547	1,104	478	746	783	380	592
(WY)	(1986)	(1993)	(1983)	(1992)	(1984)	(1992)	(2001)	(1993)	(2004)	(1993)	(1997)	(1991)
MIN	1.51	2.11	1.37	0.98	1.28	5.33	6.69	3.32	1.58	0.80	1.16	1.18
(WY)	(1990)	(1990)	(1976)	(1977)	(1989)	(2001)	(1990)	(1976)	(1976)	(1976)	(1976)	(1974)

05327000 HIGH ISLAND CREEK NEAR HENDERSON, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1974 - 2005	
ANNUAL TOTAL	40,237.2		32,849.4			
ANNUAL MEAN	110		90.0		102	
HIGHEST ANNUAL MEAN					293	1993
LOWEST ANNUAL MEAN					9.23	1976
HIGHEST DAILY MEAN	1,830	Jun 12	602	Jun 17	2,400	Apr 12, 2001
LOWEST DAILY MEAN	1.4	Jan 27	1.8	Sep 3	0.46	Oct 3, 1976
ANNUAL SEVEN-DAY MINIMUM	1.4	Jan 27	2.1	Jan 17	0.59	Jul 10, 1976
MAXIMUM PEAK FLOW			628	Apr 18	a2,830	Jul 25, 1997
MAXIMUM PEAK STAGE			5.70	Apr 18	b9.88	Apr 23, 2001
INSTANTANEOUS LOW FLOW			1.5	Sep 3	c0.20	Jan 4, 1981
ANNUAL RUNOFF (AC-FT)	79,810		65,160		74,240	
ANNUAL RUNOFF (CFSM)	0.464		0.380		0.432	
ANNUAL RUNOFF (INCHES)	6.32		5.16		5.87	
10 PERCENT EXCEEDS	317		290		292	
50 PERCENT EXCEEDS	22		29		27	
90 PERCENT EXCEEDS	2.4		3.6		2.1	

a Gage height, 9.31 ft.
b Backwater from Minnesota River.
c Result of freezeup.
e Estimated.



05330000 MINNESOTA RIVER NEAR JORDAN, MN

LOCATION.--Lat 44°41'35", long 93°38'30", in NW¼SW¼ sec. 7, T.114 N., R.23 W., Carver County, Hydrologic Unit 07020012, on right bank 100 ft downstream from bridge on Scott County Highway 9, 1.5 mi northwest of Jordan, and at mile 39.4 uptream from Mississippi River.

DRAINAGE AREA.--16,200 mi^2 (approximately).

PERIOD OF RECORD.--September 1934 to current year. Prior to Oct. 1, 1966, published as "near Carver, Minn".

REVISED RECORDS.--WSP 955: Drainage area. WSP 1508: 1935. WDR MN-87-2: 1976 (cal. yr. summary).

GAGE.--Water-stage recorder. Datum of gage is 690.00 ft above sea level (NGVD of 1929). Prior to Oct. 1, 1966, water-stage recorder 2.8 mi downstream with auxiliary nonrecording gage at present site and present datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair to poor.

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	9,720	4,280	3,700	e1,540	e912	e1,920	9,390	8,290	11,300	9,960	3,890	2,350
2	8,870	5,670	e3,470	e1,580	e960	e1,850	9,490	7,760	10,800	9,650	3,620	2,700
3	8,150	6,360	e3,420	e1,540	e1,040	e1,800	9,530	7,360	10,200	9,320	3,340	2,810
4	7,530	6,520	e3,490	e1,470	e1,120	e1,760	9,540	7,020	9,660	8,970	3,120	2,800
5	7,330	6,350	e3,610	e1,350	e1,210	e1,790	9,030	6,630	9,240	8,710	2,920	2,550
6	7,190	5,950	e3,480	e1,260	e1,300	e1,930	8,310	6,440	9,080	8,410	2,620	2,370
7	e6,840	e5,600	3,250	e1,250	e1,370	e2,210	7,700	6,390	9,880	8,300	2,280	2,300
8	e6,580	e5,300	3,140	e1,270	e1,360	e2,520	7,250	6,560	10,700	8,170	2,060	2,380
9	e6,390	5,060	3,110	e1,300	e1,320	e2,800	6,810	6,760	11,600	7,780	2,000	2,400
10	e6,610	4,880	3,060	e1,350	e1,250	e2,940	6,360	7,740	12,400	7,450	1,970	2,390
11	e6,470	4,700	3,010	e1,380	e1,210	e3,030	6,080	9,020	13,000	7,160	1,920	2,320
12	e5,990	e4,560	3,110	e1,410	e1,230	e2,900	6,670	10,100	13,800	6,880	1,920	2,450
13	5,710	e4,460	e3,150	e1,370	e1,270	e2,760	9,640	11,600	14,400	6,520	1,930	2,630
14	5,490	e4,370	e2,590	e1,250	e1,360	e2,590	12,700	14,700	14,900	6,230	1,890	2,690
15	5,270	e4,250	2,040	e1,090	e1,650	e2,520	14,600	17,200	15,400	5,960	1,840	2,760
16	5,090	e4,070	2,110	e962	e2,150	e2,480	15,800	19,100	15,600	5,790	1,770	3,230
17	4,950	e3,970	e1,940	e863	e3,010	e2,470	16,500	21,000	15,600	5,700	1,690	3,730
18	4,790	3,930	e2,010	e772	e3,910	e2,360	17,300	22,900	15,400	5,530	1,680	3,810
19	4,630	e3,870	e1,920	e680	e4,160	e2,190	17,900	24,200	14,900	5,300	1,910	3,660
20	4,450	e3,830	e1,800	e667	e3,940	e2,210	18,400	23,700	14,400	5,080	2,550	3,400
21	4,330	e3,810	e1,630	e679	e3,350	e2,300	18,200	22,500	14,100	4,980	3,060	3,290
22	4,200	e3,840	e1,500	e679	e2,960	e2,320	17,800	21,600	13,900	e5,050	3,320	3,250
23	4,080	e3,900	e1,400	e644	e2,640	e2,350	16,900	20,900	14,000	e4,930	3,250	3,180
24	3,970	e4,000	e1,350	e640	e2,440	e2,400	15,800	20,200	e13,600	e4,920	3,000	3,030
25	3,920	4,050	e1,350	e657	e2,280	e2,500	14,400	19,400	12,800	4,560	2,670	2,990
26	3,840	4,040	e1,350	e690	e2,160	e2,710	12,900	18,400	12,000	4,340	2,480	4,260
27	3,740	4,060	e1,350	e741	e2,060	e3,110	11,600	17,200	11,300	3,950	2,400	9,040
28	3,630	4,000	e1,360	e789	e1,980	e3,840	10,700	15,500	10,800	3,560	2,370	12,400
29	3,570	3,900	e1,400	e824	---	e5,180	9,790	13,900	10,400	3,480	2,110	14,400
30	3,540	3,830	e1,440	e852	---	e7,200	8,980	12,700	10,100	3,900	2,040	15,800
31	3,600	---	e1,510	e879	---	8,800	---	11,900	---	4,030	2,030	---
TOTAL	170,470	137,410	73,050	32,428	55,602	89,740	356,070	438,670	375,260	194,570	75,650	127,370
MEAN	5,499	4,580	2,356	1,046	1,986	2,895	11,870	14,150	12,510	6,276	2,440	4,246
MAX	9,720	6,520	3,700	1,580	4,160	8,800	18,400	24,200	15,600	9,960	3,890	15,800
MIN	3,540	3,810	1,350	640	912	1,760	6,080	6,390	9,080	3,480	1,680	2,300
AC-FT	338,100	272,600	144,900	64,320	110,300	178,000	706,300	870,100	744,300	385,900	150,100	252,600
CFSM	0.34	0.28	0.15	0.06	0.12	0.18	0.73	0.87	0.77	0.39	0.15	0.26
IN.	0.39	0.32	0.17	0.07	0.13	0.21	0.82	1.01	0.86	0.45	0.17	0.29

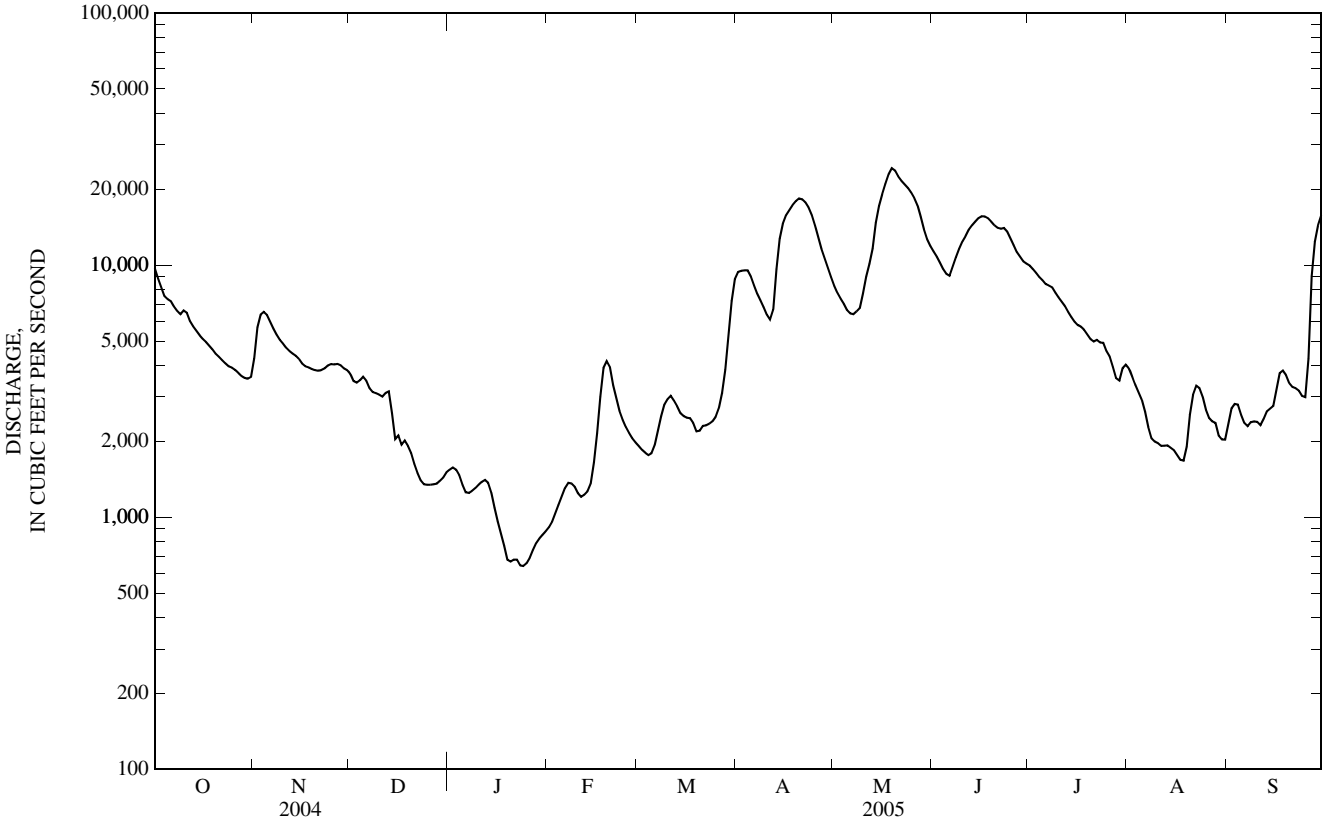
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 2005, BY WATER YEAR (WY)

MEAN	2,220	2,159	1,513	928	1,021	5,009	12,640	8,358	8,198	5,978	3,287	2,325
MAX	16,030	9,463	5,216	3,344	3,992	21,170	59,030	31,480	41,460	38,640	25,660	14,460
(WY)	(1969)	(1996)	(1983)	(1992)	(1983)	(1983)	(2001)	(2001)	(1993)	(1993)	(1993)	(1993)
MIN	167	178	158	111	130	322	926	923	633	279	178	183
(WY)	(1935)	(1935)	(1977)	(1940)	(1940)	(1940)	(1959)	(1959)	(1976)	(1936)	(1936)	(1976)

05330000 MINNESOTA RIVER NEAR JORDAN, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1935 - 2005	
ANNUAL TOTAL	1,827,316		2,126,290			
ANNUAL MEAN	4,993		5,825		a4,475	
HIGHEST ANNUAL MEAN					16,910	1993
LOWEST ANNUAL MEAN					687	1940
HIGHEST DAILY MEAN	27,600	Jun 14	24,200	May 19	112,000	Apr 11, 1965
LOWEST DAILY MEAN	304	Feb 26	640	Jan 24	85	Jan 21, 1940
ANNUAL SEVEN-DAY MINIMUM	315	Feb 3	664	Jan 19	89	Jan 20, 1940
MAXIMUM PEAK FLOW			24,500	May 19	117,000	Apr 11, 1965
MAXIMUM PEAK STAGE			23.65	May 19	35.07	Apr 12, 1965
INSTANTANEOUS LOW FLOW			b640	Jan 24	79	Nov 17, 1955
ANNUAL RUNOFF (AC-FT)	3,624,000		4,217,000		3,242,000	
ANNUAL RUNOFF (CFSM)	0.308		0.360		0.276	
ANNUAL RUNOFF (INCHES)	4.20		4.88		3.75	
10 PERCENT EXCEEDS	13,200		14,200		11,900	
50 PERCENT EXCEEDS	3,140		3,870		1,880	
90 PERCENT EXCEEDS	388		1,350		337	

a Median of annual mean discharges is 3700 ft^3/s.
b Estimated daily-mean discharge, backwater from ice.
e Estimated.



05330920 MINNESOTA RIVER AT FT. SNELLING STATE PARK, MN

LOCATION.--LAT 44°52'13", long 93°11'32", in SE¼SW¼NE¼ sec.32, T. 28 N., R. 23 W., Hennepin County, Hydrologic Unit 07020012, on left bank at Ft. Snelling State Park and at mile 3.5 upstream from Mississipp River.

DRAINAGE AREA.--16,900 mi^2 (approximately).

PERIOD OF RECORD.--January 2004 to current year.

GAGE.--Water-stage and velocity recorder. Datum of gage is 680.00 ft above sea level (NGVD of 1929).

REMARKS.--Records good to fair except those for estimated days, which are fair to poor. Backwater from Mississippi River.

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	11,200	4,550	e4,160	e1,750	e920	2,650	9,880	9,080	12,200	10,700	4,110	2,610
2	10,400	6,030	e3,880	e1,800	e960	2,430	9,960	8,520	11,500	10,400	3,820	2,910
3	9,380	7,160	e3,770	e1,850	e1,020	2,330	10,100	8,020	11,000	10,100	3,680	3,210
4	8,580	7,400	e3,710	e1,760	e1,100	e2,270	10,100	7,610	10,200	9,880	3,860	4,240
5	8,420	7,380	e3,790	e1,650	e1,160	e2,200	9,800	7,140	9,840	9,700	3,440	4,050
6	8,170	7,110	e3,880	e1,550	e1,260	e2,200	8,970	6,930	9,490	9,390	3,040	3,620
7	7,550	6,620	e3,670	e1,450	e1,340	e2,350	8,350	6,540	9,860	9,270	2,700	3,520
8	7,220	6,140	e3,530	e1,460	e1,420	e2,550	7,840	6,710	11,000	9,250	2,440	3,550
9	6,880	5,860	e3,460	e1,480	e1,500	e2,900	7,250	7,020	12,000	8,780	2,740	3,540
10	6,940	5,600	e3,380	e1,510	e1,420	3,210	6,870	7,530	12,700	8,480	2,530	3,520
11	7,070	e5,340	e3,340	e1,560	e1,380	3,320	6,330	8,810	13,300	8,120	2,500	3,330
12	6,990	e5,160	e3,370	e1,590	e1,370	3,500	6,460	10,300	13,900	7,550	2,410	3,260
13	6,430	e5,040	e3,480	e1,600	e1,360	3,370	8,810	12,000	14,600	7,110	2,250	3,600
14	6,070	e4,870	2,200	e1,590	e1,450	3,080	12,300	13,800	15,100	6,820	2,220	3,790
15	5,910	e4,750	2,130	e1,400	e1,700	2,940	14,200	15,900	16,100	6,560	2,200	3,770
16	5,760	e4,650	2,270	e1,260	e2,300	2,850	e15,600	17,600	16,400	6,120	2,120	4,050
17	5,700	e4,490	2,070	e1,110	3,150	e2,750	e16,400	19,600	16,400	6,110	2,070	4,600
18	5,390	e4,410	2,300	e1,000	3,510	e2,700	e17,300	20,600	16,400	5,860	2,200	4,520
19	5,180	e4,310	1,790	e900	3,920	e2,620	e17,900	22,300	15,900	5,440	2,400	4,520
20	4,900	e4,270	1,790	e850	4,100	2,570	18,500	23,000	15,800	5,510	2,610	4,440
21	4,990	e4,250	1,840	e830	3,950	e2,550	18,800	23,000	15,800	5,380	3,030	3,950
22	4,830	e4,310	e1,720	e840	3,540	e2,550	18,700	22,800	15,100	5,100	3,480	4,170
23	4,780	e4,310	e1,610	e840	3,390	e2,600	18,600	22,500	14,600	4,940	3,510	4,030
24	4,510	e4,340	e1,520	e830	3,200	e2,650	17,800	21,800	14,500	4,970	3,380	3,870
25	4,350	e4,410	e1,490	e830	2,980	e2,750	16,300	20,200	14,400	5,000	3,150	4,210
26	4,250	e4,490	e1,480	e820	3,030	e3,000	15,100	19,600	13,300	5,070	2,950	4,600
27	4,250	e4,520	e1,480	e810	2,690	e3,500	13,400	18,300	12,300	4,520	3,010	8,150
28	4,140	e4,540	e1,500	e810	2,680	4,220	12,400	17,000	12,100	3,920	3,020	11,400
29	4,460	e4,450	e1,550	e820	---	5,210	11,200	15,600	11,500	3,660	2,670	14,500
30	4,410	e4,350	e1,620	e850	---	7,230	10,100	14,100	11,000	4,080	2,590	16,000
31	4,210	---	e1,700	e880	---	9,170	---	12,800	---	4,420	2,460	---
TOTAL	193,320	155,110	79,480	38,280	61,800	100,220	375,320	446,710	398,290	212,210	88,590	149,530
MEAN	6,236	5,170	2,564	1,235	2,207	3,233	12,510	14,410	13,280	6,845	2,858	4,984
MAX	11,200	7,400	4,160	1,850	4,100	9,170	18,800	23,000	16,400	10,700	4,110	16,000
MIN	4,140	4,250	1,480	810	920	2,200	6,330	6,540	9,490	3,660	2,070	2,610
AC-FT	383,500	307,700	157,600	75,930	122,600	198,800	744,400	886,000	790,000	420,900	175,700	296,600
CFSM	0.37	0.31	0.15	0.07	0.13	0.19	0.74	0.85	0.79	0.41	0.17	0.29
IN.	0.43	0.34	0.17	0.08	0.14	0.22	0.83	0.98	0.88	0.47	0.20	0.33

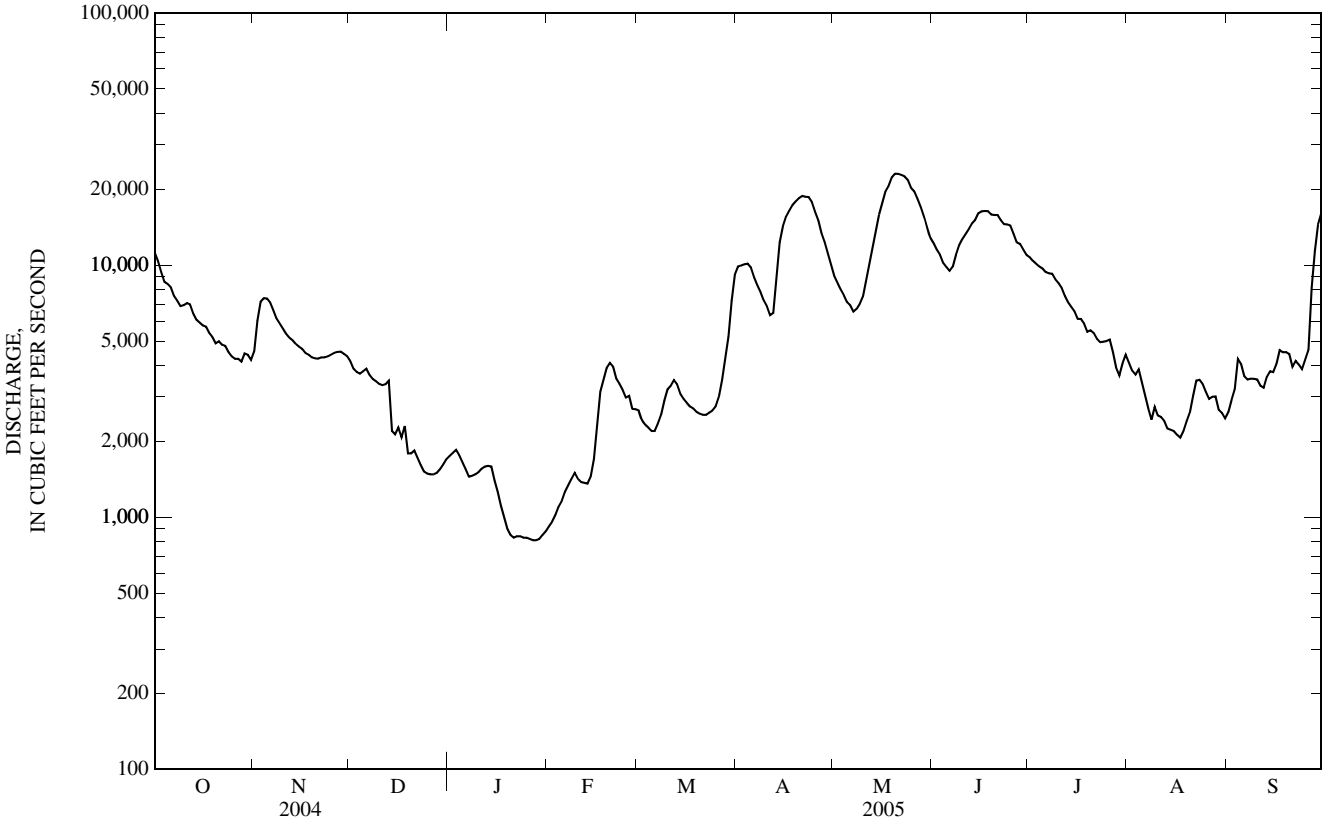
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2005, BY WATER YEAR (WY)

MEAN	6,236	5,170	2,564	1,235	1,505	3,016	7,339	9,121	16,880	7,715	3,370	6,734
MAX	6,236	5,170	2,564	1,235	2,207	3,233	12,510	14,410	20,480	8,585	3,881	8,484
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2004)	(2004)	(2004)	(2004)
MIN	6,236	5,170	2,564	1,235	827	2,800	2,167	3,832	13,280	6,845	2,858	4,984
(WY)	(2005)	(2005)	(2005)	(2005)	(2004)	(2004)	(2004)	(2004)	(2005)	(2005)	(2005)	(2005)

05330920 MINNESOTA RIVER AT FT. SNELLING STATE PARK, MN—Continued

SUMMARY STATISTICS	FOR 2005 WATER YEAR		WATER YEARS 2004 - 2005	
ANNUAL TOTAL	2,298,860			
ANNUAL MEAN	6,298		6,298	
HIGHEST ANNUAL MEAN			6,298	2005
LOWEST ANNUAL MEAN			6,298	2005
HIGHEST DAILY MEAN	23,000	May 20, 21	28,700	Jun 17, 2004
LOWEST DAILY MEAN	810	Jan 27, 28	613	Jan 31, 2004
ANNUAL SEVEN-DAY MINIMUM	823	Jan 23	618	Jan 31, 2004
MAXIMUM PEAK FLOW	24,900	May 22	31,400	Jun 17, 2004
MAXIMUM PEAK STAGE	695.54	Jun 17	696.52	Jun 17, 2004
INSTANTANEOUS LOW FLOW	a23	Aug 26	b-594	Apr 18, 2004
ANNUAL RUNOFF (AC-FT)	4,560,000		4,563,000	
ANNUAL RUNOFF (CFSM)	0.373		0.373	
ANNUAL RUNOFF (INCHES)	5.06		5.06	
10 PERCENT EXCEEDS	14,800		14,800	
50 PERCENT EXCEEDS	4,340		4,340	
90 PERCENT EXCEEDS	1,500		1,500	

a Result of seiche.
b Reverse flow detected over a one-hour period, unknown cause.
e Estimated.



05331000 MISSISSIPPI RIVER AT ST. PAUL, MN

LOCATION.--LAT 44°56'02", long 93°06'21", in NE¼NE¼ sec.13, T. 28 N., R. 22 W., Ramsey County, Hydrologic Unit 07010206, on left bank in St. Paul, 100 ft upstream from Smith Ave. Bridge, 4.8 mi downstream from Minnesota River, and at mile 840.5 upstream from Ohio River.

DRAINAGE AREA.--36,800 mi^2 (approximately).

PERIOD OF RECORD.--March 1892 to current year (prior to 1901, fragmentary during some winters). Records prior to March 1892, published in the 19th Annual Report, Part 4, have been found to be unreliable and should not be used. Monthly discharge only for some periods, published in WSP 1308. Gage-height records (winter records incomplete) collected at same site since 1866 are contained in reports of U.S. Weather Bureau, War Department and Mississippi River Commission.

REVISED RECORDS.--WSP 285: 1892-96. WSP 715: Drainage area. WSP 875: 1938. WSP 895: 1939. WSP 1308: 1867(M). WSP 1508: 1897, 1898(M). 1903(M), 1917-18(M). 1928(M), 1929. WRD MN-74: 1973.

GAGE.--Water-stage recorder. Datum of gage is 683.62 ft above sea level (NGVD of 1929). Prior to Mar. 18, 1925, nonrecording gage at several sites within 300 ft of each other and 1.2 miles downstream of present site at present datum. Mar. 19, 1925 to June 24, 1999, recording gage 1.2 miles downstream of present site at present datum. Since September 1938, auxiliary water-stage recorder 5.6 mi downstream.

REMARKS.--Records good to fair except those for estimated days, which are poor. Flow-routing techniques were used from Oct. 1 to Mar. 31, May 1-13, and July 15 to Sept. 30. Routed discharges are considered fair to poor. Slight regulation, except during extreme floods, by reservoirs on headquarters and by power plants. Beginning July 20, 1939, effluent from Minneapolis and St. Paul, which formerly entered the river above station, was diverted to a wasterwater treatment plant, thence to river about 4 miles below station. Daily-mean discharge figures do not include this diversion.

COOPERATION.--Records of discharge from the Metro Plant wastewater treatment plant were provided by the Metropolitan Council - Environmental Services.

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	20,800	15,800	e12,000	e7,340	e5,550	e7,360	25,100	24,700	33,500	28,700	10,100	6,500
2	20,100	17,800	e11,100	e7,510	e5,660	e7,070	26,700	23,600	32,800	28,600	9,660	6,840
3	19,100	19,200	e10,300	e7,140	e5,830	e6,920	28,400	21,900	31,700	28,200	9,620	6,870
4	17,800	19,900	e9,800	e6,840	e5,620	e6,750	30,000	20,600	30,800	27,100	9,360	7,820
5	17,800	20,100	e10,400	e6,700	e5,940	e6,740	29,800	19,300	30,100	25,800	8,840	8,600
6	17,500	20,100	e10,800	e6,570	e6,020	e6,950	29,700	18,600	29,600	24,400	8,270	7,610
7	16,500	19,200	e10,200	e5,960	e6,400	e7,060	30,200	17,600	29,500	24,200	7,700	8,000
8	16,300	18,600	e9,870	e6,070	e6,190	e7,480	28,900	17,300	32,200	23,800	6,960	8,270
9	15,700	17,900	e10,000	e6,520	e6,450	e8,350	28,000	17,300	33,700	22,700	7,390	8,100
10	15,500	17,200	e9,790	e6,380	e6,480	e8,950	26,700	17,400	35,700	21,100	7,030	8,140
11	15,200	e16,900	e10,400	e6,080	e6,310	e9,230	26,300	18,600	37,800	20,100	7,140	7,590
12	14,900	e16,300	e10,500	e6,190	e6,360	e9,520	27,700	19,800	39,300	18,900	6,710	7,270
13	13,800	e15,600	e10,900	e6,300	e6,370	e9,310	30,500	21,200	41,500	17,900	6,590	8,320
14	13,300	e15,100	e8,140	e5,850	e6,540	e8,800	35,200	23,100	43,400	17,200	6,600	10,900
15	13,100	e14,500	e6,680	e5,060	e6,950	e8,750	38,000	25,900	44,700	16,400	6,190	11,800
16	12,800	e14,600	e7,220	e5,130	e7,610	e8,770	40,500	27,500	46,100	15,000	5,980	12,700
17	12,800	e14,000	e7,710	e5,110	e8,530	e8,550	41,900	29,200	47,200	15,000	5,980	13,400
18	12,000	e13,700	e8,120	e5,100	e8,900	e8,140	42,900	30,800	47,200	14,000	6,010	13,500
19	11,900	e13,800	e7,360	e5,450	e9,220	e7,960	43,800	32,600	46,600	13,200	6,260	13,500
20	11,600	e13,400	e6,690	e5,400	e9,500	e7,890	44,000	34,000	45,800	12,900	6,910	13,600
21	12,000	e13,300	e5,730	e5,480	e9,570	e7,790	43,900	34,700	44,900	12,700	6,940	13,400
22	11,600	e13,400	e5,190	e5,530	e9,050	e7,790	43,200	34,500	43,000	12,400	7,260	13,400
23	11,600	e13,500	e5,440	e5,480	e8,610	e7,960	42,000	34,900	41,500	11,500	7,120	14,300
24	11,400	e13,500	e5,440	e5,300	e8,160	e8,160	40,100	34,800	40,300	11,900	6,860	13,000
25	11,500	e13,700	e5,730	e5,330	e7,940	e8,800	37,800	34,100	38,800	11,900	6,280	12,600
26	11,300	e13,800	e5,800	e5,960	e7,720	e9,260	35,300	34,100	36,700	11,700	5,650	12,900
27	11,700	e13,200	e6,310	e5,640	e7,360	e10,200	33,000	34,500	35,000	11,300	6,900	16,400
28	12,200	e12,800	e6,680	e5,440	e7,470	11,600	30,900	34,200	34,000	10,800	8,010	19,400
29	13,300	e12,700	e6,650	e5,270	---	13,600	28,600	34,200	31,400	9,880	7,120	22,300
30	14,400	e12,800	e6,850	e5,360	---	17,200	26,800	33,900	30,100	10,500	6,680	23,700
31	14,600	---	e7,030	e5,480	---	20,700	---	33,500	---	10,900	6,720	---
TOTAL	444,100	466,400	254,830	182,970	202,310	283,610	1,015,900	838,400	1,134,900	540,680	224,840	350,730
MEAN	14,330	15,550	8,220	5,902	7,225	9,149	33,860	27,050	37,830	17,440	7,253	11,690
MAX	20,800	20,100	12,000	7,510	9,570	20,700	44,000	34,900	47,200	28,700	10,100	23,700
MIN	11,300	12,700	5,190	5,060	5,550	6,740	25,100	17,300	29,500	9,880	5,650	6,500
AC-FT	880,900	925,100	505,500	362,900	401,300	562,500	2,015,000	1,663,000	2,251,000	1,072,000	446,000	695,700
CFSM	0.39	0.42	0.22	0.16	0.20	0.25	0.92	0.73	1.03	0.47	0.20	0.32
IN.	0.45	0.47	0.26	0.18	0.20	0.29	1.03	0.85	1.15	0.55	0.23	0.35
+	286	282	274	273	278	275	285	288	303	290	290	299
‡MEAN	14,600	15,800	8,490	6,180	7,500	9,420	34,100	27,300	38,100	17,700	7,540	12,000
‡CFSM	0.40	0.43	0.23	0.17	0.21	0.26	0.93	0.74	1.04	0.48	0.21	0.33
‡IN	0.41	0.44	0.24	0.18	0.22	0.27	0.94	0.75	1.05	0.49	0.22	0.34

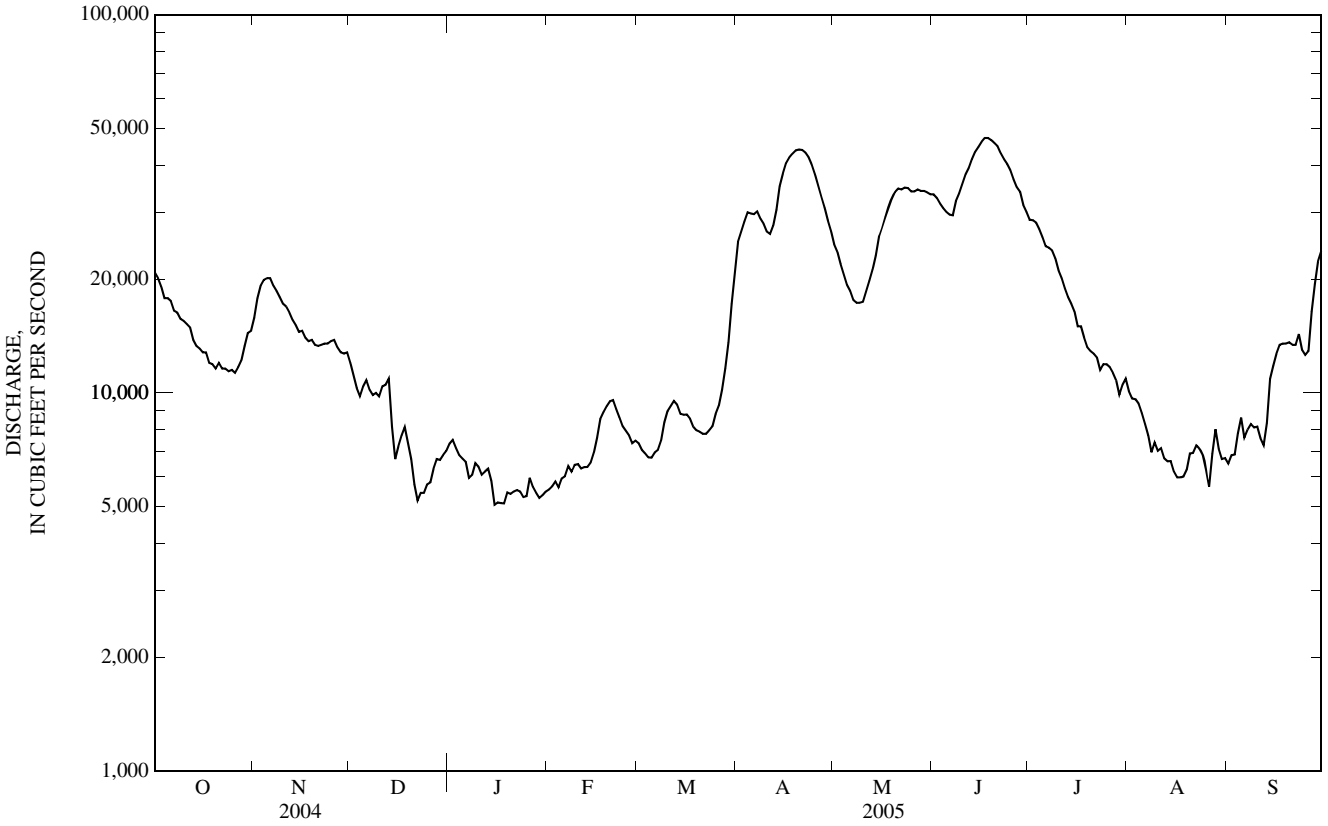
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1892 - 2005, BY WATER YEAR (WY)

MEAN	8,606	7,980	5,786	4,666	4,622	11,060	26,440	21,380	18,850	14,750	8,967	8,152
MAX	38,210	27,660	16,080	11,500	14,700	43,240	96,590	70,430	57,170	73,590	42,550	34,380
(WY)	(1987)	(1972)	(1983)	(1983)	(1966)	(1983)	(2001)	(2001)	(1993)	(1993)	(1993)	(1986)
MIN	1,289	1,348	1,277	1,097	1,300	1,757	3,421	3,085	1,980	1,272	864	1,143
(WY)	(1937)	(1937)	(1935)	(1935)	(1895)	(1940)	(1895)	(1934)	(1934)	(1934)	(1934)	(1934)

05331000 MISSISSIPPI RIVER AT ST. PAUL, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1892 - 2005	
ANNUAL TOTAL	4,471,140		5,939,670			
ANNUAL MEAN	12,220		16,270		11,850	
HIGHEST ANNUAL MEAN					29,580	1986
LOWEST ANNUAL MEAN					1,935	1934
HIGHEST DAILY MEAN	46,900	Jun 16	47,200	Jun 17, 18	171,000	Apr 16, 1965
LOWEST DAILY MEAN	2,580	Jan 20	5,060	Jan 15	632	Aug 26, 1934
ANNUAL SEVEN-DAY MINIMUM	2,810	Jan 30	5,250	Jan 15	741	Aug 26, 1934
MAXIMUM PEAK FLOW			47,400	Jun 17	171,000	Apr 16, 1965
MAXIMUM PEAK STAGE			9.99	Jun 17	26.01	Apr 16, 1965
ANNUAL RUNOFF (AC-FT)	8,869,000		11,780,000		8,586,000	
ANNUAL RUNOFF (CFSM)	0.332		0.442		0.322	
ANNUAL RUNOFF (INCHES)	4.52		6.00		4.38	
10 PERCENT EXCEEDS	23,800		34,300		27,500	
50 PERCENT EXCEEDS	10,000		12,000		7,200	
90 PERCENT EXCEEDS	3,200		6,080		2,730	

+ Diversion, in cubic feet per second, from wastewater treatment plant.
++Adjusted for discharges from wastewater treatment plant.
e Estimated.



05336700 KETTLE RIVER BELOW SANDSTONE, MN

LOCATION.--Lat 46°06'20", long 92°51'50", in NW¼SW¼ sec. 22, T.42 N., R.20 W., Pine County, Hydrologic Unit 07030003, on Sandstone Federal Correctional Institution property, on left bank, about 1.8 mi south of Sandstone.

DRAINAGE AREA.--868 mi^2.

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 931.50 ft above sea level (NGVD of 1929, Minnesota Department of Transportation benchmark).

REMARKS.--Records good except those for estimated daily discharge, which are poor. Regulation from hydropower dam from 1908 to 1963.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in April 1965 reached a stage of 12.96 ft, from flood marks, discharge, 13,400 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr 1	1130	*5,040	*8.49	No other peak greater than base discharge.			

Minimum discharge, 98 ft^3/s, Sept. 5, gage height, 3.90 ft.

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	402	575	e236	e190	e157	e154	4,920	692	1,340	1,680	138	112
2	530	579	e230	e185	e158	e152	4,690	651	1,150	1,510	131	107
3	623	568	e220	e176	e163	e150	4,310	615	973	1,300	126	103
4	598	531	e226	e172	e169	e148	3,990	572	859	1,140	120	103
5	534	499	e231	e167	e172	e143	3,630	538	846	960	113	102
6	477	467	230	e163	e174	e136	3,640	535	1,160	789	108	117
7	436	441	224	e158	e172	e140	3,660	540	1,220	667	107	113
8	399	412	223	e154	e168	e143	3,480	533	1,240	575	105	112
9	370	388	225	e152	e162	e145	3,250	538	1,850	517	110	112
10	342	370	237	e147	e159	e147	2,970	544	1,800	460	132	109
11	326	353	248	e145	e162	e155	2,770	554	1,760	410	146	108
12	304	333	e229	e143	e166	e164	2,760	554	1,690	368	135	125
13	293	308	e212	e141	e170	e171	2,590	554	1,580	332	127	218
14	289	296	e206	e140	e175	e167	2,250	541	1,690	300	121	258
15	293	302	e206	e139	e181	e135	1,960	543	2,190	271	114	241
16	297	298	e212	e140	e182	e128	1,710	536	2,140	259	110	211
17	292	293	e204	e141	e177	e127	1,510	513	1,810	241	107	188
18	290	295	e204	e144	e167	e126	1,360	515	1,470	220	138	171
19	283	292	e195	e149	e167	e127	1,260	1,010	1,210	201	127	169
20	282	305	e190	e152	e169	e128	1,250	1,880	1,100	187	124	178
21	281	315	e185	e156	e172	e129	1,310	1,890	1,690	172	122	185
22	280	316	e182	e159	e170	133	1,280	1,760	1,780	162	120	177
23	309	312	e179	e159	e166	139	1,200	1,590	1,390	155	118	164
24	377	279	e177	e158	e167	146	1,110	1,420	1,110	150	115	160
25	422	259	e174	e158	e164	162	1,010	1,270	885	150	113	179
26	427	e254	e172	e158	e163	186	921	1,800	720	147	127	222
27	417	e252	e171	e157	e162	240	881	2,310	621	147	126	245
28	420	e249	e172	e156	e161	405	853	2,240	550	162	121	240
29	444	e246	e176	e157	---	1,290	805	2,050	500	166	120	219
30	492	e242	e182	e157	---	3,070	748	1,830	891	158	118	208
31	555	---	e195	e157	---	4,340	---	1,580	---	148	115	---
TOTAL	12,084	10,629	6,353	4,830	4,695	13,126	68,078	32,698	39,215	14,104	3,754	4,956
MEAN	390	354	205	156	168	423	2,269	1,055	1,307	455	121	165
MAX	623	579	248	190	182	4,340	4,920	2,310	2,190	1,680	146	258
MIN	280	242	171	139	157	126	748	513	500	147	105	102
AC-FT	23,970	21,080	12,600	9,580	9,310	26,040	135,000	64,860	77,780	27,980	7,450	9,830
CFSM	0.45	0.41	0.24	0.18	0.19	0.49	2.61	1.22	1.51	0.52	0.14	0.19
IN.	0.52	0.46	0.27	0.21	0.20	0.56	2.92	1.40	1.68	0.60	0.16	0.21

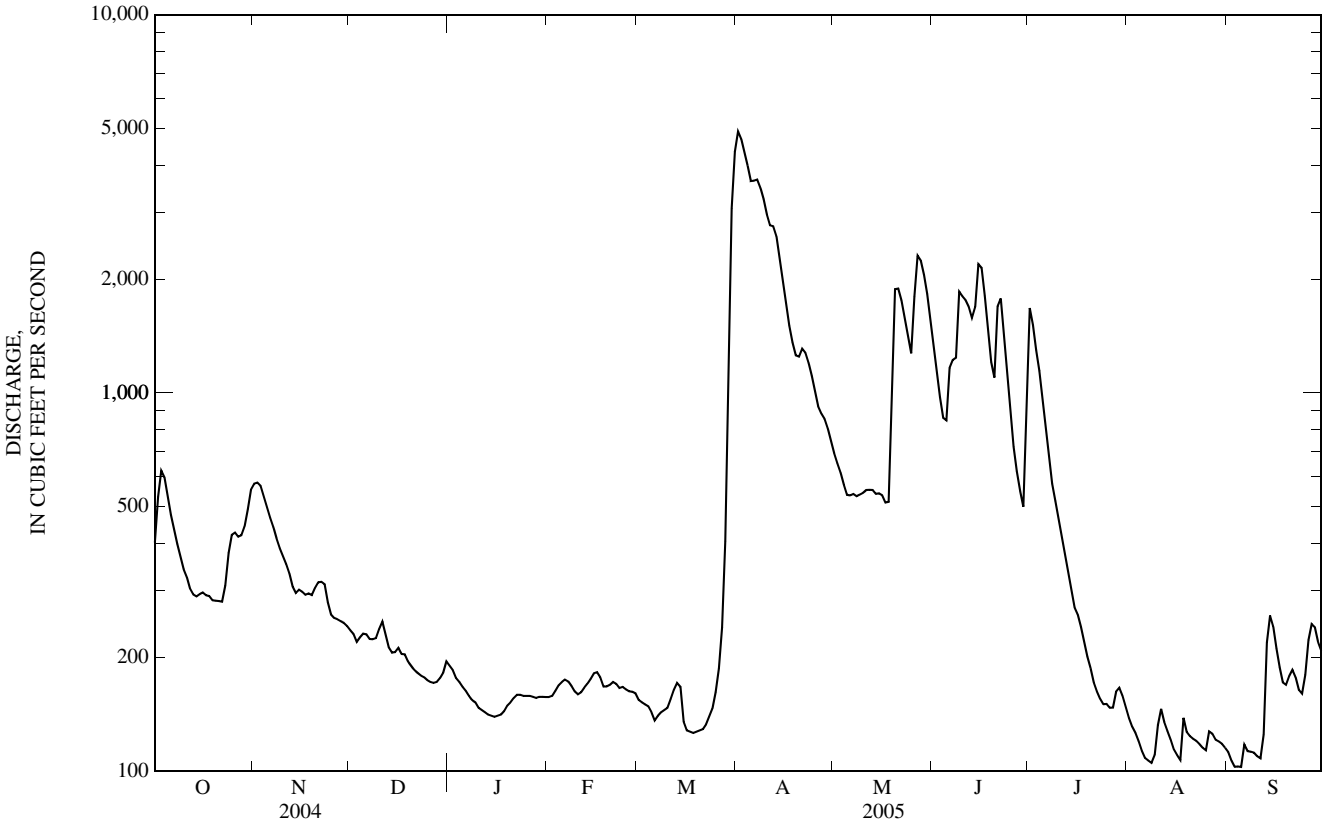
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2005, BY WATER YEAR (WY)

MEAN	645	511	278	186	193	554	2,337	1,252	918	650	379	533
MAX	2,071	1,569	652	411	447	1,451	6,459	3,168	2,799	1,960	1,575	3,065
(WY)	(1983)	(1992)	(1984)	(1984)	(1998)	(1992)	(2001)	(1986)	(1993)	(1993)	(1999)	(1986)
MIN	129	137	118	86.4	108	141	453	222	131	110	97.2	90.0
(WY)	(1988)	(1990)	(1990)	(1981)	(2003)	(1980)	(1987)	(1980)	(1988)	(1988)	(1989)	(1998)

05336700 KETTLE RIVER BELOW SANDSTONE, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1979 - 2005	
ANNUAL TOTAL	202,879		214,522			
ANNUAL MEAN	554		588		703	
HIGHEST ANNUAL MEAN					1,352	1986
LOWEST ANNUAL MEAN					318	1988
HIGHEST DAILY MEAN	4,460	Jun 1	4,920	Apr 1	14,200	Apr 24, 2001
LOWEST DAILY MEAN	116	Jan 29	102	Sep 5	78	Sep 22, 1998
ANNUAL SEVEN-DAY MINIMUM	119	Jan 28	108	Sep 1	80	Jan 23, 1981
MAXIMUM PEAK FLOW			5,040	Apr 1	17,200	Jul 23, 1972
MAXIMUM PEAK STAGE			8.49	Apr 1	15.38	Jul 23, 1972
INSTANTANEOUS LOW FLOW			98	Sep 5	a25	Nov 11, 1977
ANNUAL RUNOFF (AC-FT)	402,400		425,500		509,100	
ANNUAL RUNOFF (CFSM)	0.639		0.677		0.810	
ANNUAL RUNOFF (INCHES)	8.69		9.19		11.00	
10 PERCENT EXCEEDS	1,290		1,680		1,710	
50 PERCENT EXCEEDS	282		230		309	
90 PERCENT EXCEEDS	134		127		135	

a Result of freezeup.
e Estimated.



05338500 SNAKE RIVER NEAR PINE CITY, MN

LOCATION.--Lat 45°50'30", long 92°56'00", in SE¼NW¼ sec. 26, T. 39 N., R. 21 W., Pine County, Hydrologic Unit 07030004, on left bank at site of former power plant and dam, 0.5 mi downstream from Cross Lake and l.5 mi northeast of Pine City.

DRAINAGE AREA.--974 mi^2.

PERIOD OF RECORD.--June 1913 to September 1917, July 1951 to Sept. 1981, Oct. 1992 to current year.

REVISED RECORDS.--1999-2002, summary statistics revised in 2003.

GAGE.--Water-stage recorder. Datum of gage is 919.00 ft above sea level (NGVD of 1929). June 25, 1913 to Sept. 30, 1917, nonrecording gage at site 500 ft downstream at different datum. July l to Oct. 28, 1951, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated days, which are fair to poor.

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	633	1,320	299	e140	119	134	3,340	796	1,760	666	89	101
2	598	1,390	278	e137	120	135	3,890	711	1,680	680	83	77
3	586	1,350	254	e135	121	132	4,370	645	1,540	785	87	69
4	607	1,300	264	e135	121	121	4,670	591	1,390	832	90	93
5	600	1,170	254	e130	117	119	4,780	548	1,280	772	72	98
6	584	1,040	251	124	124	123	5,240	517	1,190	705	66	116
7	546	920	257	117	138	142	5,120	481	1,170	633	61	102
8	525	792	247	111	137	155	4,970	484	1,260	568	67	99
9	474	702	249	106	137	162	4,840	492	1,360	517	73	91
10	438	650	272	105	133	174	4,670	507	1,540	466	76	90
11	411	581	272	103	131	173	4,390	465	1,750	420	68	87
12	380	527	302	e103	130	169	4,100	458	1,930	383	76	111
13	368	484	235	e102	131	161	3,830	501	2,020	336	64	271
14	334	445	205	e101	153	151	3,620	513	2,210	297	58	235
15	328	419	210	e100	150	149	3,470	500	2,330	273	57	212
16	336	402	220	e100	150	140	3,320	480	2,450	244	57	207
17	298	382	209	e101	150	141	3,090	462	2,620	220	82	192
18	285	365	207	e103	143	139	2,840	488	2,760	212	90	181
19	297	355	197	e105	138	134	2,580	586	2,790	167	101	177
20	308	392	170	e118	140	132	2,310	736	2,740	160	99	164
21	299	394	171	e112	138	131	2,130	980	2,580	143	86	156
22	294	411	162	e115	134	140	2,010	1,220	2,330	130	72	147
23	346	445	152	117	131	163	1,880	1,290	2,150	124	65	134
24	340	431	145	118	131	221	1,730	1,310	2,000	131	60	132
25	356	419	135	118	130	330	1,560	1,290	1,790	124	60	155
26	355	402	129	118	126	474	1,400	1,290	1,550	124	120	193
27	373	412	124	118	129	627	1,240	1,310	1,340	111	135	188
28	450	373	124	118	129	830	1,090	1,480	1,120	104	125	220
29	621	346	123	115	---	1,110	970	1,640	907	94	115	217
30	920	307	132	116	---	1,630	871	1,740	812	93	98	213
31	1,170	---	142	123	---	2,510	---	1,780	---	98	93	---
TOTAL	14,460	18,926	6,391	3,564	3,731	11,052	94,321	26,291	54,349	10,612	2,545	4,528
MEAN	466	631	206	115	133	357	3,144	848	1,812	342	82.1	151
MAX	1,170	1,390	302	140	153	2,510	5,240	1,780	2,790	832	135	271
MIN	285	307	123	100	117	119	871	458	812	93	57	69
AC-FT	28,680	37,540	12,680	7,070	7,400	21,920	187,100	52,150	107,800	21,050	5,050	8,980
CFSM	0.49	0.66	0.22	0.12	0.14	0.37	3.28	0.89	1.89	0.36	0.09	0.16
IN.	0.56	0.73	0.25	0.14	0.14	0.43	3.66	1.02	2.11	0.41	0.10	0.18

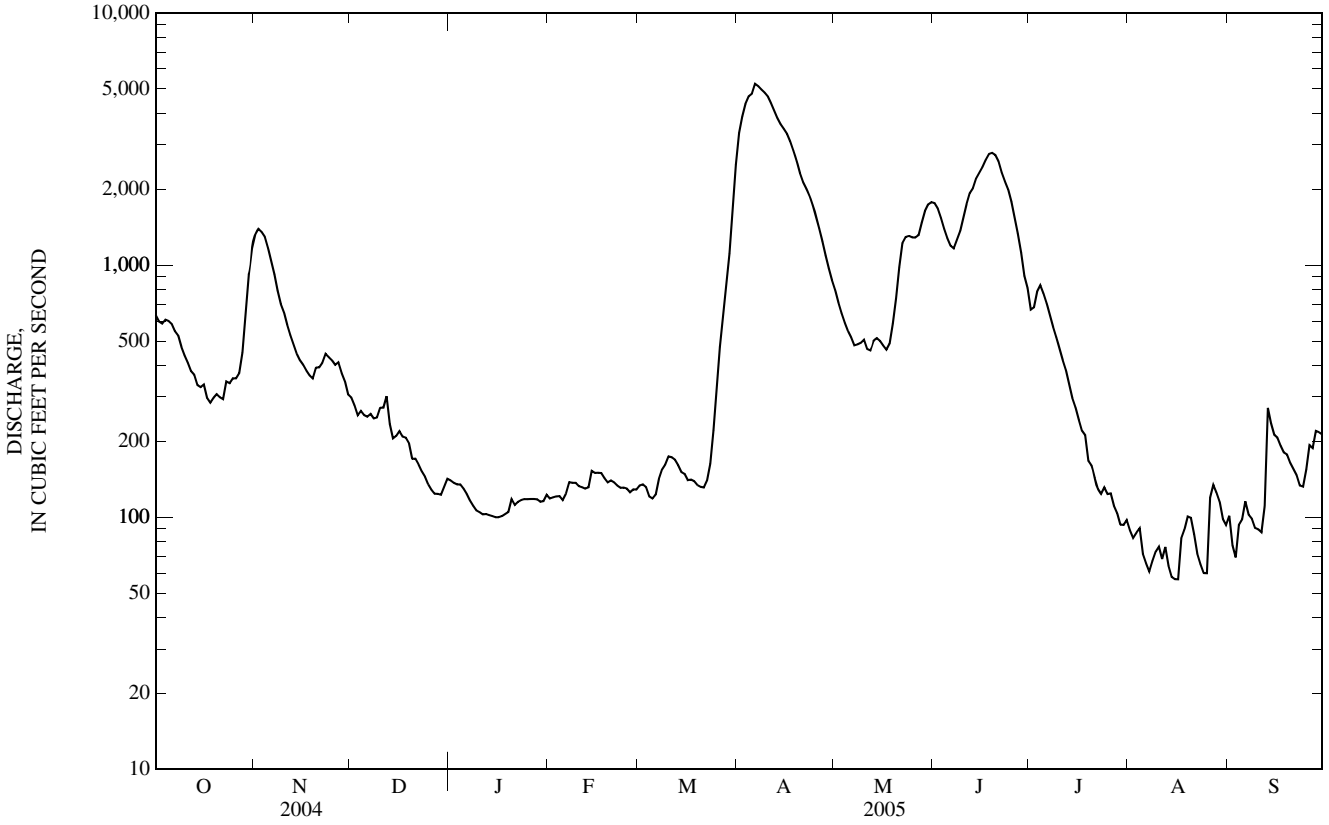
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 2005, BY WATER YEAR (WY)

MEAN	395	405	214	130	132	463	2,111	1,161	871	737	325	308
MAX	3,130	2,310	837	343	549	2,658	5,905	2,726	2,775	3,400	2,018	1,201
(WY)	(1969)	(1972)	(1978)	(1966)	(1966)	(1966)	(2001)	(1979)	(1967)	(1952)	(1972)	(1951)
MIN	47.1	59.9	36.1	29.3	33.4	61.5	172	203	167	100	34.9	37.8
(WY)	(1977)	(1977)	(1977)	(1977)	(1977)	(1965)	(1959)	(1998)	(1997)	(1961)	(1976)	(1976)

05338500 SNAKE RIVER NEAR PINE CITY, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1913 - 2005	
ANNUAL TOTAL	206,322		250,770			
ANNUAL MEAN	564		687		a601	
HIGHEST ANNUAL MEAN					1,223	1972
LOWEST ANNUAL MEAN					177	1959
HIGHEST DAILY MEAN	3,860	Jun 6	5,240	Apr 6	14,200	Jul 27, 1972
LOWEST DAILY MEAN	70	Aug 23	57	Aug 15,16	26	Aug 29, 1976
ANNUAL SEVEN-DAY MINIMUM	83	Jan 30	65	Aug 10	28	Jan 21, 1977
MAXIMUM PEAK FLOW			5,310	Apr 6	14,300	Jul 27, 1972
MAXIMUM PEAK STAGE			6.97	Apr 6	10.38	Jul 27, 1972
INSTANTANEOUS LOW FLOW			53	Aug 16	b5.5	Oct 1, 1964
ANNUAL RUNOFF (AC-FT)	409,200		497,400		435,100	
ANNUAL RUNOFF (CFSM)	0.588		0.717		0.627	
ANNUAL RUNOFF (INCHES)	8.01		9.74		8.52	
10 PERCENT EXCEEDS	1,440		1,900		1,480	
50 PERCENT EXCEEDS	298		254		220	
90 PERCENT EXCEEDS	91		99		79	

a Median of annual mean discharges is 550 ft^3/s.
b Result of dam rehabilitation.
e Estimated.



05340500 ST. CROIX RIVER AT ST. CROIX FALLS, WI

LOCATION.--Lat 45°24'25", long 92°38'49", in SW¼NW¼ 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 power plant of Northern States Power Co., in St. Croix Falls, and at mile 52.2.

DRAINAGE AREA.--6,240 mi^2.

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 sea level. Prior to July 1905, gage heights and discharge measurements were used by Loweth and Wolff, consulting engineers of St. Paul, MN, to determine the flow. July 1905 to February 1940, records were computed from power generation at the St. Croix Falls power plant. 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. Diurnal fluctuation caused by St. Croix Falls Powerplant 1,500 ft upstream.

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	3,950	8,100	3,170	2,780	2,280	2,430	19,400	5,330	6,430	4,590	1,730	1,600
2	4,070	8,030	2,980	e2,620	e2,430	2,450	22,400	5,150	5,940	5,500	1,680	1,470
3	4,370	7,490	2,450	e2,500	2,360	2,380	24,700	4,890	5,490	5,790	1,580	1,460
4	4,700	7,290	3,040	e2,480	2,410	2,470	23,300	4,690	5,200	5,360	1,430	1,460
5	4,660	6,520	3,470	e2,420	e2,650	2,330	21,400	4,480	4,880	4,890	1,450	1,630
6	4,560	6,310	3,340	2,280	2,780	2,580	20,600	4,210	4,940	4,490	1,340	1,650
7	4,190	5,940	3,270	2,420	2,720	2,920	22,100	4,190	5,410	4,020	1,350	1,720
8	4,190	5,390	3,930	2,490	2,790	3,110	21,800	4,250	5,960	3,790	1,400	1,670
9	4,080	5,430	3,710	2,370	2,840	2,810	21,700	4,220	6,360	3,500	1,370	1,470
10	3,250	5,220	3,730	2,180	2,830	2,800	20,400	4,140	7,310	3,350	1,370	1,640
11	3,460	4,530	4,220	e2,420	2,810	2,660	18,200	4,550	7,490	3,150	1,390	1,510
12	3,530	4,290	3,640	2,220	2,750	2,830	16,200	4,570	8,040	3,100	1,480	1,530
13	3,580	4,300	2,800	2,220	2,510	2,670	14,800	4,650	8,260	2,660	1,480	3,620
14	3,350	4,240	1,930	e2,200	3,130	2,550	13,400	4,770	9,060	2,520	1,370	4,350
15	3,080	4,050	1,650	e2,120	2,850	2,600	12,000	4,720	10,300	2,490	1,300	3,670
16	3,200	3,600	2,200	e2,160	2,880	2,530	10,900	4,740	11,200	2,310	1,280	3,360
17	3,210	3,850	2,620	e2,090	2,710	2,530	9,990	4,610	10,900	2,260	1,330	2,990
18	3,180	3,840	3,150	e2,060	2,650	2,530	9,270	4,540	9,780	2,140	1,440	2,670
19	3,170	4,210	2,760	e2,030	2,650	2,570	8,790	4,910	8,610	2,010	1,360	2,470
20	3,090	3,770	2,450	e1,980	2,470	2,490	8,320	5,990	7,710	1,980	1,590	2,510
21	3,230	4,300	e2,170	e1,980	2,520	2,630	7,880	7,300	7,680	2,010	1,460	2,570
22	3,140	4,260	e2,120	e2,100	2,520	2,690	7,700	7,490	7,990	1,750	1,350	2,610
23	3,380	4,160	e2,240	e2,330	2,500	2,860	7,390	7,300	7,570	1,920	1,410	2,330
24	3,640	4,060	e2,240	e2,340	2,510	3,310	7,080	6,540	6,700	1,820	1,260	2,290
25	4,090	3,760	e2,100	2,280	2,530	3,540	6,840	6,350	6,140	1,910	1,320	2,270
26	4,340	3,800	e2,120	e2,380	2,430	4,000	7,140	6,380	5,280	1,910	1,600	2,520
27	4,340	3,800	e2,100	e2,380	2,480	4,350	6,020	6,860	4,910	1,910	1,860	2,710
28	4,590	3,800	2,290	2,340	2,470	5,330	4,970	7,260	4,860	1,780	1,660	2,920
29	5,490	3,680	2,510	e2,380	---	6,770	5,240	7,200	4,450	1,550	1,680	2,730
30	6,700	3,580	e2,450	e2,390	---	9,110	5,590	6,940	4,370	1,710	1,520	2,600
31	7,520	---	e2,560	e2,430	---	14,300	---	6,740	---	1,720	1,580	---
TOTAL	125,330	145,600	85,410	71,370	73,460	111,130	405,520	169,960	209,220	89,890	45,420	70,000
MEAN	4,043	4,853	2,755	2,302	2,624	3,585	13,520	5,483	6,974	2,900	1,465	2,333
MAX	7,520	8,100	4,220	2,780	3,130	14,300	24,700	7,490	11,200	5,790	1,860	4,350
MIN	3,080	3,580	1,650	1,980	2,280	2,330	4,970	4,140	4,370	1,550	1,260	1,460
CFSM	0.65	0.78	0.44	0.37	0.42	0.57	2.17	0.88	1.12	0.46	0.23	0.37
IN.	0.75	0.87	0.51	0.43	0.44	0.66	2.42	1.01	1.25	0.54	0.27	0.42

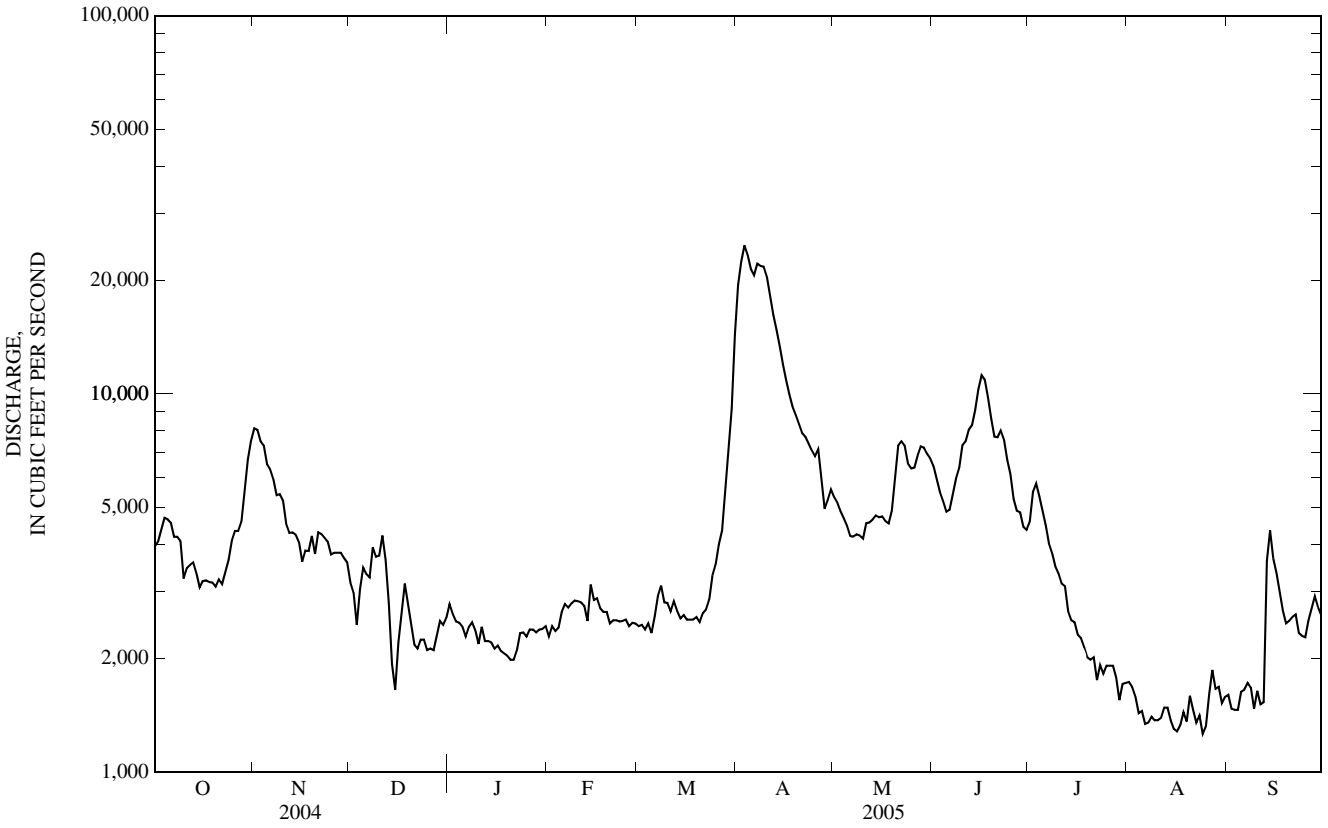
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1902 - 2005, BY WATER YEAR (WY)

MEAN	3,690	3,517	2,571	2,165	2,151	4,227	10,500	7,462	5,714	4,180	2,911	3,373
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 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1902 - 2005	
ANNUAL TOTAL	1,711,040		1,602,310			
ANNUAL MEAN	4,675		4,390		4,382	
HIGHEST ANNUAL MEAN					8,569	1986
LOWEST ANNUAL MEAN					1,754	1934
HIGHEST DAILY MEAN	21,400	Jun 3	24,700	Apr 3	59,500	Apr 26, 2001
LOWEST DAILY MEAN	1,650	Dec 15	1,260	Aug 24	75	Jul 17, 1910
ANNUAL SEVEN-DAY MINIMUM	2,020	Jan 6	1,370	Aug 13	754	Jul 29, 1934
MAXIMUM PEAK FLOW			31,100	Apr 3	60,900	Apr 25, 2001
MAXIMUM PEAK STAGE			14.51	Apr 3	25.88	Apr 25, 2001
ANNUAL RUNOFF (CFSM)	0.749		0.704		0.702	
ANNUAL RUNOFF (INCHES)	10.20		9.55		9.54	
10 PERCENT EXCEEDS	9,120		7,690		8,980	
50 PERCENT EXCEEDS	3,640		3,140		2,810	
90 PERCENT EXCEEDS	2,200		1,650		1,580	

e Estimated.



05341752 WILLOW RIVER AT WILLOW RIVER STATE PARK NEAR BURKHART, WI

LOCATION.--Lat 45°00'42", long 92°42'30", in NW¼SE¼ sec. 8, T.29 N., R.19 W., St. Croix County, Hydrologic Unit 07030005, on left bank, 0.4 mi downstream from outlet of Little Falls Lake and 2.1 mi southeast of Burkhart.

DRAINAGE AREA.--292 mi^2.

PERIOD OF RECORD.--October 1998 to September 1999, June 2005 to current year.

GAGE.--Water-stage recorder. Datum of gage is 710 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Regulation from dam at outlet of Little Falls Lake, 0.4 mi upstream from gage.

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	---	---	---	---	---	---	---	---	---	174	e96	97
2	---	---	---	---	---	---	---	---	---	148	95	74
3	---	---	---	---	---	---	---	---	---	136	97	74
4	---	---	---	---	---	---	---	---	---	130	105	83
5	---	---	---	---	---	---	---	---	---	127	102	86
6	---	---	---	---	---	---	---	---	---	127	99	115
7	---	---	---	---	---	---	---	---	---	118	96	137
8	---	---	---	---	---	---	---	---	---	123	107	108
9	---	---	---	---	---	---	---	---	---	121	109	101
10	---	---	---	---	---	---	---	---	---	119	103	100
11	---	---	---	---	---	---	---	---	---	117	100	99
12	---	---	---	---	---	---	---	---	---	118	100	99
13	---	---	---	---	---	---	---	---	---	119	97	110
14	---	---	---	---	---	---	---	---	---	120	97	108
15	---	---	---	---	---	---	---	---	---	119	97	105
16	---	---	---	---	---	---	---	---	---	126	101	101
17	---	---	---	---	---	---	---	---	---	116	104	97
18	---	---	---	---	---	---	---	---	---	110	96	102
19	---	---	---	---	---	---	---	---	---	120	95	103
20	---	---	---	---	---	---	---	---	---	119	95	101
21	---	---	---	---	---	---	---	---	---	119	92	104
22	---	---	---	---	---	---	---	---	---	120	90	137
23	---	---	---	---	---	---	---	---	139	121	87	134
24	---	---	---	---	---	---	---	---	136	127	92	120
25	---	---	---	---	---	---	---	---	133	126	93	130
26	---	---	---	---	---	---	---	---	133	135	137	127
27	---	---	---	---	---	---	---	---	134	131	144	119
28	---	---	---	---	---	---	---	---	153	113	123	121
29	---	---	---	---	---	---	---	---	169	e109	106	125
30	---	---	---	---	---	---	---	---	180	e103	101	101
31	---	---	---	---	---	---	---	---	---	e98	97	---
TOTAL	---	---	---	---	---	---	---	---	---	3,809	3,153	3,218
MEAN	---	---	---	---	---	---	---	---	---	123	102	107
MAX	---	---	---	---	---	---	---	---	---	174	144	137
MIN	---	---	---	---	---	---	---	---	---	98	87	74
AC-FT	---	---	---	---	---	---	---	---	---	7,560	6,250	6,380
CFSM	---	---	---	---	---	---	---	---	---	0.42	0.35	0.37
IN.	---	---	---	---	---	---	---	---	---	0.49	0.40	0.41

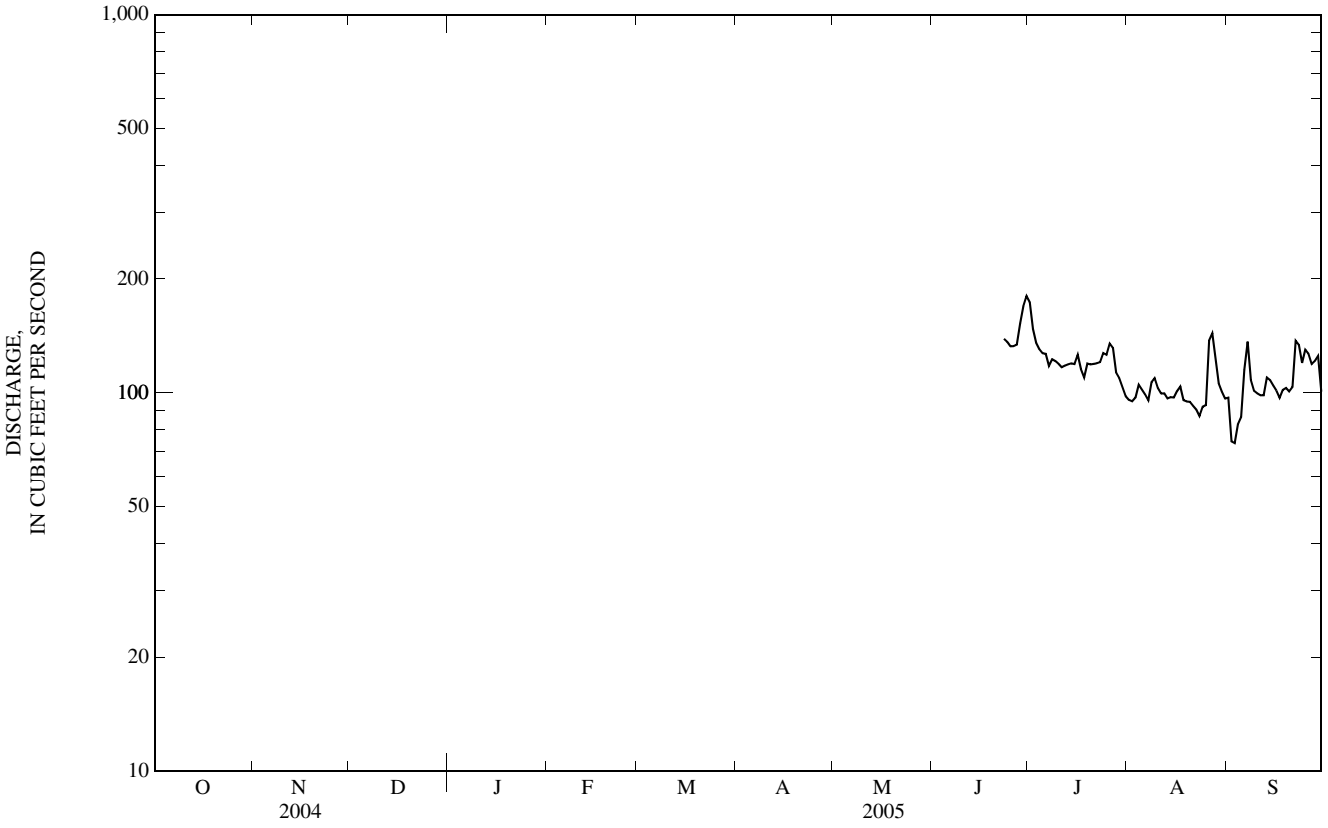
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2005, BY WATER YEAR (WY)

MEAN	124	134	117	110	118	166	165	173	156	120	124	108
MAX	124	134	117	110	118	166	165	173	156	123	146	108
(WY)	(1999)	(1999)	(1999)	(1999)	(1999)	(1999)	(1999)	(1999)	(1999)	(2005)	(1999)	(1999)
MIN	124	134	117	110	118	166	165	173	156	116	102	107
(WY)	(1999)	(1999)	(1999)	(1999)	(1999)	(1999)	(1999)	(1999)	(1999)	(1999)	(2005)	(2005)

05341752 WILLOW RIVER AT WILLOW RIVER STATE PARK NEAR BURKHART, WI—Continued

SUMMARY STATISTICS	FOR WATER YEAR 2005		WATER YEARS 1999 - 2005	
ANNUAL MEAN			136	
HIGHEST ANNUAL MEAN			136	1999
LOWEST ANNUAL MEAN			136	1999
HIGHEST DAILY MEAN	180	Jun 30	325	Apr 8, 1999
LOWEST DAILY MEAN	74	Sep 2, 3	74	Sep 2,3 , 2005
MAXIMUM PEAK FLOW	205	Sep 6	595	Apr 9, 1999
MAXIMUM PEAK STAGE	4.30	Sep 6	5.29	Apr 9, 1999
INSTANTANEOUS LOW FLOW	70	Sep 2	70	Sep 2, 2005

e Estimated.



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 fair except for those determined by flow routing, which are estimated and rated 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 2005 water year, discharges for the periods Oct. 1 to Mar. 31 and July 6 to Sep. 30 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e27,800	e23,800	e17,600	e10,600	e8,780	e10,900	36,700	33,300	39,300	35,500	e13,600	e9,060
2	e26,300	e25,700	e16,300	e11,100	e8,700	e10,700	42,900	31,600	39,100	34,400	e12,800	e8,880
3	e25,600	e27,800	e15,200	e11,100	e9,010	e10,400	47,900	30,400	38,100	34,200	e12,200	e9,100
4	e24,900	e28,700	e13,700	e10,600	e9,120	e10,200	52,900	28,800	36,900	34,500	e12,100	e9,120
5	e23,900	e29,000	e13,800	e10,300	e8,980	e10,200	55,200	27,700	36,300	33,900	e11,700	e10,100
6	e23,900	e28,300	e14,900	e10,000	e9,540	e9,990	54,100	26,600	35,800	e32,500	e11,200	e11,200
7	e23,400	e28,100	e15,200	e9,730	e9,750	e10,500	53,000	25,200	35,100	e30,600	e10,400	e10,100
8	e22,100	e26,800	e14,400	e9,250	e10,100	e11,000	52,500	24,100	35,900	e29,800	e9,830	e10,600
9	e21,800	e25,600	e14,900	e9,470	e9,910	e11,600	51,300	24,500	37,600	e29,100	e9,150	e10,800
10	e21,100	e24,700	e14,800	e9,790	e10,300	e12,200	50,400	24,800	39,100	e27,600	e9,570	e10,400
11	e20,000	e23,800	e14,700	e9,450	e10,300	e12,900	48,400	24,900	41,100	e25,800	e9,210	e10,600
12	e19,900	e22,800	e15,700	e9,360	e10,100	e13,000	46,900	25,100	43,500	e24,600	e9,340	e9,890
13	e19,600	e21,900	e15,300	e9,260	e10,100	e13,400	46,800	27,600	45,500	e23,300	e8,970	e9,590
14	e18,600	e21,300	e14,700	e9,420	e9,830	e13,000	48,800	29,200	48,200	e21,800	e8,810	e12,900
15	e17,900	e20,600	e10,900	e8,880	e10,700	e12,400	50,700	30,400	50,400	e21,000	e8,740	e16,300
16	e17,300	e19,800	e9,120	e7,900	e10,800	e12,400	51,700	32,100	53,000	e20,100	e8,240	e16,600
17	e17,100	e19,500	e10,400	e8,040	e11,500	e12,300	53,000	33,600	55,500	e18,400	e7,960	e17,200
18	e17,100	e19,100	e11,400	e7,970	e12,200	e12,100	52,700	34,800	56,400	e18,400	e8,020	e17,500
19	e16,200	e18,700	e12,300	e7,940	e12,500	e11,600	53,100	36,300	56,100	e17,200	e8,240	e17,200
20	e16,100	e19,300	e11,000	e8,280	e12,800	e11,500	53,100	37,300	55,000	e16,200	e8,360	e17,100
21	e15,700	e18,400	e9,950	e8,200	e13,000	e11,400	52,600	38,900	53,700	e15,900	e9,300	e17,200
22	e16,300	e18,900	e8,730	e8,280	e13,200	e11,400	52,000	40,200	51,500	e15,800	e9,160	e17,100
23	e15,900	e18,900	e8,180	e8,440	e12,600	e11,500	50,400	40,700	49,700	e15,200	e9,400	e17,200
24	e16,100	e18,900	e8,510	e8,660	e12,100	e11,800	48,600	41,100	48,500	e14,400	e9,310	e17,800
25	e16,200	e18,800	e8,440	e8,470	e11,700	e12,500	46,400	40,600	46,500	e14,700	e8,870	e16,300
26	e16,700	e18,600	e8,590	e8,490	e11,400	e13,400	44,500	40,200	44,000	e15,000	e8,340	e15,900
27	e16,700	e18,800	e8,820	e9,220	e11,100	e14,400	42,100	39,900	41,700	e14,700	e8,120	e16,500
28	e17,100	e18,200	e9,250	e8,870	e10,800	e15,800	39,400	40,100	40,600	e14,200	e9,640	e20,400
29	e18,100	e17,800	e9,900	e8,630	---	e18,900	36,700	40,300	38,600	e13,600	e10,500	e23,800
30	e20,200	e17,700	e10,100	e8,480	---	e22,400	34,400	40,300	36,600	e12,400	e9,640	e26,600
31	e22,800	---	e10,200	e8,600	---	e28,500	---	39,900	---	e13,200	e9,010	---
TOTAL	612,400	660,300	376,990	282,780	300,920	404,290	1,449,200	1,030,500	1,329,300	688,000	299,730	433,040
MEAN	19,750	22,010	12,160	9,122	10,750	13,040	48,310	33,240	44,310	22,190	9,669	14,430
MAX	27,800	29,000	17,600	11,100	13,200	28,500	55,200	41,100	56,400	35,500	13,600	26,600
MIN	15,700	17,700	8,180	7,900	8,700	9,990	34,400	24,100	35,100	12,400	7,960	8,880
AC-FT	1,215,000	1,310,000	747,800	560,900	596,900	801,900	2,874,000	2,044,000	2,637,000	1,365,000	594,500	858,900
CFSM	0.44	0.49	0.27	0.20	0.24	0.29	1.08	0.74	0.99	0.50	0.22	0.32
IN.	0.51	0.55	0.31	0.23	0.25	0.34	1.20	0.86	1.10	0.57	0.25	0.36

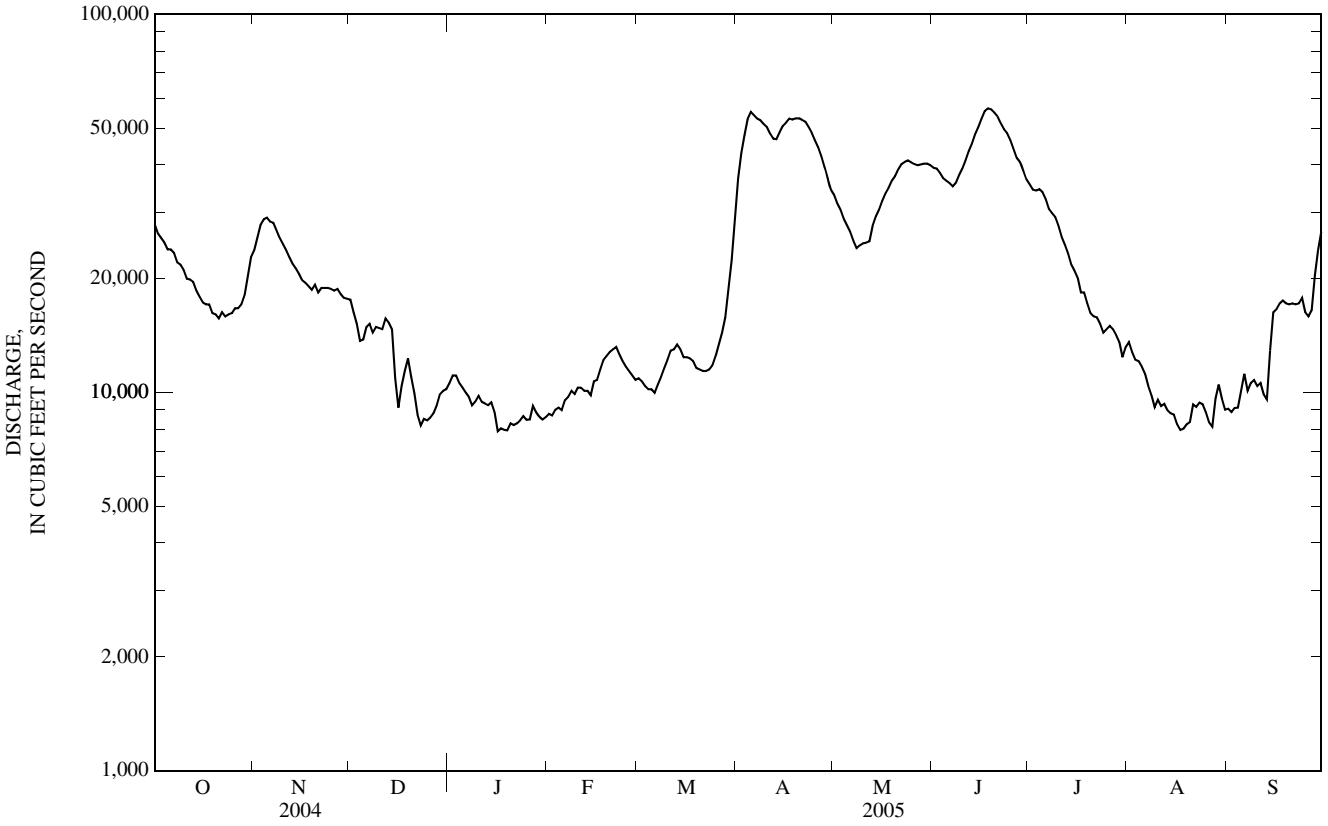
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2005, BY WATER YEAR (WY)

MEAN	13,590	13,500	10,140	8,375	8,273	17,090	41,890	32,800	26,840	21,080	13,540	12,950
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 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1928 - 2005	
ANNUAL TOTAL	6,710,030		7,867,450			
ANNUAL MEAN	18,330		21,550		a18,380	
HIGHEST ANNUAL MEAN					38,540	1986
LOWEST ANNUAL MEAN					4,367	1934
HIGHEST DAILY MEAN	58,300	Jun 6	56,400	Jun 18	226,000	Apr 18, 1965
LOWEST DAILY MEAN	5,450	Jan 21	7,900	Jan 16	1,380	Jul 13, 1940
ANNUAL SEVEN-DAY MINIMUM	5,740	Jan 31	8,090	Jan 16	2,190	Aug 11, 1936
MAXIMUM PEAK FLOW			56,600	Jun 18	228,000	Apr 18, 1965
MAXIMUM PEAK STAGE			31.75	Jun 18	43.11	Apr 18, 1965
ANNUAL RUNOFF (AC-FT)	13,310,000		15,610,000		13,320,000	
ANNUAL RUNOFF (CFSM)	0.409		0.481		0.410	
ANNUAL RUNOFF (INCHES)	5.57		6.53		5.57	
10 PERCENT EXCEEDS	31,300		44,900		39,500	
50 PERCENT EXCEEDS	16,100		16,300		12,100	
90 PERCENT EXCEEDS	6,350		8,980		5,280	

a Median of annual mean discharges is 19,000 ft^3/s.
e Estimated.



05344850 STURGEON LAKE, WEST SIDE, AT PRAIRIE ISLAND, MN

LOCATION.--Lat 44°38'18", long 92°38'38", in NE¼NE¼SW¼ sec. 32, T. 114 N., R. 15 W., Goodhue County, Hydrologic Unit 07040001, on west bank of Sturgeon Lake, 0.7 miles above lake outlet to Mississippi River and 7 miles northwest of Red Wing.

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

GAGE.--Water-stage recorder. Datum of gage is sea level (NAVD of 1988).

REMARKS.--Records fair to poor. Water level affected by U.S. Army Corp of Engineers Lock and Dam 3 on the Mississippi River above Red Wing and by seiche.

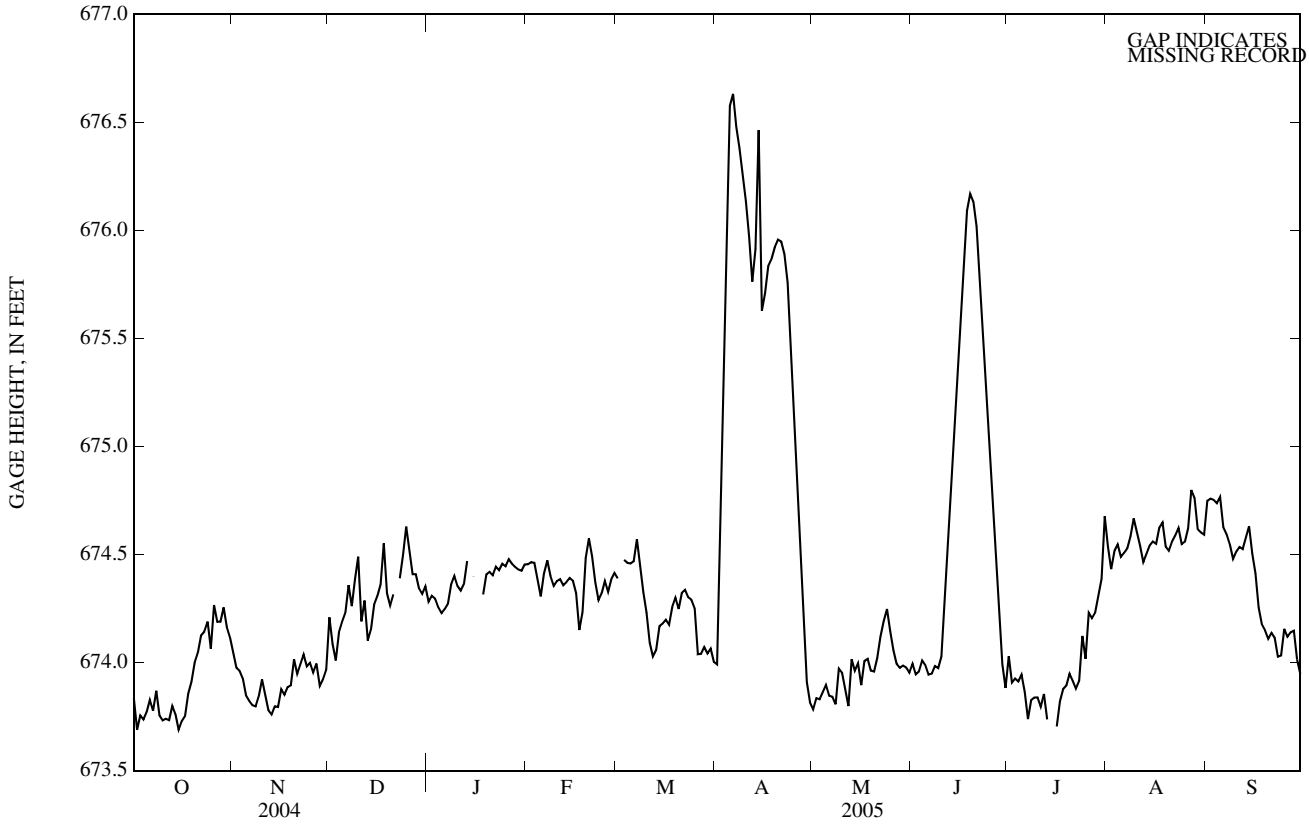
EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 685.90 ft, Apr. 28, 2001; maximum daily, 685.89 ft, Apr. 28, 2001; minimum elevation, 673.42 ft, Apr. 6, 2002; minimum daily, 673.49 ft, Apr. 6, 2002.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 677.69 ft, Apr. 14; maximum daily, 676.63 ft, Apr. 6; minimum elevation, 673.57 ft, July 16; minimum daily, 673.69 ft, Oct. 2, 15.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	673.83	674.05	674.21	674.28	674.46	674.39	673.99	673.78	673.99	674.03	674.54	674.75
2	673.69	673.98	674.09	674.31	674.46	---	674.58	673.84	673.95	673.91	674.43	674.76
3	673.76	673.96	674.01	674.30	674.46	674.48	675.43	673.83	673.96	673.93	674.52	674.75
4	673.74	673.93	674.14	674.25	674.38	674.46	676.14	673.86	674.01	673.91	674.55	674.74
5	673.77	673.85	674.19	674.23	674.31	674.46	676.58	673.90	673.99	673.94	674.49	674.77
6	673.83	673.82	674.23	674.25	674.41	674.47	676.63	673.85	673.94	673.86	674.51	674.63
7	673.78	673.80	674.36	674.27	674.47	674.57	676.48	673.84	673.95	673.74	674.53	674.59
8	673.87	673.80	674.26	674.36	674.40	674.45	676.38	673.81	673.98	673.83	674.58	674.55
9	673.76	673.85	674.39	674.40	674.36	674.33	676.27	673.97	673.97	673.84	674.67	674.48
10	673.73	673.92	674.49	674.35	674.38	674.23	676.14	673.95	674.03	673.84	674.61	674.51
11	673.74	673.85	674.19	674.33	674.39	674.09	675.97	673.87	674.21	673.80	674.54	674.53
12	673.73	673.78	674.29	674.36	674.36	674.03	675.76	673.80	674.45	673.85	674.46	674.53
13	673.80	673.76	674.10	674.47	674.37	674.06	675.91	674.02	674.71	673.74	674.50	674.58
14	673.76	673.80	674.15	---	674.39	674.17	676.46	673.96	674.99	---	674.54	674.63
15	673.69	673.79	674.27	674.40	674.38	674.18	675.63	674.00	675.25	---	674.56	674.50
16	673.73	673.88	674.31	---	674.32	674.20	675.71	673.90	675.54	673.70	674.55	674.41
17	673.75	673.85	674.36	---	674.15	674.18	675.84	674.01	675.86	673.82	674.62	674.25
18	673.86	673.89	674.55	674.32	674.23	674.26	675.87	674.02	676.09	673.88	674.65	674.18
19	673.91	673.89	674.32	674.41	674.48	674.30	675.92	673.96	676.17	673.89	674.54	674.15
20	674.00	674.02	674.26	674.42	674.57	674.25	675.96	673.96	676.13	673.95	674.52	674.11
21	674.05	673.95	674.32	674.40	674.49	674.32	675.95	674.02	676.02	673.92	674.56	674.14
22	674.13	673.99	---	674.44	674.37	674.34	675.89	674.12	675.84	673.88	674.59	674.12
23	674.14	674.04	674.39	674.43	674.29	674.30	675.76	674.19	675.63	673.92	674.62	674.03
24	674.19	673.98	674.50	674.46	674.32	674.29	675.56	674.25	675.42	674.12	674.55	674.03
25	674.06	674.00	674.63	674.45	674.38	674.25	675.30	674.15	675.18	674.02	674.56	674.16
26	674.27	673.95	674.52	674.48	674.33	674.04	675.02	674.06	674.87	674.23	674.62	674.12
27	674.19	674.00	674.41	674.46	674.39	674.04	674.66	673.99	674.53	674.21	674.80	674.14
28	674.19	673.89	674.41	674.44	674.41	674.07	674.24	673.98	674.25	674.23	674.76	674.15
29	674.26	673.92	674.34	674.43	---	674.04	673.91	673.99	673.99	674.31	674.62	674.01
30	674.16	673.97	674.32	674.42	---	674.06	673.82	673.98	673.88	674.39	674.60	673.95
31	674.12	---	674.35	674.45	---	674.00	---	673.95	---	674.68	674.59	---
MEAN	673.92	673.91	---	---	674.38	---	675.59	673.96	674.76	---	674.57	674.38
MAX	674.27	674.05	---	---	674.57	---	676.63	674.25	676.17	---	674.80	674.77
MIN	673.69	673.76	---	---	674.15	---	673.82	673.78	673.88	---	674.43	673.95

05344850 STURGEON LAKE, WEST SIDE, AT PRAIRIE ISLAND, MN—Continued



05345000 VERMILLION RIVER NEAR EMPIRE, MN

LOCATION.--Lat 44°40'00", long 93°03'17", in SW¼NW¼ sec. 24, T.114 N., R.19 W., Dakota County, Hydrologic Unit 07040001, on right bank and just downstream from County Road 79, 2 mi west of Empire and 4 mi northeast of Farmington.

DRAINAGE AREA.--129 mi^2.

PERIOD OF RECORD.--May 1942 to June 1945 (no record during July, August, and September 1944), September 1969 to September 1973 (discharge measurements only), October 1973 to current year. Prior to October 1975 published as "near Empire City".

GAGE.--Water-stage recorder. Datum of gage is 851.99 ft above sea level (NGVD of 1929, levels by U.S. Army Corps of Engineers). April 12, 1942 to June 30, 1944, and October 1, 1944 to July 7, 1945, nonrecording gage at same site and present datum.

REMARKS.--Records good. Some regulation at lower flows by wastewater treatment plant upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in April 1965, reached a stage of 7.5 ft, from information by local resident; discharge 6,200 ft^3/s, from rating extended above 2,100 ft^3/s.

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	59	61	55	41	34	40	204	70	71	102	48	39
2	63	59	54	41	34	39	132	69	68	94	47	38
3	59	59	53	40	35	39	112	67	66	93	45	37
4	56	60	53	39	36	40	102	65	67	91	64	46
5	55	59	53	36	40	43	96	64	73	86	62	51
6	54	60	53	38	66	59	92	65	75	82	56	46
7	53	56	52	38	55	197	88	64	67	81	48	51
8	55	55	52	38	46	140	84	65	122	80	55	64
9	52	55	53	39	43	74	80	66	218	77	58	67
10	51	57	56	39	41	71	77	66	199	73	77	68
11	49	56	57	38	41	62	79	65	135	70	71	65
12	51	55	57	38	41	54	93	72	122	65	79	62
13	51	55	55	38	44	51	96	126	111	63	67	77
14	52	54	50	37	67	49	88	150	116	63	61	85
15	52	56	52	35	103	46	81	134	118	60	59	73
16	53	55	51	34	81	43	85	120	114	57	57	66
17	54	55	50	33	62	43	119	113	105	55	55	60
18	53	54	49	33	56	43	111	114	98	60	56	58
19	49	58	44	33	52	43	110	140	94	53	57	57
20	51	77	47	33	50	43	143	126	96	55	52	53
21	51	72	45	34	47	44	120	113	114	55	52	49
22	52	65	42	34	44	48	105	109	104	52	49	52
23	54	61	42	35	42	67	93	100	96	50	48	49
24	53	59	41	36	42	91	86	91	117	49	51	46
25	53	57	40	35	42	106	84	89	148	52	49	92
26	51	57	39	36	41	95	82	93	119	69	52	146
27	50	60	40	34	42	92	80	90	102	61	56	117
28	57	60	41	34	43	96	76	88	114	57	50	101
29	82	57	41	34	---	99	74	83	127	54	49	96
30	72	56	42	34	---	120	71	78	110	52	48	87
31	64	---	42	35	---	229	---	75	---	49	43	---
TOTAL	1,711	1,760	1,501	1,122	1,370	2,306	2,943	2,830	3,286	2,060	1,721	1,998
MEAN	55.2	58.7	48.4	36.2	48.9	74.4	98.1	91.3	110	66.5	55.5	66.6
MAX	82	77	57	41	103	229	204	150	218	102	79	146
MIN	49	54	39	33	34	39	71	64	66	49	43	37
AC-FT	3,390	3,490	2,980	2,230	2,720	4,570	5,840	5,610	6,520	4,090	3,410	3,960
CFSM	0.43	0.45	0.38	0.28	0.38	0.58	0.76	0.71	0.85	0.52	0.43	0.52
IN.	0.49	0.51	0.43	0.32	0.40	0.66	0.85	0.82	0.95	0.59	0.50	0.58

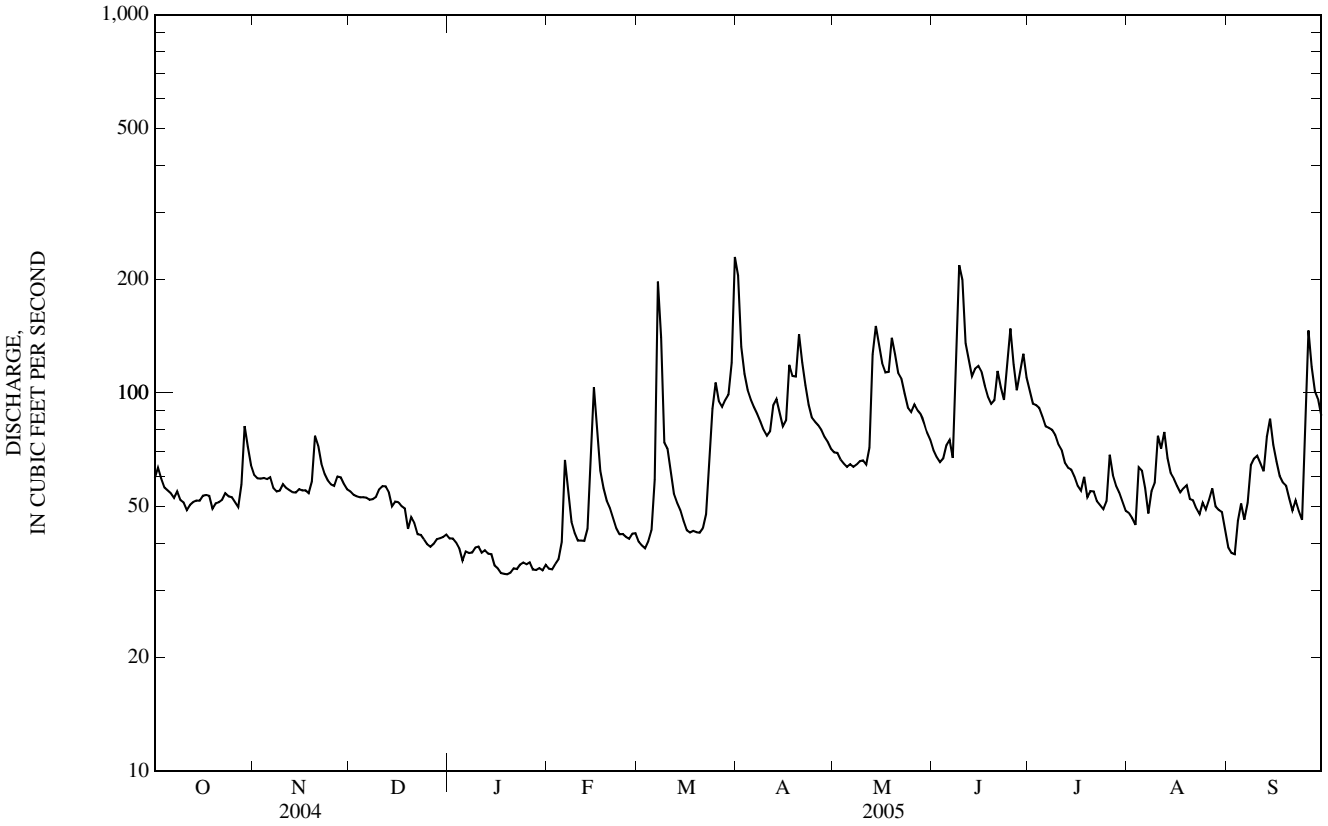
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2005, BY WATER YEAR (WY)

MEAN	61.1	52.6	41.4	33.1	38.7	96.4	114	96.1	97.8	74.9	61.6	72.5
MAX	263	133	79.5	58.6	89.8	199	337	223	290	258	234	313
(WY)	(2003)	(1993)	(1993)	(1998)	(1998)	(1983)	(2001)	(1986)	(1993)	(1997)	(1997)	(1992)
MIN	14.9	15.6	12.4	11.0	13.1	25.4	35.2	29.3	23.0	16.0	14.3	14.6
(WY)	(1977)	(1977)	(1977)	(1977)	(1977)	(1975)	(1977)	(1977)	(1988)	(1988)	(1976)	(1976)

05345000 VERMILLION RIVER NEAR EMPIRE, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1942 - 2005	
ANNUAL TOTAL	23,776		24,608			
ANNUAL MEAN	65.0		67.4		70.3	
HIGHEST ANNUAL MEAN					147	1998
LOWEST ANNUAL MEAN					23.6	1977
HIGHEST DAILY MEAN	355	Jun 13	229	Mar 31	3,000	Sep 16, 1992
LOWEST DAILY MEAN	28	Jan 6	33	Jan 17-20	8.4	Jan 15, 1975
ANNUAL SEVEN-DAY MINIMUM	28	Jan 23	33	Jan 16	9.0	Jan 13, 1975
MAXIMUM PEAK FLOW			289	Mar 31	6,570	Sep 16, 1992
MAXIMUM PEAK STAGE			5.59	Mar 31	10.00	Sep 16, 1992
INSTANTANEOUS LOW FLOW			a27	Jan 5	b6.8	Aug 15, 1992
ANNUAL RUNOFF (AC-FT)	47,160		48,810		50,910	
ANNUAL RUNOFF (CFSM)	0.504		0.523		0.545	
ANNUAL RUNOFF (INCHES)	6.86		7.10		7.40	
10 PERCENT EXCEEDS	103		111		132	
50 PERCENT EXCEEDS	55		57		47	
90 PERCENT EXCEEDS	29		39		22	

a Due in part to regulation.
b Result of regulation.



05346050 CLEAR LAKE, EAST SIDE, AT PRAIRIE ISLAND, MN

LOCATION.--Lat 44°39'13", long 92°42'36", in NE¼SE¼ sec. 15, T. 102 N., R. 18 W., Goodhue County, on east bank of Clear Lake and 0.9 miles above lake output to Vermillion River.

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

GAGE.--Water-stage recorder. Datum of gage is sea level (NAVD of 1988).

REMARKS.--Records good to fair. Water level affected by U.S. Army Corp of Engineers Lock and Dam 3 on the Mississippi River.

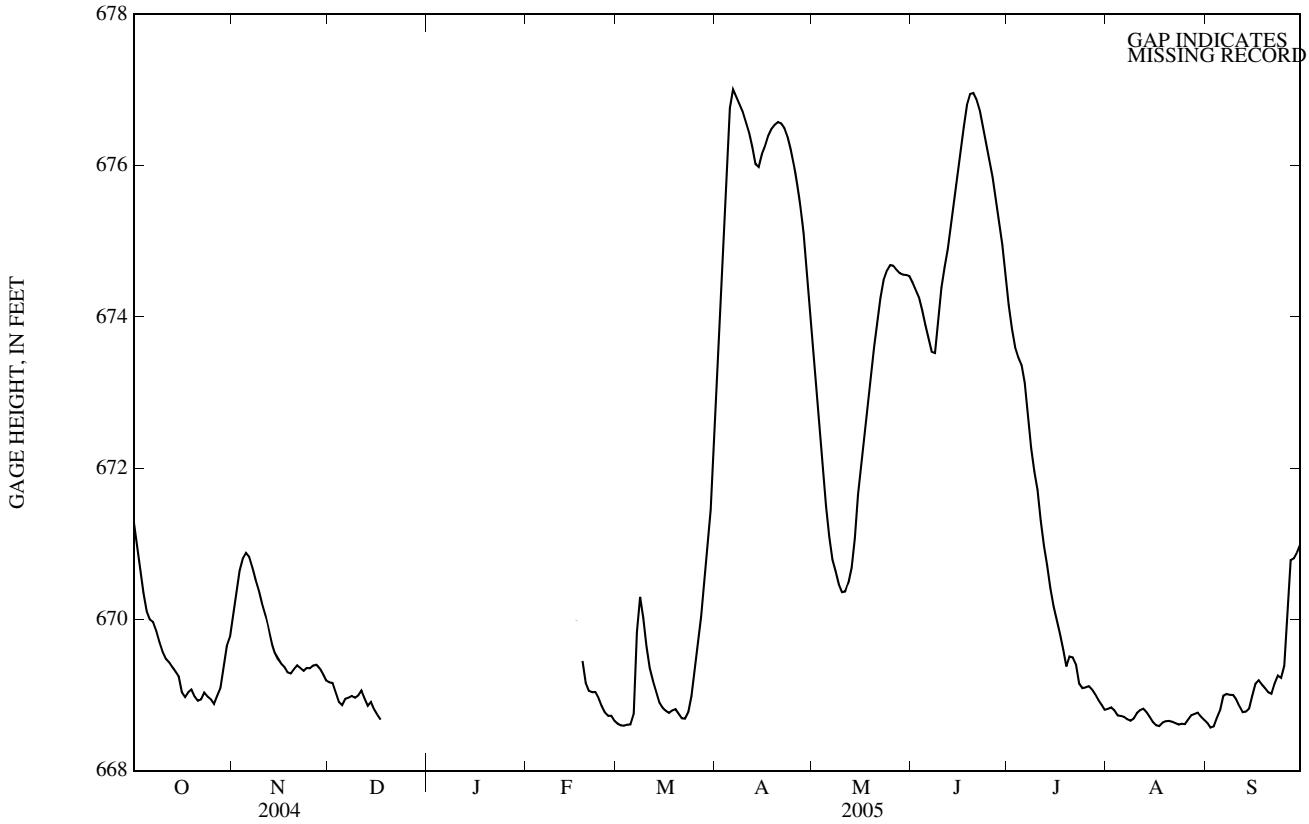
EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 685.88 ft (from floodmark), Apr. 28, 2001; maximum daily, 678.93 ft, May 22, 1999 (probably higher in April 2001); minimum elevation, 668.15 ft, Oct. 26, 2003; minimum daily, 668.17 ft, Oct. 26, 2003.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 677.03 ft, Apr. 6; maximum daily, 677.01, Apr. 6; minimum recorded elevation, 668.55 ft, Sep. 2; minimum recorded daily, 668.57 ft, Sep. 2.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	671.28	670.07	669.17	---	---	668.62	673.31	673.60	674.45	674.15	668.82	668.63
2	670.98	670.36	669.16	---	---	668.60	674.36	673.05	674.36	673.84	668.84	668.57
3	670.68	670.65	669.03	---	---	668.59	675.25	672.50	674.26	673.60	668.80	668.58
4	670.35	670.81	668.91	---	---	668.61	676.07	671.99	674.09	673.47	668.73	668.70
5	670.11	670.88	668.86	---	---	668.61	676.76	671.50	673.89	673.37	668.72	668.80
6	670.00	670.83	668.95	---	---	668.75	677.01	671.09	673.71	673.12	668.71	668.99
7	669.96	670.68	668.96	---	---	669.83	676.91	670.79	673.54	672.70	668.68	669.01
8	669.85	670.52	668.99	---	---	670.30	676.81	670.64	673.52	672.26	668.66	669.00
9	669.70	670.38	668.97	---	---	670.01	676.72	670.47	673.93	671.95	668.69	669.00
10	669.57	670.21	668.99	---	---	669.64	676.58	670.36	674.38	671.71	668.76	668.94
11	669.48	670.06	669.06	---	---	669.36	676.44	670.37	674.66	671.30	668.80	668.85
12	669.43	669.88	668.96	---	---	669.19	676.25	670.48	674.90	670.97	668.82	668.77
13	669.37	669.70	668.86	---	---	669.05	676.02	670.68	675.20	670.71	668.77	668.78
14	669.31	669.56	668.91	---	---	668.90	675.98	671.07	675.53	670.41	668.71	668.82
15	669.25	669.49	668.81	---	---	668.83	676.15	671.65	675.86	670.17	668.64	668.99
16	669.04	669.42	668.74	---	669.99	668.79	676.26	672.04	676.18	670.00	668.60	669.15
17	668.97	669.37	668.67	---	---	668.76	676.39	672.38	676.51	669.81	668.59	669.19
18	669.04	669.30	---	---	669.45	668.80	676.48	672.76	676.80	669.60	668.63	669.14
19	669.07	669.28	---	---	669.16	668.81	676.54	673.18	676.95	669.38	668.65	669.09
20	668.98	669.34	---	---	669.06	668.75	676.57	673.59	676.96	669.51	668.66	669.04
21	668.93	669.39	---	---	669.04	668.69	676.56	673.93	676.87	669.50	668.65	669.02
22	668.94	669.36	---	---	669.04	668.69	676.50	674.25	676.73	669.41	668.63	669.15
23	669.03	669.32	---	---	668.96	668.77	676.38	674.49	676.53	669.15	668.61	669.26
24	668.98	669.36	---	---	668.85	668.99	676.21	674.61	676.32	669.09	668.62	669.23
25	668.94	669.35	---	---	668.77	669.35	676.00	674.68	676.09	669.10	668.62	669.39
26	668.88	669.39	---	---	668.73	669.68	675.74	674.68	675.85	669.12	668.67	670.14
27	668.99	669.40	---	---	668.73	670.03	675.46	674.62	675.55	669.07	668.73	670.78
28	669.09	669.35	---	---	668.66	670.46	675.10	674.58	675.24	669.01	668.75	670.81
29	669.36	669.28	---	---	---	670.94	674.67	674.56	674.95	668.94	668.77	670.88
30	669.65	669.19	---	---	---	671.45	674.16	674.55	674.58	668.87	668.71	670.99
31	669.77	---	---	---	---	672.33	---	674.54	---	668.80	668.67	---
MEAN	669.52	669.81	---	---	---	669.36	675.99	672.70	675.28	670.71	668.70	669.26
MAX	671.28	670.88	---	---	---	672.33	677.01	674.68	676.96	674.15	668.84	670.99
MIN	668.88	669.19	---	---	---	668.59	673.31	670.36	673.52	668.80	668.59	668.57

05346050 CLEAR LAKE, EAST SIDE, AT PRAIRIE ISLAND, MN—Continued



05353800 STRAIGHT RIVER NEAR FARIBAULT, MN

LOCATION.--Lat 44°15'29", long 93°13'51", in NW¼SE¼ sec. 9, T.109 N., R.20 W., Rice County, Hydrologic Unit 07040002, on right bank 50 ft downstream from highway bridge, 2.8 mi upstream from Falls Creek and 3.2 mi southeast of Faribault.

DRAINAGE AREA.--435 mi^2.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,034.58 ft above sea level (NGVD of 1929).

REMARKS.--Records good except those for estimated daily discharges, which are fair to poor.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar 31	1100	*2,730	*8.06	Sep 25	1800	2,000	7.25
May 13	2100	1,630	6.83				

Minimum discharge, 50 ft^3/s, Jan. 16, (minimum daily discharge, backwater from ice).

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	386	324	e196	e143	e59	e95	2,460	267	345	402	77	60
2	403	295	e199	e131	e61	e94	1,920	252	327	316	72	57
3	476	276	e179	e108	e63	e94	1,380	239	310	270	69	55
4	438	268	e174	e103	e88	e140	956	226	303	243	66	393
5	378	258	e173	e91	e140	e180	729	216	296	217	62	287
6	347	250	181	e93	e145	e208	637	223	317	196	60	157
7	325	239	190	e88	e140	e211	591	219	319	179	57	140
8	362	217	197	e91	e133	e207	550	260	758	181	57	128
9	356	207	214	e90	e127	e195	504	284	786	160	61	109
10	337	210	235	e85	e123	e180	457	278	702	145	181	95
11	319	199	239	e86	e123	e170	432	252	574	134	90	85
12	304	182	244	e87	e126	e150	559	279	514	124	97	78
13	299	174	203	e84	e133	e150	750	1,170	451	117	75	110
14	295	167	180	e61	e150	e125	683	1,460	417	111	68	93
15	305	167	e210	e52	e160	e123	548	1,050	389	104	63	83
16	291	171	e198	e50	e156	e122	559	792	351	98	60	76
17	269	173	e186	e51	e152	e121	1,000	667	322	94	67	70
18	256	169	e181	e52	e147	e127	870	695	296	156	170	67
19	249	179	e124	e53	e135	e130	721	1,040	272	105	156	65
20	241	248	e148	e56	e127	e135	661	1,130	258	103	95	64
21	230	258	e150	e59	e124	e133	669	974	327	141	77	63
22	228	256	e145	e58	e119	e130	592	812	395	149	68	61
23	240	252	e130	e56	e114	e150	500	689	345	145	63	58
24	235	238	e120	e57	e109	e180	435	582	300	123	60	58
25	217	220	e120	e58	e106	e233	402	520	271	111	57	1,210
26	204	214	e125	e58	e103	e301	382	524	320	145	89	1,720
27	197	231	e123	e55	e98	e831	355	490	361	176	110	1,490
28	196	226	e121	e56	e96	e1,550	323	458	358	139	92	1,290
29	217	214	e125	e56	---	e1,650	302	425	309	109	79	1,060
30	294	200	e135	e57	---	1,760	283	390	486	94	69	782
31	355	---	e150	e58	---	2,630	---	363	---	84	64	---
TOTAL	9,249	6,682	5,295	2,283	3,357	12,505	21,210	17,226	11,779	4,871	2,531	10,064
MEAN	298	223	171	73.6	120	403	707	556	393	157	81.6	335
MAX	476	324	244	143	160	2,630	2,460	1,460	786	402	181	1,720
MIN	196	167	120	50	59	94	283	216	258	84	57	55
AC-FT	18,350	13,250	10,500	4,530	6,660	24,800	42,070	34,170	23,360	9,660	5,020	19,960
CFSM	0.68	0.50	0.39	0.17	0.27	0.91	1.60	1.26	0.89	0.36	0.18	0.76
IN.	0.78	0.56	0.45	0.19	0.28	1.05	1.79	1.45	0.99	0.41	0.21	0.85

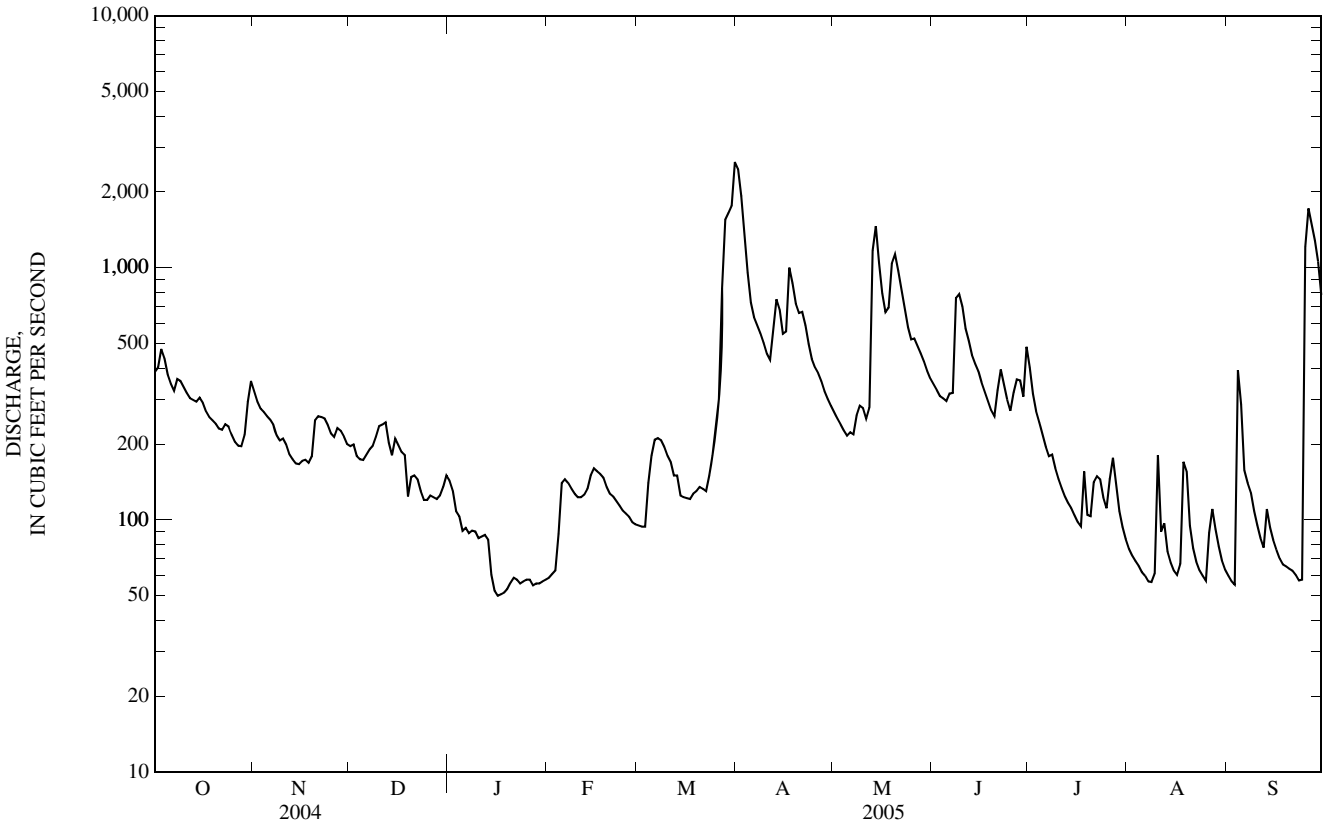
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2005, BY WATER YEAR (WY)

MEAN	219	187	118	68.4	114	494	639	472	456	322	223	191
MAX	831	595	336	167	837	1,270	2,365	1,322	1,470	1,027	1,136	977
(WY)	(1969)	(1971)	(1983)	(1992)	(1984)	(1973)	(2001)	(1999)	(2001)	(1993)	(1979)	(2004)
MIN	17.0	15.1	11.0	11.0	12.9	26.4	70.2	58.1	45.8	26.2	16.2	16.0
(WY)	(1977)	(1977)	(1977)	(1977)	(1968)	(1968)	(1977)	(1976)	(1976)	(1988)	(1976)	(1976)

05353800 STRAIGHT RIVER NEAR FARIBAULT, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1966 - 2005	
ANNUAL TOTAL	155,910		107,052			
ANNUAL MEAN	426		293		293	
HIGHEST ANNUAL MEAN					754	1993
LOWEST ANNUAL MEAN					43.9	1977
HIGHEST DAILY MEAN	5,860	Jun 11	2,630	Mar 31	5,860	Jun 11, 2004
LOWEST DAILY MEAN	17	Jan 28	50	Jan 16	a11	Feb 18, 1968
ANNUAL SEVEN-DAY MINIMUM	17	Jan 26	53	Jan 15	11	Feb 18, 1968
MAXIMUM PEAK FLOW			2,730	Mar 31	b6,080	Jun 12, 2004
MAXIMUM PEAK STAGE			8.06	Mar 31	c12.74	Mar 5, 1974
INSTANTANEOUS LOW FLOW			d50	Jan 16	10	Oct 27, 1976
ANNUAL RUNOFF (AC-FT)	309,200		212,300		211,900	
ANNUAL RUNOFF (CFSM)	0.964		0.664		0.662	
ANNUAL RUNOFF (INCHES)	13.12		9.01		8.99	
10 PERCENT EXCEEDS	814		663		709	
50 PERCENT EXCEEDS	228		181		129	
90 PERCENT EXCEEDS	21		63		32	

a Many days in 1968, and 1977.
b Gage height, 11.31 ft.
c Backwater from ice.
d Estimated daily-mean discharge, backwater from ice.
e Estimated.



05355200 CANNON RIVER AT WELCH, MN

LOCATION.--Lat 44°33'50", long 92°43'55", in NW¼SW¼ sec. 27, T. 113 N., R. 16 W., Goodhue County, on right bank 0.3 mile downstream from highway bridge at Welch and 1.8 miles upstream from Belle Creek.

DRAINAGE AREA.--1,340 mi^2.

PERIOD OF RECORD.--June 1909 to January 1914 (no winter records 1909-11), November 1930 to September 1971, October 1972 to September 1987 (annual maximum only), October 1991 to current year.

REVISED RECORDS.--WSP 1308: 1912(M). WSP 1508: 1933. WSP 1914: 1960. WRD MN-98: 1986 (M), 1997.

GAGE.--Water-stage recorder. Datum of gage is 699.16 ft above sea level (NGVD of 1929). Prior to Nov. 11, 1930, nonrecording gage on highway bridge at site 0.3 mile upstream at datum 3.00 ft lower. Nov. 11, 1930 to Oct. 11, 1938, water-stage recorder at site 0.3 mile upstream at present datum.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 17.1 ft, present datum, in April 1888, from floodmark at mill about 2,400 ft upstream.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow affected at lower stages by regulation from hydropower plant upstream.

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	902	730	582	e330	e214	433	4,170	928	916	1,020	275	247
2	952	786	563	e313	e212	399	3,850	886	821	950	246	248
3	968	788	559	e305	e227	398	3,260	862	824	772	241	240
4	1,010	777	559	e294	e265	395	2,650	836	831	764	251	304
5	904	734	541	e275	e324	427	2,320	812	848	742	233	729
6	814	682	528	e265	e536	877	2,090	792	930	653	219	798
7	764	564	539	e256	e409	1,700	1,910	825	985	527	214	726
8	675	524	535	e250	e359	1,410	1,770	880	3,120	526	226	782
9	687	550	545	e245	e332	1,130	1,530	895	4,260	524	251	721
10	749	571	591	e240	e298	960	1,370	974	3,070	491	237	533
11	862	562	618	e235	e288	831	1,290	988	2,480	412	349	431
12	877	522	630	e230	e282	770	1,350	905	2,170	394	442	431
13	907	534	618	e226	e395	754	1,540	1,130	1,940	398	264	521
14	882	530	595	e180	1,120	712	1,710	2,420	1,540	398	219	567
15	831	508	496	e162	1,750	630	1,660	2,480	1,420	383	219	654
16	794	503	459	e165	1,450	551	1,560	1,960	1,260	358	224	695
17	774	503	e486	e165	1,150	476	1,740	1,700	1,200	334	226	488
18	745	507	e495	e165	1,010	509	2,150	1,630	1,080	350	234	417
19	703	537	e435	e165	883	503	2,200	2,010	1,040	366	405	428
20	606	648	e465	e198	792	473	2,150	2,410	968	396	526	439
21	550	679	e460	e195	748	476	2,010	2,270	1,040	440	429	410
22	576	674	e429	e193	726	485	1,940	2,330	1,040	337	303	601
23	614	694	e340	e196	629	587	1,780	2,040	1,020	325	278	625
24	625	645	e317	e200	537	799	1,630	1,710	990	378	251	456
25	620	643	e318	e205	531	1,020	1,500	1,700	876	417	223	1,110
26	598	648	e325	e206	510	1,490	1,380	1,620	811	398	290	3,250
27	556	659	e321	e201	478	2,020	1,290	1,540	816	414	390	3,110
28	559	643	e315	e203	468	2,450	1,210	1,460	955	360	441	2,790
29	672	633	e322	e207	---	2,830	1,080	1,360	1,010	375	350	2,550
30	727	623	e346	e210	---	2,990	966	1,250	974	320	283	2,270
31	725	---	e365	e210	---	3,900	---	1,130	---	296	249	---
TOTAL	23,228	18,601	14,697	6,890	16,923	33,385	57,056	44,733	41,235	14,818	8,988	27,571
MEAN	749	620	474	222	604	1,077	1,902	1,443	1,374	478	290	919
MAX	1,010	788	630	330	1,750	3,900	4,170	2,480	4,260	1,020	526	3,250
MIN	550	503	315	162	212	395	966	792	811	296	214	240
AC-FT	46,070	36,900	29,150	13,670	33,570	66,220	113,200	88,730	81,790	29,390	17,830	54,690
CFSM	0.56	0.46	0.35	0.17	0.45	0.80	1.42	1.08	1.03	0.36	0.22	0.69
IN.	0.64	0.52	0.41	0.19	0.47	0.93	1.58	1.24	1.14	0.41	0.25	0.77

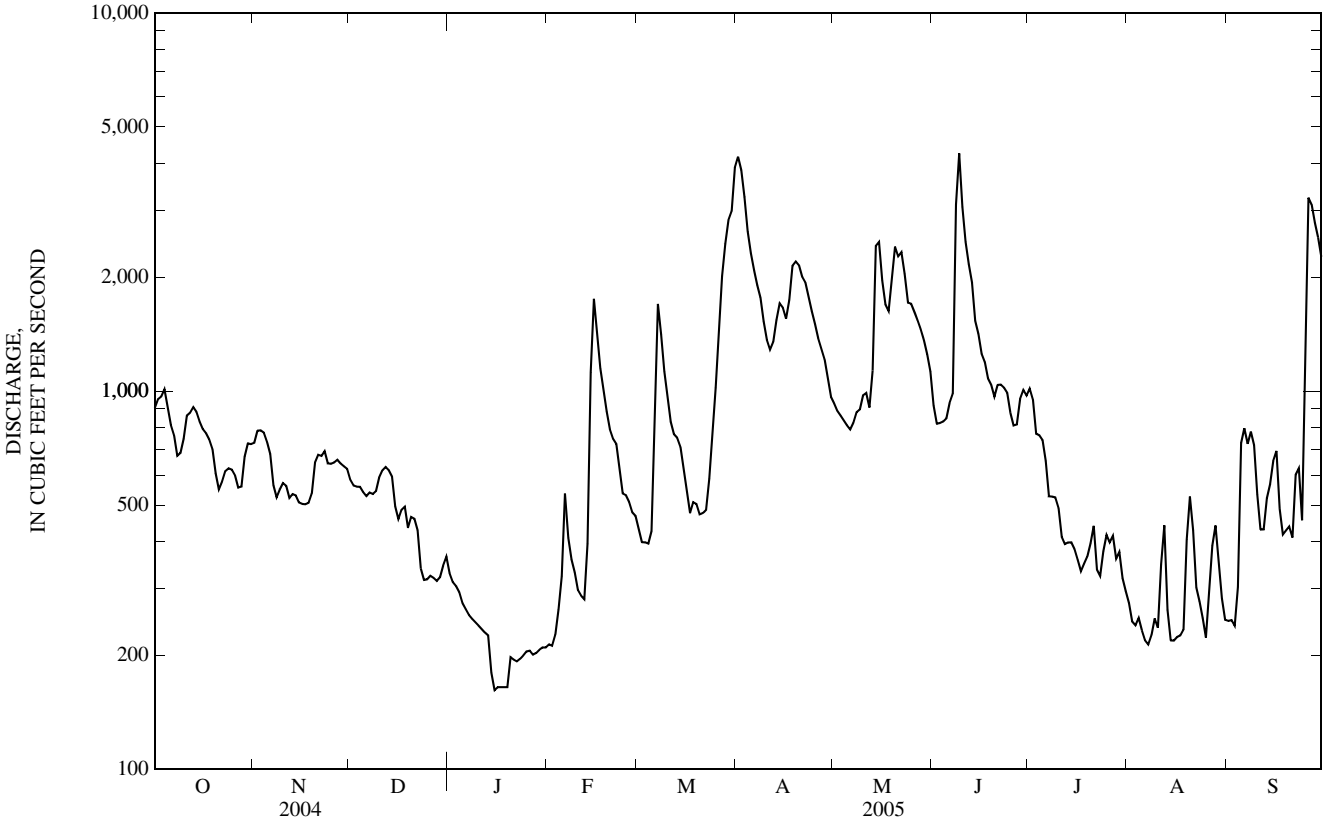
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 2005, BY WATER YEAR (WY)

MEAN	402	382	299	244	313	971	1,412	843	925	621	457	419
MAX	1,806	1,708	1,105	662	1,141	2,627	8,240	2,966	4,144	3,343	2,951	1,823
(WY)	(1969)	(1971)	(1992)	(1992)	(1966)	(1992)	(1965)	(1944)	(1993)	(1993)	(1993)	(1993)
MIN	65.5	78.8	75.0	76.9	110	149	145	84.9	80.0	71.2	78.1	72.8
(WY)	(1934)	(1934)	(1938)	(1938)	(1913)	(1911)	(1911)	(1934)	(1934)	(1934)	(1936)	(1933)

05355200 CANNON RIVER AT WELCH, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1909 - 2005	
ANNUAL TOTAL	355,992		308,125			
ANNUAL MEAN	973		844		630	
HIGHEST ANNUAL MEAN					2,132	1993
LOWEST ANNUAL MEAN					137	1934
HIGHEST DAILY MEAN	9,940	Jun 12	4,260	Jun 9	28,700	Apr 8, 1965
LOWEST DAILY MEAN	182	Jan 21	162	Jan 15	a19	Jan 2, 1950
ANNUAL SEVEN-DAY MINIMUM	189	Jan 17	171	Jan 14	42	Aug 12, 1936
MAXIMUM PEAK FLOW			5,160	Jun 9	36,100	Apr 8, 1965
MAXIMUM PEAK STAGE			8.04	Jun 9	15.05	Jun 27, 1998
INSTANTANEOUS LOW FLOW			b162	Jan 15	a2.5	Jan 3, 1950
ANNUAL RUNOFF (AC-FT)	706,100		611,200		456,200	
ANNUAL RUNOFF (CFSM)	0.726		0.630		0.470	
ANNUAL RUNOFF (INCHES)	9.88		8.55		6.38	
10 PERCENT EXCEEDS	2,010		1,830		1,410	
50 PERCENT EXCEEDS	646		618		314	
90 PERCENT EXCEEDS	207		240		107	

a Result of ice jam upstream.
b Estimated minimum-daily, result of freezeup.
e Estimated.



05372995 SOUTH FORK ZUMBRO RIVER AT ROCHESTER, MN

LOCATION.--Lat 44°03'42", long 92°27'58", in NW¼NE¼ sec. 23, T.107 N., R.14 W., Olmsted County, Hydrologic Unit 07040004, on left bank 50 ft downstream from 37th Street bridge, 0.2 mi upstream from wastewater treatment plant, and 2.0 mi downstream from Silver Lake Dam.

DRAINAGE AREA.--303 mi^2.

PERIOD OF RECORD.--March 1981 to current year.

GAGE.--Water-stage recorder. Datum of gage is 950.00 ft above sea level (NGVD of 1929). Prior to Mar. 1981, recording gage at site 0.6 miles downstream. Record published as "near Rochester, MN" and under downstream order number 05373000. Peak flow record is considered equivalent at both sites but daily-mean streamflows are not.

REMARKS.--Record good. Some regulation at times from Silver Lake.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 6, 1978, reached a stage of about 28.0 ft, on upstream side of bridge, discharge 30,500 ft^3/s. This is the highest known stage since at least 1908.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 14	0400	1,400	6.49	Mar 29	0300	*3,310	*9.78
Mar 7	0900	1,590	6.90				

Minimum discharge, 47 ft^3/s, July 19, gage height, 2.06 ft.

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	342	160	133	122	73	98	624	154	152	82	110	54
2	292	162	139	133	77	91	461	146	143	77	100	50
3	286	158	121	108	83	91	388	144	128	76	92	51
4	264	155	133	109	102	129	342	125	142	75	87	107
5	244	148	126	89	208	223	325	121	130	73	80	66
6	229	143	129	97	949	442	319	127	118	72	75	63
7	220	137	134	93	485	1,180	309	125	113	71	70	69
8	212	131	141	95	272	372	288	123	379	69	68	79
9	200	126	157	94	240	253	272	120	249	66	220	66
10	187	125	199	87	188	233	255	104	217	62	130	62
11	179	122	204	89	177	198	267	107	246	60	123	57
12	175	114	213	93	182	161	317	176	190	58	101	59
13	172	108	186	87	437	138	351	204	169	56	84	88
14	180	105	111	67	1,220	139	301	215	172	55	77	63
15	176	108	190	72	1,150	125	262	206	169	55	71	59
16	169	113	193	65	476	127	291	190	144	53	68	57
17	161	113	154	63	280	116	317	178	130	51	66	54
18	154	111	165	60	234	107	314	260	123	58	77	52
19	155	156	85	61	228	104	329	395	109	50	67	75
20	153	164	130	64	205	133	340	394	108	61	62	57
21	148	169	137	69	180	117	336	360	104	141	59	54
22	147	163	116	68	153	113	306	328	102	74	57	51
23	151	158	102	67	140	114	265	292	95	63	55	49
24	144	149	91	70	132	129	245	262	91	58	54	63
25	135	138	91	74	135	156	232	249	84	269	52	562
26	131	140	95	75	115	203	221	240	118	551	142	741
27	130	177	91	68	123	455	203	226	106	322	89	518
28	129	157	94	70	113	1,810	183	213	97	221	70	366
29	154	145	96	70	---	2,450	171	197	91	172	62	294
30	174	119	120	71	---	1,050	162	180	89	148	58	257
31	163	---	138	72	---	825	---	162	---	124	55	---
TOTAL	5,756	4,174	4,214	2,522	8,357	11,882	8,996	6,323	4,308	3,423	2,581	4,243
MEAN	186	139	136	81.4	298	383	300	204	144	110	83.3	141
MAX	342	177	213	133	1,220	2,450	624	395	379	551	220	741
MIN	129	105	85	60	73	91	162	104	84	50	52	49
AC-FT	11,420	8,280	8,360	5,000	16,580	23,570	17,840	12,540	8,540	6,790	5,120	8,420
CFSM	0.61	0.46	0.45	0.27	0.99	1.26	0.99	0.67	0.47	0.36	0.27	0.47

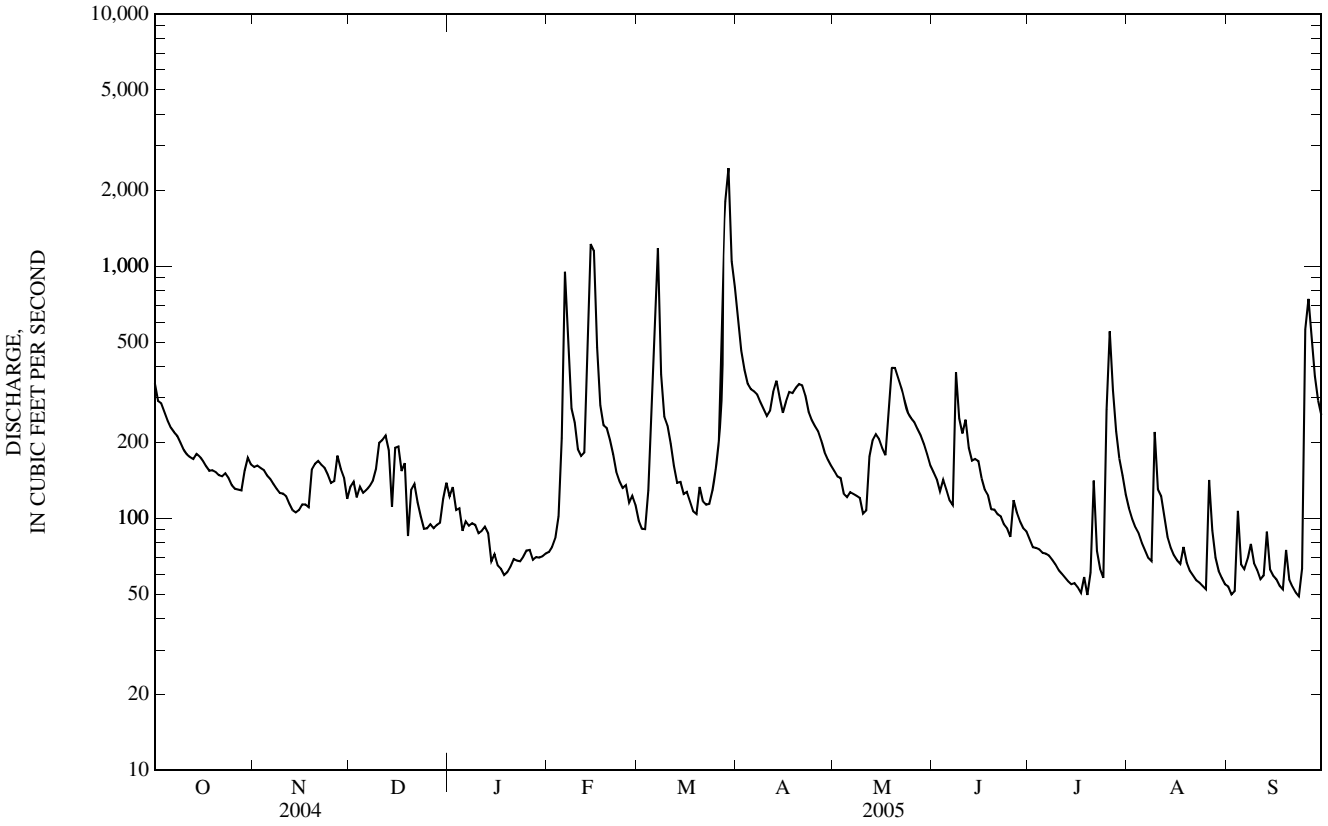
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2005, BY WATER YEAR (WY)

MEAN	147	135	111	72.7	127	341	405	323	310	235	162	177
MAX	824	338	358	167	454	760	1,310	735	1,014	663	501	1,075
(WY)	(1987)	(1992)	(1992)	(1983)	(1984)	(1983)	(2001)	(2001)	(1993)	(1993)	(1990)	(1986)
MIN	20.0	24.5	21.0	22.5	23.8	109	79.4	88.3	49.0	23.2	24.6	31.5
(WY)	(1990)	(1990)	(1990)	(1990)	(1990)	(2001)	(2000)	(1989)	(1989)	(1988)	(1988)	(1988)

05372995 SOUTH FORK ZUMBRO RIVER AT ROCHESTER, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1981 - 2005	
ANNUAL TOTAL	91,090		66,779			
ANNUAL MEAN	249		183		213	
HIGHEST ANNUAL MEAN					431	1993
LOWEST ANNUAL MEAN					87.3	1989
HIGHEST DAILY MEAN	5,550	Jun 10	2,450	Mar 29	7,710	Sep 21, 1986
LOWEST DAILY MEAN	21	Jan 30	49	Sep 23	12	Sep 12, 1988
ANNUAL SEVEN-DAY MINIMUM	22	Jan 28	54	Jul 13	14	Sep 8, 1988
MAXIMUM PEAK FLOW			3,310	Mar 29	10,000	Sep 21, 1986
MAXIMUM PEAK STAGE			9.78	Mar 29	20.77	Sep 21, 1986
INSTANTANEOUS LOW FLOW			a47	Jul 19	a10	Oct 23, 1981
ANNUAL RUNOFF (AC-FT)	180,700		132,500		154,500	
ANNUAL RUNOFF (CFSM)	0.821		0.604		0.704	
10 PERCENT EXCEEDS	394		318		450	
50 PERCENT EXCEEDS	138		131		122	
90 PERCENT EXCEEDS	27		62		46	

a Due in part to regulation.



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. 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37,000	34,800	24,000	e19,300	e15,700	17,900	61,800	48,600	49,900	49,700	14,400	12,900
2	37,600	37,400	25,800	e19,600	e15,700	17,200	67,700	46,600	48,900	47,000	16,500	11,800
3	37,100	39,500	26,300	e20,400	e15,700	16,700	76,700	43,400	48,600	45,000	18,300	11,400
4	35,300	40,400	24,100	e20,400	e16,000	16,600	85,600	42,400	48,000	44,900	17,400	12,300
5	31,900	40,200	22,700	e20,300	e16,700	16,400	91,600	39,700	47,000	44,900	17,500	14,500
6	31,400	39,100	20,700	e19,800	e17,600	17,100	90,600	38,600	46,500	44,300	16,300	18,700
7	32,300	38,000	20,500	e18,700	22,500	21,700	87,500	36,800	45,800	42,700	14,200	19,600
8	32,500	37,800	23,600	e16,900	22,300	25,300	84,600	34,500	46,200	40,800	13,800	18,800
9	31,100	35,900	23,500	e15,700	20,500	27,100	81,100	34,400	51,600	e39,100	14,200	17,400
10	28,600	34,800	24,100	e15,700	19,300	27,400	78,600	33,500	55,800	e36,900	15,200	16,300
11	27,700	34,300	25,000	e16,000	19,700	26,500	77,900	33,000	56,800	e34,900	16,800	15,900
12	27,200	33,800	24,400	e16,000	20,100	25,500	76,700	32,700	55,700	e33,400	17,300	15,500
13	26,700	32,800	24,500	e15,900	19,800	23,700	73,700	34,300	55,400	e32,500	15,500	14,900
14	27,100	31,200	22,000	e15,900	19,900	21,400	70,100	37,200	56,700	e31,500	13,400	16,600
15	26,300	29,500	19,900	e14,500	23,900	20,200	65,800	39,800	57,800	30,100	12,700	19,300
16	25,800	28,400	16,900	e14,200	26,300	20,000	66,900	40,200	60,200	29,100	12,600	21,800
17	26,200	28,100	e16,800	e14,200	26,200	20,200	67,200	42,100	62,500	26,900	12,900	22,400
18	24,600	28,100	e17,500	e14,100	23,400	20,200	66,800	43,900	64,300	24,900	14,000	21,200
19	23,400	27,200	e17,000	e13,500	20,800	20,000	67,600	45,800	65,400	23,200	13,500	21,200
20	23,500	28,600	e14,000	e13,600	18,500	20,300	69,200	47,800	65,700	19,300	14,500	21,200
21	23,400	29,600	e13,300	e13,700	18,700	20,300	69,200	47,600	66,000	24,300	15,400	20,700
22	23,000	28,400	e14,400	e13,900	19,200	19,400	69,300	49,100	66,100	26,900	15,200	21,500
23	23,000	28,100	e14,800	e14,000	20,100	19,000	69,200	52,000	64,400	23,600	14,400	22,100
24	24,000	28,100	e14,500	e14,000	19,900	19,900	69,100	52,700	e62,800	22,200	13,600	21,400
25	24,400	28,200	e13,500	e14,800	18,600	23,400	68,100	52,600	e61,000	e18,800	13,800	24,400
26	24,000	28,200	e12,600	e15,800	18,600	26,100	65,500	52,500	e58,500	26,200	13,700	27,300
27	23,800	29,000	e12,700	e15,800	18,600	29,300	64,200	52,100	56,300	23,200	14,200	27,700
28	24,500	29,500	e14,200	e15,700	18,100	35,800	60,700	51,600	55,300	23,500	16,500	26,900
29	28,500	28,300	e15,900	e15,700	---	39,100	52,500	51,300	52,800	20,300	17,300	28,800
30	30,600	25,700	e17,400	e15,700	---	43,800	51,100	51,100	50,400	18,300	16,300	31,600
31	32,100	---	e17,500	e15,700	---	e52,400	---	51,000	---	16,200	14,100	---
TOTAL	874,600	963,000	594,100	499,500	552,400	749,900	2,146,600	1,358,900	1,682,400	964,600	465,500	596,100
MEAN	28,210	32,100	19,160	16,110	19,730	24,190	71,550	43,840	56,080	31,120	15,020	19,870
MAX	37,600	40,400	26,300	20,400	26,300	52,400	91,600	52,700	66,100	49,700	18,300	31,600
MIN	23,000	25,700	12,600	13,500	15,700	16,400	51,100	32,700	45,800	16,200	12,600	11,400
AC-FT	1,735,000	1,910,000	1,178,000	990,800	1,096,000	1,487,000	4,258,000	2,695,000	3,337,000	1,913,000	923,300	1,182,000
CFSM	0.48	0.54	0.32	0.27	0.33	0.41	1.21	0.74	0.95	0.53	0.25	0.34
IN.	0.55	0.61	0.37	0.31	0.35	0.47	1.35	0.85	1.06	0.61	0.29	0.37

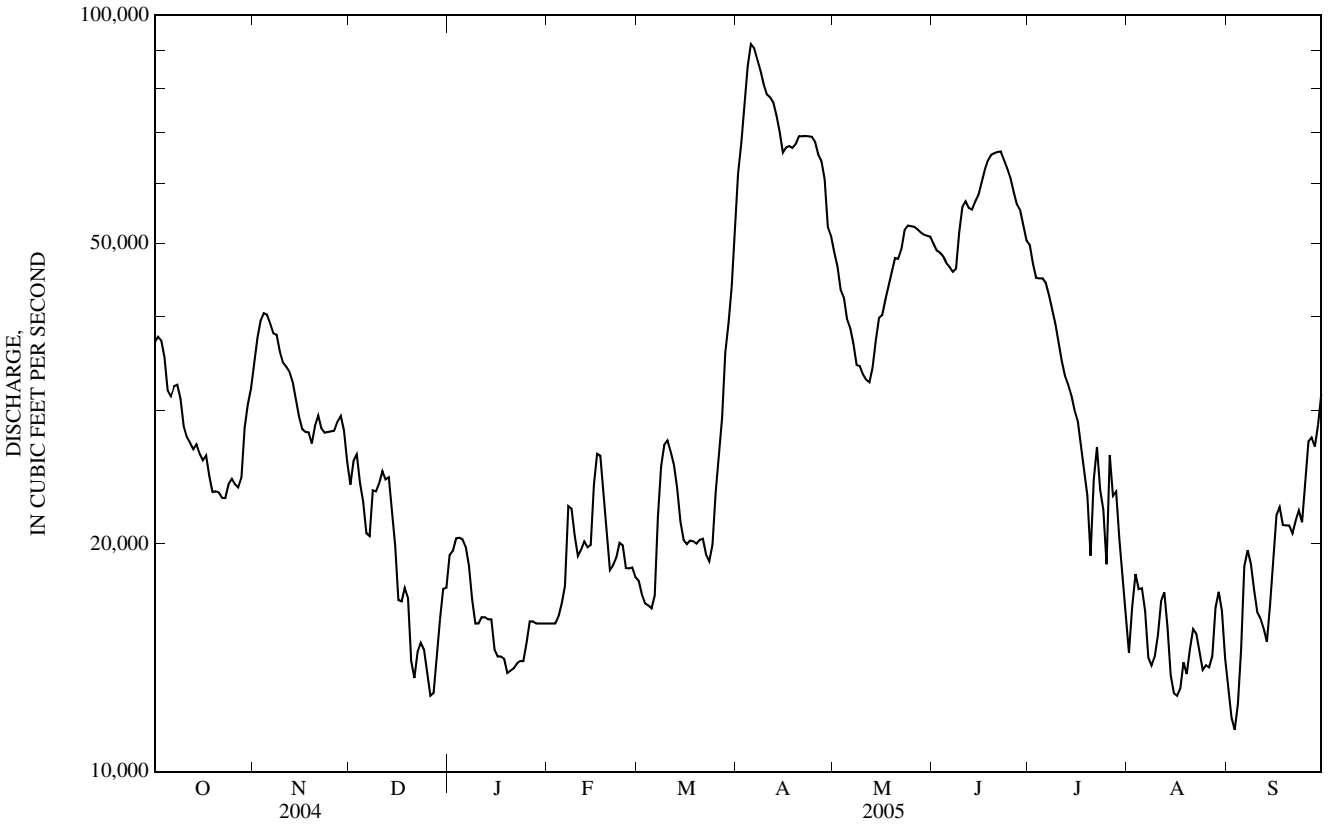
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2005, BY WATER YEAR (WY)

MEAN	22,740	23,190	17,870	15,420	15,740	30,310	62,360	49,690	40,730	32,450	21,770	22,510
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 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1928 - 2005	
ANNUAL TOTAL	10,930,200		11,447,600			
ANNUAL MEAN	29,860		31,360		29,590	
HIGHEST ANNUAL MEAN					56,850	1986
LOWEST ANNUAL MEAN					9,742	1934
HIGHEST DAILY MEAN	99,100	Jun 14	91,600	Apr 5	264,000	Apr 20, 1965
LOWEST DAILY MEAN	10,100	Jan 24	11,400	Sep 3	2,250	Dec 29, 1933
ANNUAL SEVEN-DAY MINIMUM	10,500	Jan 22	13,300	Aug 30	3,210	Dec 27, 1933
MAXIMUM PEAK FLOW			92,400	Apr 5	268,000	Apr 19, 1965
MAXIMUM PEAK STAGE			10.96	Apr 5	a20.77	Apr 19, 1965
INSTANTANEOUS LOW FLOW			b8,570	Sep 2	c1,940	Dec 12, 1980
ANNUAL RUNOFF (AC-FT)	21,680,000		22,710,000		21,440,000	
ANNUAL RUNOFF (CFSM)	0.504		0.530		0.500	
ANNUAL RUNOFF (INCHES)	6.87		7.19		6.79	
10 PERCENT EXCEEDS	54,100		60,800		60,700	
50 PERCENT EXCEEDS	26,300		24,600		21,400	
90 PERCENT EXCEEDS	12,100		14,500		10,100	

a From highwater mark.
b Result of regulation or lock use; may have been lower in July.
c Result of ice jam upstream.
e Estimated.



05383950 ROOT RIVER NEAR PILOT MOUND, MN

LOCATION.--43°47"05", long 91°01'48", in SE¼NE¼ sec. 28, T.104 N., R.10 W., Fillmore County, Hydrologic Unit 07040008, on right bank at bridge on County Road 21, 2.7 mi. south of Pilot Mound.

DRAINAGE AREA.--565 mi^2.

PERIOD OF RECORD.-August 2002 to current year.

GAGE.--Water-stage recorder. Datum of gage is 667.00 ft above sea level (NGVD of 1929). May 28, 1909 to Sept. 30, 1917, nonrecording gage at site 1.3 mi downstream at different datum. May 4, 1929 to Sept. 27, 1933, nonrecording gage and Sept. 28, 1933 to June 26, 1980, recording gage at site 0.9 mi upstream at datum 671.86 ft.

REMARKS.--Records good except those for estimated daily discharges, which are poor.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--Flood of June, 2000 reached a peak stage of 25.90 feet, discharge, 26,000 cubic feet per second, from floodmark.

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	447	376	333	e255	e235	223	932	392	387	356	322	251
2	481	398	326	e245	e233	e225	722	376	373	326	294	238
3	447	405	322	e240	e230	e226	605	363	359	307	277	230
4	436	424	323	e233	225	250	540	346	355	295	262	257
5	420	421	320	e228	e330	476	509	334	355	279	246	260
6	403	410	321	e222	e2,700	589	491	333	344	268	234	253
7	389	392	317	e215	1,770	997	481	334	328	253	227	249
8	385	372	323	e210	726	497	477	343	362	244	223	265
9	371	355	339	e206	522	355	473	341	444	235	223	265
10	360	345	387	e203	434	323	459	331	524	226	252	268
11	348	338	430	e200	384	299	441	336	684	218	253	268
12	338	329	457	e197	401	269	485	343	543	210	296	259
13	335	317	450	e189	1,310	244	608	391	489	206	281	267
14	334	311	e411	e183	2,980	250	631	439	457	202	264	282
15	334	304	e429	e181	e2,000	236	560	496	445	200	243	292
16	329	302	e435	e183	e1,050	233	510	479	422	200	229	282
17	320	302	e435	e185	e570	232	504	452	387	194	220	269
18	314	298	e383	e188	e480	240	483	444	363	206	231	258
19	308	310	e230	e190	e400	339	542	733	342	203	246	263
20	304	351	e250	e190	e340	236	839	971	325	197	291	259
21	298	357	e255	e192	e310	237	881	839	319	262	315	250
22	295	365	e260	e195	292	228	803	742	305	310	299	245
23	296	370	e265	e198	273	225	700	666	295	261	266	240
24	294	365	e270	e200	266	228	614	599	284	232	247	238
25	288	355	e275	e203	271	263	565	548	277	328	235	1,510
26	285	347	e283	e206	248	345	538	521	290	1,030	247	4,490
27	283	360	e287	e208	248	885	499	498	330	922	332	2,830
28	284	365	e290	e212	245	2,930	461	475	475	577	342	1,530
29	305	348	e292	e217	---	5,300	432	454	436	454	313	1,230
30	377	320	e285	e222	---	2,700	408	429	394	388	282	1,060
31	364	---	e275	e227	---	1,310	---	407	---	353	264	---
TOTAL	10,772	10,612	10,258	6,423	19,473	21,390	17,193	14,755	11,693	9,942	8,256	18,858
MEAN	347	354	331	207	695	690	573	476	390	321	266	629
MAX	481	424	457	255	2,980	5,300	932	971	684	1,030	342	4,490
MIN	283	298	230	181	225	223	408	331	277	194	220	230
AC-FT	21,370	21,050	20,350	12,740	38,620	42,430	34,100	29,270	23,190	19,720	16,380	37,400
CFSM	0.62	0.63	0.59	0.37	1.23	1.22	1.01	0.84	0.69	0.57	0.47	1.11
IN.	0.71	0.70	0.68	0.42	1.28	1.41	1.13	0.97	0.77	0.65	0.54	1.24

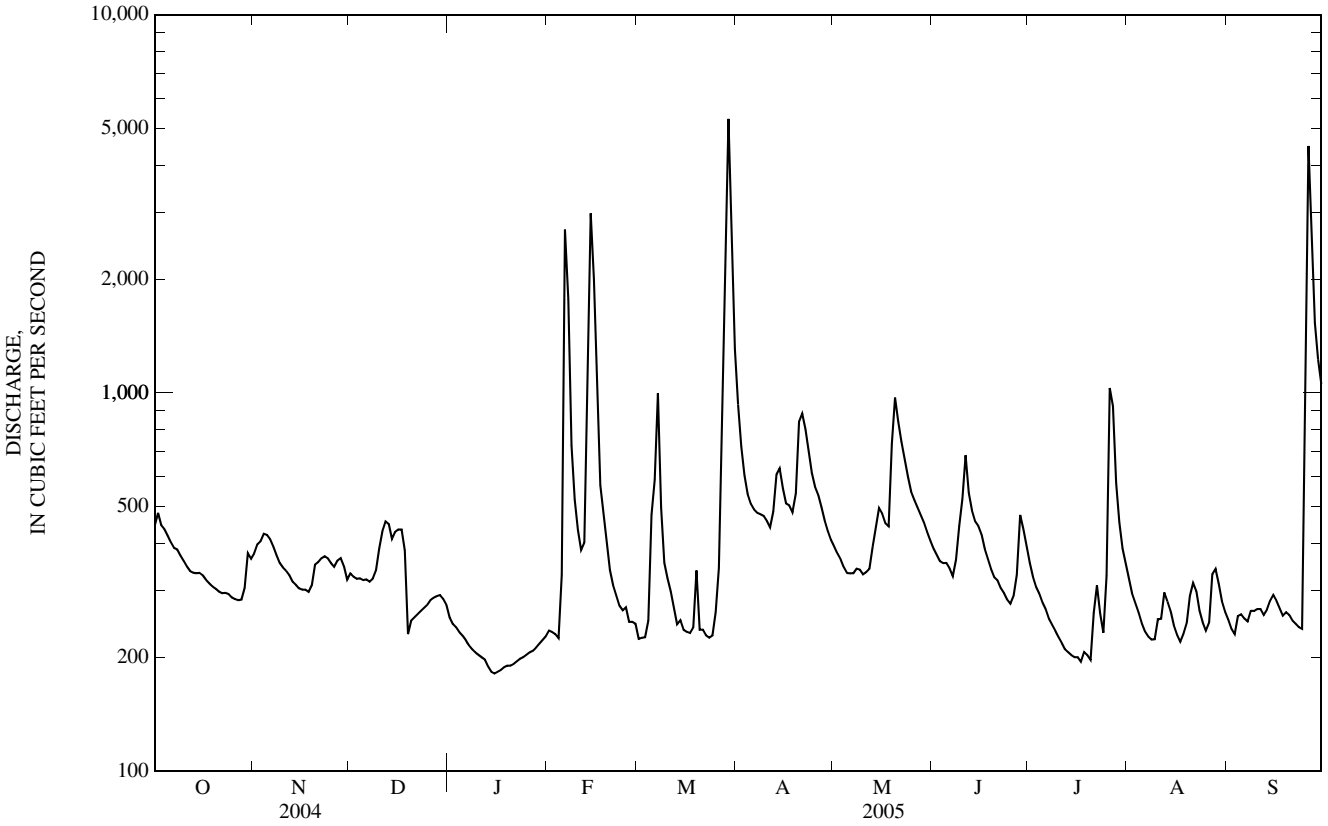
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2005, BY WATER YEAR (WY)

MEAN	231	223	195	144	311	537	345	525	771	427	246	584
MAX	347	354	331	207	695	690	573	684	1,587	708	335	1,395
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2003)	(2004)	(2004)	(2004)	(2004)
MIN	114	122	99.9	99.3	108	273	167	416	335	252	136	114
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2003)	(2004)	(2004)	(2003)	(2003)	(2003)	(2003)

05383950 ROOT RIVER NEAR PILOT MOUND, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2002 - 2005	
ANNUAL TOTAL	197,652		159,625			
ANNUAL MEAN	540		437		388	
HIGHEST ANNUAL MEAN					482	2004
LOWEST ANNUAL MEAN					245	2003
HIGHEST DAILY MEAN	16,200	Sep 16	5,300	Mar 29	16,200	Sep 16, 2004
LOWEST DAILY MEAN	79	Jan 31	181	Jan 15	79	Jan 31, 2004
ANNUAL SEVEN-DAY MINIMUM	88	Jan 27	186	Jan 13	88	Jan 27, 2004
MAXIMUM PEAK FLOW			5,980	Mar 29	21,900	Sep 16, 2004
MAXIMUM PEAK STAGE			15.08	Mar 29	23.85	Sep 16, 2004
INSTANTANEOUS LOW FLOW			180	Mar 3	a79	Jan 31, 2004
ANNUAL RUNOFF (AC-FT)	392,000		316,600		281,200	
ANNUAL RUNOFF (CFSM)	0.956		0.774		0.687	
ANNUAL RUNOFF (INCHES)	13.01		10.51		9.33	
10 PERCENT EXCEEDS	972		606		606	
50 PERCENT EXCEEDS	314		323		250	
90 PERCENT EXCEEDS	107		223		111	

a Estimated minimum daily, backwater from ice.
e Estimated.



05385000 ROOT RIVER NEAR HOUSTON, MN

LOCATION.--43°46"07", long 91°34'11", in SW¼NW¼ sec. 33, T.104 N., R.6 W., Houston County, Hydrologic Unit 07040008, on right bank 0.2 mi north of Houston and 1.6 mi upstream from South Fork and 18.2 mi upstream from mouth.

DRAINAGE AREA.--1,250 mi^2.

PERIOD OF RECORD.--May 1909 to September 1917, May to November 1929, March 1930 to 1983, 1991 to September 2000, January 2004 to current year. Operated as high-flow partial-record station October 1983 to September 1990 and October 2000 to December 2003. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 1508: 1911-12. WSP 1628: 1948(P).

GAGE.--Water-stage recorder. Datum of gage is 667.00 ft above sea level (NGVD of 1929). May 28, 1909 to Sept. 30, 1917, nonrecording gage at site 1.3 mi downstream at different datum. May 4, 1929 to Sept. 27, 1933, nonrecording gage and Sept. 28, 1933 to June 26, 1980, recording gage at site 0.9 mi upstream at datum 671.86 ft.

REMARKS.--Records good to fair except those for estimated daily discharges, which are fair to poor. Slight diurnal fluctuation at low flows caused by power plant upstream.

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	857	746	694	e735	e600	668	2,350	995	919	851	969	617
2	876	780	678	e730	e620	631	1,870	975	878	811	882	582
3	862	785	695	e710	e700	611	1,580	931	852	756	827	555
4	818	799	693	e675	e800	631	1,400	903	833	734	780	585
5	787	816	692	e660	1,180	747	1,290	876	832	710	728	593
6	764	821	703	e630	5,100	1,140	1,220	874	817	681	689	580
7	747	806	710	e615	6,740	1,770	1,170	850	795	655	677	569
8	763	782	712	e600	2,310	1,420	1,130	847	825	642	664	560
9	740	760	721	e580	1,530	1,020	1,110	847	1,010	623	630	561
10	722	741	771	e575	1,220	867	1,080	834	967	608	663	551
11	708	730	817	e560	1,050	799	1,070	826	1,140	589	676	550
12	693	714	848	e550	970	736	1,070	838	1,360	577	813	558
13	682	698	864	e545	1,160	673	1,120	897	1,170	561	818	586
14	680	682	798	e540	5,160	639	1,220	941	1,090	552	763	659
15	676	679	759	e530	4,960	627	1,210	1,020	1,030	540	726	573
16	673	678	832	e510	3,130	609	1,140	1,050	984	544	678	559
17	666	679	851	e500	1,770	600	1,110	1,030	935	517	641	545
18	660	678	826	e490	1,290	622	1,090	1,010	882	521	639	530
19	653	691	713	e500	1,120	614	1,100	1,130	839	527	667	537
20	642	735	617	e510	1,060	595	1,390	1,390	799	533	702	551
21	634	728	e560	e520	961	585	1,710	1,510	788	606	695	515
22	628	737	e530	e540	873	574	1,660	1,410	784	678	704	501
23	634	748	e500	e540	817	565	1,500	1,320	740	708	705	486
24	628	757	e510	e540	777	570	1,370	1,250	723	693	658	480
25	620	749	e530	e540	752	593	1,290	1,190	723	625	628	952
26	616	737	e570	e540	739	671	1,230	1,140	736	2,000	626	3,230
27	622	756	e660	e540	708	1,010	1,170	1,110	779	2,550	679	5,220
28	620	769	e730	e545	689	3,400	1,110	1,080	776	1,850	707	2,900
29	648	756	e751	e550	---	8,170	1,060	1,040	906	1,460	725	2,190
30	707	732	e760	e560	---	7,770	1,020	1,000	898	1,220	699	1,910
31	753	---	e755	e570	---	3,960	---	958	---	1,050	654	---
TOTAL	21,779	22,269	21,850	17,730	48,786	43,887	38,840	32,072	26,810	25,972	22,112	29,785
MEAN	703	742	705	572	1,742	1,416	1,295	1,035	894	838	713	993
MAX	876	821	864	735	6,740	8,170	2,350	1,510	1,360	2,550	969	5,220
MIN	616	678	500	490	600	565	1,020	826	723	517	626	480
AC-FT	43,200	44,170	43,340	35,170	96,770	87,050	77,040	63,610	53,180	51,520	43,860	59,080
CFSM	0.56	0.59	0.56	0.46	1.39	1.13	1.04	0.83	0.71	0.67	0.57	0.79
IN.	0.65	0.66	0.65	0.53	1.45	1.31	1.16	0.95	0.80	0.77	0.66	0.89

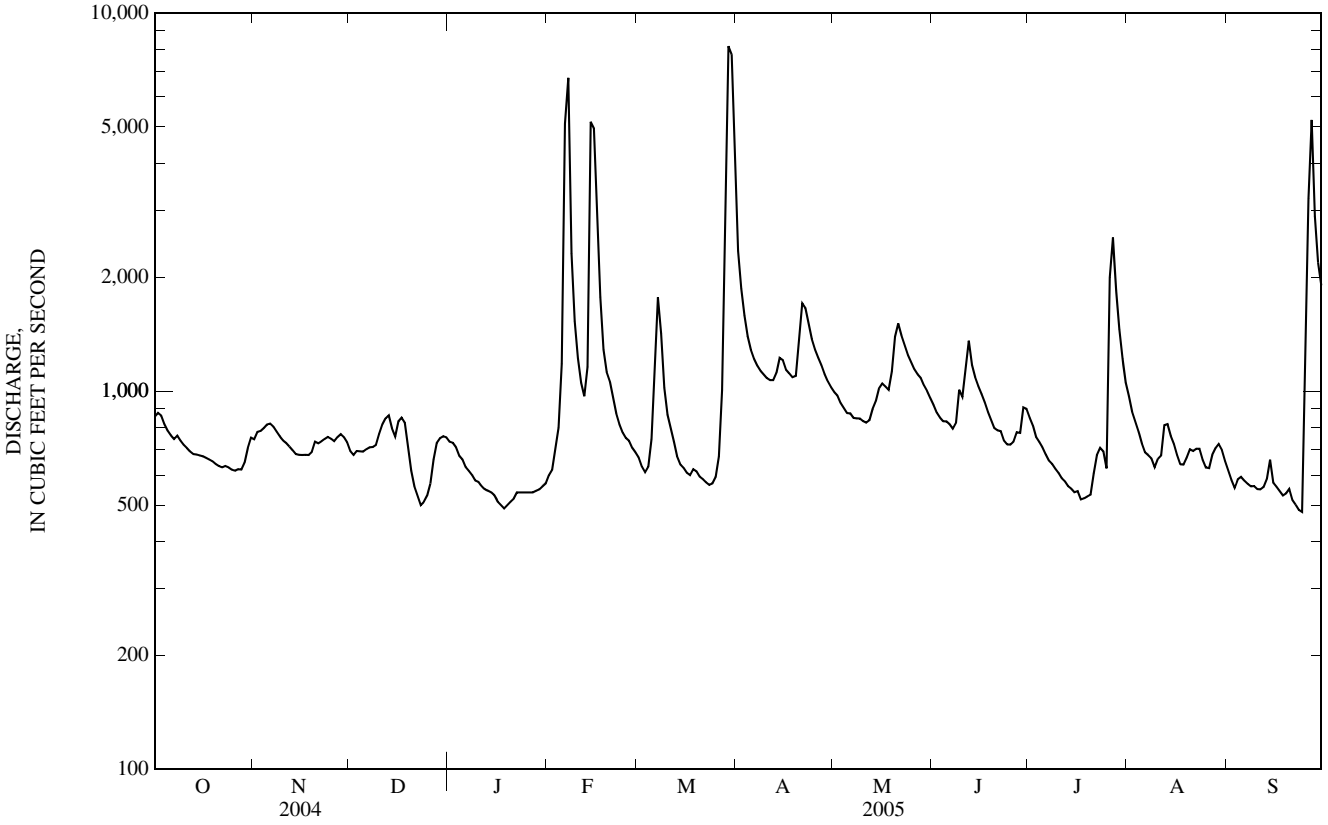
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 2005, BY WATER YEAR (WY)

MEAN	524	523	439	415	516	1,396	1,193	848	970	841	668	601
MAX	1,465	1,494	1,671	1,152	1,742	3,512	4,963	2,440	4,389	3,252	2,257	2,105
(WY)	(1974)	(1983)	(1992)	(1973)	(2005)	(1961)	(1965)	(1973)	(2000)	(1978)	(1993)	(1938)
MIN	193	218	189	172	168	251	274	234	261	236	231	243
(WY)	(1934)	(1934)	(1934)	(1959)	(1959)	(1931)	(1931)	(1934)	(1934)	(1964)	(1958)	(1933)

05385000 ROOT RIVER NEAR HOUSTON, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1910 - 2005	
ANNUAL TOTAL	378,307		351,892			
ANNUAL MEAN	1,034		964		747	
HIGHEST ANNUAL MEAN					1,590	1993
LOWEST ANNUAL MEAN					294	1931
HIGHEST DAILY MEAN	17,800	Sep 17	8,170	Mar 29	31,100	Apr 1, 1952
LOWEST DAILY MEAN	285	Jan 30	480	Sep 24	82	Nov 28, 1937
ANNUAL SEVEN-DAY MINIMUM	299	Jan 29	509	Jan 15	113	Dec 25, 1933
MAXIMUM PEAK FLOW			9,770	Feb 6	37,000	Apr 1, 1952
MAXIMUM PEAK STAGE			13.34	Feb 6	a18.32	Mar 2, 1965
INSTANTANEOUS LOW FLOW			472	Sep 24	b65	Dec 26, 1933
ANNUAL RUNOFF (AC-FT)	750,400		698,000		541,400	
ANNUAL RUNOFF (CFSM)	0.827		0.771		0.598	
ANNUAL RUNOFF (INCHES)	11.26		10.47		8.12	
10 PERCENT EXCEEDS	1,750		1,340		1,340	
50 PERCENT EXCEEDS	692		739		480	
90 PERCENT EXCEEDS	360		551		264	

a Backwater from ice.
b Also occurred Feb. 25, 1935.
e Estimated.



05457000 CEDAR RIVER NEAR AUSTIN, MN

LOCATION.--Lat 43°38'11", long 92°58'26", in NE¼SE¼ sec. 15, T.102 N., R.18 W., Mower County, Hydrologic Unit 07080201, on left bank 200 ft upstream from abandoned powerhouse, 500 ft downstream from highway bridge, 1.1 mi downstream from Turtle Creek, and 1.1 mi south of Austin.

DRAINAGE AREA.--399 mi^2.

PERIOD OF RECORD.--May 1909 to September 1914, October 1944 to current year.

REVISED RECORDS.--WSP 1145: 1945, 1948.

GAGE.--Water-stage recorder. Datum of gage is 1,162.10 ft above sea level (NGVD of 1929). May 1909 to April 1912, nonrecording gage in tailwater of power plant 200 ft downstream at datum 3.1 ft lower. May 1912 to September 1914, nonrecording gage on highway bridge 500 ft downstream at datum 1.1 ft lower.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Some regulation at lower flows by wastewater treatment plant upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 15	0615	1,750	6.40	Sep 26	1000	*3,130	*8.69
Mar 29	0900	2,490	7.65				

Minimum discharge, 70 ft^3/s, Mar. 1, gage height, 2.33 ft.

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	e560	247	197	141	90	98	1,610	234	264	191	104	92
2	e800	255	199	127	94	115	847	226	250	169	100	87
3	769	262	189	120	100	103	615	214	237	166	99	85
4	641	264	191	113	123	120	531	204	239	156	99	e144
5	537	255	188	106	225	138	500	201	237	142	91	e92
6	478	250	193	e105	715	156	477	219	222	129	87	e88
7	430	238	207	e104	448	307	466	244	205	121	85	e88
8	403	218	228	102	286	285	438	258	276	117	85	e90
9	372	210	249	100	216	182	404	260	439	108	95	e90
10	336	214	271	e100	e185	179	372	253	442	97	115	e88
11	315	205	273	98	162	156	356	253	393	92	172	e86
12	302	197	286	101	162	125	618	284	348	88	137	e85
13	298	188	233	98	304	123	796	578	309	82	104	e84
14	290	179	224	e97	1,140	134	632	655	291	86	90	e84
15	285	177	262	e98	1,580	116	510	557	272	91	87	e83
16	275	181	243	e93	760	123	436	477	243	89	85	e82
17	258	181	214	e89	376	117	414	426	219	95	84	e82
18	246	178	210	e87	296	111	414	464	198	180	152	e82
19	238	204	e146	e88	226	92	463	987	181	122	107	e90
20	227	229	e165	91	193	127	623	957	231	127	92	e85
21	220	238	e175	91	176	124	646	735	333	162	82	e82
22	215	240	e165	e92	164	126	568	627	289	166	79	e83
23	231	242	e135	e90	144	131	472	528	241	133	79	80
24	224	231	e130	e89	140	146	393	451	212	122	77	101
25	214	218	e125	88	133	177	356	401	192	140	76	1,460
26	205	213	e123	89	118	220	334	389	239	195	130	2,970
27	205	234	122	87	130	450	305	363	339	192	155	2,030
28	206	220	121	86	110	1,680	277	340	286	159	127	1,260
29	228	204	122	86	---	e2,250	261	318	247	132	104	848
30	248	187	136	85	---	1,270	247	295	221	118	98	647
31	247	---	154	88	---	1,750	---	278	---	110	91	---
TOTAL	10,503	6,559	5,876	3,029	8,796	11,231	15,381	12,676	8,095	4,077	3,168	11,348
MEAN	339	219	190	97.7	314	362	513	409	270	132	102	378
MAX	800	264	286	141	1,580	2,250	1,610	987	442	195	172	2,970
MIN	205	177	121	85	90	92	247	201	181	82	76	80
AC-FT	20,830	13,010	11,660	6,010	17,450	22,280	30,510	25,140	16,060	8,090	6,280	22,510
CFSM	0.85	0.55	0.48	0.24	0.79	0.91	1.28	1.02	0.68	0.33	0.26	0.95
IN.	0.98	0.61	0.55	0.28	0.82	1.05	1.43	1.18	0.75	0.38	0.30	1.06

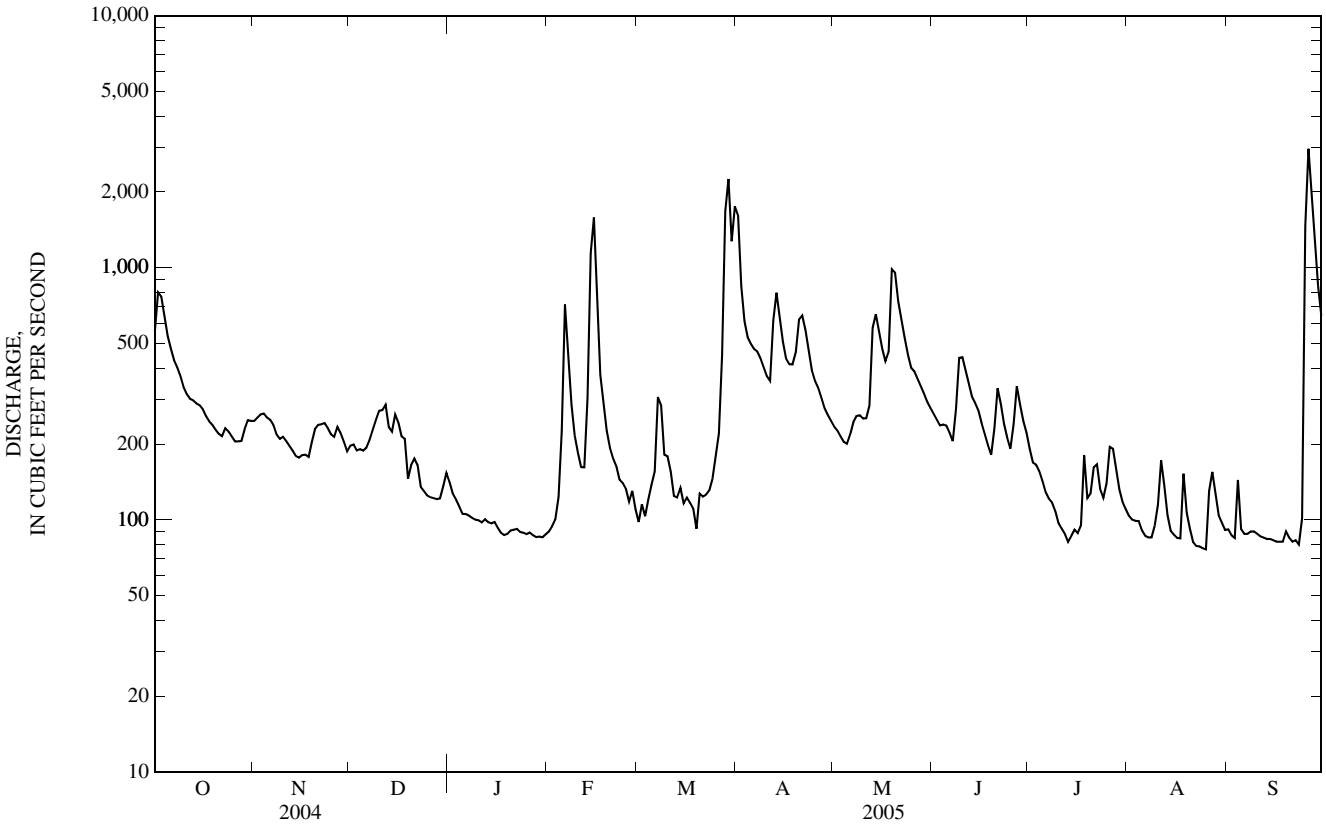
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 2005, BY WATER YEAR (WY)

MEAN	165	159	107	75.0	111	460	531	345	335	275	185	171
MAX	884	997	431	261	701	1,428	2,328	1,387	1,624	1,456	1,720	1,728
(WY)	(1974)	(1910)	(1992)	(1973)	(1984)	(1973)	(2001)	(1999)	(1993)	(1978)	(1993)	(2004)
MIN	37.3	35.7	26.6	26.5	25.0	53.3	52.9	67.9	48.9	22.6	32.3	30.9
(WY)	(1959)	(1959)	(1913)	(1913)	(1913)	(1968)	(1911)	(1910)	(1950)	(1911)	(1948)	(1911)

05457000 CEDAR RIVER NEAR AUSTIN, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1909 - 2005	
ANNUAL TOTAL	155,420		100,739			
ANNUAL MEAN	425		276		a244	
HIGHEST ANNUAL MEAN					824	1993
LOWEST ANNUAL MEAN					58.1	1977
HIGHEST DAILY MEAN	15,000	Sep 16	2,970	Sep 26	15,000	Sep 16, 2004
LOWEST DAILY MEAN	43	Feb 1	76	Aug 25	b0.00	Jan 15, 1911
ANNUAL SEVEN-DAY MINIMUM	44	Jan 26	83	Sep 12	13	Sep 1, 1912
MAXIMUM PEAK FLOW			3,130	Sep 26	20,000	Sep 16, 2004
MAXIMUM PEAK STAGE			8.69	Sep 26	c23.26	Sep 16, 2004
INSTANTANEOUS LOW FLOW			d70	Mar 1	b0.00	Jan 15, 1911
ANNUAL RUNOFF (AC-FT)	308,300		199,800		176,700	
ANNUAL RUNOFF (CFSM)	1.06		0.692		0.611	
ANNUAL RUNOFF (INCHES)	14.49		9.39		8.31	
10 PERCENT EXCEEDS	815		529		505	
50 PERCENT EXCEEDS	213		197		98	
90 PERCENT EXCEEDS	50		88		45	

a Median of annual mean discharges is 230 ft^3/s.
b Occurred on several days in 1911, result of regulation.
c From floodmark.
d Due in part to regulation.
e Estimated.



05476000 DES MOINES RIVER AT JACKSON, MN

LOCATION.--Lat 43°37'10", long 94°59'10", in SE¼SW¼ sec. 24, T.102 N., R.35 W., Jackson County, Hydrologic Unit 07100001, on right bank at old dam structure in Jackson.

DRAINAGE AREA.--1,250 mi^2.

PERIOD OF RECORD.--May 1909 to December 1913, August 1930 to current year (winter record incomplete prior to 1936). Published as "Des Moines River near Jackson", 1930-35, as "West Fork Des Moines River near Jackson", 1936-44, and as "West Fork Des Moines River at Jackson", 1945-69.

REVISED RECORDS.--WSP 1115: 1942. WSP 1175: Drainage area. WSP 1238: 1950. WSP 1308: 1938(M).

GAGE.--Water-stage recorder. Datum of gage is 1,287.75 ft above sea level (NGVD of 1929). May 31, 1909 to Dec. 20, 1913, nonrecording gage at site 0.6 mi downstream at datum 0.99 ft lower. Aug. 22, 1930 to Sept. 30, 1944, nonrecording gage at site 7 mi upstream at datum 17.10 ft higher. Oct. 1, 1944 to Oct. 26, 1949, nonrecording gage at site 600 ft upstream at datum 10.64 ft higher. Oct. 27, 1949 to Dec. 15, 1965, water-stage recorder 200 ft downstream at present datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair to poor. Regulation at times from Yankton, Long, Shetek, and Heron Lakes.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 540 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar 29	1800	716	5.55	Jul 29	0800	690	5.39
Apr 20	0300	1,360	7.36	Sep 18	0600	656	5.28
May 13	0200	2,090	9.05	Sep 27	0300	*3,250	*11.34
Jun 15	0630	1,280	7.15				

Minimum discharge, 11 ft^3/s, Dec. 13, gage height, 2.40 ft.

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	653	221	156	e90	e39	e112	583	811	987	795	434	e110
2	624	225	221	e89	e41	e97	540	779	973	718	370	e106
3	583	222	204	e85	e44	e94	497	731	934	687	321	e101
4	499	222	235	e82	e48	106	466	699	925	648	292	e97
5	478	219	212	e77	e56	111	453	665	958	590	268	e88
6	480	211	219	e71	e64	127	438	659	1,010	536	269	99
7	480	205	205	e67	e68	152	435	829	1,030	498	250	100
8	466	194	201	e62	e62	159	449	842	1,090	486	219	139
9	443	190	200	e58	e57	154	465	1,070	1,130	493	208	213
10	421	199	200	e57	e57	152	473	1,310	1,160	494	184	229
11	413	197	186	e55	e55	160	536	1,270	1,170	466	187	209
12	410	174	162	e54	e59	154	748	1,350	1,210	432	175	185
13	402	176	88	e52	e102	130	939	1,790	1,230	400	161	197
14	376	179	102	e50	e147	116	1,080	1,680	1,240	382	145	297
15	369	182	118	e48	e153	139	1,200	1,590	1,270	356	134	406
16	367	182	129	e46	e147	155	1,300	1,520	1,240	333	126	552
17	342	184	194	e44	e123	147	1,330	1,450	1,230	288	127	628
18	335	181	e182	e43	e109	113	1,330	1,420	1,180	266	333	637
19	339	190	e175	e42	e108	85	1,340	1,470	1,110	236	483	596
20	335	207	e153	e41	e108	131	1,350	1,500	1,080	222	431	540
21	324	217	e159	e41	e112	111	1,330	1,510	1,040	268	335	544
22	317	211	e128	e40	e111	113	1,300	1,510	1,000	364	261	581
23	259	212	e99	e40	e108	135	1,230	1,440	1,010	330	e193	527
24	251	202	e77	e40	e108	180	1,150	1,330	1,040	286	e153	513
25	234	178	e67	e41	e105	222	1,110	1,310	1,040	287	e131	2,640
26	228	188	e67	e43	e100	263	1,070	1,280	1,020	347	e216	3,080
27	239	211	e67	e41	e103	403	1,010	1,220	976	432	e243	3,200
28	247	182	e69	e40	e112	596	955	1,170	914	618	e202	2,950
29	257	146	e73	e39	---	661	903	1,110	861	675	e151	2,730
30	255	137	e81	e39	---	686	854	1,060	839	604	e129	2,610
31	235	---	e88	e38	---	637	---	1,010	---	509	e118	---
TOTAL	11,661	5,844	4,517	1,655	2,506	6,601	26,864	37,385	31,897	14,046	7,249	24,904
MEAN	376	195	146	53.4	89.5	213	895	1,206	1,063	453	234	830
MAX	653	225	235	90	153	686	1,350	1,790	1,270	795	483	3,200
MIN	228	137	67	38	39	85	435	659	839	222	118	88
AC-FT	23,130	11,590	8,960	3,280	4,970	13,090	53,280	74,150	63,270	27,860	14,380	49,400
CFSM	0.30	0.16	0.12	0.04	0.07	0.17	0.72	0.96	0.85	0.36	0.19	0.66
IN.	0.35	0.17	0.13	0.05	0.07	0.20	0.80	1.11	0.95	0.42	0.22	0.74

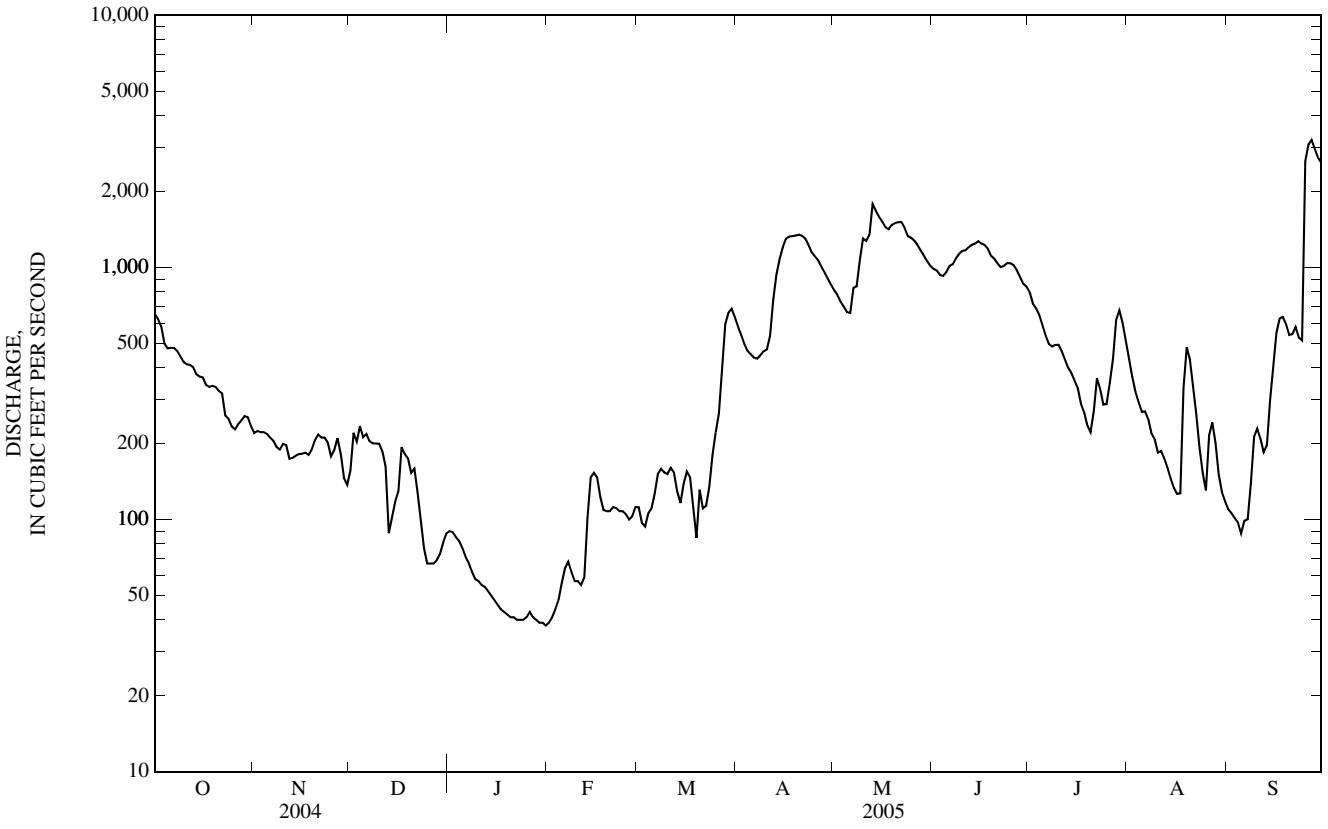
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2005, BY WATER YEAR (WY)

MEAN	163	178	108	49.6	68.3	443	1,082	683	658	545	230	182
MAX	1,724	1,833	792	298	504	2,250	6,045	3,923	4,892	6,018	2,192	2,243
(WY)	(1987)	(1980)	(1980)	(1980)	(1983)	(1983)	(1969)	(1993)	(1993)	(1993)	(1993)	(1942)
MIN	0.00	0.00	0.00	0.00	0.00	11.8	9.37	2.59	3.76	1.04	0.13	0.00
(WY)	(1956)	(1956)	(1956)	(1956)	(1936)	(1959)	(1959)	(1934)	(1931)	(1931)	(1955)	(1931)

05476000 DES MOINES RIVER AT JACKSON, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1930 - 2005	
ANNUAL TOTAL	169,481.4		175,129			
ANNUAL MEAN	463		480		a386	
HIGHEST ANNUAL MEAN					2,098	1993
LOWEST ANNUAL MEAN					15.1	1956
HIGHEST DAILY MEAN	2,420	Jul 13	3,200	Sep 27	15,500	Apr 11, 1969
LOWEST DAILY MEAN	6.8	Jan 31	38	Jan 31	b0.00	Jul 19, 1931
ANNUAL SEVEN-DAY MINIMUM	7.3	Jan 26	40	Jan 27	0.00	Jul 19, 1931
MAXIMUM PEAK FLOW			3,250	Sep 27	15,700	Apr 11, 1969
MAXIMUM PEAK STAGE			11.34	Sep 27	19.45	Apr 11, 1969
INSTANTANEOUS LOW FLOW			c11	Dec 13	b0.00	Jul 19, 1931
ANNUAL RUNOFF (AC-FT)	336,200		347,400		279,300	
ANNUAL RUNOFF (CFSM)	0.370		0.384		0.308	
ANNUAL RUNOFF (INCHES)	5.04		5.21		4.19	
10 PERCENT EXCEEDS	1,440		1,220		1,070	
50 PERCENT EXCEEDS	226		243		99	
90 PERCENT EXCEEDS	11		67		4.5	

a Median of annual mean discharges is 270 ft^3/s.
b Many days, several years.
c Result of freezeup.
e Estimated.



Discharge at High-Flow Partial-Record Stations, and Miscellaneous Sites

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Discharge at High-Flow Partial-Record Stations

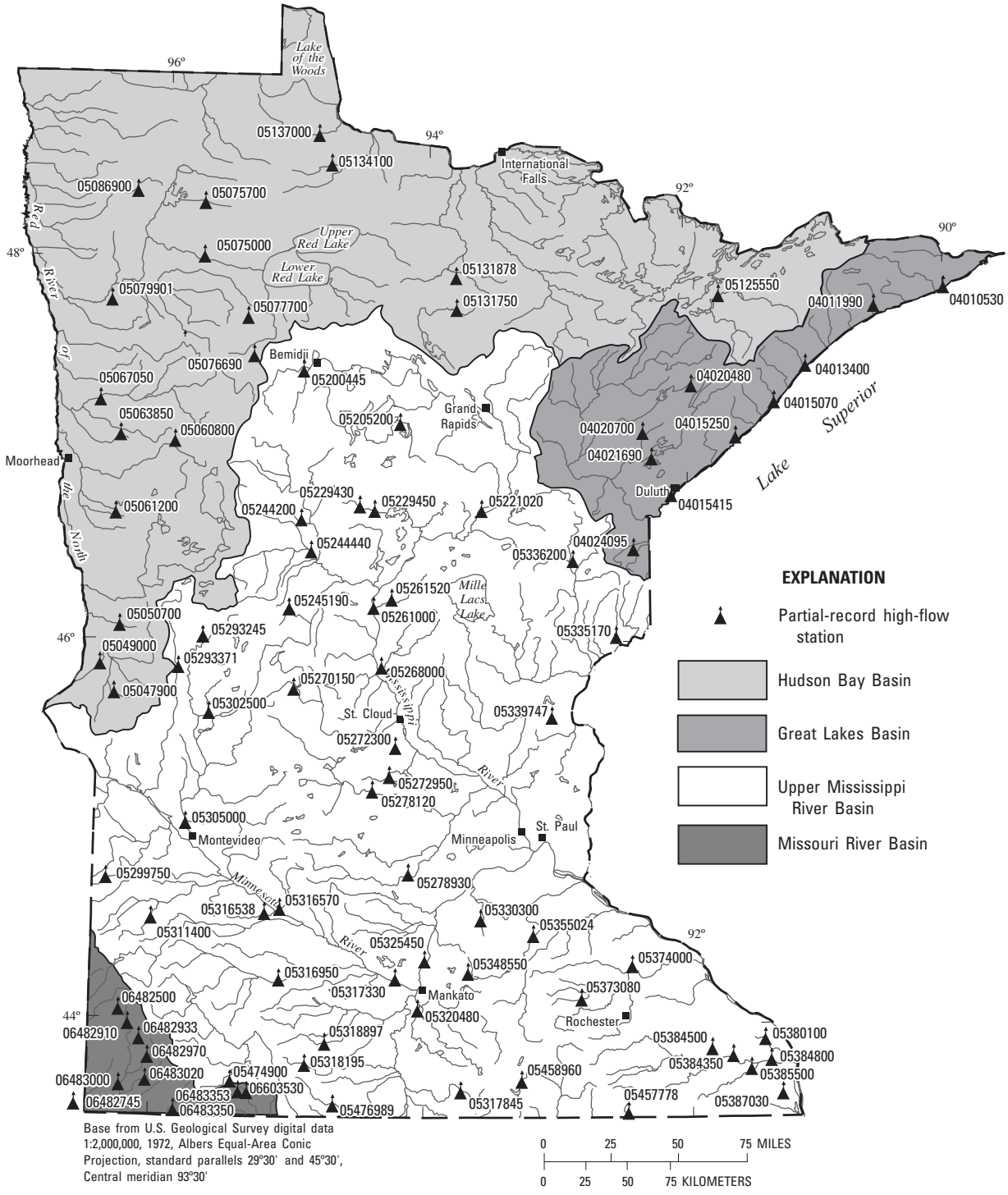

Figure 7. Location of high-flow partial-record stations.

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 U.S.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 high-flow partial-record stations are presented in a table of annual maximum stage and discharge. Discharge measurements made at miscellaneous sites for both low flows and high flows are given in a second table.

The following table contains annual maximum discharges for high-flow (crest-stage) partial-record 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. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at high-flow sites during water year 2005
[--, data not available; mi^2, square miles]

Station name and [Station number]	Location and [Drainage area]	Period of record	Water year 2005 maximum			Period of record maximum		
			Date	Gage height (feet)	Discharge (ft^3/s)	Date	Gage height (feet)	Discharge (ft^3/s)
Reservation River near Hovland [04010530]	Lat 47°52'38", long 89°51'45", in $SE^1/_4$ $SW^1/_4$ sec. 6, T.62 N., R.5 E., Cook County, Hydrologic Unit 04010101, at bridge on U.S. Highway 61, on Grand Portage Indian Reservation, 1,200 feet upstream from mouth, and 5.5 miles northeast of Hovland [Drainage area: 16.5 mi^2].	1991-92#, 2000-current year	10-23-04	3.75	1,100	10-23-04	3.75	1,100
Cascade River at Forest Rd. 45 near Grand Marais [04011990]	Lat 47°47'24", long 90°31'35", in $SE^1/_4$ $SW^1/_4$ sec. 1., T.61 N., R.2 W., Cook County, Hydrologic Unit 04010101, at bridge on Forest Road 45, 6.6 miles upstream from mouth, 9.5 miles west of Grand Marais [Drainage area: 87.6 mi^2].	1985-current year	05-10-05	11.78	853	04-24-01	13.36	1,810
Little Marais River near Little Marais [04013400]	Lat 47°24'58", long 91°06'08", in $SW^1/_4$ $SW^1/_4$ sec. 16, T.57 N., R.6 W., Lake County, Hydrologic Unit 04010101, at bridge on U.S. Highway 61, 0.5 mile northeast of Little Marais [Drainage area:4.47 mi^2].	2000-current year	06-14-05	b17.63	339	05-31-04	b18.03	437
Lake Superior Tributary at Split Rock State Park [04015070]	Lat 47°11'33', long 91°23'29", in $SE^1/_4$ $NE^1/_4$ sec. 6, T.54 N., R.8 W., Lake County, Hydrologic Unit 04010102, at culvert on U.S. Highway 61, 1 mile northeast of Split Rock River, 1.5 mile southwest of Split Rock Lighthouse State Park entrance, and 6 miles southwest of Beaver River [Drainage area: 3.27 mi^2].	2001-current year	04-06-05	14.99	107	11-07-00	16.68	197
Silver Creek Tributary near Two Harbors [04015250]	Lat 47°04'40", long 91°36'49", in $SW^1/_4NE^1/_4$ sec. 16, T.53 N.,R.10 W., Lake County, Hydrologic Unit 04010102, at culvert on County Highway 3, 1.0 mile upstream from mouth, 4.5 miles northeast of Two Harbors [Drainage area: 3.62 mi^2].	1965-current year	06-14-05	b3.56	182	9-20-72	17.08	1,880
Lake Superior Tributary at West 9th Street in Duluth [04015415]	Lat 46°45'27", long 92°09'25", in $NE^1/_4$ $SE^1/_4$ sec. 6, T.49 N., R.14 W., St. Louis County, Hydrologic Unit 04010201, at culvert on West 9th St. in Duluth, 1.0 mile above mouth, locally called Merrit Creek [Drainage area: 1.81 mi^2].	2001-current year	06-05-05	8.65	71	10-04-02	9.66	132
North Branch Whiteface River near Fairbanks [04020480]	Lat 47°22'20", long 91°56'28", in $NW^1/_4NW^1/_4$ sec. 1, T.56 N., R.13 W., St. Louis County, Hydrologic Unit 04010201, at culvert on County Highway 16, 2 miles upstream from the mouth of Jenkins Creek, 0.7 mile west of Fairbanks [Drainage area: 17.1 mi^2].	1979-current year	04-06-05	12.13	132	04-23-79	13.67	660
Bug Creek at Shaw [04020700]	Lat 47°06'40", long 92°21'03", in $SW^1/_4SE^1/_4$ sec. 34, T.54 N., R.16 W., St. Louis County, Hydrologic Unit 04010201, at culverts on County Road 15 at Shaw, 7.5 miles upstream from mouth [Drainage area: 24.8 mi^2].	1979-current year	04-05-05	13.45	190	07-05-99	18.00	1,350

Annual maximum discharge at high-flow sites during water year 2005--Continued

Station name and [Station number]	Location and [Drainage area]	Period of record	Water year 2005 maximum			Period of record maximum		
			Date	Gage height (feet)	Discharge (ft^3/s)	Date	Gage height (feet)	Discharge (ft^3/s)
Cloquet River near Toimi [04021690]	Lat 47°21'00", long 91°39'30", in $NE^1/_4SW^1/_4$ sec. 7, T.56 N., R.10 W., Lake County, Hydrologic Unit 04010202, at bridge on County Highway 2, 5.8 miles southeast of Toimi, 23 miles north of Two Harbors [Drainage area: 40.8 mi^2].	1986-current year	04-06-05	5.78	297	07-04-93	9.06	1,540
Nemadji River near Holyoke [04024095]	Lat 46°31'04", long 92°23'22", in $NE^1/_4NE^1/_4$ sec. 32, T.47 N., R.16 W, Carlton County, Hydrologic Unit 04010301, at bridge on State Highway 23, 3.5 miles north of Holyoke and 7 miles south of Wrenshall [Drainage area: 127 mi^2].	1972-current year	04-06-05	b11.41	1,660	09-03-85	17.38	4,420
Twelvemile Creek near Dumont [05047900]	Lat 45°42'58", long 96°20'54", in $SE^1/_4SW^1/_4$ sec. 17, T.126 N., R.45 W., Traverse County, Hydrologic Unit 09020102, at bridge on Traverse County Road 6, 3 miles east of Dumont.	1996-current year	06-14-05	9.85	811	04-06-97	13.63	c3,720
Mustinka River above Wheaton [05049000]	Lat 45°49'15", long 96°29'25", in $SW^1/_4SW^1/_4$ sec. 8, T.127 N., R.46 W., Traverse County, Hydrologic Unit 09020102, at bridge on U.S. Highway 75, 1 mile upstream from Chicago, Milwaukee and St. Paul railroad bridge, 0.5 mile north of Wheaton, about 8 miles above Lake Traverse. Prior to 2002 WY at datum 73.77 ft lower [Drainage area: 810 mi^2].	1915-24#, 1930-58#, 1985-current year	06-16-05	86.82	2,380	04-07-97 04-09-01	g97.40 g94.45	8,800 11,000
Rabbit River near Nashua [05050700]	Lat 46°04'30", long 96°18'24", in $SE^1/_4NE^1/_4$ sec. 15, T.130 N., R.45 W., Wilkin County, Hydrologic Unit 09020101, at bridge on County Road 19, 2.6 miles north of Nashua, 4.8 miles upstream from mouth of South Fork Rabbit River [Drainage area: 99.2 mi^2].	1979-current year	06-08-05	14.49	780	04-05-97	a15.76	c1,640
Buffalo River near Callaway [05060800]	Lat 47°01'17", long 95°54'43", in $SW^1/_4SW^1/_4$ sec. 17, T.141 N., R.41 W., Becker County, Hydrologic Unit 09020106, at culvert on U.S. Highway 59, 2.7 miles north of Callaway [Drainage area: 76.4 mi^2].	1960-current year	10-31-04	13.76	237	07-16-93	24.90	1,630
Whiskey Creek at Barnesville [05061200]	Lat 46°39'35", long 96°23'54", in $SE^1/_4SW^1/_4$ sec. 20, T.137 N., R.45 W., Clay County, Hydrologic Unit 09020106, at culvert on State Highway 34, 0.7 mile upstream from Blue Eagle Lake, 1.0 mile northeast of Barnesville [Drainage area: 76.3 mi^2].	1961-64, 1965-66#, 1967-current year	06-15-05	5.48	206	05-31-85	7.12	660
State Ditch 45 Tributary near Ulen [05063850]	Lat 47°06'28", long 96°25'03", in $SE^1/_4SW^1/_4$ sec.17, T.142 N., R.45 W., Clay County, Hydrologic Unit 09020108, at culvert on 180th Ave. North, 7.5 miles northwest of Ulen [Drainage area: 3.26 mi^2].	2002-current year	10-30-04	18.33	395	10-30-04	18.33	395
Marsh River Ditch near Ada [05067050]	Lat 47°17'46", long 96°26'09", in $NE^1/_4NE^1/_4$ sec. 13, T.144 N., R. 46 W., Norman County, Hydrologic Unit 09020107, at bridge on County Highway 24, 3.5 miles southeast of Ada.	1985-current year	10-30-04	--	--	06-24-02	19.64	2,000
Red Lake River at High Landing near Goodridge [05075000]	Lat 48°02'34", long 95°48'28", in $NW^1/_4NW^1/_4$ sec. 28, T.153 N., R.40 W., Pennington County, Hydrologic Unit 09020303, on left bank 50 ft upstream from County Highway 24 bridge at High Landing, 7 miles south of Goodridge and 33 miles upstream from Thief River Falls [Drainage area: 2,300 mi^2].	1929-2000#, 2001-current year	06-07-05	b9.76	1,740	07-07-75	13.39	4,060
Mud River near Grygla [05075700]	Lat 48°19'31", long 95°44'35", in $NE^1/_4NE^1/_4$ sec. 23, T.156 N., R.40 W., Hydrologic Unit 09020304, Marshall County, at bridge on State Highway 89, 6 miles west of Grygla [Drainage area: 150 mi^2].	1979-current year	04-01-05	a17.41	c1,070	06-22-02	18.54	2,840

Annual maximum discharge at high-flow sites during water year 2005--Continued

Station name and [Station number]	Location and [Drainage area]	Period of record	Water year 2005 maximum			Period of record maximum		
			Date	Gage height (feet)	Discharge (ft^3/s)	Date	Gage height (feet)	Discharge (ft^3/s)
Clearwater River Tributary near Bagley [05076690]	Lat 47°30'34", long 95°24'15", in $SE^1/_4NE^1/_4$ sec. 31, T.147 N., R.37 W., Clearwater County, Hydrologic Unit 09020305, at culvert on County State Aid Highway 28, 0.5 mile south of Bagley.	2001-current year	03-29-05	a9.43	c22	06-23-02	e13.50	--
Ruffy Brook near Gonvick [05077700]	Lat 47°44'50", long 95°24'45", in $SE^1/_4SE^1/_4$ sec. 5, T.149 N., R.37 W., Clearwater County, Hydrologic Unit 09020305, at culvert on County Highway 67, 4.0 miles upstream from mouth, 4.8 miles east of Gonvick [Drainage area: 46.2 mi^2].	1960-78#, 1979-85, 1986#, 1987-current year	06-06-05	b4.44	258	04-19-96	5.78	455
Burnham Creek near Crookston [05079901]	Lat 47°43'59", long 96°39'52", in $SE^1/_4SW^1/_4$ sec. 10, T.149 N., R.47 W., Polk County, Hydrologic Unit 09020303, at triple box culvert on U.S. Highway 75, 0.75 mile northeast of Girard, 3 miles southwest of Crookston, 7 miles above mouth [Drainage area: 134 mi^2].	1986-current year	06-13-05	17.74	1,260	04-15-97	22.63	3,000
Middle River near Newfolden [05086900]	Lat 48°22'04", long 96°16'47", in $NE^1/_4NE^1/_4$ sec. 3, T.156 N., R.44 W., Marshall County, Hydrologic Unit 09020309, at bridge on township road, 2.0 miles northeast of Newfolden [Drainage area: 88.8 mi^2].	1979-current year	08-19-05	19.23	1,410	06-11-02 05-18-96	20.12 18.31	1,700 2,300
Stoney River near Babbitt [05125550]	Lat 47°41'36", long 91°45'38", in $SW^1/_4SW^1/_4$ sec. 8, T.60 N., R.11 W., Lake County, Hydrologic Unit 09030001, in Superior National Forest, at bridge on Forest Road 424, 4.7 miles upstream from mouth, 8.5 miles east of Babbitt [Drainage area: 215 mi^2].	1975-80#, 1986-current year	06-20-05	5.60	695	04-19-76	8.71	2,490
Big Fork River near Bigfork [05131750]	Lat 47°44'56", long 93°46'31", in $SE^1/_4SE^1/_4$ sec. 1, T.149 N., R.25 W., Itasca County, Hydrologic Unit 09030006, at bridge on State Highway 6, 5.5 miles west of Bigfork [Drainage area: 606 mi^2].	1973-current year	04-06-05	a13.16	c1,500	04-22-79	15.48	2,830
Bowerman Brook near Craigville [05131878]	Lat 47°55'29", long 93°45'34", in $NE^1/_4NW^1/_4$ sec. 26, T.63 N., R.27 W., Koochiching County, Hydrologic Unit 09030006, at culvert on State Highway 6, 2.4 miles upstream from mouth, 7.0 miles west of Craigville [Drainage area: 25.7 mi^2].	1979-current year	05-27-05	14.36	410	06-23-02	15.83	937
North Branch Rapid River near Baudette [05134100]	Lat 48°31'56", long 94°38'50", in $NW^1/_4SW^1/_4$ sec. 4, T.158 N., R.31 W., Lake of the Woods County, Hydrologic Unit 09030007, at bridge on County Highway 1, 12.7 miles southwest of Baudette [Drainage area: 174 mi^2].	1986-current year	06-06-05	b10.17	610	06-11-02	e18.34	6,380
Winter Road River near Baudette [05137000]	Lat 48°42'39", long 94°41'52", in $NW^1/_4NE^1/_4$ sec. 1, T.160 N., R.32 W., Lake of the Woods County, Hydrologic Unit 09030008, at bridge on State Highway 11, 4.5 miles west of Baudette, 1.8 miles east of Pitt, 5 miles upstream of mouth [Drainage area: 140 mi^2].	1986-current year	06-06-05	10.59	661	06-11-02	be19.35	9,900
Mississippi River at Bemidji [05200445]	Lat 47°27'04", long 94°54'23", in $NW^1/_4NW^1/_4$ sec. 20, T.146 N., R.33 W., Beltrami County, Hydrologic Unit 07010101, at bridge on County Highway 11, 1.4 miles southwest of intersection of State Highway 197 and County Highway 7 in Bemidji [Drainage area: 358 mi^2].	1973-87, 1988-89#, 1990-current year	04-12-05	11.84	610	04-18-97	13.17	1,820
Boy River near Remer [05205200]	Lat 47°04'51", long 94°05'54", in $NE^1/_4NE^1/_4$ sec. 33, T.142 N., R.27 W., Cass County, Hydrologic Unit 07010102, at bridge on County Highway 53, 1.9 miles upstream from Boy Lake and 9 miles northwest of Remer [Drainage area: 289 mi^2].	1986-current year	07-01-05	11.09	288	04-10-96 07-23-87	a11.59 11.64	c660 660

Annual maximum discharge at high-flow sites during water year 2005--Continued

Station name and [Station number]	Location and [Drainage area]	Period of record	Water year 2005 maximum			Period of record maximum		
			Date	Gage height (feet)	Discharge (ft^3/s)	Date	Gage height (feet)	Discharge (ft^3/s)
Willow River below Palisade [05221020]	Lat 46°42'36", long 93°33'21", in $NW^1/_4NE^1/_4$ sec. 30, T.49 N., R.25 W., Aitkin County, Hydrologic Unit 07010103, at bridge on County Highway 3, 3.2 miles west of Palisade [Drainage area: 523 mi^2].	1972-current year	04-12-05	b13.01	1,680	04-25-79	17.25	3,730
Hoblin Creek near Pine River [05229430]	Lat 46°41'06", long 94°30'49", in $SE^1/_4NE^1/_4$ sec. 18, T.137 N., R.30 W., Cass County, Hydrologic Unit 07010105, at culvert on township road, 3.4 miles upstream from mouth, 5.6 miles southwest of Pine River.	2002-current year	05-26-05	b7.58	7.2	07-08-02	8.38	--
Pine River near Pine River [05229450]	Lat 46°41'39", long 94°22'11", in $NE^1/_4SE^1/_4$ sec. 8, T.137 N., R.29 W., Cass County, Hydrologic Unit 07010105, at bridge on U.S. Highway 371, 2.3 miles southeast of Pine River, 4.9 miles upstream of Upper Whitefish Lake [Drainage area: 261 mi^2].	1986-current year	06-08-05	3.50	550	05-14-99	5.15	1,520
Cat River near Nimrod [05244200]	Lat 46°37'49", long 94°55'51", in $SW^1/_4SW^1/_4$ sec. 36, T.137 N., R.34 W., Wadena County, Hydrologic Unit 07010106, at bridge on State Highway 227, 2.5 miles west of Nimrod, 3.0 miles upstream from mouth [Drainage area: 57.1 mi^2].	1961-current year	06-16-05	b5.81	79	10-12-73	9.43	560
Leaf River near Aldrich [05244440]	Lat 46°27'25", long 94°50'29", in $SW^1/_4SW^1/_4$ sec. 34, T.135 N., R.33 W., Wadena County, Hydrologic Unit 07010107, at bridge on County Highway 29, 3.3 miles upstream from mouth, 7.0 miles northeast of Aldrich [Drainage area: 870 mi^2].	1972-current year	06-16-05	13.42	1,610	04-12-01	16.40	5,800
Eagle Creek Tributary near Eagle Bend [05245190]	Lat 46°09'01", long 95°01'36", in $NW^1/_4NE^1/_4$ sec. 24, T.131 N., R.35 W., Todd County, at culvert on township road, 1.0 mile upstream from mouth, 1.0 mile south of Eagle Bend.	2003-current year	06-30-05	7.56	--	06-24-03	8.52	--
Mississippi River near Fort Ripley [05261000]	Lat 46°10'50", long 94°21'56", in $SE^1/_4NW^1/_4$ sec. 27, T.43 N., R.32 W., Crow Wing County, on left bank 600 feet. Upstream from Nokasippi River and 1.0 mile north of Ft. Ripley. [Drainage area 11,000 mi^2, approximately].	1987-00#, 2001-current year	06-16-05	9.71	15,400	04-08-97	14.15	32,200
Nokasippi River near Fort Ripley [05261520]	Lat 46°12'02", long 94°19'03", in $NE^1/_4NE^1/_4$ sec. 24, T.43 N., R.32 W., Crow Wing County, Hydrologic Unit 07010104, at bridge on County Highway 2, 3 miles northeast of Fort Ripley [Drainage area: 193 mi^2].	1967-70†, 1974†, 1976†, 1986-current year	06-17-05	12.48	494	06-26-03	15.17	1,160
Platte River at Royalton [05268000]	Lat 45°50'43", long 94°17'40", in $SE^1/_4NW^1/_4$ sec. 26, T.39 N.,R.32 W., Morrison County, Hydrologic Unit 07010201, at bridge on County Highway 27, 0.6 mile north of Royalton, 6.6 miles upstream from mouth. [Drainage area: 432 mi^2].	1929-36, 1972-current year Datum changed in 1986	09-24-05 04-01-05	11.84 a11.89	1,640 --	07-26-72	j7.84	6,850
Ashley Creek near Sauk Centre [05270150]	Lat 45°46'46", long 94°58'52", in $NW^1/_4SE^1/_4$ sec. 29, T.127 N., R.34 W., Todd County, Hydrologic Unit 07010202, at bridge on County Highway 11, 3 miles north of Sauk Centre [Drainage area: 119 mi^2].	1963-70†,74†, 1976†, 1986-88, 1989#, 1990-current year	06-16-05	<14.61	<373	04-08-01	18.00	1,020
Johnson Creek near St.Augusta [05272300]	Lat 45°27'49", long 94°09'19", in $NW^1/_4SW^1/_4$ sec. 13, T.123 N.,R.28 W., Stearns County, Hydrologic Unit 07010203, at bridge on County Highway 7, 1.0 mile south of St. Augusta, 3.3 miles upstream from mouth [Drainage area: 45.6 mi^2].	1964-current year	04-13-05 03-11-05	12.39 a13.65	154 --	09-09-85	16.37	2,350

Annual maximum discharge at high-flow sites during water year 2005--Continued

Station name and [Station number]	Location and [Drainage area]	Period of record	Water year 2005 maximum			Period of record maximum		
			Date	Gage height (feet)	Discharge (ft^3/s)	Date	Gage height (feet)	Discharge (ft^3/s)
Clearwater River near South Haven [05272950]	Lat 45°16'45", long 94°15'04", in $NE^1/_4NW^1/_4$ sec. 19, T.121 N., R.28 W., Wright County, Hydrologic Unit 07010203, at culvert 3.4 miles southeast of Kimball, 0.25 mile downstream of Scott Lake Outlet, 2.0 miles southwest of South Haven [Drainage area: 78.8 mi^2].	1985- current year	04-18-05	14.59	231	09-09-85	17.11	1,040
North Fork Crow River near Kingston [05278120]	Lat 45°12'13", long 94°23'16", in $SW^1/_4SE^1/_4$ sec. 13, T.120 N., R.30 W., Meeker County, Hydrologic Unit 07010204, at bridge on State Highway 24, 3.7 miles west of Kingston, 3.9 miles east of Forest City [Drainage area: 779 mi^2].	1986- current year	06-17-05	13.38	1,430	05-01-86	17.82	4,850
Buffalo Creek near Glencoe [05278930]	Lat 44°45'50", long 94°05'27", in $SW^1/_4SW^1/_4$ sec. 16, T.115 N., R.27 W., McLeod County, Hydrologic Unit 07010205, at bridge on County Highway 1, 2.6 miles east of Glencoe [Drainage area: 373 mi^2].	1972-95, 1998- current year	06-14-05	17.10	1,740	09-12-91	11.78	4,300
Lake Ina Tributary near Melby [05293245]	Lat 46°03'50", long 95°43'40", in $NW^1/_4NW^1/_4$ sec. 21, T.130 N., R.40 W., Douglas County, Hydrologic unit 07020002, upstream from culvert on County Road 24, at Lake Ina, 0.3 mile east of Melby.	2003- current year	03-31-05	8.74	25	06-24-03	9.95	h43
Pomme de Terre River near Elbow Lake [05293371]	Lat 45°57'47", long 95°53'07", in $SE^1/_4SW^1/_4$ sec. 19, T.129 N., R.41 W., Grant County, Hydrologic Unit 07020002, at bridge on County Road 47, 4 miles southeast of Elbow Lake, 2.5 miles south of the outlet of Pomme de Terre Lake [Drainage area: 340 mi^2].	1986- current year	07-30-05	5.54	252	06-15-01	6.85	600
Florida Creek near Burr [05299750]	Lat 44°44'10", long 96°25'10", in $SE^1/_4SE^1/_4$ sec. 29, T.115 N., R.46 W., Yellow Medicine County, Hydrologic Unit 07020003, at culvert on County Road 15, 3.0 miles west of Burr, 7.6 miles northwest of Canby [Drainage area: 77.3 mi^2].	1982, 1983-84#, 1991- current year	06-13-05 03-07-05	15.10 a16.23	118 --	04-01-97	26.57	2,490
Little Chippewa River near Starbuck [05302500]	Lat 45°36'52", long 95°37'12", in $NW^1/_4NE^1/_4$ sec. 30, T.125 N., R.39 W., Pope County, Hydrologic Unit 07020005, at culvert on State Highway 28, 4.4 miles west of Starbuck [Drainage area: 96.2 mi^2].	1979- current year	04-12-05	12.20	153	04-08-01	14.02	980
Chippewa River near Watson [05305000]	Lat 45°01'18", long 95° 47'25 ", in $NE^1/_4NW^1/_4$ sec. 22, T.118 N., R.41 W., Chippewa County, Hydrologic Unit 07020005, 150 feet downstream from County Road 13 bridge and dam, one mile north of Watson, 5.5 miles northwest of Montevideo, and 12.1 miles above confluence with Minnesota River in Montevideo [Drainage area: 2,050 mi^2].	1910-17, 1931-36, 2001- current year	06-14-05	41.37	1,260	04-11-01	45.41	4,600
South Branch Yellow Medicine River near Minneota [05311400]	Lat 44°33'50", long 95°59'50", in $SE^1/_4SE^1/_4$, sec. 26, T.113 N., R.43 W., Lyon County, Hydrologic Unit 07020004, at bridge on State Highway 68, on northwest edge of Minneota and 6 miles upstream from mouth [Drainage area: 115 mi^2].	1960-81#, 1981-87, 1998- current year	06-14-05	7.74	448	04-18-69	13.41	4,430
Ramsey Creek near Redwood Falls [05316538]	Lat 44°33'08", long 95°10'38", in $SE^1/_4NE^1/_4$ sec. 33, T.113 N., R.36 W., Redwood County, Hydrologic Unit 07020006 at bridge on township road 2.3 miles northeast of KLGR radio towers, on west side of Redwood Falls [Drainage area: 63.6 mi^2].	1991-93, 1995 - current year	05-18-05	18.87	120	06-17-93	25.94	920
Beaver Creek at Beaver Falls [05316570]	Lat 44°35'03", long 95°02'49", in $NE^1/_4NW^1/_4$ sec. 22, T.113 N., R.35 W., Renville County, Hydrologic Unit 07020004, at bridge on County Highway 2 in Beaver Falls, 2.2 miles upstream from mouth, 3.8 miles northwest of Morton [Drainage area: 191 mi^2].	1972- current year	05-18-05	9.85	757	04-02-97	14.73	3,300

Annual maximum discharge at high-flow sites during water year 2005--Continued

Station name and [Station number]	Location and [Drainage area]	Period of record	Water year 2005 maximum			Period of record maximum		
			Date	Gage height (feet)	Discharge (ft^3/s)	Date	Gage height (feet)	Discharge (ft^3/s)
Cottonwood River near Springfield [05316950]	Lat 44°12'12", long 95°02'53", in $SW^1/_4$ $NW^1/_4$ sec. 34, T.109 N., R.35 W., Brown County, Hydrologic Unit 07020008, at bridge on County Highway 2, 1.3 miles downstream from Mound Creek, 1.0 mile upstream from Coal Mine Creek, 3.5 miles southwest of Springfield [Drainage area: 777 mi^2].	1973-current year	05-19-05	18.47	1,500	06-18-93	31.40	14,500
Minnesota River Tributary at State Highway 68 near Judson [05317330]	Lat 44°11'40", long 94°12'27", in $NW^1/_4$ $NW^1/_4$ sec. 4, T.108 N., R.28 W., Blue Earth County, Hydrologic Unit 07020007, at culvert on State Highway 68, 0.5 mile southwest of Judson, 0.4 mile above mouth [Drainage area: 0.97 mi^2].	2001-current year	05-13-05	<7.08	--	06-22-02	8.84	--
East Branch Blue Earth River near Walters [05317845]	Lat 43°37'58", long 93°42'28", in $SE^1/_4SE^1/_4$ sec. 16, T.102 N., R.24 W., Faribault County, Hydrologic Unit 07020009, at culvert on State Highway 22, 2.5 miles northwest of Walters [Drainage area: 30.2 mi^2].	1979-current year	04-13-05	15.84	335	08-15-93 09-15-04	18.73 20.54	657 --
Elm Creek at County Road 103 near Trimont [05318195]	Lat 43°45'27", long 94°50'30", in $NW^1/_4NW^1/_4$ sec. 5, T.103 N., R.33 W., Martin County, Hydrologic Unit 07020009, at bridge on County Road 103, 12.5 miles northeast of Jackson, 5 miles west of Trimont.	1991-current year	09-25-05	24.37	3,000	09-15-04	23.00	2,050
South Fork Watonwan River near Ormsby [05318897]	Lat 43°53'08", long 94°41'27", in $SE^1/_4NW^1/_4$ sec.21, T.105 N., R.32 W., Watonwan County, Hydrologic Unit 07020010, at bridge on township road, 2.6 miles north of Ormsby, 5.0 miles upstream from Willow Creek [Drainage area: 107 mi^2].	1979-current year	09-26-05	18.25	2,360	05-31-80	18.40	1,920
Maple River near Rapidan [05320480]	Lat 44°03'54", long 94°01'32", in $SW^1/_4SW^1/_4$ sec. 13, T.107 N., R.27 W., Blue Earth County, Hydrologic Unit 07020011, at bridge on County Highway 35, 3.0 miles southeast of Rapidan, 3.3 miles upstream from mouth [Drainage area: 338 mi^2].	1972-current year	09-27-05	12.60	4,380	04-12-01	13.79	5,540
Minnesota River Tributary below St. Peter [05325450]	Lat 44°20'13", long 93°54'45", in $NE^1/_4NE^1/_4$ sec. 14, T.110 N., R.26 W., Le Sueur County, Hydrologic Unit 07020007, at culvert on County State Aid Highway 23, 1.8 miles east of St. Peter [Drainage area: 2.13 mi^2].	2001-current year	04-12-05	<3.91	--	02-25-01	a7.20	--
Sand Creek near New Prague [05330300]	Lat 44°32'37", long 93°32'16", in $NE^1/_4NW^1/_4$ sec. 1, T.112 N., R.23 W., Le Sueur County, Hydrologic Unit 07020012, at culvert on State Highway 13 and 19, 1.9 miles east of New Prague [Drainage area: 62.2 mi^2].	1960-current year	05-13-05	9.94	169	05-21-60	14.84	1,100
Crooked Creek near Hinckley [05335170]	Lat 46°00'42", long 92°31'45", in $NE^1/_4NE^1/_4$ sec. 30, T.41 N., R.17 W., Pine County, Hydrologic Unit 07030001, at culvert on State Highway 48, 2.7 miles upstream from mouth, 8 miles south of Duxbury, 19 miles east of Hinckley [Drainage area: 94.4 mi^2].	1966-70†,74†,76†, 79-80†, 1986-current year	04-01-05	14.51	1,190	04-23-01	16.65	2,100
Glaisby Brook near Kettle River [05336200]	Lat 46°27'19", long 92°51'34", in $SE^1/_4NW^1/_4$ sec. 22, T.46 N., R.20 W., Carlton County, Hydrologic Unit 07030003, at bridge on State Highways 27 and 73, 1.0 mile upstream from mouth, 2.4 miles south of Kettle River [Drainage area: 27.0 mi^2].	1960-70#, 1971-current year	03-31-05	4.74	250	07-22-72	10.18	1,370
Goose Creek at Harris [05339747]	Lat 45°35'11", long 92°58'39", in $SW^1/_4SW^1/_4$ sec. 21, T.36 N., R.21 W., Chisago County, Hydrologic Unit 07030005, at culverts on County Highway 9, 0.15 mile west of County Highway 30 in Harris, 8 miles above mouth [Drainage area: 47.3 mi^2].	1986-current year	04-01-05	5.87	151	04-23-01	8.11	360

Annual maximum discharge at high-flow sites during water year 2005--Continued

Station name and [Station number]	Location and [Drainage area]	Period of record	Water year 2005 maximum			Period of record maximum		
			Date	Gage height (feet)	Discharge (ft^3/s)	Date	Gage height (feet)	Discharge (ft^3/s)
Cannon River below Sabre Lake near Kilkenny [05348550]	Lat 44°17'50", long 93°37'44", in $NE^1/_4NE^1/_4$ sec. 31, T.110 N., R.23 W., Le Sueur County, Hydrologic Unit 07040002, at bridge on township road, 0.25 mile downstream of Sabre Lake, 3 miles southwest of Kilkenny [Drainage area: 87.9 mi^2].	1985- current year	05-13-05	11.93	150	04-12-01	13.83	563
Cannon River at Northfield [05355024]	Lat 44°27'19", long 93°09'46", in $NE^1/_4NE^1/_4$ sec. 1, T.111 N., R.20 W., Rice County, Hydrologic Unit 07040002, at Fifth Street bridge in Northfield [Drainage area: 929 mi^2].	1980- current year	04-01-05	903.21	3,330	04-12-01	905.40	8,370
Milliken Creek near Concord [05373080]	Lat 44°07'13", long 92°49'08", in $NW^1/_4NW^1/_4$ sec. 36, T.108 N., R.17 W., Dodge County, Hydrologic Unit 07040004, at bridge on County Road 9, 8.0 miles upstream from mouth, 2.1 miles southeast of Concord [Drainage area: 22.1 mi^2].	1979- current year	03-31-05	12.99	--	06-13-01	15.80	3,470
Zumbro River at Zumbro Falls [05374000]	Lat 44°17'12", long 92°25'56", in $NE^1/_4$ $SE^1/_4$ sec. 36, T.110 N., R.14 W., Wabasha County, Hydrologic Unit 07040004, in Zumbro Falls, 1,000 feet downstream from Cold Creek, 0.7 mile upstream from bridge on U.S. Highway 63, and 6.3 miles downstream from North Fork [Drainage area: 1,150 mi^2].	1909-17#, 1929-80#, 1990- current year	06-08-05	17.22	11,200	07-21-51	30.80	35,900
Cedar Creek near Ridgeway [05380100]	Lat 43°56'49", long 91°33'59", in $NW^1/_4NE^1/_4$ sec. 32, T.106 N., R.6 W., Winona County, Hydrologic Unit 07040003, at bridge on County Road 9, 2.9 miles northeast of Witoka, 6 miles southeast of Winona [Drainage area: 7.16 mi^2].	2001- current year	02 -14-05	12.70	--	09-15-04	13.86	--
Root River at Rushford [05384350]	Lat 43°48'11", long 91°45'10", in $NE^1/_4NE^1/_4$ sec. 23, T.104 N., R.8 W., Fillmore County, Hydrologic Unit 07040008, at U.S. Highway 16 bridge on south side of Rushford, 0.2 mile upstream from Rush Creek [Drainage area: 992 mi^2].	1985- current year	03-29-05	24.06	11,200	06-02-00 09-16-04	26.35 k27.28	32,400 --
Rush Creek near Rushford [05384500]	Lat 43°50'00", long 91°46'40", in $SW^1/_4SW^1/_4$ sec. 3, T.104 N., R.8 W., Fillmore County, Hydrologic Unit 07040008, at bridge, 1.5 miles northwest of Rushford, 3.0 miles upstream from mouth [Drainage area: 132 mi^2].	1942-79#, 1980- current year	02-06-05	7.04	2,640	03-26-50	13.54	11,600
Campbell Valley Creek near Money Creek [05384800]	Lat 43°49'54", long 91°34'53", in $NE^1/_4$ $NW^1/_4$ sec. 8, T.104 N., R.6 W., Houston County, Hydrologic Unit 07040008, at triple box culvert on County State Aid Highway 26, 1.8 miles northwest of Money Creek [Drainage area: 6.82 mi^2].	2001- current year	02-14-05	2.26	--	09-15-04	4.80	--
South Fork Root River near Houston [05385500]	Lat 43°44'19", long 91°33'50", in $NE^1/_4SW^1/_4$ sec. 9, T.103 N., R.6 W., Houston County, Hydrologic Unit 07040008, at bridge on State Highway 76, 0.5 mile upstream from Badger Creek, 1.5 mile south of Houston [Drainage area: 275 mi^2].	1953-83#, 1985- current year	02-07-05	10.68	2,860	06-01-00	14.90	13,800
Crooked Creek at Freeburg [05387030]	Lat 43°36'37", long 91°21'39", in $SW^1/_4NE^1/_4$ sec. 30, T.102 N., R.4 W., Houston County, Hydrologic Unit 07060001, at bridge on State Highway 249 at Freeburg 6.5 miles upstream from mouth [Drainage area: 44.8 mi^2].	1979- current year	02-07-05	10.29	361	03-04-92	19.02	2,200
Little Cedar River near Johnsburg [05457778]	Lat 43°30'52", long 92°45'19", in $NW^1/_4NE^1/_4$ sec. 33, T.101 N., R.16 W., Mower County, Hydrologic Unit 07080201, at bridge on County Road 6, 1 mile northeast of Johnsburg, 1 mile north of Minnesota-Iowa border [Drainage area: 45.8 mi^2].	1986- current year	09-26-05	13.90	1,650	08-16-93 09-15-04	17.58 --	9,280 --

Annual maximum discharge at high-flow sites during water year 2005--Continued

Station name and [Station number]	Location and [Drainage area]	Period of record	Water year 2005 maximum			Period of record maximum		
			Date	Gage height (feet)	Discharge (ft^3/s)	Date	Gage height (feet)	Discharge (ft^3/s)
Bancroft Creek at Bancroft [05458960]	Lat 43°42'09", long 93°21'23", in $SW^1/_4SE^1/_4$ sec. 21, T.103 N., R.21 W., Freeborn County, Hydrologic Unit 07080202, at bridge on County Road 14, 1.6 miles northeast of Fountain Lake, 1 mile north of Interstate 90 [Drainage area: 28.7 mi^2].	1985†, 1986-current year	09-26-05	7.12	343	06-14-01 09-15-04	8.81 f9.57	1,070 --
Elk Creek near Brewster [05474900]	Lat 43°40'43", long 95°27'10", in $NE^1/_4SE^1/_4$ sec. 36, T.102 N., R.39 W., Nobles County, Hydrologic Unit 07100001, at bridge on County Highway 1, 0.7 miles south of Brewster.	1996-current year	09-26-05	22.71	924	05-30-01	25.29	4,000
East Fork Des Moines River above Ceylon [05476989]	Lat 43°33'53", long 94°39'15", in $NW^1/_4SW^1/_4$ sec. 11, T.101 N., R.32 W., Martin County, Hydrologic Unit 07010003, at bridge on County Road 23, 2.4 miles northwest of Ceylon [Drainage area: 128 mi^2].	1986-current year	05-12-05	22.01	1,450	05-12-05	22.01	1,450
North Branch Pipestone Creek near Pipestone [06482500]	Lat 44°04'54", long 96°18'27", in $SE^1/_4SE^1/_4$ sec. 12, T.107 N., R.46 W., Pipestone County, Hydrologic Unit 10170203, at bridge on U.S. Highway 75, 5.5 miles north of Pipestone. Formerly "Pipestone Creek near Pipestone" [Drainage area: 31.5 mi^2].	1991-current year	09-26-05	16.57	160	05-08-93	20.28	2,650
Beaver Creek at Valley Springs, South Dakota [06482745]	Lat 43°35'10", long 96°28'20", in $NW^1/_4NW^1/_4$ sec. 3, T.101 N., R.47 W., Minnehaha County, South Dakota, Hydrologic Unit 10170203, at bridge on County Road 103 (Valley Drive), 1 mile west of South Dakota-Minnesota border, 2.5 miles south of Interstate 90 [Drainage area: 104 mi^2].	1986-current year	09-26-05	15.82	151	06-13-94	24.89	2,280
Rock River Tributary at County Highway 18 near Hatfield [06482910]	Lat 43°56'38", long 96°06'13", in $SW^1/_4NW^1/_4$ sec. 35, T.106 N., R.44 W., Pipestone County, Hydrologic Unit 10170204, at culvert on County State Aid Highway 18, 1.5 miles upstream of mouth, 4 miles east of Hatfield, 5 miles north of Edgerton [Drainage area: 3.28 mi^2].	2001-current year	09-25-05	5.38	79	06-16-04	6.31	206
Chanarambi Creek near Edgerton [06482933]	Lat 43°53'59", long 96°03'39", in $NW^1/_4SW^1/_4$ sec. 18, T.105 N., R.43 W., Murray County, Hydrologic Unit 10170204, at bridge on township road, 3.8 miles northeast of Edgerton, 7.4 miles upstream from mouth [Drainage area: 57.3 mi^2].	1979-current year	09-26-05	12.91	353	04-23-01 05-08-93	16.79 f18.14	928 c850
Champepadan Creek at County Road 18 near Leota [06482970]	Lat 43°47'24", long 96°00'40", in $NW^1/_4NW^1/_4$ sec. 28, T.104 N., R. 43 W., Nobles County, Hydrologic Unit 10170204, at bridge on County Road 18, near junction with County Road 19, 3 miles south of Leota	1996-current year	06-21-05	15.38	570	04-23-01	17.54	895
Rock River at Luverne [06483000]	Lat 43°39'15", long 96°12'03", in $SW^1/_4$ $NE^1/_4$ sec. 11, T.102 N., R45 W., Rock County, Hydrologic Unit 10170204, at bridge on Main Street (County Highway 4) in Luverne [Drainage area: 419 mi^2].	1911-14#, 1968-69, 1971-current year	09-26-05	6.40	2,050	05-08-93	14.23	c35,400
Elk Creek near Lismore [06483020]	Lat 43°41'38", long 96°00'46", in $NE^1/_4SE^1/_4$ sec. 29, T.103 N., R. 43 W., Nobles County, Hydrologic Unit 10170204, at bridge on County Road 19, 4.6 miles southwest of Lismore [Drainage area: 4.62 mi^2].	1996-current year	06-22-05	15.20	--	06-14-01	15.62	--
Little Rock River near Rushmore [06483350]	Lat 43°32'36", long 95°48'58", in $NE^1/_4NE^1/_4$ sec. 24, T.101 N., R.42 W., Nobles County, Hydrologic Unit 10170204, at bridge #4967, on County Road 6, 1.5 miles west of Ransom, 5.1 miles south of Rushmore [Drainage area: 45.8 mi^2].	1991-current year	09-25-05	24.28	326	07-11-93	27.04	4,290

Annual maximum discharge at high-flow sites during water year 2005--Continued

Station name and [Station number]	Location and [Drainage area]	Period of record	Water year 2005 maximum			Period of record maximum		
			Date	Gage height (feet)	Discharge (ft^3/s)	Date	Gage height (feet)	Discharge (ft^3/s)
Little Rock Creek near Rushmore [06483353]	Lat 43°32'37", long 95°50'50", in $NE^1/_4NW^1/_4$ sec. 23, T.101 N., R.42 W., Nobles County, Hydrologic Unit 10170204, at bridge on County Road 6, 5.5 miles southwest of Rushmore [Drainage area: 32.1 mi^2].	1996- current year	09-25-05	23.15	329	05-30-01	27.99	3,070
Little Sioux River near Spafford [06603530]	Lat 43°36'08", long 95°15'27", in $NE^1/_4NE^1/_4$ sec. 34, T.102 N., R.37 W., Jackson County, Hydrologic Unit 10230003, at bridge on township road, 1.6 miles downstream from Jackson County ditch No. 11, 5.8 miles east of Spafford [Drainage area: 40.5 mi^2].	1962- current year	09-26-05	10.68	785	06-29-69	12.06	4,500

< less than

Operated as a continuous-record gaging station.

† Operated as a low-flow site.

a Backwater from ice.

b Not annual maximum.

c Estimated.

d Did not reach bottom of gage

e From high-water mark.

f Backwater from beaver dam

g Backwater from Lake Traverse.

h Peak flow determined from indirect measurement.

i Control changed 1997.

j Datum changed 1986

k Possible backwater from Rush Creek.

Discharge at Miscellaneous Sites

Discharge measurements made at miscellaneous sites during the 2005 water year are listed in the following table. Those measurements known to be made during base flow conditions are designated by an asterisk (*). Stations previously published as Continuous Record Sites are designated by an (#), those sites published as an High-Flow Partial-Record are designated by an (+).

Stream Name and [Station No.]	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		Lake Superior Basin				
Knife River at Airport Road near Two Harbors (04015325)	Lake Superior	Lat 47°03'17", long 91°45'48", in SE1/4 SW1/4 sec. 20, T.53 N., R.11 W., Lake County, Hydrologic Unit 04010102, at bridge on Airport Road, 4.5 miles northwest of Two Harbors.	--	2004	04-05-2005 04-12-2005 06-08-2005	117 62.8 35.4
Little Knife River near Two Harbors (04015327)	Knife River	Lat 47°02'01", long 91°43'51", in SW1/4 NW1/4 sec. 34, T.53 N., R.11 W., Lake County, Hydrologic Unit 04010102, at bridge on Lake County Road 12, 3 miles west of Two Harbors and 0.7 miles upstream with confluence with Knife River.	--	2004	04-05-2005 04-12-2005 06-08-2005	59.8 21.6 8.0
Unnamed Tributary to W. Br. Knife River near Two Harbors (04015335)	West Branch Knife River	Lat 47°03'17", long 91°45'48", in SE1/4 SW1/4 sec. 20, T.53 N., R.11 W., Lake County, Hydrologic Unit 04010102, at culvert on Nappa Road, 7 miles west of Two Harbors and 2.5 miles upstream of confluence with West Branch Knife River.	--	2004	04-05-2005 04-12-2005 06-08-2005	33.0 14.5 7.51
		Red River of the North Basin				
Snake River at Alvarado (#05086000)	Red River of the North	Lat 48°11'50", long 97°00'20", in SW1/4 SE1/4 sec. 31, T.154 N., R.49 W., Marshall County, Hydrologic Unit 09020309, at bridge on State Highway 1, 0.2 miles west of Alvarado.	309	1945-46, 48-51, 78-80, 83, 86-88, 98	06-07-2005 06-21-2005 06-28-2005 07-26-2005 08-09-2005 08-18-2005 08-25-2005 09-06-2005 09-20-2005	292 316 45.1 19.6 1.15 251 239 15.1 3.87
		Mississippi River Basin				
Rice Creek at Old Hwy. 8 in Mounds View (05288580)	Mississippi River	Lat 45°05'37", long 93°11'38", in NW1/4 NE1/4 sec. 17, T.30 N., R.23 W., Hennepin County, Hydrologic Unit 07010206, at intersection of Old Highway 8 and County Road H in Mounds View.	--	2000	10-27-2004	**11.9**
		Zumbro River Basin				
Middle Fork Zumbro River at Hwy. 52 in Oronoco (05373155)	Zumbro River	Lat 44°09'58", long 92°32'45", in SW1/4 SE1/4 sec. 7, T.108 N., R.24 W., Olmstead County, Hydrologic Unit 070400004. Measured at U.S. Highway 52 in Oronoco.	--	--	06-08-2005	**432**
South Branch Middle Fork Zumbro River at Oronoco (05373299)	Middle Fork Zumbro River	Lat 44°09'38", long 92°32'25", in SE1/4 NE1/4 sec. 18, T.108 N., R.14 W., Olmstead County, Hydrologic Unit 070400004. Measured at U.S. Highway 52 in Oronoco.	--	--	06-08-2005	**127**
Middle Fork Zumbro River (Shady Lake) at Hwy. 52 in Oronoco (05373300)	Zumbro River	Lat 44°09'45", long 92°32'04", in NW1/4 NW1/4 sec. 17, T.108 N., R.14 W., Olmstead County, Hydrologic Unit 070400004. Measured below Minnesota Avenue.	--	--	06-08-05	**476**

Water Quality at Miscellaneous Sites

GLACIAL RIDGE SURFACE-WATER WATER QUALITY

MISCELLANEOUS STATION ANALYSES

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unf lab, uS/cm 25 degC (90095)	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)
05078720 CO DITCH 140 ABV BR-6 IMP NR TILDEN JCT, MN (SW8) (LAT 47 40 01N LONG 096 20 18W)												
OCT 2004												
12...	1430	Environmental	.32	731	14.8	8.6	8.5	594	680	15.7	81.1	48.3
30...	1500	Environmental	137	726	12.5	8.1	7.8	291	305	6.4	30.8	17.0
NOV												
30...	1345	Environmental	1.0	731	17.4	8.3	--	--	790	.1	--	--
MAR 2005												
29...	1640	Environmental	54	718	11.0	7.9	--	--	252	.0	--	--
JUL												
28...	0830	Environmental	.09	737	8.2	8.0	--	--	723	16.8	--	--
05078730 COUNTY DITCH 140 NEAR BENOIT, MN (SW1) (LAT 47 41 15N LONG 096 22 23W)												
OCT 2004												
13...	0830	Environmental	.57	737	7.0	7.8	8.4	462	632	8.4	67.4	42.5
31...	1315	Environmental	--	734	10.8	8.0	7.7	376	388	4.0	40.6	23.0
DEC												
01...	1115	Environmental	1.7	739	14.1	8.3	--	--	587	.1	--	--
MAR 2005												
29...	1340	Environmental	41	718	11.8	7.5	--	--	256	.5	--	--
JUL												
28...	0710	Environmental	.21	738	2.0	7.4	--	--	682	15.8	--	--
05079250 COUNTY DITCH 65 NEAR MAPLE BAY, MN (SW2) (LAT 47 36 43N LONG 096 16 46W)												
OCT 2004												
11...	1410	Environmental	.35	738	15.2	8.4	8.3	560	647	16.2	78.9	40.8
30...	1130	Environmental	--	722	9.4	7.8	7.7	256	260	7.9	28.1	15.0
NOV												
30...	1110	Environmental	1.7	--	10.3	7.5	--	--	579	.1	--	--
30...	1115	Replicate	1.7	730	10.3	7.5	--	--	579	.1	--	--
MAR 2005												
31...	0750	Environmental	29	734	10.8	7.6	--	--	264	.0	--	--
JUL												
27...	1140	Environmental	.22	736	4.8	7.6	--	--	465	18.2	--	--
05079200 COUNTY DITCH 72 (BURNHAM CK) NR. MAPLE BAY (SW3) (LAT 47 38 19N LONG 096 16 48W)												
OCT 2004												
12...	0830	Environmental	.03	733	8.2	7.7	8.1	558	642	11.3	88.6	34.2
30...	1415	Environmental	28	723	11.2	7.8	7.6	287	295	7.4	39.7	13.4
NOV												
30...	0910	Environmental	.85	730	10.1	7.6	--	--	698	.4	--	--
MAR 2005												
30...	1450	Environmental	5.8	726	8.6	7.6	--	--	243	.1	--	--
JUL												
27...	1300	Environmental	.07	736	10.2	7.9	--	--	690	19.2	--	--
27...	1301	Replicate	.07	736	10.2	7.9	--	--	690	19.2	--	--
05078520 CYR CREEK NEAR MARCOUX CORNERS, MN (SW5) (LAT 47 48 12N LONG 096 16 35W)												
OCT 2004												
13...	1620	Environmental	.19	738	9.4	7.8	7.9	669	740	10.4	97.8	43.8
NOV												
01...	0800	Environmental	68	738	9.8	7.8	7.6	377	389	4.9	44.6	21.3
DEC												
02...	1040	Environmental	.58	736	11.6	7.8	--	--	964	.1	--	--
MAR 2005												
31...	1000	Environmental	31	737	11.9	7.9	--	--	307	.8	--	--
31...	1100	Blank	--	--	--	--	--	--	--	--	--	--

GLACIAL RIDGE SURFACE-WATER WATER QUALITY—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	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)	Sulfate water, fltrd, mg/L (00945)	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)
05078720 CO DITCH 140 ABV BR-6 IMP NR TILDEN JCT, MN (SW8) (LAT 47 40 01N LONG 096 20 18W)													
OCT 2004													
12...	4.62	12.5	305	372	11	6.81	70.3	1.2	1.2	<.04	<.06	<.008	<.02
30...	5.97	4.83	114	139	--	5.50	35.3	.58	.75	<.04	.25	<.008	.04
NOV													
30...	--	--	344	420	--	--	--	.81	.85	<.04	.34	<.008	<.02
MAR 2005													
29...	--	--	87	106	--	--	--	.75	1.1	.09	.27	.012	.04
JUL													
28...	--	--	368	449	--	--	--	1.2	1.2	<.04	E.05	<.008	<.02
05078730 COUNTY DITCH 140 NEAR BENOIT, MN (SW1) (LAT 47 41 15N LONG 096 22 23W)													
OCT 2004													
13...	5.71	12.9	253	309	--	7.82	81.3	1.0	1.1	<.04	<.06	<.008	<.02
31...	5.21	7.34	202	246	--	5.73	47.9	.62	.73	<.04	.08	<.008	E.01
DEC													
01...	--	--	248	303	--	--	--	.77	.88	<.04	.15	<.008	<.02
MAR 2005													
29...	--	--	90	110	--	--	--	.80	1.1	.09	.21	.011	.04
JUL													
28...	--	--	297	362	--	--	--	1.2	1.3	<.04	<.06	<.008	<.02
05079250 COUNTY DITCH 65 NEAR MAPLE BAY, MN (SW2) (LAT 47 36 43N LONG 096 16 46W)													
OCT 2004													
11...	3.64	13.6	332	405	7	4.88	23.2	.59	.62	<.04	<.06	<.008	<.02
30...	4.06	3.73	118	144	--	3.16	13.5	.59	.99	<.04	E.05	<.008	<.02
NOV													
30...	--	--	290	354	--	--	--	.80	.83	.04	.11	<.008	<.02
30...	--	--	278	339	--	--	--	.82	.87	.05	.11	<.008	<.02
MAR 2005													
31...	--	--	119	146	--	--	--	.93	1.2	.16	.23	.012	.03
JUL													
27...	--	--	203	248	--	--	--	.88	1.0	E.02	<.06	<.008	<.02
05079200 COUNTY DITCH 72 (BURNHAM CK) NR. MAPLE BAY (SW3) (LAT 47 38 19N LONG 096 16 48W)													
OCT 2004													
12...	1.99	10.5	275	336	--	14.1	51.3	.60	.62	<.04	<.06	<.008	<.02
30...	4.43	2.77	123	150	--	5.78	19.2	.61	.72	<.04	E.05	<.008	E.01
NOV													
30...	--	--	317	387	--	--	--	.71	.73	<.04	.29	<.008	<.02
MAR 2005													
30...	--	--	100	122	--	--	--	.66	.90	.10	.12	E.006	E.01
JUL													
27...	--	--	253	309	--	--	--	.89	.94	E.04	<.06	<.008	E.02
27...	--	--	248	303	--	--	--	.91	.93	.05	<.06	<.008	E.02
05078520 CYR CREEK NEAR MARCOUX CORNERS, MN (SW5) (LAT 47 48 12N LONG 096 16 35W)													
OCT 2004													
13...	4.11	14.6	349	426	--	12.8	47.8	.83	.77	<.04	<.06	<.008	E.01
NOV													
01...	5.43	6.69	146	178	--	6.24	38.8	.72	.81	<.04	.13	E.004	<.02
DEC													
02...	--	--	409	499	--	--	--	.70	.78	.09	.92	.016	<.02
MAR 2005													
31...	--	--	95	116	--	--	--	.93	1.2	.08	.42	.019	.03
31...	--	--	--	--	--	--	--	<.10	<.10	<.04	<.06	<.008	<.02

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)
05078720 CO DITCH 140 ABV BR-6 IMP NR TILDEN JCT, MN (SW8) (LAT 47 40 01N LONG 096 20 18W)		
OCT 2004		
12...	.013	.018
30...	.066	.123
NOV		
30...	.005	.010
MAR 2005		
29...	.074	.164
JUL		
28...	.013	.035
05078730 COUNTY DITCH 140 NEAR BENOIT, MN (SW1) (LAT 47 41 15N LONG 096 22 23W)		
OCT 2004		
13...	.015	.035
31...	.030	.057
DEC		
01...	.009	.025
MAR 2005		
29...	.070	.139
JUL		
28...	.038	.061
05079250 COUNTY DITCH 65 NEAR MAPLE BAY, MN (SW2) (LAT 47 36 43N LONG 096 16 46W)		
OCT 2004		
11...	.006	.013
30...	.028	.120
NOV		
30...	.010	.016
30...	.008	.016
MAR 2005		
31...	.051	.096
JUL		
27...	.020	.046
05079200 COUNTY DITCH 72 (BURNHAM CK) NR. MAPLE BAY (SW3) (LAT 47 38 19N LONG 096 16 48W)		
OCT 2004		
12...	.007	.012
30...	.040	.064
NOV		
30...	.004	.008
MAR 2005		
30...	.024	.071
JUL		
27...	.043	.051
27...	.042	.052
05078520 CYR CREEK NEAR MARCOUX CORNERS, MN (SW5) (LAT 47 48 12N LONG 096 16 35W)		
OCT 2004		
13...	.026	.036
NOV		
01...	.023	.048
DEC		
02...	.020	.032
MAR 2005		
31...	.061	.106
31...	<.004	<.004

GLACIAL RIDGE SURFACE-WATER WATER QUALITY—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unf lab, uS/cm 25 degC (90095)	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)
05078470 JUDICIAL DITCH 64 NEAR MENTOR, MN (SW4) (LAT 47 44 16N LONG 096 12 08W)												
OCT 2004												
12...	1130	Environmental	.39	731	9.7	8.0	8.2	562	647	11.3	85.6	37.2
31...	0830	Environmental	64	730	8.5	7.7	7.7	332	342	5.5	41.9	18.7
DEC												
01...	0825	Environmental	1.2	735	12.2	7.8	--	--	752	.0	--	--
MAR 2005												
30...	1240	Environmental	30	725	10.1	7.6	--	--	232	.1	--	--
JUL												
27...	1000	Environmental	1.1	736	8.5	7.9	--	--	470	15.6	--	--
05078770 JUDICIAL DITCH 66 NEAR MARCOUX CORNERS, MN (SW6) (LAT 47 46 54N LONG 096 19 52W)												
OCT 2004												
13...	1420	Environmental	1.5	738	13.0	8.6	8.0	558	494	11.8	59.1	30.3
31...	1050	Environmental	--	734	10.4	8.0	7.7	386	400	4.7	41.4	21.9
DEC												
02...	0820	Environmental	2.4	736	14.1	7.9	--	--	580	.0	--	--
MAR 2005												
30...	1010	Environmental	67	726	12.1	7.8	--	--	302	.0	--	--
JUL												
27...	0750	Environmental	.66	738	8.8	7.8	--	--	596	15.1	--	--

Date	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	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)	Sulfate water, fltrd, mg/L (00945)	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)
05078470 JUDICIAL DITCH 64 NEAR MENTOR, MN (SW4) (LAT 47 44 16N LONG 096 12 08W)													
OCT 2004													
12...	3.34	9.74	313	382	--	7.22	36.6	.62	.63	<.04	.21	<.008	<.02
31...	4.96	4.10	155	189	--	4.29	19.2	.64	.72	<.04	E.06	<.008	<.02
DEC													
01...	--	--	359	438	--	--	--	.66	.64	<.04	.53	E.004	<.02
MAR 2005													
30...	--	--	90	110	--	--	--	1.1	1.4	.31	.32	.014	.06
JUL													
27...	--	--	196	239	--	--	--	.65	.69	<.04	<.06	<.008	<.02
05078770 JUDICIAL DITCH 66 NEAR MARCOUX CORNERS, MN (SW6) (LAT 47 46 54N LONG 096 19 52W)													
OCT 2004													
13...	4.18	7.66	184	224	8	7.44	70.6	.37	.40	<.04	.51	E.007	<.02
31...	5.92	9.64	143	174	--	9.10	49.5	.82	1.1	<.04	.64	E.007	E.02
DEC													
02...	--	--	215	262	--	--	--	.42	.41	.07	1.33	.013	<.02
MAR 2005													
30...	--	--	97	118	--	--	--	.92	1.3	.13	1.06	.032	.03
JUL													
27...	--	--	176	215	--	--	--	.47	.62	<.04	.11	E.006	<.02

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)
05078470 JUDICIAL DITCH 64 NEAR MENTOR, MN (SW4) (LAT 47 44 16N LONG 096 12 08W)		
OCT 2004		
12...	.008	.011
31...	.014	.034
DEC		
01...	.010	.013
MAR 2005		
30...	.095	.169
JUL		
27...	.017	.031
05078770 JUDICIAL DITCH 66 NEAR MARCOUX CORNERS, MN (SW6) (LAT 47 46 54N LONG 096 19 52W)		
OCT 2004		
13...	.006	.015
31...	.043	.124
DEC		
02...	.006	.011
MAR 2005		
30...	.056	.169
JUL		
27...	.017	.050

GLACIAL RIDGE GROUND-WATER WATER QUALITY

MISCELLANEOUS STATION ANALYSES

Date	Time	Sample type	Depth to water level, feet below LSD (72019)	Turbidity, water, unfltrd field, NTU (61028)	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, air, deg C (00020)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)
		474135096203001 G01-R 149N44W30CAAD 0000620661 (LAT 47 41 34N LONG 096 20 30W)										
OCT 2004												
13...	1730	Environmental	3.30	1,070	736	9.3	90	6.7	868	5.5	12.3	467
APR 2005												
14...	1000	Environmental	--	--	739	--	--	6.5	895	12.0	4.0	487
JUN												
01...	1730	Environmental	--	39	730	.8	7	6.4	867	24.0	10.0	458
JUL												
01...	0930	Environmental	--	--	733	.3	3	7.2	889	920	12.5	467
AUG												
10...	1430	Environmental	--	--	736	.8	8	6.8	890	23.0	15.2	464
SEP												
21...	1330	Environmental	--	--	729	.3	4	8.3	880	22.0	15.1	482
		474346096185501 G08-R 149N44W17ABAD 0000620668 (LAT 47 43 45N LONG 096 18 54W)										
OCT 2004												
13...	0900	Environmental	6.10	110	738	7.7	73	7.5	1,040	6.8	11.3	368
13...	0905	9 S	--	420	738	7.7	73	7.5	1,040	6.8	11.3	--
APR 2005												
13...	1000	Environmental	--	--	740	--	--	6.3	841	14.0	4.4	297
MAY												
24...	1030	Environmental	--	1,190	733	.1	.0	7.1	1,030	15.5	7.7	314
24...	1730	Blank	--	--	--	--	--	--	180	--	--	2
JUN												
30...	1900	Environmental	--	--	728	1.7	16	7.0	1,120	16.5	11.3	341
AUG												
11...	1600	Environmental	--	--	7	.9	.0	7.2	1,140	20.0	13.2	345
SEP												
22...	1530	Environmental	--	--	737	.4	4	6.5	1,010	19.5	13.9	351
		474129096145202 G09 149N44W26DDCA 0000620669 (LAT 47 41 29N LONG 096 14 52W)										
OCT 2004												
14...	1400	Environmental	3.29	9.4	720	.3	3	7.4	534	5.5	9.1	260
APR 2005												
13...	1300	Environmental	--	--	738	--	--	7.1	519	17.0	3.6	247
JUN												
02...	1330	Environmental	--	26	725	.3	3	7.1	526	20.0	7.5	263
30...	1600	Environmental	--	--	724	<.2	--	7.1	521	15.0	9.0	265
AUG												
10...	1030	Environmental	--	--	735	3.2	30	7.6	524	21.5	11.5	254
SEP												
20...	1100	Environmental	--	--	731	M	.0	7.6	566	20.5	11.4	278
		474128096175501 G13 149N44W28CADD 0000620673 (LAT 47 41 28N LONG 096 17 55W)										
OCT 2004												
13...	1400	Environmental	7.18	5.9	734	5.9	56	7.3	785	8.5	10.9	458
APR 2005												
12...	1100	Environmental	--	130	729	6.5	53	7.0	725	7.5	4.2	394
MAY												
27...	1100	Environmental	--	2.6	727	7.4	64	7.4	717	8.0	7.0	445
JUN												
28...	1700	Environmental	--	--	731	7.1	70	7.7	666	--	12.2	374
AUG												
11...	1430	Environmental	--	--	729	6.1	59	7.3	728	17.5	11.9	414
SEP												
21...	1530	Environmental	--	--	728	5.6	55	8.9	744	21.0	12.6	425

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	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)	Total nitrogen, wat flt by analysis, mg/L (62854)	Data base number
474135096203001 G01-R 149N44W30CAAD 0000620661 (LAT 47 41 34N LONG 096 20 30W)									
OCT 2004									
13...	570	.0	.22	<.06	<.008	<.006	.018	.83	01
APR 2005									
14...	594	--	.20	<.06	<.008	<.006	.015	1.05	01
JUN									
01...	559	--	.14	<.06	<.008	<.006	.013	.94	01
JUL									
01...	569	.0	.15	<.06	<.008	.013	.021	1.00	01
AUG									
10...	565	.0	.20	<.06	E.005	<.006	.023	.99	01
SEP									
21...	587	.0	.18	<.06	E.004	<.006	.019	.93	01
474346096185501 G08-R 149N44W17ABAD 0000620668 (LAT 47 43 45N LONG 096 18 54W)									
OCT 2004									
13...	449	.0	E.02	30.4	.036	E.003	.005	30.9	01
13...	--	--	E.02	29.9	.037	<.006	.006	31.3	77
APR 2005									
13...	362	--	<.04	35.2	.017	<.006	E.003	36.3	01
MAY									
24...	383	--	<.04	41.9	.018	E.004	E.003	44.6	01
24...	2	--	<.04	<.06	<.008	<.006	<.004	<.06	77
JUN									
30...	415	.0	<.04	55.5	.023	<.006	E.003	53.8	01
AUG									
11...	419	.0	<.04	45.8	.066	<.006	E.003	45.0	01
SEP									
22...	426	.0	<.04	34.5	.054	E.003	.009	33.4	01
474129096145202 G09 149N44W26DDCA 0000620669 (LAT 47 41 29N LONG 096 14 52W)									
OCT 2004									
14...	318	.0	<.04	3.77	.051	<.006	.005	4.22	01
APR 2005									
13...	302	--	<.04	5.47	.031	<.006	.006	6.07	01
JUN									
02...	321	--	<.04	3.67	.051	<.006	E.004	4.14	01
30...	322	.0	<.04	3.11	.038	<.006	E.004	3.72	01
AUG									
10...	308	.0	<.04	1.95	.034	<.006	.007	2.52	01
SEP									
20...	339	.0	<.04	4.01	.069	<.006	.006	4.55	01
474128096175501 G13 149N44W28CADD 0000620673 (LAT 47 41 28N LONG 096 17 55W)									
OCT 2004									
13...	559	.0	<.04	.09	<.008	<.006	<.004	.27	01
APR 2005									
12...	481	--	<.04	.07	<.008	<.006	E.003	.24	01
MAY									
27...	543	--	<.04	E.05	<.008	<.006	<.004	.28	01
JUN									
28...	453	1	<.04	.06	<.008	<.006	E.003	.34	01
AUG									
11...	504	.0	<.04	E.05	<.008	<.006	E.003	.26	01
SEP									
21...	515	1	<.04	.07	<.008	<.006	E.003	.23	01

GLACIAL RIDGE GROUND-WATER WATER QUALITY—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Sample type	Depth to water level, feet below LSD (72019)	Turbidity, water, unfltrd field, NTU (61028)	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, air, deg C (00020)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)
473841096153101 G15-R 148N44W10CCCC 0000620675 (LAT 47 38 40N LONG 096 15 30W)												
OCT 2004												
15...	0900	Environmental	3.06	85	721	.3	3	7.7	653	1.5	10.0	207
APR 2005												
14...	0800	Environmental	--	--	736	--	--	6.5	657	6.5	3.4	205
14...	0801	Replicate	--	--	--	--	--	--	--	--	--	--
MAY												
26...	1830	Environmental	--	63	727	.1	.0	7.8	649	12.0	5.8	208
JUN												
30...	1200	Environmental	--	--	721	<.2	--	7.4	661	14.5	9.2	205
30...	1202	Replicate	--	--	721	<.2	--	7.3	665	14.5	9.1	205
AUG												
09...	1700	Environmental	--	--	731	7.2	72	8.2	618	27.5	13.1	193
SEP												
22...	1000	Environmental	--	--	735	.3	3	7.6	658	10.5	12.0	209
474221096120901 G16 149N43W19DADD 0000620676 (LAT 47 42 21N LONG 096 12 08W)												
OCT 2004												
15...	1145	Environmental	3.71	6.2	722	4.6	43	7.5	405	4.0	10.1	209
APR 2005												
11...	1500	Environmental	--	5.9	724	2.4	19	7.1	387	10.0	3.9	208
JUN												
01...	1130	Environmental	--	.0	730	5.2	46	7.0	393	18.0	7.5	202
29...	0900	Environmental	--	--	727	4.8	44	7.2	392	16.5	9.2	195
AUG												
11...	1000	Environmental	--	--	730	5.6	53	7.7	388	14.0	11.2	193
SEP												
22...	1330	Environmental	--	--	735	4.7	45	7.9	397	21.5	12.1	202
22...	1332	Replicate	--	--	735	4.4	42	7.3	399	21.5	11.9	204
474125096120602 G22S-R 149N43W29CCBB 0000620682 (LAT 47 41 25N LONG 096 12 05W)												
OCT 2004												
15...	1045	Environmental	21.89	300	720	8.5	77	7.2	1,460	2.5	8.3	285
APR 2005												
12...	0800	Environmental	--	94	724	9.2	81	7.0	1,080	--	7.6	261
JUN												
01...	1430	Environmental	--	23	729	6.2	58	6.8	1,200	25.0	10.2	278
29...	1200	Environmental	--	--	724	8.3	77	7.3	1,190	16.5	9.5	266
AUG												
11...	1200	Environmental	--	--	729	10.2	100	7.4	1,160	18.0	12.2	258
11...	1305	Blank	--	--	728	9.0	103	6.5	2	15.5	19.6	--
SEP												
22...	1200	Environmental	--	--	734	8.1	76	7.5	1,180	16.0	10.7	274
473945096202401 E01D-R 148N45W01CBDD L107 0000516287 (LAT 47 39 44N LONG 096 20 24W)												
OCT 2004												
14...	1130	Environmental	--	46	725	.3	3	7.8	740	7.0	8.1	389
APR 2005												
12...	1300	Environmental	--	--	731	--	--	6.4	715	8.5	6.8	354
MAY												
26...	1500	Environmental	--	6.2	729	.1	.0	8.0	738	11.5	7.8	351
JUN												
30...	1000	Environmental	--	--	722	<.2	--	7.6	732	16.0	11.4	375
AUG												
09...	1330	Environmental	--	--	733	.4	4	8.3	742	25.5	15.1	363
SEP												
21...	1130	Environmental	--	--	729	.2	2	9.4	746	21.0	11.5	373

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	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)	Total nitrogen, wat flt by analysis, mg/L (62854)
473841096153101 G15-R 148N44W10CCCC 0000620675 (LAT 47 38 40N LONG 096 15 30W)								
OCT 2004								
15...	252	.0	<.04	10.9	.659	.006	.011	11.2
APR 2005								
14...	250	--	<.04	13.5	.400	E.004	.011	14.0
14...	--	--	<.04	13.5	.382	E.005	.010	14.1
MAY								
26...	253	--	<.04	13.9	.287	E.004	.011	14.3
JUN								
30...	249	.0	<.04	14.3	.336	E.005	.012	13.5
30...	250	.0	<.04	15.2	.245	.007	.011	14.1
AUG								
09...	234	.0	<.04	14.0	.303	.007	.012	14.3
SEP								
22...	254	.0	<.04	13.3	.439	.007	.011	14.2
474221096120901 G16 149N43W19DADD 0000620676 (LAT 47 42 21N LONG 096 12 08W)								
OCT 2004								
15...	255	.0	<.04	.80	.011	<.006	E.003	.88
APR 2005								
11...	254	--	<.04	.60	.011	<.006	.004	.70
JUN								
01...	246	--	<.04	.97	.008	<.006	<.004	1.03
29...	237	.0	<.04	.99	E.006	<.006	E.004	1.16
AUG								
11...	235	.0	<.04	1.01	E.005	<.006	E.003	1.14
SEP								
22...	246	.0	<.04	.86	E.006	<.006	E.004	1.00
22...	248	.0	<.04	.96	E.005	<.006	.004	1.10
474125096120602 G22S-R 149N43W29CCBB 0000620682 (LAT 47 41 25N LONG 096 12 05W)								
OCT 2004								
15...	347	.0	<.04	112	<.008	<.006	.004	116
APR 2005								
12...	318	--	<.04	70.3	<.008	E.005	.005	65.2
JUN								
01...	339	--	<.04	69.8	<.008	<.006	E.003	66.5
29...	324	.0	<.04	69.4	<.008	E.003	.006	68.7
AUG								
11...	313	.0	<.04	68.7	<.008	<.006	.004	65.7
11...	--	--	<.04	<.06	<.008	<.006	<.004	<.06
SEP								
22...	333	.0	<.04	69.9	<.008	E.003	.006	71.8
473945096202401 E01D-R 148N45W01CBDD L107 096 20 24W) 0000516287 (LAT 47 39 44N LONG								
OCT 2004								
14...	475	.0	3.64	<.06	<.008	.276	.27	3.80
APR 2005								
12...	431	--	3.37	<.06	<.008	.289	.27	3.82
MAY								
26...	429	--	3.51	<.06	<.008	.227	.093	3.83
JUN								
30...	456	.0	3.48	<.06	<.008	.252	.27	3.77
AUG								
09...	436	3	3.45	<.06	E.006	.248	.28	3.74
SEP								
21...	448	3	3.35	<.06	<.008	.280	.28	3.75

GLACIAL RIDGE GROUND-WATER WATER QUALITY—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Sample type	Depth to water level, feet below LSD (72019)	Turbidity, water, unfltrd field, NTU (61028)	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, air, deg C (00020)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)
473945096202402 E01S-R 148N45W01CBDD L000 0000249810 (LAT 47 39 44N LONG 096 20 24W)												
OCT 2004												
14...	0945	Environmental	6.51	3.2	725	3.4	31	7.3	716	7.0	8.9	350
APR 2005												
12...	1400	Environmental	--	3,020	731	2.9	24	7.1	655	7.5	5.6	261
MAY												
26...	1400	Environmental	--	10	729	2.0	18	7.6	650	12.0	7.0	268
JUN												
29...	1630	Environmental	--	--	723	6.7	62	7.4	642	19.0	9.8	290
AUG												
09...	0930	Environmental	--	--	733	4.1	40	8.1	607	21.5	12.0	260
SEP												
21...	1000	Environmental	--	--	729	6.1	59	8.8	578	21.5	11.2	264
474129096145201 E02D 149N44W26DACD Stock well near G09S (LAT 47 41 29N LONG 096 14 52W)												
OCT 2004												
14...	1530	Environmental	11.29	12	720	.2	2	7.6	610	5.5	7.2	316
APR 2005												
13...	1500	Environmental	--	180	738	.0	.0	7.3	557	19.0	6.8	308
JUN												
02...	1430	Environmental	--	30	725	--	--	7.4	599	22.0	7.8	323
JUL												
01...	1100	Environmental	--	--	731	.5	4	8.4	624	22.5	7.9	324
AUG												
10...	1230	Environmental	--	--	734	.4	4	7.9	610	20.5	9.0	298
SEP												
20...	1330	Environmental	--	--	732	.3	3	8.3	608	24.5	8.8	317
474436096140801 E03-R 149N44W12BADA S12 Ob. Well 1 0000654754 (LAT 47 44 35N LONG 096 14 07W)												
OCT 2004												
15...	1500	Environmental	7.22	120	723	.4	4	7.3	716	2.5	7.8	316
APR 2005												
13...	1630	Environmental	--	1,820	739	--	--	6.9	687	21.5	7.5	291
JUN												
02...	1000	Environmental	--	20	726	.8	7	7.0	713	22.0	8.3	305
JUL												
01...	1500	Environmental	--	--	731	1.1	10	7.8	728	26.0	9.1	306
AUG												
10...	1700	Environmental	--	--	734	.8	8	7.5	721	24.5	9.4	306
SEP												
20...	1600	Environmental	--	--	732	.9	8	8.7	715	23.5	9.4	294
474708096261801 L043 150N45W29ADAA Gentilly (LAT 47 47 08N LONG 096 26 18W)												
OCT 2004												
14...	0800	Environmental	15.56	160	730	9.4	82	7.7	512	4.0	7.8	277
APR 2005												
13...	0730	Environmental	--	--	742	9.9	83	7.4	414	3.5	6.4	236
MAY												
27...	0900	Environmental	--	1.0	730	8.1	70	7.7	452	8.0	7.0	253
JUN												
28...	1930	Environmental	--	--	735	6.2	58	8.0	469	23.0	10.9	250
AUG												
12...	1000	Environmental	--	--	732	10.9	99	7.8	464	16.5	9.3	245
SEP												
23...	1000	Environmental	--	--	740	9.4	85	8.3	464	14.0	9.6	253

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	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)	Total nitrogen, wat flt by analysis, mg/L (62854)
473945096202402 E01S-R 148N45W01CBDD L000 0000249810 (LAT 47 39 44N LONG 096 20 24W)								
OCT 2004								
14...	428	.0	.10	9.50	.014	E.004	.004	10.4
APR 2005								
12...	318	--	.06	13.4	<.008	<.006	.004	13.9
MAY								
26...	327	--	E.03	12.2	<.008	<.006	.005	12.8
JUN								
29...	353	.0	E.04	10.6	<.008	E.003	.006	10.5
AUG								
09...	314	1	.04	8.08	.008	E.003	.006	8.61
SEP								
21...	321	.0	E.04	6.46	<.008	E.003	.005	6.90
474129096145201 E02D 149N44W26DACD Stock well near G09S (LAT 47 41 29N LONG 096 14 52W)								
OCT 2004								
14...	386	.0	.90	<.06	<.008	.055	.060	.96
APR 2005								
13...	376	--	.91	<.06	<.008	.019	.020	1.02
JUN								
02...	394	--	.90	<.06	<.008	.033	.019	.99
JUL								
01...	393	1	.87	<.06	<.008	.046	.053	.99
AUG								
10...	362	1	.94	<.06	E.005	.038	.068	1.05
SEP								
20...	386	.0	--	--	--	--	--	--
474436096140801 E03-R 149N44W12BADA S12 Ob. Well 1 0000654754 (LAT 47 44 35N LONG 096 14 07W)								
OCT 2004								
15...	386	.0	<.04	5.56	.073	<.006	E.003	5.93
APR 2005								
13...	355	--	<.04	6.21	.039	E.004	.007	6.22
JUN								
02...	372	--	<.04	6.43	.027	E.003	E.003	6.23
JUL								
01...	372	.0	<.04	7.74	.037	E.003	E.004	7.74
AUG								
10...	373	.0	<.04	4.79	.055	E.003	.006	4.93
SEP								
20...	358	.0	<.04	7.55	.060	<.006	.006	7.69
474708096261801 L043 150N45W29ADAA Gentilly (LAT 47 47 08N LONG 096 26 18W)								
OCT 2004								
14...	337	.0	<.04	1.46	<.008	E.003	.006	1.69
APR 2005								
13...	288	--	<.04	1.17	<.008	<.006	.004	1.33
MAY								
27...	309	--	<.04	.90	<.008	<.006	E.004	.99
JUN								
28...	303	.0	<.04	.87	<.008	E.005	.004	1.11
AUG								
12...	298	.0	<.04	1.03	<.008	<.006	.004	1.22
SEP								
23...	306	1	<.04	.96	<.008	<.006	.005	1.11

MERCURY CYCLING in VOYAGEURS NATIONAL PARK

MISCELLANEOUS STATION ANALYSES

Date	Time	Sample type	Trans-parency Secchi disc, meters (00078)	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)	pH, water, unfltrd lab, std units (00403)	Specif. conduc-tance, wat unf lab, uS/cm 25 degC (90095)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, air, deg C (00020)	Temper-ature, water, deg C (00010)
482951092531601 SHOEPACK LAKE NR INTERNATIONAL FALLS,MN (LAT 48 29 51N LONG 092 53 16W)												
MAY 2005												
12...	1330	Environmental	--	744	9.9	91	6.2	E6.7	31	26	--	11.7
12...	1335	Environmental	--	--	--	--	--	--	--	--	--	--
JUL												
14...	1040	Environmental	1.20	736	8.8	115	7.2	--	--	30	--	27.3
SEP												
15...	1115	Environmental	1.50	732	7.9	84	6.1	--	--	27	18.0	18.5
483129092462001 PEARY LAKE NR INTERNATIONAL FALLS MN (LAT 48 31 29N LONG 092 46 20W)												
MAY 2005												
13...	1200	Environmental	2.00	732	10.4	95	6.8	7.0	28	27	--	11.1
JUL												
13...	1225	Environmental	2.10	735	7.2	97	7.3	--	--	29	--	28.7
SEP												
14...	1235	Environmental	2.50	733	8.2	89	6.9	--	--	29	14.0	19.2
14...	1245	Blank	--	--	--	--	--	--	--	--	--	--
483059092474501 BROWN LAKE NR INTERNATIONAL FALLS MN (LAT 48 30 59N LONG 092 47 45W)												
MAY 2005												
13...	1345	Environmental	2.40	--	10.1	732	6.6	6.8	25	23	--	10.9
JUL												
13...	1420	Environmental	2.40	734	7.2	97	7.1	--	--	25	--	29.0
SEP												
14...	1420	Environmental	2.00	732	8.5	92	6.9	--	--	27	15.0	19.1
483109092422601 RYAN LAKE NR INTERNATIONAL FALLS MN (LAT 48 31 09N LONG 092 42 26W)												
MAY 2005												
13...	1030	Environmental	3.20	732	10.1	91	6.5	6.8	28	27	--	11.1
JUL												
13...	1040	Environmental	--	735	7.1	93	7.1	--	--	27	--	27.6
15...	1040	Environmental	--	--	--	--	--	--	--	--	--	--
SEP												
14...	1050	Environmental	1.50	732	8.3	90	6.5	--	--	31	13.5	19.2

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	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)	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)
482951092531601 SHOEPACK LAKE NR INTERNATIONAL FALLS,MN (LAT 48 29 51N LONG 092 53 16W)													
MAY 2005													
12...	2.40	1.04	.71	1.06	4	4	.0	.34	<.1	3.31	3.5	50	.52
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
483129092462001 PEARY LAKE NR INTERNATIONAL FALLS MN (LAT 48 31 29N LONG 092 46 20W)													
MAY 2005													
13...	2.50	1.11	.64	1.07	8	10	.0	.23	<.1	2.17	1.6	27	.37
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
483059092474501 BROWN LAKE NR INTERNATIONAL FALLS MN (LAT 48 30 59N LONG 092 47 45W)													
MAY 2005													
13...	1.96	.877	.60	.98	6	7	.0	.22	<.1	2.98	1.7	36	.38
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
483109092422601 RYAN LAKE NR INTERNATIONAL FALLS MN (LAT 48 31 09N LONG 092 42 26W)													
MAY 2005													
13...	2.46	.985	.48	1.01	4	5	.0	.24	<.1	3.58	3.3	43	.48
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--

MERCURY CYCLING in VOYAGEURS NATIONAL PARK—Continued

MISCELLANEOUS STATION ANALYSES—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)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Organic carbon, water, unfltrd mg/L (00680)	Iron, water, fltrd, ug/L (01046)	Mangan-ese, water, fltrd, ug/L (01056)	Mercury water unfltrd ng/L (50286)	Methyl-mercury water unfltrd ng/L (50284)
482951092531601 SHOEPACK LAKE NR INTERNATIONAL FALLS,MN (LAT 48 29 51N LONG 092 53 16W)												
MAY 2005												
12...	.66	<.04	.08	<.008	<.02	.008	.023	15.3	286	47.2	3.94	.24
12...	--	--	--	--	--	--	--	15.1	--	--	--	--
JUL												
14...	--	--	--	--	--	--	--	15.3	--	--	3.69	.20
SEP												
15...	--	--	--	--	--	--	--	--	--	--	2.24	.16
483129092462001 PEARY LAKE NR INTERNATIONAL FALLS MN (LAT 48 31 29N LONG 092 46 20W)												
MAY 2005												
13...	.49	<.04	<.06	<.008	<.02	.006	.024	9.3	145	.7	2.01	.10
JUL												
13...	--	--	--	--	--	--	--	9.8	--	--	1.77	.07
SEP												
14...	--	--	--	--	--	--	--	--	--	--	1.09	<.04
14...	--	--	--	--	--	--	--	--	--	--	.14	<.04
483059092474501 BROWN LAKE NR INTERNATIONAL FALLS MN (LAT 48 30 59N LONG 092 47 45W)												
MAY 2005												
13...	.50	<.04	.07	<.008	<.02	.006	.011	9.6	173	13.8	2.56	.16
JUL												
13...	--	--	--	--	--	--	--	10.1	--	--	2.24	.17
SEP												
14...	--	--	--	--	--	--	--	--	--	--	2.04	.10
483109092422601 RYAN LAKE NR INTERNATIONAL FALLS MN (LAT 48 31 09N LONG 092 42 26W)												
MAY 2005												
13...	.57	.08	E.05	<.008	<.02	.006	.011	11.2	178	29.1	3.07	.19
JUL												
13...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	12.0	--	--	2.35	.10
SEP												
14...	--	--	--	--	--	--	--	--	--	--	--	.15

SITES near US HIGHWAY 169, MILLE LACS LAKE AREA

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Sample type	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)	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)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)
461814093500401 WETLAND 9 SOUTHEAST OF BORDEN LK OTFLW NR GARRISON (LAT 46 18 14N LONG 093 50 04W)												
SEP 2005												
14...	0935	Environmental	--	--	--	--	--	--	--	--	--	--
14...	0935	Composite (time)	--	--	--	--	--	--	--	--	--	--
14...	0945	Composite (time)	2.1	20	5.3	54	13.1	2.8	.07	<.06	E.006	<.02
461715093494201 WETLAND 15 SOUTH OF GARRISON, MN (LAT 46 17 15N LONG 093 49 42W)												
SEP 2005												
13...	1435	Environmental	--	--	--	--	--	--	--	--	--	--
13...	1435	Composite (time)	--	--	--	--	--	--	--	--	--	--
13...	1445	Composite (time)	1.8	20	6.8	74	18.4	1.2	.05	E.05	E.004	<.02
13...	1446	Blank	--	--	--	--	--	<.10	<.04	<.06	<.008	<.04
461546093493601 WETLAND 16 WEST OF ST. ALBANS BAY NEAR GARRISON,MN (LAT 46 15 46N LONG 093 49 36W)												
SEP 2005												
13...	1335	Composite (time)	--	--	--	--	--	--	--	--	--	--
13...	1345	Composite (time)	3.4	36	5.1	62	17.1	1.6	.04	<.06	E.004	E.02

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Bed sedi-ment, dry svd sve dia percent <.063mm (80164)	Bed sedi-ment, dry svd sve dia percent <1 mm (80168)	Bed sedi-ment falldia dst wat percent <.002mm (80294)	Bed sedi-ment, falldia dst wat percent <.004mm (80157)	Bed sedi men falld dst w perce <.008 (8029	Bed sedi-ment, falldia dst wat percent <.004mm (80157)	Bed sedi-ment falldia dst wat percent <.008mm (80293)	Bed sedi-ment, falldia dst wat percent <.016mm (80282)	Bed sedi-ment, falldia dst wat percent <.031mm (80283)	Data base number
461814093500401 WETLAND 9 SOUTHEAST OF BORDEN LK OTFLW NR GARRISON (LAT 46 18 14N LONG 093 50 04W)												
SEP 2005												
14...	--	--	9	100	2	3	4	3	4	8	9	01
14...	--	--	--	--	--	--	--	--	--	--	--	01
14...	.07	.13	--	--	--	--	--	--	--	--	--	01
461715093494201 WETLAND 15 SOUTH OF GARRISON, MN (LAT 46 17 15N LONG 093 49 42W)												
SEP 2005												
13...	--	--	15	100	3	Environmental		Environmental		10	13	01
13...	--	--	--	--	--	--	--	--	--	--	--	01
13...	E.04	.12	--	--	--	--	--	--	--	--	--	01
13...	<.04	<.04	--	--	--	--	--	--	--	--	--	77
461546093493601 WETLAND 16 WEST OF ST. ALBANS BAY NEAR GARRISON,MN (LAT 46 15 46N LONG 093 49 36W)												
SEP 2005												
13...	--	--	--	--	--	--	--	--	--	--	--	01
13...	.05	.10	--	--	--	--	--	--	--	--	--	01

AMPHIBIAN RESEARCH and MONITORING INITIATIVE (ARMI) WATER QUALITY

MISCELLANEOUS STATION ANALYSES

Date	Time	Sample type	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, air, deg C (00020)	Temperature, water, deg C (00010)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIAT, water, fltrd 0.7u GF ug/L (62676)
053715052 HERSHEY ISLAND SLOUGH NEAR WABASHA, MN (P4DC1) (LAT 44 22 36N LONG 092 00 31W)												
JUN 2005 20...	1400	Environmental	749	4.9	57	7.7	480	30.5	22.9	.070	.040	<.025

Date	OIET, water, fltrd, ug/L (50355)	OEAT, water, fltrd 0.7u GF ug/L (62678)	Atrazine, water, fltrd, ug/L (39632)	Bromacil, water, fltrd, ug/L (04029)	Chlorodiaminos-triazine, wat flt ug/L (04039)	Cyanazine acid, water, wat flt ug/L (61745)	Cyanazine amide, water, fltrd, ug/L (61709)	Cyanazine, water, fltrd, ug/L (04041)	Deethyl cyanazine acid, wat flt ug/L (61750)	Deethyl cyanazine amide, wat flt ug/L (61751)	Deethyl cyanazine, water, fltrd, ug/L (61749)	Demethyl fluometuron water, fltrd, ug/L (61755)	Diuron, water, fltrd, ug/L (50374)
053715052 HERSHEY ISLAND SLOUGH NEAR WABASHA, MN (P4DC1) (LAT 44 22 36N LONG 092 00 31W)													
JUN 2005 20...	<.025	<.025	.220	<.025	.080	<.025	<.025	<.025	.240	<.025	<.20	<.2	<.2

Date	Fluometuron water fltrd 0.7u GF ug/L (38811)	Hydroxysimazine, water, fltrd, ug/L (63154)	Linuron water fltrd 0.7u GF ug/L (38478)	Prometon, water, fltrd, ug/L (04037)	Propazine, water, fltrd, ug/L (38535)	Simazine, water, fltrd, ug/L (04035)
053715052 HERSHEY ISLAND SLOUGH NEAR WABASHA, MN (P4DC1) (LAT 44 22 36N LONG 092 00 31W)						
JUN 2005 20...	<.2	<.025	<.2	<.025	.040	.030

DECORAH EDGE WATER QUALITY

MISCELLANEOUS STATION ANALYSES

Date	Time	Sample type	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unf lab, uS/cm 25 degC (90095)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)
440329092255801 StoneEt1 107N13W19BDCC01 (LAT 44 03 29N LONG 092 25 58W)												
OCT 2004												
21...	1130	Environmental	737	7.5	69	7.0	7.2	697	728	7.5	11.3	136
APR 2005												
28...	1030	Environmental	734	9.4	86	7.2	7.3	668	711	5.5	11.3	136
440329092255803 StoneEt3 107N13W19BDCC03 (LAT 44 03 29N LONG 092 25 58W)												
OCT 2004												
21...	1220	Environmental	737	10.1	88	7.3	7.4	542	568	7.5	9.1	94.8
APR 2005												
28...	1200	Environmental	733	10.8	94	7.4	7.6	550	578	5.5	9.0	97.5
440349092255901 StoneEt5 107N13W19BABC (LAT 44 03 49N LONG 092 25 59W)												
OCT 2004												
21...	1430	Environmental	739	10.9	102	7.2	7.2	494	512	9.5	10.4	93.6
21...	1435	Replicate	--	--	--	--	E7.0	478	--	--	--	92.0
APR 2005												
28...	1400	Environmental	736	11.4	107	7.2	7.4	547	571	8.0	12.5	106
28...	1401	Replicate	--	--	--	--	7.3	530	--	--	--	110
440344092255501 StonMP1-2 107N13W19BABA02 (LAT 44 03 44N LONG 092 25 55W)												
OCT 2004												
20...	1500	Environmental	739	4.3	39	7.2	--	--	703	16.5	10.9	--
APR 2005												
27...	1350	Environmental	732	1.2	10	6.9	--	--	670	4.0	5.5	--
440344092255601 StonMP1-3 107N13W19BABA03 (LAT 44 03 44N LONG 092 25 56W)												
OCT 2004												
20...	1400	Environmental	740	2.0	18	7.0	--	--	660	13.7	10.1	--
APR 2005												
27...	1100	Environmental	733	.9	7	6.9	--	--	650	3.0	2.1	--
440344092255701 StonMP1-4 107N13W19BABB01 (LAT 44 03 44N LONG 092 25 57W)												
OCT 2004												
20...	1300	Environmental	740	.9	8	7.0	7.2	641	674	13.2	10.4	120
APR 2005												
27...	1050	Environmental	733	2.7	22	7.1	7.4	536	582	3.0	5.5	109
440342092255601 StonMP2-2 107N13W19BABD01 (LAT 44 03 42N LONG 092 25 56W)												
OCT 2004												
20...	1030	Environmental	740	1.5	13	6.9	7.2	727	770	9.8	9.4	134
20...	1035	Replicate	--	--	--	--	E6.9	731	--	--	--	137
APR 2005												
27...	1300	Environmental	732	1.0	8	6.8	E7.6	684	731	5.0	5.5	133
440342092255701 StonMP2-3 107N13W19BABC01 (LAT 44 03 42N LONG 092 25 57W)												
OCT 2004												
20...	1050	Environmental	740	5.3	49	7.2	--	--	677	12.5	10.4	--
APR 2005												
27...	1330	Environmental	733	.7	5	6.9	--	--	700	4.5	4.5	--
440343092255701 StonMP2-4 107N13W19BABB02 (LAT 44 03 43N LONG 092 25 57W)												
OCT 2004												
20...	1130	Environmental	740	2.4	21	7.1	--	--	778	14.8	10.5	--
APR 2005												
27...	1400	Environmental	733	.4	3	6.8	--	--	681	4.5	4.8	--

DECORAH EDGE WATER QUALITY—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	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)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	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)
440329092255801 StoneEt1 107N13W19BDCC01 (LAT 44 03 29N LONG 092 25 58W)													
OCT 2004													
21...	12.8	.65	6.49	294	359	.0	17.8	19.6	24.0	452	<.04	14.7	<.008
APR 2005													
28...	12.0	.64	6.13	270	329	.0	19.8	18.1	26.0	488	<.04	15.1	<.008
440329092255803 StoneEt3 107N13W19BDCC03 (LAT 44 03 29N LONG 092 25 58W)													
OCT 2004													
21...	19.8	.82	2.86	273	333	.0	12.8	17.5	20.7	341	<.04	1.66	<.008
APR 2005													
28...	19.7	.77	2.81	267	326	.0	12.8	17.5	20.2	355	<.04	1.61	E.005
440349092255901 StoneEt5 107N13W19BABC (LAT 44 03 49N LONG 092 25 59W)													
OCT 2004													
21...	12.7	.51	1.74	246	300	.0	6.18	14.0	12.0	301	<.04	3.17	<.008
21...	12.6	.45	1.68	--	--	--	6.14	14.0	11.6	303	<.04	3.19	<.008
APR 2005													
28...	14.0	.62	2.10	281	343	.0	7.58	14.5	16.3	339	<.04	2.92	<.008
28...	14.2	.65	2.12	--	--	--	7.46	14.5	16.0	350	<.04	3.07	<.008
440344092255501 StonMP1-2 107N13W19BABA02 (LAT 44 03 44N LONG 092 25 55W)													
OCT 2004													
20...	--	--	--	--	--	--	21.2	--	--	--	<.04	.08	<.008
APR 2005													
27...	--	--	--	--	--	--	22.5	--	--	--	.09	.92	.030
440344092255601 StonMP1-3 107N13W19BABA03 (LAT 44 03 44N LONG 092 25 56W)													
OCT 2004													
20...	--	--	--	--	--	--	23.8	--	--	--	.10	<.06	<.008
APR 2005													
27...	--	--	--	--	--	--	18.9	--	--	--	.16	.25	E.007
440344092255701 StonMP1-4 107N13W19BABB01 (LAT 44 03 44N LONG 092 25 57W)													
OCT 2004													
20...	16.4	.24	3.52	328	399	.0	25.1	15.4	11.4	401	<.04	<.06	<.008
APR 2005													
27...	14.6	.22	2.85	264	322	.0	19.6	13.1	18.5	336	<.04	<.06	<.008
440342092255601 StonMP2-2 107N13W19BABD01 (LAT 44 03 42N LONG 092 25 56W)													
OCT 2004													
20...	20.6	.99	3.90	343	419	.0	25.7	19.2	28.2	465	E.03	4.50	<.008
20...	20.5	1.05	3.84	--	--	--	26.0	19.2	28.2	464	<.04	4.49	<.008
APR 2005													
27...	18.9	.87	3.65	310	379	.0	26.6	17.1	26.5	436	<.04	4.46	<.008
440342092255701 StonMP2-3 107N13W19BABC01 (LAT 44 03 42N LONG 092 25 57W)													
OCT 2004													
20...	--	--	--	--	--	--	23.1	--	19.8	--	E.02	1.79	.012
APR 2005													
27...	--	--	--	--	--	--	24.7	--	25.3	--	.05	1.44	E.007
440343092255701 StonMP2-4 107N13W19BABB02 (LAT 44 03 43N LONG 092 25 57W)													
OCT 2004													
20...	--	--	--	--	--	--	20.9	--	--	--	E.02	<.06	<.008
APR 2005													
27...	--	--	--	--	--	--	21.5	--	--	--	.09	E.03	<.008

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Total nitro-gen, wat flt by anal ysis, mg/L (62854)	Iron, water, fltrd, ug/L (01046)
440329092255801 StoneEt1 107N13W19BDCC01 (LAT 44 03 29N LONG 092 25 58W)				
OCT 2004				
21...	.026	.031	14.9	<6
APR 2005				
28...	.025	.030	14.8	<6
440329092255803 StoneEt3 107N13W19BDCC03 (LAT 44 03 29N LONG 092 25 58W)				
OCT 2004				
21...	.008	.010	1.85	<6
APR 2005				
28...	E.004	.008	1.73	<6
440349092255901 StoneEt5 107N13W19BABC (LAT 44 03 49N LONG 092 25 59W)				
OCT 2004				
21...	E.003	.005	3.35	<6
21...	E.003	.004	3.35	<6
APR 2005				
28...	E.004	.006	3.06	E4
28...	E.005	.007	3.23	<6
440344092255501 StonMP1-2 107N13W19BABA02 (LAT 44 03 44N LONG 092 25 55W)				
OCT 2004				
20...	--	--	.46	--
APR 2005				
27...	--	--	1.21	--
440344092255601 StonMP1-3 107N13W19BABA03 (LAT 44 03 44N LONG 092 25 56W)				
OCT 2004				
20...	--	--	.39	--
APR 2005				
27...	--	--	.66	--
440344092255701 StonMP1-4 107N13W19BABB01 (LAT 44 03 44N LONG 092 25 57W)				
OCT 2004				
20...	<.006	<.004	.15	37
APR 2005				
27...	<.006	<.004	.20	E3
440342092255601 StonMP2-2 107N13W19BABD01 (LAT 44 03 42N LONG 092 25 56W)				
OCT 2004				
20...	E.004	.008	4.78	86
20...	E.004	.008	4.50	11
APR 2005				
27...	E.003	.006	4.67	10
440342092255701 StonMP2-3 107N13W19BABC01 (LAT 44 03 42N LONG 092 25 57W)				
OCT 2004				
20...	--	--	1.97	--
APR 2005				
27...	--	--	1.50	--
440343092255701 StonMP2-4 107N13W19BABB02 (LAT 44 03 43N LONG 092 25 57W)				
OCT 2004				
20...	--	--	.24	--
APR 2005				
27...	--	--	.41	--

DECORAH EDGE WATER QUALITY—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Sample type	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unf lab, uS/cm 25 degC (90095)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)
440343092255801 StonMP2-5 107N13W19BABB03 (LAT 44 03 43N LONG 092 25 58W)												
OCT 2004 20...	1200	Environmental	740	6.7	61	7.4	7.5	655	693	14.0	10.9	120
APR 2005 27...	1500	Environmental	733	4.8	34	7.0	7.8	593	708	5.0	4.1	118
440341092255701 StonMP3-1 107N13W19BABC02 (LAT 44 03 41N LONG 092 25 57W)												
OCT 2004 18...	1720	Environmental	733	.8	7	7.0	7.2	622	671	13.0	11.0	126
APR 2005 26...	1400	Environmental	725	3.5	27	7.1	E7.7	591	640	6.0	5.3	127
440341092255702 StonMP3-2 107N13W19BABC03 (LAT 44 03 41N LONG 092 25 57W)												
OCT 2004 19...	1300	Environmental	736	3.2	28	6.9	--	--	644	8.0	9.3	--
APR 2005 26...	1430	Environmental	725	2.8	23	7.1	--	--	618	6.0	6.3	--
440342092255801 StonMP3-3 107N13W19BABC04 (LAT 44 03 42N LONG 092 25 58W)												
OCT 2004 19...	1230	Environmental	736	.9	8	6.8	--	--	663	8.5	9.9	--
APR 2005 26...	1500	Environmental	725	.9	8	7.1	--	--	541	8.5	6.0	--
440341092255801 StonMP3-4 107N13W19BABC05 (LAT 44 03 41N LONG 092 25 58W)												
OCT 2004 19...	1400	Environmental	736	1.9	16	7.2	--	--	588	8.0	9.2	--
APR 2005 26...	1520	Environmental	725	1.1	9	7.1	--	--	573	7.0	5.5	--
440342092255901 StonMP3-5 107N13W19BABC06 (LAT 44 03 42N LONG 092 25 59W)												
OCT 2004 19...	1540	Environmental	736	3.1	27	6.9	7.2	625	683	9.0	9.3	130
APR 2005 26...	1540	Environmental	725	1.2	8	7.2	7.3	493	542	7.0	5.4	104
440340092255601 StonMP4-1 107N13W19BABD02 (LAT 44 03 40N LONG 092 25 56W)												
OCT 2004 19...	1000	Environmental	735	8.6	76	6.9	--	--	767	7.0	9.9	--
440340092255701 StonMP4-2 107N13W19BABD03 (LAT 44 03 40N LONG 092 25 57W)												
OCT 2004 19...	1010	Environmental	735	8.0	71	7.0	--	--	780	7.0	9.6	--
440340092255702 StonMP4-3 107N13W19BABD04 (LAT 44 03 40N LONG 092 25 57W)												
OCT 2004 19...	1030	Environmental	735	3.2	29	7.0	7.4	554	602	7.0	9.7	111
APR 2005 26...	1230	Environmental	722	6.5	53	7.2	7.5	516	561	7.0	6.0	106
440340092255801 StonMP4-4 107N13W19BABC07 (LAT 44 03 40N LONG 092 25 58W)												
OCT 2004 19...	1140	Environmental	735	7.0	63	6.9	7.2	589	633	8.0	10.2	120
APR 2005 26...	1240	Environmental	722	2.4	20	7.1	7.3	506	543	7.0	7.4	108
440337092255901 StonMP5-1 107N13W19BDBB01 (LAT 44 03 37N LONG 092 25 59W)												
APR 2005 26...	1120	Environmental	722	9.9	75	7.0	7.3	514	505	6.5	3.8	117

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	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)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	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)
440343092255801 StonMP2-5 107N13W19BABB03 (LAT 44 03 43N LONG 092 25 58W)													
OCT 2004 20...	17.9	.67	3.87	307	375	.0	37.2	12.4	17.8	407	<.04	<.06	<.008
APR 2005 27...	16.8	.47	3.31	296	361	.0	23.0	12.2	24.8	392	<.04	<.06	<.008
440341092255701 StonMP3-1 107N13W19BABC02 (LAT 44 03 41N LONG 092 25 57W)													
OCT 2004 18...	12.6	.65	4.51	286	349	.0	24.9	16.9	21.8	398	<.04	4.07	<.008
APR 2005 26...	10.9	.92	4.29	279	340	.0	18.9	13.6	26.0	370	<.04	1.88	<.008
440341092255702 StonMP3-2 107N13W19BABC03 (LAT 44 03 41N LONG 092 25 57W)													
OCT 2004 19...	--	--	--	--	--	--	16.5	--	--	--	E.02	E.04	<.008
APR 2005 26...	--	--	--	--	--	--	21.9	--	--	--	<.04	2.71	.030
440342092255801 StonMP3-3 107N13W19BABC04 (LAT 44 03 42N LONG 092 25 58W)													
OCT 2004 19...	--	--	--	--	--	--	17.8	--	--	--	.33	<.06	<.008
APR 2005 26...	--	--	--	--	--	--	18.8	--	--	--	.64	<.06	<.008
440341092255801 StonMP3-4 107N13W19BABC05 (LAT 44 03 41N LONG 092 25 58W)													
OCT 2004 19...	--	--	--	--	--	--	20.9	--	--	--	<.04	.37	<.008
APR 2005 26...	--	--	--	--	--	--	21.6	--	--	--	.06	.27	<.008
440342092255901 StonMP3-5 107N13W19BABC06 (LAT 44 03 42N LONG 092 25 59W)													
OCT 2004 19...	14.1	.42	3.06	316	385	.0	22.1	15.5	13.3	406	E.03	<.06	<.008
APR 2005 26...	10.2	.48	3.06	226	276	.0	20.2	10.2	28.5	327	.06	<.06	<.008
440340092255601 StonMP4-1 107N13W19BABD02 (LAT 44 03 40N LONG 092 25 56W)													
OCT 2004 19...	--	--	--	--	--	--	30.4	--	30.2	--	<.04	8.86	<.008
440340092255701 StonMP4-2 107N13W19BABD03 (LAT 44 03 40N LONG 092 25 57W)													
OCT 2004 19...	--	--	--	--	--	--	30.8	--	31.0	--	<.04	8.69	<.008
440340092255702 StonMP4-3 107N13W19BABD04 (LAT 44 03 40N LONG 092 25 57W)													
OCT 2004 19...	12.9	.56	4.13	267	326	.0	16.2	15.2	22.3	349	<.04	3.79	<.008
APR 2005 26...	10.9	.45	4.14	219	268	.0	15.6	11.6	23.9	331	<.04	6.47	<.008
440340092255801 StonMP4-4 107N13W19BABC07 (LAT 44 03 40N LONG 092 25 58W)													
OCT 2004 19...	14.2	.58	2.58	308	376	.0	11.5	14.5	26.4	388	<.04	.94	<.008
APR 2005 26...	11.3	.52	2.51	240	292	.0	12.0	11.1	23.6	318	<.04	3.01	<.008
440337092255901 StonMP5-1 107N13W19BDBB01 (LAT 44 03 37N LONG 092 25 59W)													
APR 2005 26...	2.06	<.16	1.38	243	296	.0	4.08	10.1	20.0	317	<.04	3.80	<.008

DECORAH EDGE WATER QUALITY—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Total nitro-gen, wat flt by anal ysis, mg/L (62854)	Iron, water, fltrd, ug/L (01046)
440343092255801 StonMP2-5 107N13W19BABB03 (LAT 44 03 43N LONG 092 25 58W)				
OCT 2004				
20...	<.006	E.003	.17	E4
APR 2005				
27...	<.006	E.003	.27	<6
440341092255701 StonMP3-1 107N13W19BABC02 (LAT 44 03 41N LONG 092 25 57W)				
OCT 2004				
18...	<.006	.004	4.17	39
APR 2005				
26...	.007	.009	1.94	<6
440341092255702 StonMP3-2 107N13W19BABC03 (LAT 44 03 41N LONG 092 25 57W)				
OCT 2004				
19...	--	--	.16	--
APR 2005				
26...	--	--	2.69	--
440342092255801 StonMP3-3 107N13W19BABC04 (LAT 44 03 42N LONG 092 25 58W)				
OCT 2004				
19...	--	--	.84	--
APR 2005				
26...	--	--	.93	--
440341092255801 StonMP3-4 107N13W19BABC05 (LAT 44 03 41N LONG 092 25 58W)				
OCT 2004				
19...	--	--	.55	--
APR 2005				
26...	--	--	.53	--
440342092255901 StonMP3-5 107N13W19BABC06 (LAT 44 03 42N LONG 092 25 59W)				
OCT 2004				
19...	<.006	.006	.28	652
APR 2005				
26...	E.005	.013	.29	1,630
440340092255601 StonMP4-1 107N13W19BABD02 (LAT 44 03 40N LONG 092 25 56W)				
OCT 2004				
19...	--	--	9.27	--
440340092255701 StonMP4-2 107N13W19BABD03 (LAT 44 03 40N LONG 092 25 57W)				
OCT 2004				
19...	--	--	8.54	--
440340092255702 StonMP4-3 107N13W19BABD04 (LAT 44 03 40N LONG 092 25 57W)				
OCT 2004				
19...	<.006	<.004	3.92	<6
APR 2005				
26...	<.006	E.003	6.55	<6
440340092255801 StonMP4-4 107N13W19BABC07 (LAT 44 03 40N LONG 092 25 58W)				
OCT 2004				
19...	<.006	<.004	1.12	<6
APR 2005				
26...	<.006	E.002	3.06	<6
440337092255901 StonMP5-1 107N13W19BDBB01 (LAT 44 03 37N LONG 092 25 59W)				
APR 2005				
26...	.008	.014	3.92	<6

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Sample type	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unf lab, uS/cm 25 degC (90095)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)
440343092255501 StonMP1-1 107N13W19BABA01 (LAT 44 03 43N LONG 092 25 55W)												
APR 2005 27...	1420	Environmental	732	1.3	10	7.0	7.6	510	619	4.0	4.7	109
440339092255901 StonMP5-2 107N13W19BDBB02 (LAT 44 03 39N LONG 092 25 59W)												
APR 2005 26...	1050	Environmental	723	1.3	10	6.9	--	--	633	7.0	6.2	--

Date	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)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	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)
440343092255501 StonMP1-1 107N13W19BABA01 (LAT 44 03 43N LONG 092 25 55W)													
APR 2005 27...	12.9	.47	2.61	258	314	.0	15.0	12.2	23.1	344	.04	.37	<.008
440339092255901 StonMP5-2 107N13W19BDBB02 (LAT 44 03 39N LONG 092 25 59W)													
APR 2005 26...	--	--	--	--	--	--	9.61	--	23.8	--	.06	6.51	.012

Date	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Total nitrogen, wat flt by analysis, mg/L (62854)	Iron, water, fltrd, ug/L (01046)
440343092255501 StonMP1-1 107N13W19BABA01 (LAT 44 03 43N LONG 092 25 55W)				
APR 2005 27...	<.006	.006	.61	<6
440339092255901 StonMP5-2 107N13W19BDBB02 (LAT 44 03 39N LONG 092 25 59W)				
APR 2005 26...	--	--	6.90	--

QUALITY of WATER at RAIN GARDEN SITES

MISCELLANEOUS STATION ANALYSES

Date	Time	Sample type	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	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)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)
450943092593901 RAIN GARDEN WELL AT HUGO, MN. (LAT 45 09 43N LONG 092 59 39W)											
OCT 2004											
10...	1415	Environmental	7.0	58	1.06	.13	<.04	.80	<.008	.06	.06
NOV											
13...	1300	Environmental	7.1	44	.73	.14	<.04	.37	<.008	.07	.07
MAY 2005											
23...	1120	Environmental	6.4	165	24.5	E.10	<.04	.14	<.008	E.03	E.02
23...	1130	Replicate	6.4	162	22.6	.11	<.04	.15	<.008	E.03	E.04
450943092593902 RAIN GARDEN LYSIMETER AT HUGO, MN. (LAT 45 09 43N LONG 092 59 39W)											
OCT 2004											
10...	1430	Soil Moisture	9.1	152	--	.27	<.04	.82	<.008	.07	.07
NOV											
13...	1430	Soil Moisture	9.2	121	--	.23	.04	.38	<.008	.12	.06
450946092593901 RAIN GARDEN BACKGROUND WELL AT HUGO, MN. (LAT 45 09 46N LONG 092 59 39W)											
OCT 2004											
10...	1330	Environmental	6.8	237	45.5	E.06	<.04	1.96	<.008	.06	.06
NOV											
13...	1400	Environmental	7.1	244	43.2	E.09	<.04	1.77	<.008	.07	.06
450946092593902 RAIN GARDEN BACKGROUND LYSIMETER AT HUGO, MN. (LAT 45 09 46N LONG 092 59 39W)											
OCT 2004											
10...	1440	Soil Moisture	9.3	187	--	.35	--	--	--	--	<.04
NOV											
13...	1715	Soil Moisture	9.3	157	--	.89	<.04	2.81	<.008	E.02	.11
445512092564401 RAIN GARDEN WELL NR WOODBURY, MN. (LAT 44 55 12N LONG 092 56 44W)											
OCT 2004											
24...	1630	Environmental	7.9	257	16.3	.64	<.04	<.06	<.008	.05	.19
MAY 2005											
20...	1050	Environmental	7.6	472	86.4	.29	.05	<.06	<.008	E.03	.05
445512092564402 RAIN GARDEN LYSIMETER NR WOODBURY, MN. (LAT 44 55 12N LONG 092 56 44W)											
OCT 2004											
24...	1640	Soil Moisture	7.6	2,680	--	.47	E.02	.09	<.008	.06	.06
MAY 2005											
20...	1100	Soil Moisture	6.9	3,950	1,010	.46	E.03	<.06	<.008	E.03	E.03
445516092563801 RAIN GARDEN BACKGROUND WELL NR WOODBURY, MN. (LAT 44 55 16N LONG 092 56 38W)											
OCT 2004											
24...	1500	Environmental	7.2	1,460	310	E.10	<.04	.57	<.008	E.02	E.03
445643093253801 RAIN GARDEN WELL NR MINNETONKA, MN. (LAT 44 56 43N LONG 093 25 38W)											
OCT 2004											
23...	1340	Environmental	12.1	1,670	20.9	1.2	.53	1.15	.540	<.04	.09
MAY 2005											
06...	1230	Environmental	11.7	1,450	36.2	1.4	.69	.46	.334	<.04	E.03
445643093253802 RAIN GARDEN LYSIMETER NR MINNETONKA, MN. (LAT 44 56 43N LONG 093 25 38W)											
OCT 2004											
02...	1645	Soil Moisture	7.7	760	--	.89	<.04	1.17	<.008	.08	.08
23...	1645	Soil Moisture	8.5	774	14.1	.82	<.04	1.29	<.008	.08	.10
MAY 2005											
06...	1500	Soil Moisture	8.2	666	--	.54	<.04	6.94	<.008	.05	.05

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Time	Sample type	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Chlor-ide, water, fltrd, mg/L (00940)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)
445643093253803 RAIN GARDEN INFLOW NR MINNETONKA, MN. (LAT 44 56 43N LONG 093 25 38W)								
OCT 2004								
01...	0546	Environmental	8.1	475	103	351	282	3.9
01...	1315	Environmental	8.3	28	1.20	22	64	.69
445645093254001 RAIN GARDEN BACKGROUND WELL NR MINNETONKA, MN. (LAT 44 56 45N LONG 093 25 40W)								
OCT 2004								
02...	1630	Environmental	8.3	554	8.23	--	--	.35
23...	1730	Environmental	7.6	580	10.5	--	--	.36
445645093254003 RAIN GARDEN OUTFLOW NR MINNETONKA, MN. (LAT 44 56 45N LONG 093 25 40W)								
OCT 2004								
01...	1035	Environmental	8.1	270	24.3	185	164	2.5
443914093171801 RAIN GARDEN WELL NR LAKEVILLE, MN. (LAT 44 39 14N LONG 093 17 18W)								
OCT 2004								
09...	1500	Environmental	7.9	316	5.01	--	--	.19
NOV								
12...	1430	Environmental	8.2	298	6.80	--	--	.19
MAY 2005								
24...	1100	Environmental	7.5	1,000	202	--	--	.23
443914093171802 RAIN GARDEN LYSIMETER NR LAKEVILLE, MN. (LAT 44 39 14N LONG 093 17 18W)								
OCT 2004								
09...	1630	Soil Moisture	8.4	336	--	--	--	.20
NOV								
12...	1550	Soil Moisture	8.8	278	--	--	--	.15
MAY 2005								
24...	1200	Soil Moisture	8.7	340	5.94	--	--	.26
443920093173501 RAIN GARDEN BACKGROUND WELL NR LAKEVILLE, MN. (LAT 44 39 20N LONG 093 17 35W)								
OCT 2004								
09...	1600	Environmental	7.2	1,730	243	--	--	.23
NOV								
12...	1700	Environmental	7.2	2,340	446	--	--	.39
443914093173602 RAIN GARDEN BACKGROUND LYSIMETER NR LAKEVILLE, MN. (LAT 44 39 14N LONG 093 17 36W)								
OCT 2004								
09...	1700	Soil Moisture	8.2	3,180	--	--	--	.94
NOV								
12...	1715	Soil Moisture	7.9	2,640	--	--	--	.38
445149093365502 RAIN GARDEN LYSIMETER NR CHANHASSEN, MN. (LAT 44 51 49N LONG 093 36 55W)								
OCT 2004								
16...	1500	Soil Moisture	7.7	577	7.92	--	--	.23
NOV								
14...	1530	Soil Moisture	7.7	650	6.46	--	--	.19
MAY 2005								
19...	1200	Soil Moisture	7.4	1,090	98.6	--	--	.21
445150093365402 RAIN GARDEN BACKGROUND LYSIMETER NR CHANHASSEN,MN. (LAT 44 51 50N LONG 093 36 54W)								
OCT 2004								
16...	1600	Soil Moisture	7.9	759	--	--	--	.37
NOV								
14...	1700	Soil Moisture	8.1	710	--	--	--	--
MAY 2005								
19...	1315	Soil Moisture	7.7	613	3.34	--	--	.28

QUALITY of WATER at RAIN GARDEN SITES—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	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)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)
445643093253803 RAIN GARDEN INFLOW NR MINNETONKA, MN. (LAT 44 56 43N LONG 093 25 38W)					
OCT 2004					
01...	1.19	1.55	.028	.13	.45
01...	.20	.09	E.004	E.03	.12
445645093254001 RAIN GARDEN BACKGROUND WELL NR MINNETONKA, MN. (LAT 44 56 45N LONG 093 25 40W)					
OCT 2004					
02...	<.04	6.13	<.008	<.04	<.04
23...	<.04	6.03	<.008	<.04	<.04
445645093254003 RAIN GARDEN OUTFLOW NR MINNETONKA, MN. (LAT 44 56 45N LONG 093 25 40W)					
OCT 2004					
01...	.58	.68	.035	.13	.45
443914093171801 RAIN GARDEN WELL NR LAKEVILLE, MN. (LAT 44 39 14N LONG 093 17 18W)					
OCT 2004					
09...	<.04	.46	<.008	<.04	.06
NOV					
12...	<.04	.60	<.008	<.04	.06
MAY 2005					
24...	<.04	1.18	<.008	<.04	.05
443914093171802 RAIN GARDEN LYSIMETER NR LAKEVILLE, MN. (LAT 44 39 14N LONG 093 17 18W)					
OCT 2004					
09...	<.04	1.76	.008	.12	.12
NOV					
12...	<.04	1.18	.008	.12	.11
MAY 2005					
24...	<.04	1.15	<.008	.29	.34
443920093173501 RAIN GARDEN BACKGROUND WELL NR LAKEVILLE, MN. (LAT 44 39 20N LONG 093 17 35W)					
OCT 2004					
09...	<.04	4.32	<.008	<.04	<.04
NOV					
12...	<.04	7.96	<.008	<.04	.10
443914093173602 RAIN GARDEN BACKGROUND LYSIMETER NR LAKEVILLE, MN. (LAT 44 39 14N LONG 093 17 36W)					
OCT 2004					
09...	<.04	9.36	<.008	.10	.10
NOV					
12...	<.04	8.36	E.007	.10	E.03
445149093365502 RAIN GARDEN LYSIMETER NR CHANHASSEN, MN. (LAT 44 51 49N LONG 093 36 55W)					
OCT 2004					
16...	<.04	<.06	<.008	E.04	.04
NOV					
14...	<.04	.47	<.008	.04	E.04
MAY 2005					
19...	<.04	.13	<.008	E.04	E.03
445150093365402 RAIN GARDEN BACKGROUND LYSIMETER NR CHANHASSEN,MN. (LAT 44 51 50N LONG 093 36 54W)					
OCT 2004					
16...	<.04	<.06	<.008	E.02	E.03
NOV					
14...	--	--	--	--	--
MAY 2005					
19...	<.04	<.06	<.008	E.02	<.04

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MISSISSIPPI RIVER BELOW I-694 AT FRIDLEY, MN

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Sample type	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unf lab, uS/cm 25 degC (90095)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)
NOV												
16...	1115	Environmental	--	12.8	102	8.2	--	--	356	8.7	4.9	--
DEC												
09...	1000	Environmental	735	14.2	103	8.4	--	--	428	6.0	1.9	--
29...	1015	Environmental	744	14.4	99	8.0	--	--	447	--	.0	--
JAN												
20...	1015	Environmental	742	12.7	89	7.9	--	--	451	--	.0	--
FEB												
09...	1100	Environmental	750	15.3	107	8.2	7.9	402	422	--	.3	52.1
MAR												
02...	0915	Environmental	746	15.7	108	8.2	--	--	441	-6.5	.2	--
23...	0930	Environmental	745	15.3	111	8.5	--	--	411	2.5	1.9	--
APR												
18...	0930	Environmental	738	11.3	105	7.9	--	--	260	19.0	12.2	--
MAY												
04...	0945	Environmental	747	12.3	110	8.4	8.0	308	330	11.0	9.5	41.8
13...	0945	Environmental	--	11.8	--	8.1	--	--	357	9.5	11.3	--
31...	1200	Environmental	748	9.3	96	8.1	--	--	300	24.0	17.2	--
JUN												
07...	1000	Environmental	739	8.8	99	8.0	--	--	288	24.0	21.3	--
22...	1100	Environmental	--	--	--	7.6	--	--	315	--	--	--
JUL												
07...	0930	Environmental	743	8.5	102	8.1	8.1	295	335	--	23.1	43.8
25...	1100	Environmental	738	8.1	101	8.1	--	--	357	--	26.5	--
AUG												
03...	1130	Environmental	737	8.1	103	8.4	8.6	352	370	--	27.4	44.4
11...	1030	Environmental	741	7.1	86	8.4	--	--	377	--	25.1	--
25...	1330	Environmental	747	10.5	121	8.6	--	--	392	24.0	22.5	--
SEP												
08...	1020	Environmental	745	8.1	93	8.3	--	--	407	--	21.2	--
23...	1000	Environmental	746	7.6	83	8.1	7.6	386	396	--	18.9	48.7
30...	1000	Environmental	734	9.3	95	8.2	--	--	436	14.0	14.7	--

MISSISSIPPI RIVER BELOW I-694 AT FRIDLEY, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	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)	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 + org-N, water, fltrd, mg/L as N (00623)
NOV													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	169	206	.0	--	15.5	--	--	16.6	--	--
JAN													
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
09...	18.5	2.74	13.8	174	212	.0	.21	20.2	.2	12.3	15.8	269	.54
MAR													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
04...	13.9	2.50	8.00	137	168	.0	--	13.0	.1	6.63	10.8	208	.62
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	14.9	1.66	7.07	142	173	.0	--	11.1	.1	11.9	8.5	219	.77
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
03...	16.4	1.97	9.15	162	197	.0	--	13.7	.1	11.1	12.5	230	.66
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	16.0	3.19	11.7	152	187	.0	--	22.8	.2	13.1	18.0	248	.72
30...	--	--	--	--	--	--	--	--	--	--	--	--	--

MISSISSIPPI RIVER BELOW I-694 AT FRIDLEY, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—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)	Nitrite water, fltrd, mg/L as N (00613)	Total nitro-gen, wat unf by anal ysis, mg/L (62855)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Organic carbon, water, fltrd, mg/L (00681)	E coli, modif. m-TEC, water, col/ 100 mL (90902)	Iron, water, fltrd, ug/L (01046)	Manga-nese, water, fltrd, ug/L (01056)	1,4-Di-chloro-benzene water, fltrd, ug/L (34572)
NOV													
16...	--	--	--	--	--	--	--	--	9.1	48	--	--	<.5
DEC													
09...	--	--	--	--	--	--	--	--	7.9	72	--	--	<.5
29...	--	<.04	.88	.010	1.53	.011	--	.036	.5	31	--	--	<.5
JAN													
20...	--	--	--	--	--	--	--	--	7.0	57	--	--	<.5
FEB													
09...	.61	.06	.90	.011	--	E.01	.026	.043	6.4	43	68	48.3	<.5
MAR													
02...	--	--	--	--	--	--	--	--	7.2	20	--	--	<.5
23...	--	--	--	--	--	--	--	--	6.6	3	--	--	<.5
APR													
18...	--	--	--	--	--	--	--	--	11.7	18	--	--	<.5
MAY													
04...	.90	<.04	.41	E.005	--	<.02	.014	.062	9.9	E9	115	13.5	<.5
13...	--	--	--	--	--	--	--	--	8.6	63	--	--	<.5
31...	--	--	--	--	--	--	--	--	12.4	--	--	--	<.5
JUN													
07...	--	--	--	--	--	--	--	--	13.4	180	--	--	<.5
22...	--	--	--	--	--	--	--	--	15.5	E93	--	--	<.5
JUL													
07...	1.0	<.04	.39	E.004	--	.03	.055	.129	14.1	29	149	2.4	<.5
25...	--	--	--	--	--	--	--	--	10.0	66	--	--	<.5
AUG													
03...	.87	<.04	.09	<.008	--	E.01	.030	.082	9.0	E34	14	2.6	<.5
11...	--	--	--	--	--	--	--	--	7.9	E32	--	--	<.5
25...	--	--	--	--	--	--	--	--	6.8	--	--	--	<.5
SEP													
08...	--	--	--	--	--	--	--	--	6.9	70	--	--	<.5
23...	1.1	E.04	.62	.010	--	.04	.065	.157	9.1	720	32	1.9	<.5
30...	--	--	--	--	--	--	--	--	8.7	77	--	--	<.5

MISSISSIPPI RIVER BELOW I-694 AT FRIDLEY, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	1-Methyl-naphth-alene, water, fltrd, ug/L (62054)	1-Naph-thol, water, fltrd 0.7u GF ug/L (49295)	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd 0.7u GF ug/L (38746)	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)	2Chloro -2',6-' diethyl acet-anilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	Ala-chlor 2nd amide, water, fltrd, ug/L (63781)	Aceto-chlor 3rd amide, water, fltrd, ug/L (63782)
NOV													
16...	<.5	<.09	<.016	E.03	<.02	<.006	<.5	--	<.005	E.008	<.08	--	--
DEC													
09...	<.5	<.09	<.016	E.03	<.02	<.006	<.5	<.02	<.005	E.011	<.08	--	--
29...	<.5	<.09	<.016	<.04	<.02	<.006	<.5	--	<.005	E.013	<.08	--	--
JAN													
20...	M	<.09	<.016	<.04	<.02	<.006	<.5	<.02	<.005	E.013	<.08	<.02	<.02
FEB													
09...	<.5	<.09	<.016	.04	<.02	<.006	<.5	<.02	<.005	E.014	<.08	<.02	<.02
MAR													
02...	<.5	<.09	<.016	<.04	<.02	<.006	<.5	.02	<.005	E.012	M	<.02	<.02
23...	<.5	<.09	<.016	<.04	<.02	<.006	<.5	<.02	<.005	E.013	<.08	<.02	<.02
APR													
18...	<.5	<.09	<.016	E.17	<.02	<.006	<.5	.06	<.005	E.014	E.02	<.02	<.02
MAY													
04...	<.5	<.09	<.016	<.04	<.02	<.006	<.5	<.02	<.005	E.012	<.08	<.02	<.02
13...	<.5	<.09	<.016	.04	<.05	<.006	<.5	<.02	<.005	E.014	<.08	<.02	<.02
31...	<.5	<.09	<.016	E.04	<.02	<.006	<.5	<.02	<.005	E.017	<.08	<.02	<.02
JUN													
07...	<.5	M	<.016	E.10	<.02	<.006	<.5	<.02	<.005	E.019	<.08	<.02	<.02
22...	<.5	<.09	<.016	E.14	<.02	<.006	<.5	<.02	<.005	E.029	<.08	<.02	<.02
JUL													
07...	<.5	<.09	<.016	E.04	<.02	<.006	<.5	<.02	<.005	E.021	<.08	<.02	<.02
25...	<.5	<.09	<.016	E.05	<.02	<.006	<.5	<.02	<.005	E.018	<.08	<.02	<.02
AUG													
03...	<.5	<.09	<.016	<.04	<.02	<.006	<.5	.03	<.005	E.016	<.08	<.02	<.02
11...	<.5	<.09	--	--	--	<.006	<.5	<.02	<.005	E.013	--	<.02	<.02
25...	<.5	<.09	<.016	<.04	<.02	<.006	<.5	<.02	<.005	E.014	<.08	<.02	<.02
SEP													
08...	<.5	<.09	--	--	--	<.006	<.5	<.02	<.005	E.008	--	<.02	<.02
23...	<.5	<.09	<.016	.09	<.02	<.006	<.5	<.02	<.005	E.023	<.08	<.02	<.02
30...	<.5	<.09	<.016	E.05	<.02	<.006	<.5	.02	<.005	E.013	<.08	<.02	<.02

MISSISSIPPI RIVER BELOW I-694 AT FRIDLEY, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	2-Ethyl -6- methyl- aniline water, fltrd, ug/L (61620)	OIET, water, fltrd, ug/L (50355)	2- Methyl- naphth- alene, water, fltrd, ug/L (62056)	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- Hydroxy carbo- furan, wat flt 0.7u GF ug/L (49308)	3-Keto- carbo- furan, water, fltrd, ug/L (50295)	3- Methyl- 1H- indole, water, fltrd, ug/L (62058)	3-tert- Butyl- 4-hy- droxy- anisole wat flt ug/L (62059)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	4- Cumyl- phenol, water, fltrd, ug/L (62060)	4- Octyl- phenol, water, fltrd, ug/L (62061)
NOV													
16...	<.004	<.050	<.5	<.004	--	<2	<.008	<.02	<1	<5	<.006	<1	<1
DEC													
09...	<.004	.044	<.5	<.004	--	<2	<.008	<.02	<1	<5	<.006	<1	<1
29...	<.004	<.037	<.5	<.004	--	<2	<.008	<.02	<1	<5	<.006	<1	<1
JAN													
20...	<.004	.034	<.5	<.004	--	<2	<.008	<.02	<1	<5	<.006	<1	<1
FEB													
09...	<.004	<.032	<.5	<.004	--	<2	<.008	<.02	<1	<5	<.006	<1	<1
MAR													
02...	<.004	E.023	<.5	<.004	--	<2	<.008	<.02	<1	<5	<.006	<1	<1
23...	<.004	E.029	M	<.004	--	<2	<.008	<.02	M	<5	<.006	<1	<1
APR													
18...	<.004	.212	<.5	<.004	--	<2	<.008	<.02	M	<5	<.006	<1	<1
MAY													
04...	<.004	.039	<.5	<.004	--	<2	<.008	<.02	<1	<5	<.006	<1	<1
13...	<.004	.037	<.5	--	--	<2	<.008	<.02	<1	<5	<.006	<1	<1
31...	<.004	.045	<.5	<.004	--	<2	<.008	<.02	<1	<5	<.006	<1	<1
JUN													
07...	<.004	.050	<.5	<.004	<.004	M	<.008	<.02	M	<5	<.006	<1	<1
22...	<.004	<.032	<.5	<.004	<.004	<2	<.008	<.20	<1	<5	<.006	<1	<1
JUL													
07...	<.004	<.043	<.5	<.004	<.004	<2	<.008	--	<1	<5	<.006	<1	<1
25...	<.004	.043	<.5	E.005	<.004	<2	<.008	<.25	<1	<5	E.003	<1	<1
AUG													
03...	<.004	.045	<.5	<.004	<.004	<2	<.008	<.02	<1	<5	<.006	<1	<1
11...	<.004	--	<.5	<.004	<.004	<2	--	--	<1	<5	<.006	<1	<1
25...	<.004	<.032	<.5	<.004	<.004	<2	<.008	<.02	<1	<5	<.006	<1	<1
SEP													
08...	<.004	--	<.5	<.004	<.004	M	--	--	<1	<5	<.006	<1	<1
23...	<.004	E.046	<.5	<.004	<.004	<2	<.008	<.02	<1	<5	<.010	<1	<1
30...	<.004	.070	<.5	<.004	<.004	<2	<.008	<.02	<1	<5	<.006	<1	<1

MISSISSIPPI RIVER BELOW I-694 AT FRIDLEY, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	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)	Acifluorfen, water, fltrd 0.7u GF ug/L (49315)	Alachlor ESA SA, water, fltrd, ug/L (62849)	Alachlor ESA, water, fltrd 0.7u GF ug/L (50009)
NOV													
16...	<5	<1	<2	<.5	--	--	--	<.006	<.5	E.1	<.028	--	--
DEC													
09...	<5	<1	<2	<.5	.06	.04	<.02	<.006	<.5	<.5	<.028	<.02	.18
29...	<5	<1	<2	<.5	--	--	--	<.006	<.5	M	<.028	--	--
JAN													
20...	<5	<1	<2	<.5	.03	.02	<.02	<.006	<.5	M	<.028	<.02	.15
FEB													
09...	M	<1	<2	<.5	<.02	<.02	<.02	<.006	<.5	E.1	<.028	<.02	.17
MAR													
02...	<5	<1	<2	<.5	.18	.16	<.02	<.006	<.5	E.1	<.028	.04	.74
23...	E1	M	<2	<.5	.04	.03	<.02	<.006	<.5	E.1	<.028	<.02	.13
APR													
18...	M	<1	<2	<.5	<.02	<.02	<.02	.009	<.5	<.5	<.028	<.02	.02
MAY													
04...	<5	<1	<2	<.5	.08	.04	<.02	.009	<.5	M	<.028	<.02	.14
13...	<5	<1	<2	<.5	<.02	.04	<.02	.026	<.5	<.5	<.028	<.02	.15
31...	<5	<1	<2	<.5	.06	.07	<.02	.048	<.5	<.5	<.028	<.02	.08
JUN													
07...	M	M	<2	<.5	.11	.10	<.02	.039	<.5	M	<.028	<.02	.12
22...	<5	<1	<2	<.5	.20	.36	<.02	.026	<.5	<.5	<.028	<.02	.12
JUL													
07...	M	<1	--	<.5	.14	.22	<.02	.012	<.5	M	<.028	<.02	.09
25...	<5	<1	<2	M	<.02	<.02	<.02	<.02	<.5	<.5	<.028	<.02	.06
AUG													
03...	E2	M	<2	<.5	.05	.06	<.02	<.02	<.5	M	<.028	<.02	.09
11...	<5	<1	<2	<.5	.03	.05	<.02	<.02	<.5	<.5	--	<.02	.09
25...	<5	<1	<2	<.5	.06	.05	<.02	<.02	<.5	<.5	<.028	<.02	.18
SEP													
08...	M	<1	<2	<.5	.06	.05	<.02	<.02	<.5	<.5	--	<.02	.15
23...	<5	<1	<2	<.5	.11	.07	<.02	<.02	<.5	<.5	<.028	<.02	.14
30...	<5	<1	<2	<.5	.02	<.02	<.02	<.02	<.5	M	<.028	<.02	<.02

MISSISSIPPI RIVER BELOW I-694 AT FRIDLEY, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Alachlor OA, water, fltrd 0.7u GF ug/L (61031)	Alachlor SAA, water, fltrd, ug/L (62848)	Alachlor, water, fltrd, ug/L (46342)	Aldicarb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldicarb sulfoxide, wat flt 0.7u GF ug/L (49314)	Aldicarb, water, fltrd 0.7u GF ug/L (49312)	alpha-Endosulfan, water, fltrd, ug/L (34362)	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)	Bendiocarb, water, fltrd, ug/L (50299)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)
NOV													
16...	--	--	<.005	<.02	<.022	<.04	--	<.5	.025	<.07	<.050	<.02	<.010
DEC													
09...	<.02	<.02	<.005	<.02	<.022	<.04	--	<.5	.024	<.07	<.050	<.02	<.010
29...	--	--	<.005	<.02	<.022	<.04	--	<.5	.024	<.07	<.050	<.02	<.010
JAN													
20...	<.02	<.02	<.005	<.02	<.022	<.04	--	<.5	.026	<.07	<.050	<.02	<.010
FEB													
09...	<.02	<.02	<.005	<.02	<.022	<.04	--	<.5	.024	<.07	<.050	<.02	<.010
MAR													
02...	.06	<.02	<.005	<.02	<.022	<.04	--	<.5	.028	<.07	<.050	<.02	<.010
23...	<.02	<.02	<.005	<.02	<.022	<.04	--	<.5	.030	<.07	<.050	<.02	<.010
APR													
18...	<.02	<.02	<.005	<.02	<.022	<.04	--	<.5	.033	<.07	<.050	<.02	<.010
MAY													
04...	<.02	<.02	<.005	<.02	<.022	<.04	--	<.5	.026	<.07	<.050	<.02	<.010
13...	<.02	<.02	<.005	<.02	<.022	<.04	--	<.5	.047	<.07	<.050	<.02	<.010
31...	.02	<.02	<.005	<.02	<.022	<.04	--	<.5	.106	<.07	<.050	<.02	<.010
JUN													
07...	.04	<.02	E.006	<.02	<.022	<.04	<.005	<.5	.102	<.07	<.050	<.02	<.010
22...	.03	<.02	<.005	<.02	<.022	<.04	<.005	<.5	.176	<.07	<.050	<.02	<.010
JUL													
07...	<.02	<.02	<.005	<.02	<.022	<.04	<.005	<.5	.092	<.07	<.050	<.02	<.010
25...	<.02	<.02	<.02	<.02	<.022	<.04	<.005	<.5	.050	<.07	<.050	<.02	<.010
AUG													
03...	.02	<.02	<.02	<.02	<.022	<.04	<.005	<.5	.042	<.07	<.050	<.02	<.010
11...	.02	<.02	<.02	--	--	--	<.005	<.5	.032	<.07	<.050	--	<.010
25...	.02	<.02	<.02	<.02	<.022	<.04	<.005	<.5	.034	<.07	<.050	<.02	<.010
SEP													
08...	.02	<.02	<.02	--	--	--	<.005	<.5	.032	<.07	<.050	--	<.010
23...	<.02	<.02	<.02	<.02	<.022	<.04	<.005	<.5	.041	<.07	<.050	<.02	<.010
30...	<.02	<.02	<.02	<.02	<.022	<.04	<.005	<.5	.037	<.07	<.050	<.02	<.010

MISSISSIPPI RIVER BELOW I-694 AT FRIDLEY, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Benomyl water, fltrd, ug/L (50300)	Bensulfuron, water, fltrd, ug/L (61693)	Bentazon, water, fltrd 0.7u GF ug/L (38711)	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)	Bromacil, water, fltrd, ug/L (04029)	Bromoxynil, water, fltrd 0.7u GF ug/L (49311)	Caffeine, water, fltrd, ug/L (50305)	Camphor water, fltrd, ug/L (62070)	Carbaryl, water, fltrd 0.7u GF ug/L (49310)
NOV													
16...	<.022	<.02	<.01	<.5	<.5	<2	<2	<1	<.02	<.03	.020	<.5	<.02
DEC													
09...	<.022	<.02	M	<.5	<.5	<2	<2	<1	<.02	<.03	.050	<.5	<.02
29...	<.022	<.02	<.01	<.5	<.5	<2	<2	<1	<.02	<.03	.051	M	<.02
JAN													
20...	<.022	<.02	<.01	<.5	M	<2	<2	<1	<.02	<.03	.043	<.5	<.02
FEB													
09...	<.022	<.02	<.01	<.5	<.5	<2	<2	<1	<.02	<.03	.099	<.5	<.02
MAR													
02...	<.022	<.02	M	<.5	M	<2	<2	--	<.02	<.03	.066	<.5	<.02
23...	<.022	<.02	<.01	<.5	E.1	<2	<2	<1	<.02	<.03	E.094	M	<.02
APR													
18...	<.022	<.02	<.01	<.5	<.5	<2	<2	<1	<.02	<.03	.066	<.5	<.02
MAY													
04...	<.022	<.02	<.01	<.5	<.5	<2	<2	M	<.02	<.03	<.026	<.5	<.02
13...	<.022	<.02	E.01	<.5	<.5	<2	<2	--	<.02	<.03	.036	M	<.02
31...	<.022	<.02	<.01	<.5	<.5	<2	<2	--	<.02	<.03	<.021	<.5	<.02
JUN													
07...	<.022	<.02	<.01	<.5	M	M	M	<1	<.02	<.03	.036	<.5	.03
22...	<.022	<.02	<.01	<.5	M	<2	<2	<1	<.02	<.03	<.026	M	<.02
JUL													
07...	<.022	<.02	<.01	<.5	M	<2	<2	--	<.02	<.03	<.035	<.5	<.02
25...	<.022	<.02	<.01	<.5	M	<2	<2	<1	<.02	<.03	.044	<.5	<.02
AUG													
03...	<.022	<.02	<.01	<.5	M	<2	<2	<1	<.02	<.03	.029	<.5	<.02
11...	--	--	--	<.5	M	M	<2	--	--	--	--	<.5	--
25...	<.022	<.02	<.01	<.5	M	<2	<2	<1	<.02	<.03	<.026	<.5	<.02
SEP													
08...	--	--	--	<.5	<.5	M	E1	<1	--	--	--	<.5	--
23...	<.022	<.02	<.01	<.5	M	<2	<2	--	<.02	<.03	.019	M	<.02
30...	<.022	<.02	<.01	<.5	M	<2	<2	--	<.02	<.03	.022	M	<.02

MISSISSIPPI RIVER BELOW I-694 AT FRIDLEY, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbazole, water, fltrd, ug/L (62071)	Carbofuran, water, fltrd 0.7u GF ug/L (49309)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chlorambenmethyl ester, water, fltrd, ug/L (61188)	Chlorimuron, water, fltrd, ug/L (50306)	Chlorodiamino-s-triazine, wat flt ug/L (04039)	Chlorothalonil, water, fltrd 0.7u GF ug/L (49306)	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)	cis-Propiconazole, water, fltrd, ug/L (79846)
NOV													
16...	<.041	<.5	<.016	--	<.02	<.032	<.04	<.04	<.06	<.005	<2	<.006	--
DEC													
09...	<.041	<.5	<.016	--	<.02	<.032	<.04	<.04	<.06	<.005	<2	<.006	--
29...	<.041	<.5	<.016	--	<.02	<.032	<.04	--	<.06	<.005	<2	<.006	--
JAN													
20...	<.041	<.5	<.016	--	<.02	<.032	<.04	<.04	<.06	<.005	<2	<.006	--
FEB													
09...	<.041	<.5	<.016	--	<.02	<.032	<.04	<.04	<.06	<.005	<2	<.006	--
MAR													
02...	<.041	<.5	<.016	--	<.02	<.032	<.04	<.04	<.06	<.005	<2	<.006	--
23...	<.041	<.5	<.016	--	<.02	<.032	<.04	<.04	<.06	<.005	M	<.006	--
APR													
18...	<.041	<.5	<.016	--	<.02	<.032	<.04	<.04	<.06	<.005	<2	<.006	--
MAY													
04...	<.041	<.5	<.016	--	<.02	<.032	<.04	<.04	<.06	<.005	<2	<.006	--
13...	<.041	<.5	<.016	--	<.02	<.032	<.04	<.04	<.06	<.005	<2	<.006	--
31...	<.041	<.5	<.016	--	<.02	<.032	<.04	<.04	<.06	<.005	M	<.006	--
JUN													
07...	E.033	<.5	<.016	<.020	<.02	<.032	<.04	<.04	<.06	<.005	M	<.006	<.008
22...	<.041	<.5	<.016	<.020	<.02	<.032	<.04	<.04	<.06	<.005	M	<.006	<.008
JUL													
07...	<.041	<.5	<.016	<.020	<.02	<.032	<.04	<.04	<.06	<.005	M	<.006	<.008
25...	<.041	<.5	<.016	<.020	<.02	<.032	<.04	<.04	<.06	<.010	<2	<.006	<.008
AUG													
03...	<.041	<.5	<.016	<.020	<.02	<.032	<.04	<.04	<.06	E.007	<2	<.006	<.008
11...	<.041	<.5	--	<.020	--	--	--	--	<.06	E.005	M	<.006	<.008
25...	<.041	<.5	<.016	<.020	<.02	<.032	<.02	<.04	<.06	<.005	<2	<.006	<.008
SEP													
08...	<.041	<.5	--	<.020	--	--	--	--	<.06	<.005	E1	<.006	<.008
23...	<.041	<.5	<.016	<.020	<.02	<.032	<.04	<.04	<.06	<.005	M	<.006	<.008
30...	<.041	<.5	<.016	<.020	<.02	<.032	<.04	<.04	<.06	<.005	M	<.006	<.008

MISSISSIPPI RIVER BELOW I-694 AT FRIDLEY, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Clopyr-alid, water, fltrd 0.7u GF ug/L (49305)	Cot-inine, water, fltrd, ug/L (62005)	Cyana-zine, water, fltrd, ug/L (04041)	Cyclo-ate, water, fltrd, ug/L (04031)	Cyflu-thrin, water, fltrd, ug/L (61585)	lambda-Cyhalo-thrin, water, fltrd, ug/L (61595)	Cyper-methrin water, fltrd, ug/L (61586)	Dacthal mono-acid, water, fltrd 0.7u GF ug/L (49304)	DCPA, water fltrd 0.7u GF ug/L (82682)	De-chloro-aceto-chlor, water, fltrd, ug/L (63778)	De-chloro-ala-chlor, water, fltrd, ug/L (63777)	De-chloro-dimeth-enamid, water, fltrd, ug/L (63779)	De-chloro-metola-chlor, water, fltrd, ug/L (63780)
NOV													
16...	<.02	<1.00	--	<.01	<.008	--	<.009	<.03	<.003	--	--	--	--
DEC													
09...	<.02	<1.00	--	<.01	<.008	--	<.009	<.03	<.003	--	--	--	--
29...	<.02	<1.00	--	<.01	<.008	--	<.009	<.03	<.003	--	--	--	--
JAN													
20...	<.02	<1.00	--	<.01	<.008	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02
FEB													
09...	<.02	<1.00	--	<.01	<.008	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02
MAR													
02...	<.02	<1.00	--	<.01	<.027	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02
23...	<.02	<1.00	--	<.01	<.027	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02
APR													
18...	<.02	<1.00	--	<.01	<.027	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02
MAY													
04...	<.02	<1.00	--	<.01	<.027	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02
13...	<.02	<1.00	--	<.01	<.027	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02
31...	<.02	<1.00	--	<.01	<.027	--	<.016	<.03	<.003	<.02	<.02	<.02	<.02
JUN													
07...	<.02	<1.00	<.018	<.01	<.027	<.009	<.009	<.03	E.002	<.02	<.02	<.02	<.02
22...	<.02	<1.00	<.018	<.01	<.027	<.009	<.009	<.03	<.003	<.02	<.02	<.02	<.02
JUL													
07...	<.02	<1.00	<.018	<.01	<.027	<.009	<.009	<.03	<.003	<.02	<.02	<.02	<.02
25...	<.02	<1.00	<.018	<.01	<.027	<.009	<.009	<.03	<.003	<.02	<.02	<.02	<.02
AUG													
03...	<.02	E.041	<.018	<.01	<.027	<.009	<.009	<.03	<.003	<.02	<.02	<.02	<.02
11...	--	<1.00	<.018	--	<.027	<.009	<.009	--	<.003	<.02	<.02	<.02	<.02
25...	<.02	<1.00	<.018	<.01	<.027	<.009	<.009	<.03	<.003	<.02	<.02	<.02	<.02
SEP													
08...	--	<1.00	<.018	--	<.027	<.009	<.009	--	<.003	<.02	<.02	<.02	<.02
23...	<.02	<1.00	<.018	<.01	<.027	<.009	<.009	<.03	<.005	<.02	<.02	<.02	<.02
30...	<.02	<1.00	<.018	<.01	<.027	<.009	<.009	<.03	<.003	<.02	<.02	<.02	<.02

MISSISSIPPI RIVER BELOW I-694 AT FRIDLEY, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—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)	Dicamba water fltrd 0.7u GF ug/L (38442)	Dichlorprop, water, fltrd 0.7u GF ug/L (49302)	Dicrotophos, water fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)	Diethoxynonylphenol, water, fltrd, ug/L (62083)	Diethoxyoctylphenol, water, fltrd ug/L (61705)	Dimethenamid ESA, water, fltrd, ug/L (61951)	Dimethenamid OA, water, fltrd, ug/L (62482)	Dimethenamid water, fltrd, ug/L (61588)
NOV													
16...	M	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	--	--	--
DEC													
09...	<.5	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02	<.02	<.02
29...	M	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	--	--	--
JAN													
20...	M	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02	<.02	<.02
FEB													
09...	M	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02	<.02	<.02
MAR													
02...	E.1	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02	<.02	<.02
23...	E.2	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02	<.02	<.02
APR													
18...	E.1	<.012	<.01	.074	<.04	<.03	<.08	<.009	<5	<1	<.02	<.02	<.02
MAY													
04...	M	<.012	<.01	.005	<.04	<.03	<.08	<.009	<5	<1	<.02	<.02	<.02
13...	M	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02	<.02	<.02
31...	M	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02	<.02	<.02
JUN													
07...	E.2	<.012	<.01	E.005	<.04	<.03	<.08	<.009	M	<1	<.02	<.02	<.02
22...	E.1	<.012	<.01	<.005	<.04	<.03	<.08	<.009	E1	<1	.03	<.02	.02
JUL													
07...	E.1	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02	<.02	<.02
25...	E.1	<.012	<.01	<.010	<.04	<.03	<.08	<.009	<5	M	<.02	<.02	<.02
AUG													
03...	.9	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	M	<.02	<.02	<.02
11...	E.1	<.012	<.01	<.005	--	--	<.08	<.009	<5	<1	<.02	<.02	<.02
25...	E.1	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02	<.02	<.02
SEP													
08...	E.1	<.012	<.01	<.005	--	--	<.08	<.009	E1	<1	<.02	<.02	<.02
23...	E.1	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	.03	<.02	<.02
30...	E.2	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02	<.02	<.02

MISSISSIPPI RIVER BELOW I-694 AT FRIDLEY, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Dimeth-oate, water, fltrd 0.7u GF ug/L (82662)	Dinoseb water, fltrd 0.7u GF ug/L (49301)	Diphen-amid, water, fltrd, ug/L (04033)	Disulf-oton sulfone water, fltrd, ug/L (61640)	Disul-foton, water, fltrd 0.7u GF ug/L (82677)	Diuron, water, fltrd 0.7u GF ug/L (49300)	D-Limo-nene, water, fltrd, ug/L (62073)	Endo-sulfan sulfate water, fltrd, ug/L (61590)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Etho-prop, water, fltrd 0.7u GF ug/L (82672)	Ethoxy-octyl-phenol, water, fltrd ug/L (61706)
NOV													
16...	<.006	<.04	<.01	--	--	<.01	<.5	--	--	<.0020	<.004	--	<1
DEC													
09...	<.006	<.04	<.01	--	--	<.01	<.5	--	--	<.0020	<.004	--	<1
29...	<.006	<.04	<.01	--	--	<.01	<.5	--	--	<.0020	<.004	--	<1
JAN													
20...	<.006	<.04	<.01	--	--	<.01	<.5	--	--	<.0020	<.004	--	<1
FEB													
09...	<.006	<.04	<.01	--	--	<.01	<.5	--	--	<.0020	<.004	--	<1
MAR													
02...	<.006	<.04	<.01	--	--	<.01	<.5	--	--	<.0020	<.004	--	<1
23...	<.006	<.04	<.01	--	--	<.01	<.5	--	--	<.0020	<.004	--	M
APR													
18...	<.006	<.04	<.01	--	--	.14	<.5	--	--	<.0020	<.004	--	<1
MAY													
04...	<.006	<.04	<.01	--	--	<.01	<.5	--	--	<.0020	<.004	--	<1
13...	<.006	<.04	<.01	--	--	.12	<.5	--	--	<.0020	<.004	--	<1
31...	<.006	<.04	<.01	--	--	.08	<.5	--	--	<.0020	<.004	--	<1
JUN													
07...	<.006	<.04	<.01	<.01	<.02	<.01	<.5	<.014	<.004	<.002	<.004	<.005	M
22...	<.006	<.04	<.01	<.01	<.02	<.01	<.5	<.014	<.004	<.002	<.004	<.005	<1
JUL													
07...	<.006	<.04	<.01	<.01	<.02	<.01	<.5	<.014	<.004	<.002	<.004	<.005	<1
25...	<.006	<.04	<.01	<.01	<.02	.26	<.5	<.014	<.004	<.002	<.004	<.005	<1
AUG													
03...	<.006	<.04	<.01	<.01	<.02	<.01	<.5	<.014	<.004	<.002	<.004	<.005	M
11...	<.006	--	--	<.01	<.02	--	<.5	<.014	<.004	<.002	<.004	<.005	<1
25...	<.006	<.04	<.01	<.01	<.02	<.01	<.5	<.014	<.004	<.002	<.004	<.005	<1
SEP													
08...	<.006	--	--	<.01	<.02	--	<.5	<.014	<.004	<.002	<.004	<.005	<1
23...	<.006	<.04	<.01	<.01	<.02	<.01	<.5	<.014	<.004	<.002	<.004	<.005	<1
30...	<.006	<.04	<.01	<.01	<.02	<.01	<.5	<.014	<.004	<.002	<.004	<.005	M

MISSISSIPPI RIVER BELOW I-694 AT FRIDLEY, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Fenamiphos sulfone water, fltrd, ug/L (61645)	Fenamiphos sulfoxide, water, fltrd, ug/L (61646)	Fenamiphos, water, fltrd, ug/L (61591)	Fenuron water, fltrd 0.7u GF ug/L (49297)	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)	Flumetsulam, water, fltrd, ug/L (61694)	Fluometuron water fltrd 0.7u GF ug/L (38811)
NOV													
16...	<.049	<.04	<.03	<.02	<.029	<.013	<.024	<.016	--	--	--	<.04	<.02
DEC													
09...	<.049	--	<.03	<.02	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02
29...	<.049	--	<.03	<.02	<.029	<.013	<.024	<.016	--	--	--	<.04	<.02
JAN													
20...	<.049	<.04	<.03	<.02	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02
FEB													
09...	<.049	<.04	<.03	<.02	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02
MAR													
02...	<.049	<.04	<.03	<.02	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02
23...	<.049	<.04	<.03	<.02	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02
APR													
18...	<.049	<.04	<.03	<.02	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02
MAY													
04...	<.049	<.04	<.03	<.02	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02
13...	<.049	<.04	<.03	<.02	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02
31...	<.049	<.04	<.03	<.02	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02
JUN													
07...	<.049	<.04	<.03	<.02	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02
22...	<.049	<.04	<.03	<.02	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02
JUL													
07...	<.049	<.04	<.03	<.02	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02
25...	<.049	<.04	<.03	<.02	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02
AUG													
03...	<.049	<.04	<.03	<.02	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02
11...	<.049	<.04	<.03	--	<.029	<.013	<.024	<.016	<.02	<.02	<.02	--	--
25...	<.049	<.04	<.03	<.03	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02
SEP													
08...	<.049	<.04	<.03	--	<.029	<.013	<.024	<.016	<.02	<.02	<.02	--	--
23...	<.049	<.04	<.03	<.02	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02
30...	<.049	<.04	<.03	<.02	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02

MISSISSIPPI RIVER BELOW I-694 AT FRIDLEY, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Fluor-anthene water, fltrd, ug/L (34377)	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)	Hydroxy aceto-chlor, water, fltrd, ug/L (63784)	Hydroxy ala-chlor, water, fltrd, ug/L (63783)	Hydroxy dimeth-enamid, water, fltrd, ug/L (64045)	Hydroxy metola-chlor, water, fltrd, ug/L (63785)	Imaza-quin, water, fltrd, ug/L (50356)	Imaze-thapyr, water, fltrd, ug/L (50407)	Imida-cloprid water, fltrd, ug/L (61695)	Indole, water, fltrd, ug/L (62076)
NOV													
16...	<.5	<.003	<.003	<.5	<.013	--	--	--	--	<.04	<.04	<.020	<.5
DEC													
09...	<.5	<.003	<.003	<.5	<.013	--	--	--	--	<.04	<.04	<.020	<.5
29...	<.5	<.003	<.003	<.5	<.013	--	--	--	--	<.04	<.04	<.020	<.5
JAN													
20...	<.5	<.003	<.003	M	<.013	<.02	<.02	<.02	<.02	<.04	E.03	<.020	<.5
FEB													
09...	<.5	<.003	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.07	<.020	<.5
MAR													
02...	<.5	--	<.003	M	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020	<.5
23...	<.5	--	<.003	M	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020	M
APR													
18...	<.5	--	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020	<.5
MAY													
04...	<.5	--	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020	<.5
13...	M	--	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020	<.5
31...	<.5	--	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020	<.5
JUN													
07...	M	--	<.003	M	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020	<.5
22...	<.5	--	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020	<.5
JUL													
07...	<.5	--	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020	<.5
25...	<.5	--	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020	<.5
AUG													
03...	<.5	--	<.003	M	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020	<.5
11...	<.5	--	<.003	<.5	<.013	<.02	<.02	<.02	<.02	--	--	--	<.5
25...	<.5	--	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020	<.5
SEP													
08...	M	--	<.003	<.5	<.013	<.02	<.02	<.02	<.02	--	--	--	<.5
23...	M	--	<.003	M	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020	<.5
30...	<.5	--	<.003	M	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020	<.5

MISSISSIPPI RIVER BELOW I-694 AT FRIDLEY, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—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)	Linuron water fltrd 0.7u GF ug/L (38478)	Malaoxon, water, fltrd, ug/L (61652)	Malathion, water, fltrd, ug/L (39532)	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Menthol water, fltrd, ug/L (62080)	Metalaxyl, water, fltrd, ug/L (50359)
NOV													
16...	<.387	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027	<.03	<.01	<.5	<.01
DEC													
09...	<.387	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027	<.03	<.01	<.5	<.01
29...	<.387	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027	<.03	<.01	<.5	<.01
JAN													
20...	<.387	<.5	<.003	M	<.5	<.5	<.01	<.030	<.027	<.03	<.01	<.5	<.01
FEB													
09...	<.387	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027	<.03	<.01	<.5	<.01
MAR													
02...	<.538	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027	<.03	<.01	<.5	<.01
23...	<.538	<.5	<.003	M	<.5	<.5	<.01	<.030	<.027	<.03	<.01	E.1	<.01
APR													
18...	<.538	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027	<.03	<.01	<.5	<.01
MAY													
04...	<.538	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027	<.03	<.01	<.5	<.01
13...	<.538	<.5	<.003	M	<.5	<.5	<.01	<.030	<.027	<.03	<.05	<.5	<.01
31...	<.538	<.5	<.003	M	<.5	<.5	<.01	<.030	<.027	<.03	<.01	<.5	<.01
JUN													
07...	<.538	<.5	<.003	M	<.5	<.5	<.01	<.030	<.027	<.03	<.01	E.1	<.01
22...	<.538	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027	<.03	<.01	<.5	<.01
JUL													
07...	<.538	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027	<.03	<.01	<.5	<.01
25...	<.538	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027	E.04	<.01	<.5	<.01
AUG													
03...	<.538	<.5	<.003	M	<.5	--	<.01	<.030	<.027	<.03	<.01	M	<.01
11...	<.538	<.5	<.003	<.5	<.5	<.5	--	<.030	<.027	--	--	<.5	--
25...	<.538	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027	<.03	<.01	<.5	<.01
SEP													
08...	<.538	<.5	<.003	<.5	<.5	<.5	--	<.030	<.027	--	--	<.5	--
23...	<.538	<.5	<.003	M	<.5	<.5	<.01	<.030	<.027	E.02	<.01	<.5	<.01
30...	<.538	<.5	<.003	M	<.5	<.5	<.01	<.030	<.027	E.02	<.01	M	<.01

MISSISSIPPI RIVER BELOW I-694 AT FRIDLEY, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Metalaxyl, water, fltrd, ug/L (61596)	Methiathion water, fltrd, ug/L (61598)	Methiocarb, water, fltrd 0.7u GF ug/L (38501)	Methomyl, water, fltrd 0.7u GF ug/L (49296)	Methyl acetate water unfltrd ug/L (77032)	Methyl paraoxon, water, fltrd, ug/L (61664)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Methyl salicylate, water, fltrd, ug/L (62081)	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)	Metsulfuron, water, fltrd, ug/L (61697)
NOV													
16...	<.005	<.006	<.010	<.020	<1.0	<.03	<.015	<.5	--	--	.007	<.006	<.03
DEC													
09...	<.005	<.006	<.010	<.020	<1.0	<.03	<.015	<.5	.26	.06	<.006	<.006	<.03
29...	<.005	<.006	<.010	<.020	<1.0	<.03	<.015	M	--	--	.009	<.006	<.03
JAN													
20...	<.005	<.006	<.010	<.020	<1.0	<.03	<.015	<.5	.18	.09	.011	<.006	<.04
FEB													
09...	<.005	<.006	<.010	<.020	<1.0	<.03	<.015	<.5	.20	.05	.009	<.006	<.03
MAR													
02...	<.005	<.006	<.010	<.020	<1.0	<.03	<.015	<.5	.80	.24	.086	<.006	<.03
23...	<.005	<.006	<.010	<.020	<1.0	<.03	<.015	M	.14	.06	.073	<.006	<.03
APR													
18...	<.005	<.006	<.010	<.020	<1.0	<.03	<.015	<.5	.02	<.02	.021	<.006	<.03
MAY													
04...	<.005	<.006	<.010	<.020	<1.0	<.03	<.015	<.5	.18	.05	.011	<.006	<.03
13...	<.005	<.006	<.010	<.020	<1.0	<.03	<.015	<.5	.19	.06	.018	<.006	<.03
31...	<.005	<.006	<.010	<.020	<1.0	<.03	<.015	<.5	.11	.04	.025	<.006	<.03
JUN													
07...	<.005	<.006	<.010	<.020	<1.0	<.03	<.015	M	.18	.06	.023	<.006	<.03
22...	<.005	<.006	<.010	<.020	<1.0	<.03	<.015	<.5	.31	.08	.050	<.006	<.03
JUL													
07...	<.005	<.006	<.010	<.020	E.1	<.03	<.015	<.5	.23	.05	.010	<.006	<.03
25...	<.005	<.006	<.010	<.020	<1.0	<.03	<.015	<.5	<.02	<.02	<.02	<.006	<.03
AUG													
03...	<.005	<.006	<.010	<.020	<1.0	<.03	<.015	<.5	.16	.06	<.02	<.006	<.03
11...	<.005	<.006	--	--	<1.0	<.03	<.015	<.5	.11	.05	<.02	<.006	--
25...	<.005	<.006	<.010	<.020	<1.0	<.03	<.015	<.5	.21	.06	<.02	<.006	<.03
SEP													
08...	<.005	<.006	--	--	<1.0	<.03	<.015	M	.18	.06	<.02	<.006	--
23...	<.010	<.006	<.010	<.020	<1.0	<.03	<.015	<.5	.23	.08	<.02	<.010	<.03
30...	<.005	<.006	<.010	<.020	<1.0	<.03	<.015	M	.03	<.02	<.02	<.006	<.03

MISSISSIPPI RIVER BELOW I-694 AT FRIDLEY, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Molinate, water, fltrd 0.7u GF ug/L (82671)	Myclobutanil water, fltrd, ug/L (61599)	N-(4-Chlorophenyl)-N'-methylurea, ug/L (61692)	Naphthalene, water, fltrd, ug/L (34443)	Neburon water, fltrd 0.7u GF ug/L (49294)	Nicosulfuron, water, fltrd, ug/L (50364)	Norflurazon, water, fltrd 0.7u GF ug/L (49293)	Oryzalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	Oxyfluorfen, water, fltrd, ug/L (61600)	p-Cresol, water, fltrd, ug/L (62084)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Pentachlorophenol, water, fltrd, ug/L (34459)
NOV													
16...	--	<.008	<.04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	<2
DEC													
09...	--	<.008	<.04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	<2
29...	--	<.008	<.04	<.5	<.01	<.04	<.02	<.01	<.03	--	M	<.022	<2
JAN													
20...	--	<.008	<.04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	<2
FEB													
09...	--	<.008	<.04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	<2
MAR													
02...	--	<.008	<.04	M	<.01	<.04	<.02	<.01	<.03	--	M	<.022	--
23...	--	<.008	<.04	M	<.01	<.04	<.02	<.01	<.03	--	M	<.022	<2
APR													
18...	--	<.008	<.04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	--
MAY													
04...	--	<.008	<.04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	--
13...	--	<.008	<.04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	--
31...	--	<.008	<.04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	--
JUN													
07...	<.003	<.008	<.04	<.5	<.01	<.04	<.02	<.01	<.03	<.007	M	<.022	<2
22...	<.003	<.008	<.04	<.5	<.01	<.04	<.02	<.01	<.03	<.007	<1	<.022	<2
JUL													
07...	<.003	<.008	<.04	<.5	<.01	<.04	<.02	<.01	<.03	<.007	<1	<.022	--
25...	<.003	<.008	<.04	<.5	<.01	<.04	<.02	<.01	<.03	<.007	<1	<.022	<2
AUG													
03...	<.003	<.008	<.04	<.5	<.01	<.04	<.02	<.01	<.03	<.007	<1	<.022	<2
11...	<.003	<.008	--	<.5	--	--	--	--	--	<.007	<1	<.022	--
25...	<.003	<.008	<.04	<.5	<.01	<.04	<.02	<.01	<.03	<.007	<1	<.022	<2
SEP													
08...	<.003	<.008	--	<.5	--	--	--	--	--	<.007	<1	<.022	<2
23...	<.003	<.008	<.04	<.5	<.01	<.04	<.02	<.01	<.03	<.007	<1	<.022	--
30...	<.003	<.008	<.04	<.5	<.01	<.04	<.02	<.01	<.03	<.007	<1	<.022	--

MISSISSIPPI RIVER BELOW I-694 AT FRIDLEY, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—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)	Picloram, water, fltrd 0.7u GF ug/L (49291)	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)	Propanil, water, fltrd 0.7u GF ug/L (82679)
NOV													
16...	<.5	<.5	<.10	<.011	<.05	<.008	<.03	M	<.005	<.004	--	--	--
DEC													
09...	<.5	E.4	<.10	<.011	<.05	<.008	<.03	<.01	<.005	<.004	<.05	<.02	--
29...	<.5	<.5	<.10	<.011	<.05	<.008	<.03	<.01	<.005	<.004	--	--	--
JAN													
20...	<.5	E.1	<.10	<.011	<.05	<.008	<.03	<.01	<.005	<.004	<.05	<.02	--
FEB													
09...	<.5	E.2	<.10	<.011	<.05	<.008	<.03	<.01	<.005	<.004	<.05	<.02	--
MAR													
02...	<.5	E.2	<.10	<.011	<.05	<.008	--	<.01	<.005	<.004	<.05	<.02	--
23...	<.5	E.3	<.10	<.011	<.05	<.008	--	E.01	<.005	<.004	<.05	<.02	--
APR													
18...	<.5	E.3	<.10	<.011	<.05	<.008	--	<.01	<.005	<.004	<.05	<.02	--
MAY													
04...	<.5	.6	<.10	<.011	<.05	<.008	<.03	E.01	<.005	<.004	<.05	<.02	--
13...	<.5	E.1	<.10	<.011	<.05	<.008	<.03	E.01	<.005	<.004	<.05	<.02	--
31...	<.5	.6	<.10	<.011	--	<.008	<.03	<.01	<.005	<.004	<.05	<.02	--
JUN													
07...	<.5	E.4	<.10	<.011	--	--	<.03	E.01	<.005	<.004	<.05	<.02	<.011
22...	<.5	E.3	<.10	<.011	--	--	<.03	E.01	<.005	<.004	<.05	<.02	<.011
JUL													
07...	<.5	E.1	<.10	<.011	--	--	<.03	E.01	<.005	<.004	<.05	<.02	<.011
25...	<.5	<.5	<.10	<.011	<.05	<.008	<.03	.01	<.005	<.004	<.05	<.02	<.011
AUG													
03...	<.5	E.1	<.10	<.011	<.05	<.008	<.03	E.01	<.005	<.010	<.05	<.02	<.011
11...	<.5	E.3	<.10	<.011	<.05	<.008	--	E.01	<.005	<.004	<.05	<.02	<.011
25...	<.5	<.5	<.10	<.011	<.05	<.008	<.03	<.01	<.005	<.004	<.05	<.02	<.011
SEP													
08...	<.5	E.2	<.10	<.011	--	--	--	E.01	<.005	<.004	<.05	<.02	<.011
23...	M	<.5	<.10	<.011	<.05	<.008	<.03	.01	<.005	<.004	<.05	<.02	<.011
30...	<.5	<.5	<.10	<.011	<.05	<.008	<.03	E.01	<.005	<.004	<.05	<.02	<.011

MISSISSIPPI RIVER BELOW I-694 AT FRIDLEY, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Propargite, water, fltrd 0.7u GF ug/L (82685)	Propham water fltrd 0.7u GF ug/L (49236)	Propiconazole, water, fltrd, ug/L (50471)	Propoxur, water, fltrd 0.7u GF ug/L (38538)	Pyrene, water, fltrd, ug/L (34470)	Siduron water, fltrd, ug/L (38548)	Simazine, water, fltrd, ug/L (04035)	Sulfometruron, water, fltrd, ug/L (50337)	Tebuconazole, water, fltrd, ug/L (62852)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Tefluthrin, water, fltrd, ug/L (61606)	Terbacil, water, fltrd, ug/L (04032)	Terbufos oxon sulfone water, fltrd, ug/L (61674)
NOV													
16...	--	<.030	<.01	<.008	<.5	<.02	<.005	<.038	--	<.02	--	<.016	<.07
DEC													
09...	--	<.030	<.01	<.008	<.5	<.02	<.005	<.038	--	<.02	--	<.016	<.07
29...	--	<.030	<.01	<.008	<.5	<.02	<.005	<.038	--	<.02	--	<.016	<.07
JAN													
20...	--	<.030	<.01	<.008	<.5	<.02	<.005	<.038	--	<.02	--	<.016	<.07
FEB													
09...	--	<.030	<.01	<.008	<.5	<.02	<.005	<.038	--	<.02	--	<.016	<.07
MAR													
02...	--	<.030	<.01	<.008	<.5	<.02	<.005	<.038	--	<.02	--	<.016	<.07
23...	--	<.030	<.01	<.008	<.5	<.02	<.005	<.038	--	<.02	--	<.016	<.07
APR													
18...	--	<.030	<.01	<.008	<.5	<.02	<.005	E.011	--	<.02	--	<.016	<.07
MAY													
04...	--	<.030	<.01	<.008	<.5	<.02	<.010	<.038	--	<.02	--	<.016	<.07
13...	--	<.030	<.01	<.008	M	<.02	<.005	<.038	--	<.02	--	<.016	<.07
31...	--	<.030	<.01	<.008	<.5	<.02	<.005	<.038	--	<.02	--	<.016	<.07
JUN													
07...	<.02	<.030	<.01	<.008	M	<.02	E.007	<.038	<.01	<.02	<.008	<.016	<.07
22...	<.02	<.030	<.01	<.008	<.5	<.02	<.005	<.038	<.01	<.02	<.008	<.016	<.07
JUL													
07...	<.02	<.030	<.01	<.008	<.5	<.02	<.008	<.038	<.01	<.02	<.008	<.016	<.07
25...	<.02	<.030	<.01	<.008	<.5	<.02	E.008	E.011	<.01	<.02	<.008	<.016	<.07
AUG													
03...	<.02	<.030	<.01	<.008	<.5	<.02	<.010	<.038	<.01	<.02	<.008	<.016	<.07
11...	<.02	--	--	--	<.5	--	<.005	--	<.01	<.02	<.008	--	<.07
25...	<.02	<.030	<.01	<.008	<.5	<.02	<.005	<.038	<.01	<.02	<.008	<.016	<.07
SEP													
08...	<.02	--	--	--	M	--	E.006	--	--	<.02	<.008	--	<.07
23...	<.02	<.030	<.01	<.008	M	<.02	<.010	<.038	<.01	<.02	<.008	<.016	<.07
30...	<.02	<.030	<.01	<.008	<.5	<.02	<.005	<.038	<.01	<.02	<.008	<.016	<.07

MISSISSIPPI RIVER BELOW I-694 AT FRIDLEY, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Terbuthylazine, water, fltrd, ug/L (04022)	tert-Amyl alcohol water unfltrd ug/L (77073)	tert-Butyl alcohol water unfltrd ug/L (77035)	Tetrachloroethene, water, fltrd, ug/L (34476)	Thiobencarb water fltrd 0.7u GF ug/L (82681)	trans-Propiconazole, water, fltrd, ug/L (79847)	Tribromomethane water, fltrd, ug/L (34288)	Tribuphos, water, fltrd, ug/L (61610)	Tributyl phosphate, water, fltrd, ug/L (62089)	Triclopyr, water, fltrd 0.7u GF ug/L (49235)	Triclosan, water, fltrd, ug/L (62090)	Triethyl citrate water, fltrd, ug/L (62091)
NOV													
16...	<.02	<.01	<1.0	<2.00	<.5	--	--	<.5	--	<.5	<.03	<1	<.5
DEC													
09...	<.02	<.01	<1.0	<2.00	<.5	--	--	<.5	--	<.5	<.03	<1	<.5
29...	<.02	<.01	<1.0	<2.00	<.5	--	--	<.5	--	<.5	<.03	<1	<.5
JAN													
20...	<.02	<.01	<1.0	<2.00	<.5	--	--	<.5	--	M	<.03	<1	<.5
FEB													
09...	<.02	<.01	<1.0	<2.00	<.5	--	--	<.5	--	<.5	<.03	<1	<.5
MAR													
02...	<.02	<.01	<1.0	<2.00	<.5	--	--	<.5	--	M	<.03	<1	<.5
23...	<.02	<.01	<1.0	<2.00	<.5	--	--	<.5	--	E.1	<.03	<1	M
APR													
18...	<.02	<.01	<1.0	<2.00	<.5	--	--	<.5	--	<.5	<.03	<1	<.5
MAY													
04...	<.02	<.01	<1.0	<2.00	<.5	--	--	<.5	--	E.1	<.03	<1	<.5
13...	<.02	<.01	<1.0	<2.00	<.5	--	--	<.5	--	<.5	<.03	<1	<.5
31...	<.02	<.01	<1.0	<2.00	<.5	--	--	<.5	--	<.5	<.03	<1	<.5
JUN													
07...	<.02	<.01	<1.0	<2.00	<.5	<.010	<.01	<.5	<.004	E.2	<.03	<1	<.5
22...	<.02	<.01	<1.0	<2.00	<.5	<.010	<.01	<.5	<.004	<.5	<.03	M	<.5
JUL													
07...	<.02	<.01	<1.0	<2.00	<.5	<.010	<.01	M	<.004	M	<.03	<1	<.5
25...	<.02	<.01	<1.0	<2.00	<.5	<.010	<.01	<.5	<.004	M	<.03	<1	<.5
AUG													
03...	<.02	<.01	<1.0	<2.00	<.5	<.010	<.01	<.5	<.004	E.3	<.03	<1	<.5
11...	<.02	<.01	<1.0	<2.00	<.5	<.010	<.01	<.5	<.004	<.5	--	<1	<.5
25...	<.02	<.01	<1.0	<2.00	<.5	<.010	<.01	<.5	<.004	<.5	<.03	<1	<.5
SEP													
08...	<.02	<.01	<1.0	<2.00	<.5	<.010	<.01	<.5	<.010	<.5	--	<1	<.5
23...	<.02	<.01	<1.0	<2.00	<.5	<.010	<.01	M	<.025	M	<.03	<1	<.5
30...	<.02	<.01	<1.0	<2.00	<.5	<.010	<.01	<.5	<.004	E.1	<.03	<1	<.5

MISSISSIPPI RIVER BELOW I-694 AT FRIDLEY, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	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)	1,1,1,2 -Tetra-chloro-ethane, water, unfltrd ug/L (77562)	1,1,1-Tri-chloro-ethane, water, unfltrd ug/L (34506)	1,1,2,2 -Tetra-chloro-ethane, water, unfltrd ug/L (34516)	CFC-113 water unfltrd ug/L (77652)	1,1,2-Tri-chloro-ethane, water, unfltrd ug/L (34511)	1,1-Di-chloro-ethane, water unfltrd ug/L (34496)	1,1-Di-chloro-ethene, water, unfltrd ug/L (34501)	1,1-Di-chloro-propene water unfltrd ug/L (77168)
NOV													
16...	<.009	<.5	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02	<.03
DEC													
09...	<.009	<.5	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02	<.03
29...	<.009	<.5	E.2	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02	<.03
JAN													
20...	<.009	M	E.1	E.1	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02	<.03
FEB													
09...	<.009	<.5	E.3	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02	<.03
MAR													
02...	<.009	<.5	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02	<.03
23...	<.009	M	E.2	E.1	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02	<.03
APR													
18...	<.009	<.5	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02	<.03
MAY													
04...	<.009	<.5	E.2	M	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02	<.03
13...	<.009	<.5	<.5	<.5	M	<.03	<.03	<.08	<.04	<.04	<.04	<.02	<.03
31...	<.009	<.5	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02	<.03
JUN													
07...	E.004	M	E.4	E.1	M	<.03	<.03	<.08	<.04	<.04	<.04	<.02	<.03
22...	<.009	M	E.1	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02	<.03
JUL													
07...	<.009	M	E.2	M	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02	<.03
25...	<.009	M	E.3	<.5	M	<.03	<.03	<.08	<.04	<.04	<.04	<.02	<.03
AUG													
03...	<.009	M	E.3	E.2	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02	<.03
11...	<.009	<.5	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02	<.03
25...	<.009	<.5	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02	<.03
SEP													
08...	<.009	<.5	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02	<.03
23...	<.009	<.5	E.1	M	M	<.03	<.03	<.08	<.04	<.04	<.04	<.02	<.03
30...	<.009	M	<.5	E.1	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02	<.03

MISSISSIPPI RIVER BELOW I-694 AT FRIDLEY, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	1,2,3,4 Tetra-methyl-benzene water unfltrd ug/L (49999)	1,2,3,5 Tetra-methyl-benzene water unfltrd ug/L (50000)	1,2,3-Tri-chloro-benzene water unfltrd ug/L (77613)	1,2,3-Tri-chloro-propane water unfltrd ug/L (77443)	1,2,3-Tri-methyl-benzene water unfltrd ug/L (77221)	1,2,4-Tri-chloro-benzene water unfltrd ug/L (34551)	1,2,4-Tri-methyl-benzene water unfltrd ug/L (77222)	Dibromo chloro-propane water unfltrd ug/L (82625)	1,2-Di-bromo-ethane, water, unfltrd ug/L (77651)	1,2-Di-chloro-benzene water unfltrd ug/L (34536)	1,2-Di-chloro-ethane, water, unfltrd ug/L (32103)	1,2-Di-chloro-propane water unfltrd ug/L (34541)	1,3,5-Tri-methyl-benzene water unfltrd ug/L (77226)
NOV													
16...	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04	<.05	<.1	<.03	<.04
DEC													
09...	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04	<.05	<.1	<.03	<.04
29...	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04	<.05	<.1	<.03	<.04
JAN													
20...	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04	<.05	<.1	<.03	<.04
FEB													
09...	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04	<.05	<.1	<.03	<.04
MAR													
02...	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04	<.05	<.1	<.03	<.04
23...	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04	<.05	<.1	<.03	<.04
APR													
18...	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04	<.05	<.1	<.03	<.04
MAY													
04...	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04	<.05	<.1	<.03	<.04
13...	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04	<.05	<.1	<.03	<.04
31...	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04	<.05	<.1	<.03	<.04
JUN													
07...	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04	<.05	<.1	<.03	<.04
22...	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04	<.05	<.1	<.03	<.04
JUL													
07...	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04	<.05	<.1	<.03	<.04
25...	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04	<.05	<.1	<.03	<.04
AUG													
03...	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04	<.05	<.1	<.03	<.04
11...	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04	<.05	<.1	<.03	<.04
25...	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04	<.05	<.1	<.03	<.04
SEP													
08...	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04	<.05	<.1	<.03	<.04
23...	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04	<.05	<.1	<.03	<.04
30...	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04	<.05	<.1	<.03	<.04

MISSISSIPPI RIVER BELOW I-694 AT FRIDLEY, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	1,3-Dichlorobenzene water unfltrd ug/L (34566)	1,3-Dichloropropane water unfltrd ug/L (77173)	1,4-Dichlorobenzene water unfltrd ug/L (34571)	2,2-Dichloropropane water unfltrd ug/L (77170)	2-Chlorotoluene water unfltrd ug/L (77275)	2-Ethyltoluene water unfltrd ug/L (77220)	3-Chloropropene water unfltrd ug/L (78109)	4-Chlorotoluene water unfltrd ug/L (77277)	4-Isopropyltoluene water unfltrd ug/L (77356)	Acetone water unfltrd ug/L (81552)	Acrylonitrile water unfltrd ug/L (34215)	Benzene water unfltrd ug/L (34030)	Bromobenzene water unfltrd ug/L (81555)
NOV													
16...	<.03	<.1	<.03	<.05	<.04	<.06	<.50	<.05	<.08	<6	<.8	E.01	<.03
DEC													
09...	<.03	<.1	<.03	<.05	<.04	<.06	<.50	<.05	<.08	<6	<.8	<.02	<.03
29...	<.03	<.1	<.03	<.05	<.04	<.06	<.50	<.05	<.08	<6	<.8	E.01	<.03
JAN													
20...	<.03	<.1	<.03	<.05	<.04	<.06	<.50	<.05	<.08	<6	<.8	<.02	<.03
FEB													
09...	<.03	<.1	<.03	<.05	<.04	<.06	<.50	<.05	<.08	<6	<.8	<.02	<.03
MAR													
02...	<.03	<.1	<.03	<.05	<.04	<.06	<.50	<.05	<.08	<6	<.8	E.02	<.03
23...	<.03	<.1	<.03	<.05	<.04	<.06	<.50	<.05	<.08	<6	<.8	<.02	<.03
APR													
18...	<.03	<.1	<.03	<.05	<.04	<.06	<.50	<.05	<.08	<6	<.8	<.02	<.03
MAY													
04...	<.03	<.1	<.03	<.05	<.04	<.06	<.50	<.05	<.08	E1	<.8	E.01	<.03
13...	<.03	<.1	<.03	<.05	<.04	<.06	<.50	<.05	<.08	<6	<.8	<.02	<.03
31...	<.03	<.1	<.03	<.05	<.04	<.06	<.50	<.05	<.08	<6	<.8	<.02	<.03
JUN													
07...	<.03	<.1	<.03	<.05	<.04	<.06	<.50	<.05	<.08	<6	<.8	E.01	<.03
22...	<.03	<.1	<.03	<.05	<.04	<.06	<.50	<.05	<.08	<6	<.8	<.02	<.03
JUL													
07...	<.03	<.1	<.03	<.05	<.04	<.06	<.50	<.05	<.08	<6	<.8	<.02	<.03
25...	<.03	<.1	<.03	<.05	<.04	<.06	<.50	<.05	<.08	E3	<.8	E.02	<.03
AUG													
03...	<.03	<.1	<.03	<.05	<.04	<.06	<.50	<.05	<.08	<6	<.8	<.02	<.03
11...	<.03	<.1	<.03	<.05	<.04	<.06	<.50	<.05	<.08	E2	<.8	<.02	<.03
25...	<.03	<.1	<.03	<.05	<.04	<.06	<.50	<.05	<.08	E4	<.8	<.02	<.03
SEP													
08...	<.03	<.1	<.03	<.05	<.04	<.06	<.50	<.05	<.08	E2	<.8	<.02	<.03
23...	<.03	<.1	<.03	<.05	<.04	<.06	<.50	<.05	<.08	E4	<.8	<.02	<.03
30...	<.03	<.1	<.03	<.05	<.04	<.06	<.50	<.05	<.08	<6	<.8	<.02	<.03

MISSISSIPPI RIVER BELOW I-694 AT FRIDLEY, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Bromo-chloro-methane water unfltrd ug/L (77297)	Bromo-di-chloro-methane water unfltrd ug/L (32101)	Bromo-ethene, water, unfltrd ug/L (50002)	Bromo-methane water unfltrd ug/L (34413)	Carbon di-sulfide water unfltrd ug/L (77041)	Chloro-benzene water unfltrd ug/L (34301)	Chloro-ethane, water, unfltrd ug/L (34311)	Chloro-methane water unfltrd ug/L (34418)	cis-1,2-Di-chloro-ethene, water, unfltrd ug/L (77093)	cis-1,3-Di-chloro-propene water unfltrd ug/L (34704)	Di-bromo-chloro-methane water unfltrd ug/L (32105)	Di-bromo-methane water unfltrd ug/L (30217)	Di-chloro-di-fluoro-methane wat unf ug/L (34668)
NOV													
16...	<.12	<.03	<.1	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05	<.18
DEC													
09...	<.12	<.03	<.1	<.3	<.04	<.03	<.1	<.2	E.02	<.05	<.1	<.05	<.18
29...	<.12	<.03	<.1	<.3	<.04	<.03	<.1	<.2	E.02	<.05	<.1	<.05	<.18
JAN													
20...	<.12	<.03	<.1	<.3	<.04	<.03	<.1	<.2	E.02	<.05	<.1	<.05	<.18
FEB													
09...	<.12	<.03	<.1	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05	<.18
MAR													
02...	<.12	<.03	<.1	<.3	<.04	<.03	<.1	<.2	E.02	<.05	<.1	<.05	<.18
23...	<.12	<.03	<.1	<.3	<.04	<.03	<.1	<.2	E.02	<.05	<.1	<.05	<.18
APR													
18...	<.12	<.03	<.1	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05	<.18
MAY													
04...	<.12	<.03	<.1	<.3	<.04	<.03	<.1	<.2	E.02	<.05	<.1	<.05	<.18
13...	<.12	<.03	<.1	<.3	<.04	<.03	<.1	M	E.02	<.05	<.1	<.05	<.18
31...	<.12	<.03	<.1	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05	<.18
JUN													
07...	<.12	<.03	<.1	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05	<.18
22...	<.12	<.03	<.1	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05	<.18
JUL													
07...	<.12	<.03	<.1	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05	<.18
25...	<.12	<.03	<.1	<.3	<.04	<.03	<.1	<.2	E.02	<.05	<.1	<.05	<.18
AUG													
03...	<.12	<.03	<.1	<.3	<.04	<.03	<.1	<.2	E.02	<.05	<.1	<.05	<.18
11...	<.12	<.03	<.1	<.3	<.04	<.03	<.1	<.2	E.02	<.05	<.1	<.05	<.18
25...	<.12	<.03	<.1	<.3	<.04	<.03	<.1	<.2	E.02	<.05	<.1	<.05	<.18
SEP													
08...	<.12	<.03	<.1	<.3	<.04	<.03	<.1	<.2	E.02	<.05	<.1	<.05	<.18
23...	<.12	<.03	<.1	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05	<.18
30...	<.12	<.03	<.1	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05	<.18

MISSISSIPPI RIVER BELOW I-694 AT FRIDLEY, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Dichloromethane water unfltrd ug/L (34423)	Diethyl ether, water, unfltrd ug/L (81576)	Diisopropyl ether, water, unfltrd ug/L (81577)	Ethyl methacrylate, water, unfltrd ug/L (73570)	Ethyl methyl ketone, water, unfltrd ug/L (81595)	Ethylbenzene water unfltrd ug/L (34371)	Hexachlorobutadiene, water, unfltrd ug/L (39702)	Hexachloroethane, water, unfltrd ug/L (34396)	Iodomethane water unfltrd ug/L (77424)	Isobutyl methyl ketone, water, unfltrd ug/L (78133)	Isopropylbenzene water unfltrd ug/L (77223)	Methyl acrylonitrile water unfltrd ug/L (81593)	Methyl acrylate, water, unfltrd ug/L (49991)
NOV													
16...	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4	<.04	<.4	<1.0
DEC													
09...	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4	<.04	<.4	<1.0
29...	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4	<.04	<.4	<1.0
JAN													
20...	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4	<.04	<.4	<1.0
FEB													
09...	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4	<.04	<.4	<1.0
MAR													
02...	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4	<.04	<.4	<1.0
23...	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4	<.04	<.4	<1.0
APR													
18...	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4	<.04	<.4	<1.0
MAY													
04...	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4	<.04	<.4	<1.0
13...	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4	<.04	<.4	<1.0
31...	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4	<.04	<.4	<1.0
JUN													
07...	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4	<.04	<.4	<1.0
22...	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4	<.04	<.4	<1.0
JUL													
07...	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4	<.04	<.4	<1.0
25...	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4	<.04	<.4	<1.0
AUG													
03...	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4	<.04	<.4	<1.0
11...	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4	<.04	<.4	<1.0
25...	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4	<.04	<.4	<1.0
SEP													
08...	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4	<.04	<.4	<1.0
23...	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4	<.04	<.4	<1.0
30...	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4	<.04	<.4	<1.0

MISSISSIPPI RIVER BELOW I-694 AT FRIDLEY, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Methyl methacrylate, water, unfltrd ug/L (81597)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	Naphthalene, water, unfltrd ug/L (34696)	Methyl n-butyl ketone, water, unfltrd ug/L (77103)	n-Butyl benzene water unfltrd ug/L (77342)	n-propylbenzene water unfltrd ug/L (77224)	o-Xylene, water, unfltrd ug/L (77135)	sec-Butylbenzene water unfltrd ug/L (77350)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)	tert-Butylbenzene water unfltrd ug/L (77353)
NOV													
16...	<.2	<.04	<.06	<.5	<.4	<.1	<.04	<.04	<.06	<.04	<.03	<.1	<.06
DEC													
09...	<.2	<.04	<.06	<.5	<.4	<.1	<.04	<.04	<.06	<.04	<.03	<.1	<.06
29...	<.2	<.04	<.06	<.5	<.4	<.1	<.04	<.04	<.06	<.04	<.03	<.1	<.06
JAN													
20...	<.2	<.04	<.06	<.5	<.4	<.1	<.04	<.04	<.06	<.04	<.03	<.1	<.06
FEB													
09...	<.2	<.04	<.06	<.5	<.4	<.1	<.04	<.04	<.06	<.04	<.03	<.1	<.06
MAR													
02...	<.2	<.04	E.02	<.5	<.4	<.1	<.04	<.04	<.06	<.04	<.03	<.1	<.06
23...	<.2	<.04	<.06	<.5	<.4	<.1	<.04	<.04	<.06	<.04	<.03	<.1	<.06
APR													
18...	<.2	<.04	<.06	<.5	<.4	<.1	<.04	<.04	<.06	<.04	<.03	<.1	<.06
MAY													
04...	<.2	<.04	<.06	<.5	<.4	<.1	<.04	<.04	<.06	<.04	<.03	<.1	<.06
13...	<.2	<.04	<.06	<.5	<.4	<.1	<.04	<.04	<.06	<.04	<.03	<.1	<.06
31...	<.2	<.04	<.06	<.5	<.4	<.1	<.04	<.04	<.06	<.04	<.03	<.1	<.06
JUN													
07...	<.2	<.04	<.06	<.5	<.4	<.1	<.04	<.04	<.06	<.04	<.03	<.1	<.06
22...	<.2	<.04	<.06	<.5	<.4	<.1	<.04	<.04	<.06	<.04	<.03	<.1	<.06
JUL													
07...	<.2	<.04	<.06	<.5	<.4	<.1	<.04	<.04	<.06	<.04	<.03	<.1	<.06
25...	<.2	<.04	<.06	<.5	<.4	<.1	<.04	<.04	<.06	<.04	<.03	<.1	<.06
AUG													
03...	<.2	<.04	<.06	<.5	<.4	<.1	<.04	<.04	<.06	<.04	<.03	<.1	<.06
11...	<.2	<.04	<.06	<.5	<.4	<.1	<.04	<.04	<.06	<.04	<.03	<.1	<.06
25...	<.2	<.04	<.06	<.5	<.4	<.1	<.04	<.04	<.06	<.04	<.03	<.1	<.06
SEP													
08...	<.2	<.04	<.06	<.5	<.4	<.1	<.04	<.04	<.06	<.04	<.03	<.1	<.06
23...	<.2	<.04	<.06	<.5	<.4	<.1	<.04	<.04	<.06	<.04	<.03	<.1	<.06
30...	<.2	<.04	<.06	<.5	<.4	<.1	<.04	<.04	<.06	<.04	<.03	<.1	<.06

MISSISSIPPI RIVER BELOW I-694 AT FRIDLEY, MN—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Tetra-chloro-ethene, water, unfltrd ug/L (34475)	Tetra-chloro-methane water unfltrd ug/L (32102)	Tetra-hydro-furan, water, unfltrd ug/L (81607)	Toluene water unfltrd ug/L (34010)	trans-1,2-Di-chloro-ethene, water, unfltrd ug/L (34546)	trans-1,3-Di-chloro-propene water unfltrd ug/L (34699)	trans-1,4-Di-chloro-2-butene, wat unf ug/L (73547)	Tri-bromo-methane water unfltrd ug/L (32104)	Tri-chloro-ethene, water, unfltrd ug/L (39180)	Tri-chloro-fluoro-methane water unfltrd ug/L (34488)	Tri-chloro-methane water unfltrd ug/L (32106)	Vinyl chlor-ide, water, unfltrd ug/L (39175)	Di-chlor-vos, water fltrd, ug/L (38775)
NOV													
16...	<.03	<.06	<1	E.03	<.03	<.09	<.7	<.10	E.03	<.08	E.02	<.1	<.01
DEC													
09...	<.03	<.06	<1	E.04	<.03	<.09	<.7	<.10	E.06	<.08	E.02	<.1	<.01
29...	<.03	<.06	<1	E.02	<.03	<.09	<.7	<.10	E.08	<.08	E.03	<.1	<.01
JAN													
20...	E.01	<.06	<1	<.02	<.03	<.09	<.7	<.10	E.06	<.08	E.03	<.1	<.01
FEB													
09...	<.03	<.06	<1	E.02	<.03	<.09	<.7	<.10	E.06	<.08	E.03	<.1	<.01
MAR													
02...	<.03	<.06	<1	E.03	<.03	<.09	<.7	<.10	E.06	<.08	E.02	<.1	<.01
23...	<.03	<.06	<1	E.02	<.03	<.09	<.7	<.10	E.07	<.08	E.02	<.1	<.01
APR													
18...	<.03	<.06	<1	E.03	<.03	<.09	<.7	<.10	<.04	<.08	E.02	<.1	<.01
MAY													
04...	<.03	<.06	<1	.13	<.03	<.09	<.7	<.10	E.04	<.08	E.08	<.1	<.01
13...	<.03	<.06	<1	.14	<.03	<.09	<.7	<.10	E.06	<.08	E.08	<.1	<.01
31...	<.03	<.06	<1	E.04	<.03	<.09	<.7	<.10	<.04	<.08	E.10	<.1	<.01
JUN													
07...	<.03	<.06	<1	E.09	<.03	<.09	<.7	<.10	<.04	<.08	E.03	<.1	<.01
22...	<.03	<.06	<1	E.04	<.03	<.09	<.7	<.10	<.04	<.08	E.03	<.1	<.01
JUL													
07...	<.03	<.06	<1	<.02	<.03	<.09	<.7	<.10	E.02	<.08	E.03	<.1	<.01
25...	<.03	<.06	<1	E.04	<.03	<.09	<.7	<.10	E.05	<.08	E.04	<.1	<.01
AUG													
03...	<.03	<.06	<1	E.02	<.03	<.09	<.7	<.10	E.03	<.08	E.03	<.1	<.01
11...	<.03	<.06	<1	E.02	<.03	<.09	<.7	<.10	E.05	<.08	E.03	<.1	<.01
25...	<.03	<.06	<1	E.01	<.03	<.09	<.7	<.10	E.04	<.08	E.03	<.1	<.01
SEP													
08...	<.03	<.06	<1	E.01	<.03	<.09	<.7	<.10	E.04	<.08	E.03	<.1	<.01
23...	<.03	<.06	<1	E.02	<.03	<.09	<.7	<.10	E.02	<.08	E.04	<.1	<.01
30...	<.03	<.06	<1	<.02	<.03	<.09	<.7	<.10	E.03	<.08	E.02	<.1	<.01

GROUND-WATER ASSESSMENT STUDY

MULTIPLE STATION ANALYSES

Local identifier	Date	Time	Sample type	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unf lab, uS/cm 25 degC (90095)	Specif. conductance, wat unf uS/cm 25 degC (00095)
DAKOTA COUNTY										
SSP1 28N22W27CBBCCD0	11-08-04	0930	Environmental	751	.1	1	7.4	7.5	493	515
HENNEPIN COUNTY										
HOPK4 117N22W13CCDCBB0	11-09-04	0930	Environmental	745	.9	8	7.4	E7.3	717	736
	08-24-05	1030	Environmental	745	.3	7	7.4	7.6	759	782
HOPK4-F 117N22W13CCDCBB0	08-24-05	1130	Environmental	745	8.1	72	7.3	7.5	756	784
BRCN5 119N21W25DCBDCB0	11-09-04	1330	Environmental	744	.2	1	7.3	7.5	726	757
DAKOTA COUNTY										
IGH3 27N23W 3CCBCCA0	11-10-04	0900	Environmental	740	.5	5	7.5	7.5	463	491
RAMSEY COUNTY										
NBRT1515030N23W30ADC	11-10-04	1330	Environmental	741	.2	2	7.6	7.7	538	561
	11-10-04	1332	Replicate	--	--	--	--	8.0	533	--
	08-10-05	1325	Blank	--	--	--	--	8.9	6	--
	08-10-05	1330	Environmental	745	M	.0	7.4	7.6	561	596
NBRT15-F 030N23W30ADC	08-10-05	1455	Blank	--	--	--	--	9.0	6	--
	08-10-05	1515	Environmental	745	M	.0	7.4	7.8	576	609
CARVER COUNTY										
CHAN3 116N05W31BACDAD0	11-12-04	1030	Environmental	748	.5	4	7.4	7.7	552	592
CHAN5 116N23W12DDBCDC0	12-01-04	1130	Environmental	739	.2	1	7.5	7.5	590	644
HENNEPIN COUNTY										
EDN13 117N21W30BABBAA0	11-15-04	0930	Environmental	749	.3	3	7.5	7.4	600	649
	08-09-05	1130	Environmental	741	M	.0	7.4	7.5	633	670
EDN13-F 117N21W30BABBAA0	08-09-05	1230	Environmental	741	M	.0	7.2	7.3	638	669
EDPR 116N22W16ACCBCC	11-15-04	1200	Environmental	749	.2	2	7.6	E7.1	563	610
BLM6 027N24W18ACA01	11-12-04	1200	Environmental	747	.1	1	7.6	7.8	527	568
	08-09-05	1000	Environmental	743	.1	.0	7.4	7.6	584	613
BLM6-F 027N24W18ACA02	08-09-05	1040	Environmental	743	7.4	66	8.4	8.4	214	225
RICE COUNTY										
FARB9 110N21W25	11-16-04	1000	Environmental	741	.2	2	7.1	7.3	661	704
	08-08-05	1045	Environmental	741	4.4	39	7.0	7.2	674	721
FARB9-F 110N21W2502	08-08-05	1145	Environmental	741	5.3	48	7.1	7.3	652	696

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Temperature, air, deg C (00020)	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)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Bromide water, fltrd, mg/L (71870)
					DAKOTA COUNTY						
SSP1 28N22W2	11-08-04	17.5	10.2	71.5	26.9	2.29	5.22	261	318	--	.03
					HENNEPIN COUNTY						
HOPK4 117N22W1	11-09-04	16.0	10.2	87.8	33.9	1.99	24.2	293	357	--	.06
	08-24-05	--	10.1	91.8	34.6	2.01	25.3	275	335	.0	.21
HOPK4-F 117N22W1	08-24-05	--	10.2	89.8	34.9	1.99	25.6	275	335	.0	.28
BRCN5 119N21W2	11-09-04	25.5	10.3	91.8	38.2	2.06	11.8	263	320	--	.05
					DAKOTA COUNTY						
IGH3 27N23W	11-10-04	17.0	10.2	66.0	26.8	1.76	3.64	272	331	--	E.02
					RAMSEY COUNTY						
NBRT1515030N23W 30	11-10-04	18.0	10.3	72.6	30.1	2.14	6.64	278	339	--	.03
	11-10-04	--	--	71.3	29.6	2.13	6.53	--	--	--	.03
	08-10-05	--	--	.17	E.007	<.16	.40	--	--	--	E.02
	08-10-05	--	10.1	76.1	30.3	2.06	6.81	273	333	.0	.21
NBRT15-F 030N23W3	08-10-05	--	--	.34	.015	<.16	.53	--	--	--	E.01
	08-10-05	--	10.3	75.7	30.4	2.24	8.38	283	345	.0	.19
					CARVER COUNTY						
CHAN3 116N05W3	11-12-04	17.0	9.8	72.2	33.4	3.72	6.15	319	389	--	.03
CHAN5 116N23W1	12-01-04	23.5	10.1	90.0	32.9	3.21	3.85	342	416	--	<.20
					HENNEPIN COUNTY						
EDN13 117N21W3	11-15-04	17.5	11.2	82.0	32.7	2.05	10.8	293	357	--	.10
	08-09-05	--	10.0	79.3	31.3	1.84	10.0	291	355	.0	.24
EDN13-F 117N21W3	08-09-05	--	10.9	77.8	31.2	2.14	10.5	283	345	.0	.20
EDPR 116N22W1	11-15-04	14.5	10.0	82.8	29.5	2.39	8.21	295	360	--	.02
BLM6 027N24W1	11-12-04	9.0	9.5	72.8	31.3	2.67	4.79	295	360	--	.04
	08-09-05	--	10.1	73.2	29.0	2.39	4.72	299	365	.0	.23
BLM6-F 027N24W1	08-09-05	--	10.1	10.8	15.7	2.28	4.74	73	89	.0	.23
					RICE COUNTY						
FARB9 110N21W2	11-16-04	19.5	9.8	95.6	31.3	2.70	12.9	334	407	--	<.10
	08-08-05	--	9.7	96.7	29.9	2.70	12.0	332	404	.0	.26
FARB9-F 110N21W2	08-08-05	--	11.0	92.1	28.9	2.64	9.53	315	384	.0	.26

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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)	Total nitrogen, wat flt by analysis, mg/L (62854)	Orthophosphate, water, fltrd, mg/L as P (00671)
DAKOTA COUNTY											
SSP1 28N22W2	11-08-04	5.85	.2	16.1	16.3	303	.14	<.06	<.008	.19	.006
HENNEPIN COUNTY											
HOPK4 117N22W1	11-09-04	61.5	.2	20.8	20.2	442	.40	<.06	<.008	.50	.023
	08-24-05	65.9	.2	19.8	22.8	437	.38	<.06	<.008	.51	.006
HOPK4-F 117N22W1	08-24-05	68.3	1.0	20.4	22.9	444	.31	<.06	<.008	.44	.396
BRCN5 119N21W2	11-09-04	39.9	.2	19.7	88.1	468	.30	<.06	<.008	.38	<.006
DAKOTA COUNTY											
IGH3 27N23W	11-10-04	1.97	.2	17.6	10.4	295	.07	<.06	<.008	.09	<.006
RAMSEY COUNTY											
NBRT1515030N23W 30	11-10-04	13.5	.2	23.7	20.0	340	.14	<.06	<.008	.16	.046
	11-10-04	13.5	.2	23.5	20.1	340	.13	<.06	<.008	.20	.042
	08-10-05	<.20	E.1	1.97	<.2	<10	<.04	<.06	<.008	<.06	<.006
	08-10-05	13.0	.2	23.1	18.5	349	.14	<.06	<.008	.17	.038
NBRT15-F 030N23W3	08-10-05	<.20	<.1	2.73	<.2	<10	<.04	<.06	<.008	<.06	<.006
	08-10-05	15.2	.2	22.2	20.4	338	.06	<.06	<.008	E.05	.038
CARVER COUNTY											
CHAN3 116N05W3	11-12-04	3.27	.4	22.6	10.1	347	.34	<.06	<.008	.44	.018
CHAN5 116N23W1	12-01-04	3.01	.2	32.2	22.3	388	.28	<.06	<.008	.33	.006
HENNEPIN COUNTY											
EDN13 117N21W3	11-15-04	24.0	.2	19.2	18.1	366	.50	<.06	<.008	.57	.023
	08-09-05	24.4	.2	17.2	18.0	374	.51	<.06	<.008	.56	.017
EDN13-F 117N21W3	08-09-05	31.1	1.3	17.5	18.3	369	<.04	<.06	<.008	E.05	.221
EDPR 116N22W1	11-15-04	13.3	.2	24.3	16.1	345	.33	<.06	<.008	.40	.010
BLM6 027N24W1	11-12-04	8.85	.2	18.9	12.2	332	.39	<.06	<.008	.44	.033
	08-09-05	11.5	.2	17.1	13.8	336	.41	<.06	<.008	.57	.019
BLM6-F 027N24W1	08-09-05	12.0	1.2	10.9	11.9	118	.86	<.06	E.006	1.08	<.006
RICE COUNTY											
FARB9 110N21W2	11-16-04	4.33	.2	13.8	49.2	416	.36	<.06	<.008	.44	E.003
	08-08-05	4.14	.2	13.2	48.6	412	.37	<.06	<.008	.45	.006
FARB9-F 110N21W2	08-08-05	10.2	.2	16.5	36.5	387	.34	<.06	<.008	.42	<.006

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Organic carbon, water, fltrd, mg/L (00681)	Colipge F-spec, FAMP, 2-step, pres(1) abs(2) /L (99335)	Colipge som, Ec CN13hst 2-step, pres(1) abs(2) /L (99332)	E coli, MI MF, water, col/ 100 mL (90901)	Total coli-form, MI MF, water, col/ 100 mL (90900)	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)	1-Naph-thol, water, fltrd 0.7u GF ug/L (49295)
DAKOTA COUNTY											
SSP1 28N22W2	11-08-04	.4	2	2	<1	<1	154	56.7	<.5	<.5	<.09
HENNEPIN COUNTY											
HOPK4 117N22W1	11-09-04	1.1	2	2	<1	<1	231	71.6	<.5	<.5	<.09
	08-24-05	--	--	--	--	--	10	74.7	<.5	<.5	--
HOPK4-F 117N22W1	08-24-05	--	--	--	--	--	<6	49.1	<.5	<.5	--
BRCN5 119N21W2	11-09-04	.7	2	2	<1	<1	E4	379	<.5	<.5	<.09
DAKOTA COUNTY											
IGH3 27N23W	11-10-04	.4	2	2	<1	<1	7	217	<.5	<.5	<.09
RAMSEY COUNTY											
NBRT1515030N23W 30	11-10-04	1.1	2	2	<1	<1	15	388	<.5	<.5	<.09
	11-10-04	1.0	--	--	--	--	8	384	<.5	<.5	<.09
	08-10-05	--	--	--	--	--	E4	<.6	<.5	<.5	<.09
	08-10-05	--	--	--	--	--	<6	388	<.5	<.5	<.09
NBRT15-F 030N23W3	08-10-05	--	--	--	--	--	9	<.6	<.5	<.5	<.09
	08-10-05	--	--	--	--	--	E4	<.6	<.5	<.5	<.09
CARVER COUNTY											
CHAN3 116N05W3	11-12-04	.9	2	2	<1	<1	E3	376	<.5	<.5	<.09
CHAN5 116N23W1	12-01-04	1.0	2	2	<1	<1	38	385	<.5	<.5	<.09
HENNEPIN COUNTY											
EDN13 117N21W3	11-15-04	1.1	2	2	<1	<1	194	47.5	<.5	<.5	<.09
	08-09-05	--	--	--	--	--	80	43.9	--	--	--
EDN13-F 117N21W3	08-09-05	--	--	--	--	--	<6	<.6	--	--	--
EDPR 116N22W1	11-15-04	1.2	2	2	<1	<1	98	73.3	<.5	<.5	<.09
BLM6 027N24W1	11-12-04	1.0	2	2	<1	<1	184	52.6	<.5	<.5	<.09
	08-09-05	--	--	--	--	--	10	44.4	<.5	<.5	<.09
BLM6-F 027N24W1	08-09-05	--	--	--	--	--	<6	.6	<.5	<.5	<.09
RICE COUNTY											
FARB9 110N21W2	11-16-04	--	2	2	<1	<1	398	38.3	<.5	<.5	<.09
	08-08-05	--	--	--	--	--	635	38.0	--	--	--
FARB9-F 110N21W2	08-08-05	--	--	--	--	--	E4	99.3	--	--	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd 0.7u GF ug/L (38746)	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)	2Chloro -2',6-' diethyl acet-anilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	Ala-chlor 2nd amide, water, fltrd, ug/L (63781)
DAKOTA COUNTY											
SSP1 28N22W2	11-08-04	<.016	<.04	<.02	<.006	<.5	<.02	<.005	<.006	<.08	<.02
HENNEPIN COUNTY											
HOPK4 117N22W1	11-09-04	<.016	<.04	<.02	<.006	<.5	<.02	<.005	<.006	<.08	<.02
	08-24-05	--	--	--	--	<.5	--	--	--	--	--
HOPK4-F 117N22W1	08-24-05	--	--	--	--	<.5	--	--	--	--	--
BRCN5 119N21W2	11-09-04	<.016	<.04	<.02	<.006	<.5	<.02	<.005	<.006	<.08	<.02
DAKOTA COUNTY											
IGH3 27N23W	11-10-04	<.016	<.04	<.02	<.006	<.5	<.02	<.005	<.006	<.08	<.02
RAMSEY COUNTY											
NBRT1515030N23W 30	11-10-04	<.016	<.04	<.02	<.006	<.5	<.02	<.005	E.011	<.08	<.02
	11-10-04	<.016	<.04	<.02	<.006	<.5	<.02	<.005	E.013	<.08	<.02
	08-10-05	<.050	<.04	<.02	<.006	<.5	--	<.005	<.006	<.08	--
	08-10-05	<.050	<.04	<.02	<.006	<.5	--	<.005	E.016	<.08	--
NBRT15-F 030N23W3	08-10-05	<.050	<.04	<.02	<.006	<.5	--	<.005	<.006	<.08	--
	08-10-05	<.016	<.04	<.02	<.006	<.5	--	<.005	<.006	<.08	--
CARVER COUNTY											
CHAN3 116N05W3	11-12-04	<.016	<.04	<.02	<.006	M	<.02	<.005	<.006	<.08	<.02
CHAN5 116N23W1	12-01-04	<.016	<.04	<.02	<.006	<.5	<.02	<.005	<.006	<.08	<.02
HENNEPIN COUNTY											
EDN13 117N21W3	11-15-04	<.016	<.04	<.02	<.006	<.5	<.02	<.005	<.006	<.08	<.02
	08-09-05	--	--	--	--	--	--	--	--	--	--
EDN13-F 117N21W3	08-09-05	--	--	--	--	--	--	--	--	--	--
EDPR 116N22W1	11-15-04	<.016	<.04	<.02	<.006	<.5	<.02	<.005	<.006	<.08	<.02
BLM6 027N24W1	11-12-04	<.016	<.04	<.02	<.006	<.5	<.02	<.005	<.006	<.08	<.02
	08-09-05	--	--	--	<.006	<.5	--	<.005	<.006	--	--
BLM6-F 027N24W1	08-09-05	--	--	--	<.006	<.5	--	<.005	<.006	--	--
RICE COUNTY											
FARB9 110N21W2	11-16-04	<.016	<.04	<.02	<.006	<.5	<.02	<.005	<.006	<.08	<.02
	08-08-05	--	--	--	--	--	<.02	--	--	--	<.02
FARB9-F 110N21W2	08-08-05	--	--	--	--	--	.02	--	--	--	<.02

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Aceto-chlor 3rd amide, water, fltrd, ug/L (63782)	2-Ethyl -6-methyl-aniline water, fltrd, ug/L (61620)	OIET, water, fltrd, ug/L (50355)	2-Methyl-naphth-alene, water, fltrd, ug/L (62056)	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-Hydroxy carbo-furan, wat flt 0.7u GF ug/L (49308)	3-Keto-carbo-furan, water, fltrd, ug/L (50295)	3-Methyl-1H-indole, water, fltrd, ug/L (62058)
DAKOTA COUNTY											
SSP1 28N22W2	11-08-04	<.02	<.004	<.032	<.5	<.004	--	<2	<.008	<.02	<1
HENNEPIN COUNTY											
HOPK4 117N22W1	11-09-04	<.02	<.004	<.032	<.5	<.004	--	<2	<.008	<.02	<1
	08-24-05	--	--	--	<.5	--	--	<2	--	--	<1
HOPK4-F 117N22W1	08-24-05	--	--	--	<.5	--	--	<2	--	--	<1
BRCN5 119N21W2	11-09-04	<.02	<.004	<.032	<.5	<.004	--	<2	<.008	<.02	<1
DAKOTA COUNTY											
IGH3 27N23W	11-10-04	<.02	<.004	<.032	<.5	<.004	--	<2	<.008	<.02	<1
RAMSEY COUNTY											
NBRT1515030N23W 30	11-10-04	<.02	<.004	E.013	<.5	<.004	--	<2	<.008	<.02	<1
	11-10-04	<.02	<.004	E.017	<.5	<.004	--	<2	<.008	<.02	<1
	08-10-05	--	<.004	<.032	<.5	<.004	<.004	<2	<.008	<.25	<1
	08-10-05	--	<.004	<.032	<.5	<.004	<.004	<2	<.008	<.25	<1
NBRT15-F 030N23W3	08-10-05	--	<.004	<.032	<.5	<.004	<.004	<2	<.008	<.25	<1
	08-10-05	--	<.004	<.032	<.5	<.004	<.004	<2	<.008	<.02	<1
CARVER COUNTY											
CHAN3 116N05W3	11-12-04	<.02	<.004	<.032	<.5	<.004	--	<2	<.008	<.02	<1
CHAN5 116N23W1	12-01-04	<.02	<.004	<.032	<.5	<.004	--	<2	<.008	<.02	<1
HENNEPIN COUNTY											
EDN13 117N21W3	11-15-04	<.02	<.004	<.032	<.5	<.004	--	<2	<.008	<.02	<1
	08-09-05	--	--	--	--	--	--	--	--	--	--
EDN13-F 117N21W3	08-09-05	--	--	--	--	--	--	--	--	--	--
EDPR 116N22W1	11-15-04	<.02	<.004	<.032	<.5	<.004	--	<2	<.008	<.02	<1
BLM6 027N24W1	11-12-04	<.02	<.004	<.032	<.5	<.004	--	<2	<.008	<.02	<1
	08-09-05	--	<.004	--	<.5	<.004	<.004	<2	--	--	<1
BLM6-F 027N24W1	08-09-05	--	<.004	--	<.5	<.004	<.004	<2	--	--	<1
RICE COUNTY											
FARB9 110N21W2	11-16-04	<.02	<.004	<.032	<.5	<.004	--	<2	<.008	<.02	<1
	08-08-05	<.02	--	--	--	--	--	--	--	--	--
FARB9-F 110N21W2	08-08-05	<.02	--	--	--	--	--	--	--	--	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	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 ESA, water, fltrd 0.7u GF ug/L (61029)	Acetochlor OA, water, fltrd 0.7u GF ug/L (61030)
DAKOTA COUNTY											
SSP1 28N22W2	11-08-04	<5	<.006	<1	<1	<5	<1	<2	<.5	<.02	<.02
HENNEPIN COUNTY											
HOPK4 117N22W1	11-09-04	<5	<.006	<1	<1	E2	<1	<2	<.5	<.02	<.02
	08-24-05	<5	--	<1	<1	<5	<1	<2	<.5	--	--
HOPK4-F 117N22W1	08-24-05	<5	--	<1	<1	<5	<1	<2	<.5	--	--
BRCN5 119N21W2	11-09-04	<5	<.006	<1	<1	<5	<1	<2	<.5	<.02	<.02
DAKOTA COUNTY											
IGH3 27N23W	11-10-04	<5	<.006	<1	<1	<5	<1	<2	<.5	<.02	<.02
RAMSEY COUNTY											
NBRT1515030N23W 30	11-10-04	<5	<.006	<1	<1	<5	<1	<2	<.5	<.02	<.02
	11-10-04	<5	<.006	<1	<1	<5	<1	<2	<.5	<.02	<.02
	08-10-05	<5	<.006	<1	<1	<5	<1	<2	<.5	--	--
	08-10-05	<5	<.006	<1	<1	<5	<1	<2	<.5	--	--
NBRT15-F 030N23W3	08-10-05	<5	<.006	<1	<1	<5	<1	<2	<.5	--	--
	08-10-05	<5	<.006	<1	<1	<5	<1	<2	<.5	--	--
CARVER COUNTY											
CHAN3 116N05W3	11-12-04	<5	<.006	<1	<1	<5	<1	<2	<.5	<.02	<.02
CHAN5 116N23W1	12-01-04	<5	<.006	<1	<1	<5	<1	<2	<.5	<.02	<.02
HENNEPIN COUNTY											
EDN13 117N21W3	11-15-04	<5	<.006	<1	<1	<5	<1	<2	<.5	<.02	<.02
	08-09-05	--	--	--	--	--	--	--	--	--	--
EDN13-F 117N21W3	08-09-05	--	--	--	--	--	--	--	--	--	--
EDPR 116N22W1	11-15-04	<5	<.006	<1	<1	<5	<1	<2	<.5	<.02	<.02
BLM6 027N24W1	11-12-04	<5	<.006	<1	<1	<5	<1	<2	<.5	<.02	<.02
	08-09-05	<5	<.006	<1	<1	<5	<1	<2	<.5	--	--
BLM6-F 027N24W1	08-09-05	<5	<.006	<1	<1	<5	<1	<2	<.5	--	--
RICE COUNTY											
FARB9 110N21W2	11-16-04	<5	<.006	<1	<1	<5	<1	<2	<.5	<.02	<.02
	08-08-05	--	--	--	--	--	--	--	--	<.02	<.02
FARB9-F 110N21W2	08-08-05	--	--	--	--	--	--	--	--	.02	.04

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Aceto-chlor SAA, water, fltrd, ug/L (62847)	Aceto-chlor, water, fltrd, ug/L (49260)	Aceto-phenone water, fltrd, ug/L (62064)	AHTN, water, fltrd, ug/L (62065)	Aci-fluor-fen, water, fltrd 0.7u GF ug/L (49315)	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)
DAKOTA COUNTY											
SSP1 28N22W2	11-08-04	<.02	<.006	<.5	M	<.028	<.02	<.02	<.02	<.02	<.005
HENNEPIN COUNTY											
HOPK4 117N22W1	11-09-04	<.02	<.006	<.5	M	<.028	<.02	<.02	<.02	<.02	<.005
	08-24-05	--	--	<.5	<.5	--	--	--	--	--	--
HOPK4-F 117N22W1	08-24-05	--	--	<.5	<.5	--	--	--	--	--	--
BRCN5 119N21W2	11-09-04	<.02	<.006	<.5	<.5	<.028	<.02	<.02	<.02	<.02	<.005
DAKOTA COUNTY											
IGH3 27N23W	11-10-04	<.02	<.006	<.5	<.5	<.028	<.02	<.02	<.02	<.02	<.005
RAMSEY COUNTY											
NBRT1515030N23W 30	11-10-04	<.02	<.006	<.5	<.5	<.028	<.02	<.02	<.02	<.02	<.005
	11-10-04	<.02	<.006	<.5	<.5	<.028	<.02	<.02	<.02	<.02	<.005
	08-10-05	--	<.006	<.5	<.5	<.028	--	--	--	--	<.005
	08-10-05	--	<.006	<.5	<.5	<.028	--	--	--	--	<.005
NBRT15-F 030N23W3	08-10-05	--	<.006	<.5	E.1	<.028	--	--	--	--	<.005
	08-10-05	--	<.006	<.5	<.5	<.028	--	--	--	--	<.005
CARVER COUNTY											
CHAN3 116N05W3	11-12-04	<.02	<.006	<.5	<.5	<.028	<.02	<.02	<.02	<.02	<.005
CHAN5 116N23W1	12-01-04	<.02	<.006	<.5	<.5	<.028	<.02	<.02	<.02	<.02	<.005
HENNEPIN COUNTY											
EDN13 117N21W3	11-15-04	<.02	<.006	<.5	<.5	<.028	<.02	<.02	<.02	<.02	<.005
	08-09-05	--	--	--	--	--	--	--	--	--	--
EDN13-F 117N21W3	08-09-05	--	--	--	--	--	--	--	--	--	--
EDPR 116N22W1	11-15-04	<.02	<.006	<.5	<.5	<.028	<.02	<.02	<.02	<.02	<.005
BLM6 027N24W1	11-12-04	<.02	<.006	<.5	M	<.028	<.02	<.02	<.02	<.02	<.005
	08-09-05	--	<.006	<.5	<.5	--	--	--	--	--	<.005
BLM6-F 027N24W1	08-09-05	--	<.006	<.5	<.5	--	--	--	--	--	<.005
RICE COUNTY											
FARB9 110N21W2	11-16-04	<.02	<.006	<.5	<.5	<.028	<.02	.03	<.02	<.02	<.005
	08-08-05	<.02	<.02	--	--	--	<.02	.02	<.02	<.02	<.02
FARB9-F 110N21W2	08-08-05	<.02	<.02	--	--	--	<.02	.07	.02	<.02	<.02

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Aldicarb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldicarb sulfoxide, wat flt 0.7u GF ug/L (49314)	Aldicarb, water, fltrd 0.7u GF ug/L (49312)	alpha-Endosulfan, water, fltrd, ug/L (34362)	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)	Bendiocarb, water, fltrd, ug/L (50299)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)
					DAKOTA COUNTY						
SSP1 28N22W2	11-08-04	<.02	<.022	<.04	--	<.5	<.007	<.07	<.050	<.02	<.010
					HENNEPIN COUNTY						
HOPK4 117N22W1	11-09-04	<.02	<.022	<.04	--	<.5	<.007	<.07	<.050	<.02	<.010
	08-24-05	--	--	--	--	<.5	--	--	--	--	--
HOPK4-F 117N22W1	08-24-05	--	--	--	--	<.5	--	--	--	--	--
BRCN5 119N21W2	11-09-04	<.02	<.022	<.04	--	<.5	<.007	<.07	<.050	<.02	<.010
					DAKOTA COUNTY						
IGH3 27N23W	11-10-04	<.02	<.022	<.04	--	<.5	<.007	<.07	<.050	<.02	<.010
					RAMSEY COUNTY						
NBRT1515030N23W 30	11-10-04	<.02	<.022	<.04	--	<.5	.035	<.07	<.050	<.02	<.010
	11-10-04	<.02	<.022	<.04	--	<.5	.039	<.07	<.050	<.02	<.010
	08-10-05	<.02	<.022	<.04	<.005	<.5	<.007	<.07	<.050	<.02	<.010
	08-10-05	<.02	<.022	<.04	<.005	<.5	.050	<.07	<.050	<.02	<.010
NBRT15-F 030N23W3	08-10-05	<.02	<.022	<.04	<.005	<.5	<.007	<.07	<.050	<.02	<.010
	08-10-05	<.02	<.022	<.04	<.005	<.5	<.007	<.07	<.050	<.02	<.010
					CARVER COUNTY						
CHAN3 116N05W3	11-12-04	<.02	<.022	<.04	--	<.5	<.007	<.07	<.050	<.02	<.010
CHAN5 116N23W1	12-01-04	<.02	<.022	<.04	--	<.5	<.007	<.07	<.050	<.02	<.010
					HENNEPIN COUNTY						
EDN13 117N21W3	11-15-04	<.02	<.022	<.04	--	<.5	<.007	<.07	<.050	<.02	<.010
	08-09-05	--	--	--	--	--	--	--	--	--	--
EDN13-F 117N21W3	08-09-05	--	--	--	--	--	--	--	--	--	--
EDPR 116N22W1	11-15-04	<.02	<.022	<.04	--	<.5	<.007	<.07	<.050	<.02	<.010
BLM6 027N24W1	11-12-04	<.02	<.022	<.04	--	<.5	<.007	<.07	<.050	<.02	<.010
	08-09-05	--	--	--	<.005	<.5	<.007	<.07	<.050	--	<.010
BLM6-F 027N24W1	08-09-05	--	--	--	<.005	<.5	<.007	<.07	<.050	--	<.010
					RICE COUNTY						
FARB9 110N21W2	11-16-04	<.02	<.022	<.04	--	<.5	<.007	<.07	<.050	<.02	<.010
	08-08-05	--	--	--	--	--	--	--	--	--	--
FARB9-F 110N21W2	08-08-05	--	--	--	--	--	--	--	--	--	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Benomyl water, fltrd, ug/L (50300)	Bensulfuron, water, fltrd, ug/L (61693)	Bentazon, water, fltrd 0.7u GF ug/L (38711)	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)	Bromacil, water, fltrd, ug/L (04029)	Bromoxynil, water, fltrd 0.7u GF ug/L (49311)
DAKOTA COUNTY											
SSP1 28N22W2	11-08-04	<.022	<.02	<.01	<.5	<.5	<2	<2	<1	<.02	<.03
HENNEPIN COUNTY											
HOPK4 117N22W1	11-09-04	<.022	<.02	<.01	<.5	E.1	<2	<2	<1	<.02	<.03
	08-24-05	--	--	--	<.5	<.5	<2	<2	--	<.5	--
HOPK4-F 117N22W1	08-24-05	--	--	--	<.5	M	<2	<2	--	<.5	--
BRCN5 119N21W2	11-09-04	<.022	<.02	<.01	<.5	<.5	<2	<2	<1	<.02	<.03
DAKOTA COUNTY											
IGH3 27N23W	11-10-04	<.022	<.02	<.01	<.5	<.5	<2	<2	<1	<.02	<.03
RAMSEY COUNTY											
NBRT1515030N23W 30	11-10-04	<.022	<.02	<.01	<.5	<.5	<2	<2	<1	.03	<.03
	11-10-04	<.022	<.02	<.01	<.5	<.5	<2	<2	<1	.03	<.03
	08-10-05	<.022	<.02	<.01	<.5	M	<2	<2	--	<.02	<.03
	08-10-05	<.022	<.02	<.01	<.5	<.5	<2	<2	--	.03	<.03
NBRT15-F 030N23W3	08-10-05	<.022	<.02	<.01	<.5	M	<2	<2	--	<.02	<.03
	08-10-05	<.022	<.02	<.01	<.5	<.5	<2	<2	--	<.02	<.03
CARVER COUNTY											
CHAN3 116N05W3	11-12-04	<.022	<.02	<.01	<.5	<.5	<2	<2	<1	<.02	<.03
CHAN5 116N23W1	12-01-04	<.022	<.02	<.01	<.5	<.5	<2	<2	<1	<.02	<.03
HENNEPIN COUNTY											
EDN13 117N21W3	11-15-04	<.022	<.02	<.01	<.5	<.5	<2	<2	<1	<.02	<.03
	08-09-05	--	--	--	--	--	--	--	--	--	--
EDN13-F 117N21W3	08-09-05	--	--	--	--	--	--	--	--	--	--
EDPR 116N22W1	11-15-04	<.022	<.02	<.01	<.5	<.5	<2	<2	<1	<.02	<.03
BLM6 027N24W1	11-12-04	<.022	<.02	<.01	<.5	M	<2	<2	<1	<.02	<.03
	08-09-05	--	--	--	<.5	<.5	<2	<2	--	<.5	--
BLM6-F 027N24W1	08-09-05	--	--	--	<.5	M	<2	<2	--	<.5	--
RICE COUNTY											
FARB9 110N21W2	11-16-04	<.022	<.02	<.01	<.5	<.5	<2	<2	<1	<.02	<.03
	08-08-05	--	--	--	--	--	--	--	--	--	--
FARB9-F 110N21W2	08-08-05	--	--	--	--	--	--	--	--	--	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Caffeine, water, fltrd, ug/L (50305)	Camphor water, fltrd, ug/L (62070)	Carbaryl, water, fltrd 0.7u GF ug/L (49310)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbazole, water, fltrd, ug/L (62071)	Carbofuran, water, fltrd 0.7u GF ug/L (49309)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chloramben methyl ester, water, fltrd, ug/L (61188)	Chlorimuron, water, fltrd, ug/L (50306)	Chloro-di-amino-s-triazine, wat flt ug/L (04039)
					DAKOTA COUNTY						
SSP1 28N22W2	11-08-04	<.018	<.5	<.02	<.041	<.5	<.016	--	<.02	<.032	<.04
					HENNEPIN COUNTY						
HOPK4 117N22W1	11-09-04	<.018	<.5	<.02	<.041	<.5	<.016	--	<.02	<.032	<.04
	08-24-05	<.5	<.5	--	<1	<.5	--	--	--	--	--
HOPK4-F 117N22W1	08-24-05	<.5	<.5	--	<1	<.5	--	--	--	--	--
BRCN5 119N21W2	11-09-04	<.018	<.5	<.02	<.041	<.5	<.016	--	<.02	<.032	<.04
					DAKOTA COUNTY						
IGH3 27N23W	11-10-04	<.018	<.5	<.02	<.041	<.5	<.016	--	<.02	<.032	<.04
					RAMSEY COUNTY						
NBRT1515030N23W 30	11-10-04	<.018	<.5	<.02	<.041	<.5	<.016	--	<.02	<.032	<.04
	11-10-04	<.018	<.5	<.02	<.041	<.5	<.016	--	<.02	<.032	<.04
	08-10-05	<.018	<.5	<.02	<.041	<.5	<.016	<.020	<.05	<.032	<.04
	08-10-05	<.018	<.5	<.02	<.041	<.5	<.016	<.020	<.05	<.032	<.04
NBRT15-F 030N23W3	08-10-05	<.018	<.5	<.02	<.041	<.5	<.016	<.020	<.05	<.032	<.04
	08-10-05	<.018	<.5	<.02	<.041	<.5	<.016	<.020	<.02	<.032	<.02
					CARVER COUNTY						
CHAN3 116N05W3	11-12-04	<.018	<.5	<.02	<.041	<.5	<.016	--	<.02	<.032	<.04
CHAN5 116N23W1	12-01-04	<.018	<.5	<.02	<.041	<.5	<.016	--	<.02	<.032	<.04
					HENNEPIN COUNTY						
EDN13 117N21W3	11-15-04	<.018	<.5	<.02	<.041	<.5	<.016	--	<.02	<.032	<.04
	08-09-05	--	--	--	--	--	--	--	--	--	--
EDN13-F 117N21W3	08-09-05	--	--	--	--	--	--	--	--	--	--
EDPR 116N22W1	11-15-04	<.018	<.5	<.02	<.041	<.5	<.016	--	<.02	<.032	<.04
BLM6 027N24W1	11-12-04	<.018	<.5	<.02	<.041	<.5	<.016	--	<.02	<.032	<.04
	08-09-05	<.5	<.5	--	<.041	<.5	--	<.020	--	--	--
BLM6-F 027N24W1	08-09-05	<.5	<.5	--	<.041	<.5	--	<.020	--	--	--
					RICE COUNTY						
FARB9 110N21W2	11-16-04	<.018	<.5	<.02	<.041	<.5	<.016	--	<.02	<.032	<.04
	08-08-05	--	--	--	--	--	--	--	--	--	--
FARB9-F 110N21W2	08-08-05	--	--	--	--	--	--	--	--	--	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Chloro-thalo-nil, water, fltrd 0.7u GF ug/L (49306)	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)	cis-Propi-cona-zole, water, fltrd, ug/L (79846)	Clopyr-alid, water, fltrd 0.7u GF ug/L (49305)	Cot-inine, water, fltrd, ug/L (62005)	Cyana-zine, water, fltrd, ug/L (04041)	Cyclo-ate, water, fltrd, ug/L (04031)
					DAKOTA COUNTY						
SSP1 28N22W2	11-08-04	<.04	<.06	<.005	<2	<.006	--	<.02	<1.00	--	<.01
					HENNEPIN COUNTY						
HOPK4 117N22W1	11-09-04	<.04	<.06	<.005	<2	<.006	--	<.02	<1.00	--	<.01
	08-24-05	--	--	<.5	<2	--	--	--	<1.00	--	--
HOPK4-F 117N22W1	08-24-05	--	--	<.5	<2	--	--	--	<1.00	--	--
BRCN5 119N21W2	11-09-04	<.04	<.06	<.005	<2	<.006	--	<.02	<1.00	--	<.01
					DAKOTA COUNTY						
IGH3 27N23W	11-10-04	<.04	<.06	<.005	<2	<.006	--	<.02	<1.00	--	<.01
					RAMSEY COUNTY						
NBRT1515030N23W 30	11-10-04	<.04	<.06	<.005	<2	<.006	--	<.02	<1.00	--	<.01
	11-10-04	<.04	<.06	<.005	<2	<.006	--	<.02	<1.00	--	<.01
	08-10-05	<.04	<.06	<.005	<2	<.006	<.008	<.02	<1.00	<.018	<.05
	08-10-05	<.04	<.06	<.005	<2	<.006	<.008	<.02	<1.00	<.018	<.05
NBRT15-F 030N23W3	08-10-05	<.04	<.06	<.005	<2	<.006	<.008	<.02	<1.00	<.018	<.05
	08-10-05	<.04	<.06	<.005	<2	<.006	<.008	<.02	<1.00	<.018	<.01
					CARVER COUNTY						
CHAN3 116N05W3	11-12-04	<.04	<.06	<.005	<2	<.006	--	<.02	<1.00	--	<.01
CHAN5 116N23W1	12-01-04	<.04	<.06	<.005	<2	<.006	--	<.02	<1.00	--	<.01
					HENNEPIN COUNTY						
EDN13 117N21W3	11-15-04	<.04	<.06	<.005	<2	<.006	--	<.02	<1.00	--	<.01
	08-09-05	--	--	--	--	--	--	--	--	--	--
EDN13-F 117N21W3	08-09-05	--	--	--	--	--	--	--	--	--	--
EDPR 116N22W1	11-15-04	<.04	<.06	<.005	<2	<.006	--	<.02	<1.00	--	<.01
BLM6 027N24W1	11-12-04	<.04	<.06	<.005	<2	<.006	--	<.02	<1.00	--	<.01
	08-09-05	--	<.06	<.005	<2	<.006	<.008	--	<1.00	<.018	--
BLM6-F 027N24W1	08-09-05	--	<.06	<.005	<2	<.006	<.008	--	<1.00	<.018	--
					RICE COUNTY						
FARB9 110N21W2	11-16-04	<.04	<.06	<.005	<2	<.006	--	<.02	<1.00	--	<.01
	08-08-05	--	--	--	--	--	--	--	--	--	--
FARB9-F 110N21W2	08-08-05	--	--	--	--	--	--	--	--	--	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Cyfluthrin, water, fltrd, ug/L (61585)	lambda-Cyhalothrin, water, fltrd, ug/L (61595)	Cypermethrin water, fltrd, ug/L (61586)	Dacthal mono-acid, water, fltrd 0.7u GF ug/L (49304)	DCPA, water fltrd 0.7u GF ug/L (82682)	Dechloroacetochlor, water, fltrd, ug/L (63778)	Dechloroalachlor, water, fltrd, ug/L (63777)	Dechlorodimethenamid, water, fltrd, ug/L (63779)	Dechlorometolachlor, water, fltrd, ug/L (63780)	DEET, water, fltrd, ug/L (62082)
DAKOTA COUNTY											
SSP1 28N22W2	11-08-04	<.008	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02	<.5
HENNEPIN COUNTY											
HOPK4 117N22W1	11-09-04	<.008	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02	E.2
	08-24-05	--	--	--	--	--	--	--	--	--	M
HOPK4-F 117N22W1	08-24-05	--	--	--	--	--	--	--	--	--	E.1
BRCN5 119N21W2	11-09-04	<.008	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02	<.5
DAKOTA COUNTY											
IGH3 27N23W	11-10-04	<.008	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02	E.1
RAMSEY COUNTY											
NBRT1515030N23W 30	11-10-04	<.008	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02	<.5
	11-10-04	<.008	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02	<.5
	08-10-05	<.027	<.009	<.009	<.03	<.003	--	--	--	--	M
	08-10-05	<.027	<.009	<.009	<.03	<.003	--	--	--	--	M
NBRT15-F 030N23W3	08-10-05	<.027	<.009	<.009	<.03	<.003	--	--	--	--	M
	08-10-05	<.027	<.009	<.009	<.03	<.003	--	--	--	--	M
CARVER COUNTY											
CHAN3 116N05W3	11-12-04	<.008	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02	M
CHAN5 116N23W1	12-01-04	<.008	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02	<.5
HENNEPIN COUNTY											
EDN13 117N21W3	11-15-04	<.008	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02	<.5
	08-09-05	--	--	--	--	--	--	--	--	--	--
EDN13-F 117N21W3	08-09-05	--	--	--	--	--	--	--	--	--	--
EDPR 116N22W1	11-15-04	<.008	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02	<.5
BLM6 027N24W1	11-12-04	<.008	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02	M
	08-09-05	<.027	<.009	<.009	--	<.003	--	--	--	--	M
BLM6-F 027N24W1	08-09-05	<.027	<.009	<.009	--	<.003	--	--	--	--	M
RICE COUNTY											
FARB9 110N21W2	11-16-04	<.008	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02	<.5
	08-08-05	--	--	--	--	--	<.02	<.02	<.02	<.02	--
FARB9-F 110N21W2	08-08-05	--	--	--	--	--	<.02	<.02	<.02	<.02	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon oxon, water, fltrd, ug/L (61638)	Diazinon, water, fltrd, ug/L (39572)	Dicamba water fltrd 0.7u GF ug/L (38442)	Dichlorprop, water, fltrd 0.7u GF ug/L (49302)	Dicrotophos, water fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)	Diethoxynonylphenol, water, fltrd, ug/L (62083)	Diethoxyoctylphenol, water, fltrd ug/L (61705)	Dimethenamid ESA, water, fltrd, ug/L (61951)
					DAKOTA COUNTY						
SSP1 28N22W2	11-08-04	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02
					HENNEPIN COUNTY						
HOPK4 117N22W1	11-09-04	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02
	08-24-05	--	--	<.5	--	--	--	--	<5	<1	--
HOPK4-F 117N22W1	08-24-05	--	--	<.5	--	--	--	--	<5	<1	--
BRCN5 119N21W2	11-09-04	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02
					DAKOTA COUNTY						
IGH3 27N23W	11-10-04	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02
					RAMSEY COUNTY						
NBRT1515030N23W 30	11-10-04	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02
	11-10-04	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02
	08-10-05	<.012	--	<.005	<.04	<.03	<.08	<.009	<5	<1	--
	08-10-05	<.012	--	<.005	<.04	<.03	<.08	<.009	<5	<1	--
NBRT15-F 030N23W3	08-10-05	<.012	--	<.005	<.04	<.03	<.08	<.009	<5	<1	--
	08-10-05	<.012	--	<.005	<.04	<.03	<.08	<.009	<5	<1	--
					CARVER COUNTY						
CHAN3 116N05W3	11-12-04	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02
CHAN5 116N23W1	12-01-04	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02
					HENNEPIN COUNTY						
EDN13 117N21W3	11-15-04	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02
	08-09-05	--	--	--	--	--	--	--	--	--	--
EDN13-F 117N21W3	08-09-05	--	--	--	--	--	--	--	--	--	--
EDPR 116N22W1	11-15-04	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02
BLM6 027N24W1	11-12-04	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02
	08-09-05	<.012	--	<.005	--	--	<.08	<.009	<5	<1	--
BLM6-F 027N24W1	08-09-05	<.012	--	<.005	--	--	<.08	<.009	<5	<1	--
					RICE COUNTY						
FARB9 110N21W2	11-16-04	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02
	08-08-05	--	--	--	--	--	--	--	--	--	<.02
FARB9-F 110N21W2	08-08-05	--	--	--	--	--	--	--	--	--	<.02

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Dimeth-enamid OA, water, fltrd, ug/L (62482)	Dimeth-enamid water, fltrd, ug/L (61588)	Dimeth-oate, water, fltrd 0.7u GF ug/L (82662)	Dinoseb water, fltrd 0.7u GF ug/L (49301)	Diphen-amid, water, fltrd, ug/L (04033)	Disulf-oton sulfone water, fltrd, ug/L (61640)	Disul-foton, water, fltrd 0.7u GF ug/L (82677)	Diuron, water, fltrd 0.7u GF ug/L (49300)	D-Limo-nene, water, fltrd, ug/L (62073)	Endo-sulfan sulfate water, fltrd, ug/L (61590)
DAKOTA COUNTY											
SSP1 28N22W2	11-08-04	<.02	<.02	<.006	<.04	<.01	--	--	<.01	<.5	--
HENNEPIN COUNTY											
HOPK4 117N22W1	11-09-04	<.02	<.02	<.006	<.04	<.01	--	--	<.01	<.5	--
	08-24-05	--	--	--	--	--	--	--	--	<.5	--
HOPK4-F 117N22W1	08-24-05	--	--	--	--	--	--	--	--	<.5	--
BRCN5 119N21W2	11-09-04	<.02	<.02	<.006	<.04	<.01	--	--	<.01	<.5	--
DAKOTA COUNTY											
IGH3 27N23W	11-10-04	<.02	<.02	<.006	<.04	<.01	--	--	<.01	<.5	--
RAMSEY COUNTY											
NBRT1515030N23W 30	11-10-04	<.02	<.02	<.006	<.04	<.01	--	--	<.01	<.5	--
	11-10-04	<.02	<.02	<.006	<.04	<.01	--	--	<.01	<.5	--
	08-10-05	--	--	<.006	<.04	<.01	<.01	<.02	<.02	<.5	<.014
	08-10-05	--	--	<.006	<.04	<.01	<.01	<.02	<.01	<.5	<.014
NBRT15-F 030N23W3	08-10-05	--	--	<.006	<.04	<.01	<.01	<.02	<.02	<.5	<.014
	08-10-05	--	--	<.006	<.04	<.01	<.01	<.02	<.01	<.5	<.014
CARVER COUNTY											
CHAN3 116N05W3	11-12-04	<.02	<.02	<.006	<.04	<.01	--	--	<.01	<.5	--
CHAN5 116N23W1	12-01-04	<.02	<.02	<.006	<.04	<.01	--	--	<.01	<.5	--
HENNEPIN COUNTY											
EDN13 117N21W3	11-15-04	<.02	<.02	<.006	<.04	<.01	--	--	<.01	<.5	--
	08-09-05	--	--	--	--	--	--	--	--	--	--
EDN13-F 117N21W3	08-09-05	--	--	--	--	--	--	--	--	--	--
EDPR 116N22W1	11-15-04	<.02	<.02	<.006	<.04	<.01	--	--	<.01	<.5	--
BLM6 027N24W1	11-12-04	<.02	<.02	<.006	<.04	<.01	--	--	<.01	<.5	--
	08-09-05	--	--	<.006	--	--	<.01	<.02	--	<.5	<.014
BLM6-F 027N24W1	08-09-05	--	--	<.006	--	--	<.01	<.02	--	<.5	<.014
RICE COUNTY											
FARB9 110N21W2	11-16-04	<.02	<.02	<.006	<.04	<.01	--	--	<.01	<.5	--
	08-08-05	<.02	<.02	--	--	--	--	--	--	--	--
FARB9-F 110N21W2	08-08-05	<.02	<.02	--	--	--	--	--	--	--	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Etho-prop, water, fltrd 0.7u GF ug/L (82672)	Ethoxy-octyl-phenol, water, fltrd ug/L (61706)	Fenami-phos sulfone water, fltrd, ug/L (61645)	Fenamiphos sulf-oxide, water, fltrd, ug/L (61646)	Fenami-phos, water, fltrd, ug/L (61591)	Fenuron water, fltrd 0.7u GF ug/L (49297)	Desulf-inyl-fipro-nil amide, wat flt ug/L (62169)
					DAKOTA COUNTY						
SSP1 28N22W2	11-08-04	--	<.0020	<.004	--	<1	<.049	<.04	<.03	<.02	<.029
					HENNEPIN COUNTY						
HOPK4 117N22W1	11-09-04	--	<.0020	<.004	--	<1	<.049	<.04	<.03	<.02	<.029
	08-24-05	--	--	--	--	<1	--	--	--	--	--
HOPK4-F 117N22W1	08-24-05	--	--	--	--	<1	--	--	--	--	--
BRCN5 119N21W2	11-09-04	--	<.0020	<.004	--	<1	<.049	<.04	<.03	<.02	<.029
					DAKOTA COUNTY						
IGH3 27N23W	11-10-04	--	<.0020	<.004	--	<1	<.049	--	<.03	<.02	<.029
					RAMSEY COUNTY						
NBRT1515030N23W 30	11-10-04	--	<.0020	<.004	--	<1	<.049	--	<.03	<.02	<.029
	11-10-04	--	<.0020	<.004	--	<1	<.049	--	<.03	<.02	<.029
	08-10-05	<.004	<.002	<.004	<.005	<1	<.049	<.04	<.03	<.02	<.029
	08-10-05	<.004	<.002	<.004	<.005	<1	<.049	<.04	<.03	<.02	<.029
NBRT15-F 030N23W3	08-10-05	<.004	<.002	<.004	<.005	<1	<.049	<.04	<.03	<.02	<.029
	08-10-05	<.004	<.002	<.004	<.005	<1	<.049	<.04	<.03	<.03	<.029
					CARVER COUNTY						
CHAN3 116N05W3	11-12-04	--	<.0020	<.004	--	<1	<.049	--	<.03	<.02	<.029
CHAN5 116N23W1	12-01-04	--	<.0020	<.004	--	<1	<.049	--	<.03	<.02	<.029
					HENNEPIN COUNTY						
EDN13 117N21W3	11-15-04	--	<.0020	<.004	--	<1	<.049	--	<.03	<.02	<.029
	08-09-05	--	--	--	--	--	--	--	--	--	--
EDN13-F 117N21W3	08-09-05	--	--	--	--	--	--	--	--	--	--
EDPR 116N22W1	11-15-04	--	<.0020	<.004	--	<1	<.049	--	<.03	<.02	<.029
BLM6 027N24W1	11-12-04	--	<.0020	<.004	--	<1	<.049	--	<.03	<.02	<.029
	08-09-05	<.004	<.002	<.004	<.005	<1	<.049	<.04	<.03	--	<.029
BLM6-F 027N24W1	08-09-05	<.004	<.002	<.004	<.005	<1	<.049	<.04	<.03	--	<.029
					RICE COUNTY						
FARB9 110N21W2	11-16-04	--	<.0020	<.004	--	<1	<.049	<.04	<.03	<.02	<.029
	08-08-05	--	--	--	--	--	--	--	--	--	--
FARB9-F 110N21W2	08-08-05	--	--	--	--	--	--	--	--	--	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	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)	Flumetsulam, water, fltrd, ug/L (61694)	Fluometuron water fltrd 0.7u GF ug/L (38811)	Fluoranthene water, fltrd, ug/L (34377)	Fonofos oxon, water, fltrd, ug/L (61649)
DAKOTA COUNTY											
SSP1 28N22W2	11-08-04	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02	<.5	<.003
HENNEPIN COUNTY											
HOPK4 117N22W1	11-09-04	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02	<.5	<.003
	08-24-05	--	--	--	--	--	--	--	--	<.5	--
HOPK4-F 117N22W1	08-24-05	--	--	--	--	--	--	--	--	<.5	--
BRCN5 119N21W2	11-09-04	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02	<.5	<.003
DAKOTA COUNTY											
IGH3 27N23W	11-10-04	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02	<.5	<.003
RAMSEY COUNTY											
NBRT1515030N23W 30	11-10-04	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02	<.5	<.003
	11-10-04	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02	<.5	<.003
	08-10-05	<.013	<.024	<.016	--	--	--	<.04	<.02	<.5	--
	08-10-05	<.013	<.024	<.016	--	--	--	<.04	<.02	<.5	--
NBRT15-F 030N23W3	08-10-05	<.013	<.024	<.016	--	--	--	<.04	<.02	<.5	--
	08-10-05	<.013	<.024	<.016	--	--	--	<.04	<.02	<.5	--
CARVER COUNTY											
CHAN3 116N05W3	11-12-04	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02	<.5	<.003
CHAN5 116N23W1	12-01-04	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02	<.5	<.003
HENNEPIN COUNTY											
EDN13 117N21W3	11-15-04	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02	<.5	<.003
	08-09-05	--	--	--	--	--	--	--	--	--	--
EDN13-F 117N21W3	08-09-05	--	--	--	--	--	--	--	--	--	--
EDPR 116N22W1	11-15-04	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02	<.5	<.003
BLM6 027N24W1	11-12-04	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02	<.5	<.003
	08-09-05	<.013	<.024	<.016	--	--	--	--	--	<.5	--
BLM6-F 027N24W1	08-09-05	<.013	<.024	<.016	--	--	--	--	--	<.5	--
RICE COUNTY											
FARB9 110N21W2	11-16-04	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02	<.5	<.003
	08-08-05	--	--	--	<.02	<.02	.02	--	--	--	--
FARB9-F 110N21W2	08-08-05	--	--	--	<.02	<.02	<.02	--	--	--	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Fonofos water, fltrd, ug/L (04095)	HHCB, water, fltrd, ug/L (62075)	Hexazinone, water, fltrd, ug/L (04025)	Hydroxy acetochlor, water, fltrd, ug/L (63784)	Hydroxy alachlor, water, fltrd, ug/L (63783)	Hydroxy dimethenamid, water, fltrd, ug/L (64045)	Hydroxy metolachlor, water, fltrd, ug/L (63785)	Imazaquin, water, fltrd, ug/L (50356)	Imazethapyr, water, fltrd, ug/L (50407)	Imidacloprid water, fltrd, ug/L (61695)
DAKOTA COUNTY											
SSP1 28N22W2	11-08-04	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020
HENNEPIN COUNTY											
HOPK4 117N22W1	11-09-04	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020
	08-24-05	--	<.5	--	--	--	--	--	--	--	--
HOPK4-F 117N22W1	08-24-05	--	<.5	--	--	--	--	--	--	--	--
BRCN5 119N21W2	11-09-04	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020
DAKOTA COUNTY											
IGH3 27N23W	11-10-04	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020
RAMSEY COUNTY											
NBRT1515030N23W 30	11-10-04	<.003	<.5	<.020	<.02	<.02	<.02	<.02	<.04	<.04	<.020
	11-10-04	<.003	<.5	<.020	<.02	<.02	<.02	<.02	<.04	<.04	<.020
	08-10-05	<.003	<.5	<.013	--	--	--	--	<.04	<.04	<.020
	08-10-05	<.003	<.5	.017	--	--	--	--	<.04	<.04	<.020
NBRT15-F 030N23W3	08-10-05	<.003	E.1	<.013	--	--	--	--	<.04	<.04	<.020
	08-10-05	<.003	<.5	<.013	--	--	--	--	<.04	<.04	<.020
CARVER COUNTY											
CHAN3 116N05W3	11-12-04	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020
CHAN5 116N23W1	12-01-04	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020
HENNEPIN COUNTY											
EDN13 117N21W3	11-15-04	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020
	08-09-05	--	--	--	--	--	--	--	--	--	--
EDN13-F 117N21W3	08-09-05	--	--	--	--	--	--	--	--	--	--
EDPR 116N22W1	11-15-04	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020
BLM6 027N24W1	11-12-04	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020
	08-09-05	<.003	<.5	<.013	--	--	--	--	--	--	--
BLM6-F 027N24W1	08-09-05	<.003	<.5	<.013	--	--	--	--	--	--	--
RICE COUNTY											
FARB9 110N21W2	11-16-04	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020
	08-08-05	--	--	--	<.02	<.02	<.02	<.02	--	--	--
FARB9-F 110N21W2	08-08-05	--	--	--	<.02	<.02	<.02	<.02	--	--	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	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)	Linuron water fltrd 0.7u GF ug/L (38478)	Malaoxon, water, fltrd, ug/L (61652)	Malathion, water, fltrd, ug/L (39532)
DAKOTA COUNTY											
SSP1 28N22W2	11-08-04	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
HENNEPIN COUNTY											
HOPK4 117N22W1	11-09-04	<.5	<.387	<.5	<.003	E.1	<.5	<.5	<.01	<.030	<.027
	08-24-05	<.5	--	<.5	--	<.5	<.5	<.5	--	--	--
HOPK4-F 117N22W1	08-24-05	<.5	--	<.5	--	M	<.5	<.5	--	--	--
BRCN5 119N21W2	11-09-04	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
DAKOTA COUNTY											
IGH3 27N23W	11-10-04	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
RAMSEY COUNTY											
NBRT1515030N23W 30	11-10-04	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
	11-10-04	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
	08-10-05	<.5	<.538	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
	08-10-05	<.5	<.538	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
NBRT15-F 030N23W3	08-10-05	<.5	<.538	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
	08-10-05	<.5	<.538	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
CARVER COUNTY											
CHAN3 116N05W3	11-12-04	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
CHAN5 116N23W1	12-01-04	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
HENNEPIN COUNTY											
EDN13 117N21W3	11-15-04	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
	08-09-05	--	--	--	--	--	--	--	--	--	--
EDN13-F 117N21W3	08-09-05	--	--	--	--	--	--	--	--	--	--
EDPR 116N22W1	11-15-04	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
BLM6 027N24W1	11-12-04	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
	08-09-05	<.5	<.538	<.5	<.003	<.5	<.5	<.5	--	<.030	<.027
BLM6-F 027N24W1	08-09-05	<.5	<.538	<.5	<.003	<.5	<.5	<.5	--	<.030	<.027
RICE COUNTY											
FARB9 110N21W2	11-16-04	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
	08-08-05	--	--	--	--	--	--	--	--	--	--
FARB9-F 110N21W2	08-08-05	--	--	--	--	--	--	--	--	--	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Menthol water, fltrd, ug/L (62080)	Metalaxyl, water, fltrd, ug/L (50359)	Metalaxyl, water, fltrd, ug/L (61596)	Methiathion water, fltrd, ug/L (61598)	Methiocarb, water, fltrd 0.7u GF ug/L (38501)	Methomyl, water, fltrd 0.7u GF ug/L (49296)	Methyl acetate water unfltrd ug/L (77032)	Methyl paraoxon, water, fltrd, ug/L (61664)
DAKOTA COUNTY											
SSP1 28N22W2	11-08-04	<.03	<.01	<.5	<.01	<.005	<.006	<.010	<.020	<.4	<.03
HENNEPIN COUNTY											
HOPK4 117N22W1	11-09-04	<.03	<.01	E.2	<.01	<.005	<.006	<.010	<.020	<.4	<.03
	08-24-05	--	--	<.5	<.5	--	--	--	--	--	--
HOPK4-F 117N22W1	08-24-05	--	--	<.5	<.5	--	--	--	--	--	--
BRCN5 119N21W2	11-09-04	<.03	<.01	<.5	<.01	<.005	<.006	<.010	<.020	<.4	<.03
DAKOTA COUNTY											
IGH3 27N23W	11-10-04	<.03	<.01	<.5	<.01	<.005	<.006	<.010	<.020	<.4	<.03
RAMSEY COUNTY											
NBRT1515030N23W 30	11-10-04	<.03	<.01	M	<.01	<.005	<.006	<.010	<.020	<.4	<.03
	11-10-04	<.03	<.01	<.5	<.01	<.005	<.006	<.010	<.020	<.4	<.03
	08-10-05	--	<.01	<.5	<.01	<.005	<.006	<.010	<.020	--	<.03
	08-10-05	--	<.01	<.5	<.01	<.005	<.006	<.010	<.020	--	<.03
NBRT15-F 030N23W3	08-10-05	--	<.01	<.5	<.01	<.005	<.006	<.010	<.020	--	<.03
	08-10-05	<.03	<.01	<.5	<.01	<.005	<.006	<.010	<.020	--	<.03
CARVER COUNTY											
CHAN3 116N05W3	11-12-04	<.03	<.01	<.5	<.01	<.005	<.006	<.010	<.020	<.4	<.03
CHAN5 116N23W1	12-01-04	<.03	<.01	<.5	<.01	<.005	<.006	<.010	<.020	<1.0	<.03
HENNEPIN COUNTY											
EDN13 117N21W3	11-15-04	<.03	<.01	<.5	<.01	<.005	<.006	<.010	<.020	<.4	<.03
	08-09-05	--	--	--	--	--	--	--	--	--	--
EDN13-F 117N21W3	08-09-05	--	--	--	--	--	--	--	--	--	--
EDPR 116N22W1	11-15-04	<.03	<.01	<.5	<.01	<.005	<.006	<.010	<.020	<.4	<.03
BLM6 027N24W1	11-12-04	<.03	<.01	M	<.01	<.005	<.006	<.010	<.020	<.4	<.03
	08-09-05	--	--	<.5	<.5	<.005	<.006	--	--	--	<.03
BLM6-F 027N24W1	08-09-05	--	--	<.5	<.5	<.005	<.006	--	--	--	<.03
RICE COUNTY											
FARB9 110N21W2	11-16-04	<.03	<.01	<.5	<.01	<.005	<.006	<.010	<.020	<.4	<.03
	08-08-05	--	--	--	--	--	--	--	--	--	--
FARB9-F 110N21W2	08-08-05	--	--	--	--	--	--	--	--	--	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Methyl salicylate, water, fltrd, ug/L (62081)	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)	Metsulfuron, water, fltrd, ug/L (61697)	Molinate, water, fltrd 0.7u GF ug/L (82671)	Myclobutanil water, fltrd, ug/L (61599)	N-(4-Chlorophenyl) -N'-methylurea, ug/L (61692)
DAKOTA COUNTY											
SSP1 28N22W2	11-08-04	<.015	<.5	<.02	<.02	<.006	<.006	<.03	--	<.008	<.04
HENNEPIN COUNTY											
HOPK4 117N22W1	11-09-04	<.015	<.5	<.02	<.02	<.006	<.006	<.03	--	<.008	<.04
	08-24-05	--	<.5	--	--	<.5	--	--	--	--	--
HOPK4-F 117N22W1	08-24-05	--	<.5	--	--	<.5	--	--	--	--	--
BRCN5 119N21W2	11-09-04	<.015	<.5	<.02	<.02	<.006	<.006	<.03	--	<.008	<.04
DAKOTA COUNTY											
IGH3 27N23W	11-10-04	<.015	<.5	<.02	<.02	<.006	<.006	<.03	--	<.008	<.04
RAMSEY COUNTY											
NBRT1515030N23W 30	11-10-04	<.015	<.5	<.02	<.02	<.006	<.006	<.03	--	<.008	<.04
	11-10-04	<.015	<.5	<.02	<.02	<.006	<.006	<.03	--	<.008	<.04
	08-10-05	<.015	<.5	--	--	<.006	<.006	<.07	<.003	<.008	<.04
	08-10-05	<.015	<.5	--	--	<.006	<.006	<.03	<.003	<.008	<.04
NBRT15-F 030N23W3	08-10-05	<.015	<.5	--	--	<.006	<.006	<.07	<.003	<.008	<.04
	08-10-05	<.015	<.5	--	--	<.006	<.006	<.03	<.003	<.008	<.04
CARVER COUNTY											
CHAN3 116N05W3	11-12-04	<.015	<.5	<.02	<.02	<.006	<.006	<.03	--	<.008	<.04
CHAN5 116N23W1	12-01-04	<.015	<.5	<.02	<.02	<.006	<.006	<.03	--	<.008	<.04
HENNEPIN COUNTY											
EDN13 117N21W3	11-15-04	<.015	<.5	<.02	<.02	<.006	<.006	<.03	--	<.008	<.04
	08-09-05	--	--	--	--	--	--	--	--	--	--
EDN13-F 117N21W3	08-09-05	--	--	--	--	--	--	--	--	--	--
EDPR 116N22W1	11-15-04	<.015	<.5	<.02	<.02	<.006	<.006	<.03	--	<.008	<.04
BLM6 027N24W1	11-12-04	<.015	<.5	<.02	<.02	<.006	<.006	<.03	--	<.008	<.04
	08-09-05	<.015	<.5	--	--	<.006	<.006	--	<.003	<.008	--
BLM6-F 027N24W1	08-09-05	<.015	<.5	--	--	<.006	<.006	--	<.003	<.008	--
RICE COUNTY											
FARB9 110N21W2	11-16-04	<.015	<.5	<.02	<.02	<.006	<.006	<.03	--	<.008	<.04
	08-08-05	--	--	.02	<.02	.02	--	--	--	--	--
FARB9-F 110N21W2	08-08-05	--	--	.08	.04	<.02	--	--	--	--	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Naphthalene, water, fltrd, ug/L (34443)	Neburon water, fltrd 0.7u GF ug/L (49294)	Nicosulfuron, water, fltrd, ug/L (50364)	Norflurazon, water, fltrd 0.7u GF ug/L (49293)	Oryzalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	Oxyfluorfen, water, fltrd, ug/L (61600)	p-Cresol, water, fltrd, ug/L (62084)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Pentachlorophenol, water, fltrd, ug/L (34459)
					DAKOTA COUNTY						
SSP1 28N22W2	11-08-04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	<2
					HENNEPIN COUNTY						
HOPK4 117N22W1	11-09-04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	<2
	08-24-05	<.5	--	--	--	--	--	--	<1	--	--
HOPK4-F 117N22W1	08-24-05	<.5	--	--	--	--	--	--	<1	--	--
BRCN5 119N21W2	11-09-04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	<2
					DAKOTA COUNTY						
IGH3 27N23W	11-10-04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	<2
					RAMSEY COUNTY						
NBRT1515030N23W 30	11-10-04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	<2
	11-10-04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	<2
	08-10-05	M	<.01	<.04	<.02	<.01	<.03	<.007	<1	<.022	--
	08-10-05	<.5	<.01	<.04	<.02	<.01	<.03	<.007	<1	<.022	--
NBRT15-F 030N23W3	08-10-05	M	<.01	<.04	<.02	<.01	<.03	<.007	<1	<.022	--
	08-10-05	<.5	<.01	<.04	<.02	<.01	<.03	<.007	<1	<.022	--
					CARVER COUNTY						
CHAN3 116N05W3	11-12-04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	<2
CHAN5 116N23W1	12-01-04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	<2
					HENNEPIN COUNTY						
EDN13 117N21W3	11-15-04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	<2
	08-09-05	--	--	--	--	--	--	--	--	--	--
EDN13-F 117N21W3	08-09-05	--	--	--	--	--	--	--	--	--	--
EDPR 116N22W1	11-15-04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	<2
BLM6 027N24W1	11-12-04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	<2
	08-09-05	<.5	--	--	--	--	--	<.007	<1	<.022	--
BLM6-F 027N24W1	08-09-05	<.5	--	--	--	--	--	<.007	<1	<.022	--
					RICE COUNTY						
FARB9 110N21W2	11-16-04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	<2
	08-08-05	--	--	--	--	--	--	--	--	--	--
FARB9-F 110N21W2	08-08-05	--	--	--	--	--	--	--	--	--	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	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)	Picloram, water, fltrd 0.7u GF ug/L (49291)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)
DAKOTA COUNTY											
SSP1 28N22W2	11-08-04	<.5	<.5	<.10	<.011	<.05	<.008	<.03	<.01	<.005	<.004
HENNEPIN COUNTY											
HOPK4 117N22W1	11-09-04	<.5	.6	<.10	<.011	<.05	<.008	<.03	.02	<.005	<.004
	08-24-05	<.5	<.5	--	--	--	--	--	<.5	--	--
HOPK4-F 117N22W1	08-24-05	<.5	<.5	--	--	--	--	--	<.5	--	--
BRCN5 119N21W2	11-09-04	<.5	E.4	<.10	<.011	<.05	<.008	<.03	<.01	<.005	<.004
DAKOTA COUNTY											
IGH3 27N23W	11-10-04	<.5	E1.0	<.10	<.011	<.05	<.008	<.03	<.01	<.005	<.004
RAMSEY COUNTY											
NBRT1515030N23W 30	11-10-04	<.5	E.2	<.10	<.011	<.05	<.008	<.03	<.01	<.005	<.004
	11-10-04	<.5	.8	<.10	<.011	<.05	<.008	<.03	<.01	<.005	<.004
	08-10-05	<.5	E.2	<.10	<.011	--	--	<.03	<.01	<.005	<.004
	08-10-05	<.5	E.4	<.10	<.011	--	<.008	<.03	<.01	<.005	<.004
NBRT15-F 030N23W3	08-10-05	<.5	E.4	<.10	<.011	--	<.008	<.03	<.01	<.005	<.004
	08-10-05	<.5	<.5	<.10	<.011	<.05	<.008	<.03	<.01	<.005	<.004
CARVER COUNTY											
CHAN3 116N05W3	11-12-04	<.5	.7	<.10	<.011	<.05	<.008	<.03	<.01	<.005	<.004
CHAN5 116N23W1	12-01-04	<.5	<.5	<.10	<.011	--	<.008	<.03	<.01	<.005	<.004
HENNEPIN COUNTY											
EDN13 117N21W3	11-15-04	<.5	<.5	<.10	<.011	<.05	<.008	<.03	<.01	<.005	<.004
	08-09-05	--	--	--	--	--	--	--	--	--	--
EDN13-F 117N21W3	08-09-05	--	--	--	--	--	--	--	--	--	--
EDPR 116N22W1	11-15-04	<.5	<.5	<.10	<.011	<.05	<.008	<.03	<.01	<.005	<.004
BLM6 027N24W1	11-12-04	<.5	E.4	<.10	<.011	<.05	<.008	<.03	<.01	<.005	<.004
	08-09-05	<.5	<.5	<.10	<.011	<.05	<.008	--	<.01	<.005	<.004
BLM6-F 027N24W1	08-09-05	<.5	<.5	<.10	<.011	<.05	<.008	--	<.01	<.005	<.004
RICE COUNTY											
FARB9 110N21W2	11-16-04	<.5	<.5	<.10	<.011	<.05	<.008	<.03	M	<.005	<.004
	08-08-05	--	--	--	--	--	--	--	--	--	--
FARB9-F 110N21W2	08-08-05	--	--	--	--	--	--	--	--	--	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Propachlor ESA, water, fltrd 0.7u GF ug/L (62766)	Propachlor OA, water, fltrd 0.7u GF ug/L (62767)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Propham water fltrd 0.7u GF ug/L (49236)	Propiconazole, water, fltrd, ug/L (50471)	Propoxur, water, fltrd 0.7u GF ug/L (38538)	Pyrene, water, fltrd, ug/L (34470)	Siduron water, fltrd, ug/L (38548)	Simazine, water, fltrd, ug/L (04035)
DAKOTA COUNTY											
SSP1 28N22W2	11-08-04	<.05	<.02	--	--	<.030	<.01	<.008	<.5	<.02	<.005
HENNEPIN COUNTY											
HOPK4 117N22W1	11-09-04	<.05	<.02	--	--	<.030	<.01	<.008	<.5	<.02	<.005
	08-24-05	--	--	--	--	--	--	--	<.5	--	--
HOPK4-F 117N22W1	08-24-05	--	--	--	--	--	--	--	<.5	--	--
BRCN5 119N21W2	11-09-04	<.05	<.02	--	--	<.030	<.01	<.008	<.5	<.02	<.005
DAKOTA COUNTY											
IGH3 27N23W	11-10-04	<.05	<.02	--	--	<.030	<.01	<.008	<.5	<.02	<.005
RAMSEY COUNTY											
NBRT1515030N23W 30	11-10-04	<.05	<.02	--	--	<.030	<.01	<.008	<.5	<.02	<.005
	11-10-04	<.05	<.02	--	--	<.030	<.01	<.008	<.5	<.02	<.005
	08-10-05	--	--	<.011	<.02	<.030	<.01	<.008	<.5	<.02	<.005
	08-10-05	--	--	<.011	<.02	<.030	<.01	<.008	<.5	<.02	<.005
NBRT15-F 030N23W3	08-10-05	--	--	<.011	<.02	<.030	<.01	<.008	<.5	<.02	<.005
	08-10-05	--	--	<.011	<.02	<.030	<.01	<.008	<.5	<.02	<.005
CARVER COUNTY											
CHAN3 116N05W3	11-12-04	<.05	<.02	--	--	<.030	<.01	<.008	<.5	<.02	<.005
CHAN5 116N23W1	12-01-04	<.05	<.02	--	--	<.030	<.01	<.008	<.5	<.02	<.005
HENNEPIN COUNTY											
EDN13 117N21W3	11-15-04	<.05	<.02	--	--	<.030	<.01	<.008	<.5	<.02	<.005
	08-09-05	--	--	--	--	--	--	--	--	--	--
EDN13-F 117N21W3	08-09-05	--	--	--	--	--	--	--	--	--	--
EDPR 116N22W1	11-15-04	<.05	<.02	--	--	<.030	<.01	<.008	<.5	<.02	<.005
BLM6 027N24W1	11-12-04	<.05	<.02	--	--	<.030	<.01	<.008	<.5	<.02	<.005
	08-09-05	--	--	<.011	<.02	--	--	--	<.5	--	<.005
BLM6-F 027N24W1	08-09-05	--	--	<.011	<.02	--	--	--	<.5	--	<.005
RICE COUNTY											
FARB9 110N21W2	11-16-04	<.05	<.02	--	--	<.030	<.01	<.008	<.5	<.02	<.005
	08-08-05	<.05	<.02	--	--	--	--	--	--	--	--
FARB9-F 110N21W2	08-08-05	<.05	<.02	--	--	--	--	--	--	--	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Sulfo-met-ruron, water, fltrd, ug/L (50337)	Tebu-thiuron water fltrd 0.7u GF ug/L (82670)	Teflu-thrin, water, fltrd, ug/L (61606)	Terba-cil, water, fltrd, ug/L (04032)	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)	tert-Amyl alcohol water unfltrd ug/L (77073)	tert-Butyl-alcohol water unfltrd ug/L (77035)	Tetra-chloro-ethene, water, fltrd, ug/L (34476)
DAKOTA COUNTY											
SSP1 28N22W2	11-08-04	<.038	<.02	--	<.016	<.07	<.02	<.01	<1.0	<1.00	<.5
HENNEPIN COUNTY											
HOPK4 117N22W1	11-09-04	<.038	<.02	--	<.016	<.07	<.02	<.01	<1.0	<1.00	<.5
	08-24-05	--	--	--	--	--	--	--	--	--	<.5
HOPK4-F 117N22W1	08-24-05	--	--	--	--	--	--	--	--	--	<.5
BRCN5 119N21W2	11-09-04	<.038	<.02	--	<.016	<.07	<.02	<.01	<1.0	<1.00	<.5
DAKOTA COUNTY											
IGH3 27N23W	11-10-04	<.038	<.02	--	<.016	<.07	<.02	<.01	<1.0	<1.00	<.5
RAMSEY COUNTY											
NBRT1515030N23W 30	11-10-04	<.038	<.02	--	<.016	<.07	<.02	<.01	<1.0	<1.00	<.5
	11-10-04	<.038	<.02	--	<.016	<.07	<.02	<.01	<1.0	<1.00	<.5
	08-10-05	<.090	<.02	<.008	<.016	<.07	<.02	<.01	--	--	<.5
	08-10-05	<.038	<.02	<.008	<.016	<.07	<.02	<.01	--	--	E.1
NBRT15-F 030N23W3	08-10-05	<.090	<.02	<.008	<.016	<.07	<.02	<.01	--	--	<.5
	08-10-05	<.038	<.02	<.008	<.016	<.07	<.02	<.01	--	--	<.5
CARVER COUNTY											
CHAN3 116N05W3	11-12-04	<.038	<.02	--	<.016	<.07	<.02	<.01	<1.0	<1.00	<.5
CHAN5 116N23W1	12-01-04	<.038	<.02	--	<.016	<.07	<.02	<.01	<1.0	<2.00	<.5
HENNEPIN COUNTY											
EDN13 117N21W3	11-15-04	<.038	<.02	--	<.016	<.07	<.02	<.01	<1.0	<1.00	<.5
	08-09-05	--	--	--	--	--	--	--	--	--	--
EDN13-F 117N21W3	08-09-05	--	--	--	--	--	--	--	--	--	--
EDPR 116N22W1	11-15-04	<.038	<.02	--	<.016	<.07	<.02	<.01	<1.0	<1.00	<.5
BLM6 027N24W1	11-12-04	<.038	<.02	--	<.016	<.07	<.02	<.01	<1.0	<1.00	<.5
	08-09-05	--	<.02	<.008	--	<.07	<.02	<.01	--	--	<.5
BLM6-F 027N24W1	08-09-05	--	<.02	<.008	--	<.07	<.02	<.01	--	--	<.5
RICE COUNTY											
FARB9 110N21W2	11-16-04	<.038	<.02	--	<.016	<.07	<.02	<.01	<1.0	<1.00	<.5
	08-08-05	--	--	--	--	--	--	--	--	--	--
FARB9-F 110N21W2	08-08-05	--	--	--	--	--	--	--	--	--	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Thio-bencarb water fltrd 0.7u GF ug/L (82681)	trans-Propi-cona-zole, water, fltrd, ug/L (79847)	Tri-bromo-methane water, fltrd, ug/L (34288)	Tribu-phos, water, fltrd, ug/L (61610)	Tri-butyl phos-phate, water, fltrd, ug/L (62089)	Tri-clopyr, water, fltrd 0.7u GF ug/L (49235)	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)
DAKOTA COUNTY											
SSP1 28N22W2	11-08-04	--	--	<.5	--	<.5	<.03	<1	<.5	<.009	<.5
HENNEPIN COUNTY											
HOPK4 117N22W1	11-09-04	--	--	<.5	--	M	<.03	<1	<.5	<.009	<.5
	08-24-05	--	--	<.5	--	<.5	--	<1	<.5	--	<.5
HOPK4-F 117N22W1	08-24-05	--	--	E2.0	--	<.5	--	<1	<.5	--	<.5
BRCN5 119N21W2	11-09-04	--	--	<.5	--	<.5	<.03	<1	<.5	<.009	<.5
DAKOTA COUNTY											
IGH3 27N23W	11-10-04	--	--	<.5	--	<.5	<.03	<1	<.5	<.009	<.5
RAMSEY COUNTY											
NBRT1515030N23W 30	11-10-04	--	--	<.5	--	<.5	<.03	<1	<.5	<.009	<.5
	11-10-04	--	--	<.5	--	<.5	<.03	<1	<.5	<.009	<.5
	08-10-05	<.010	<.01	<.5	<.004	<.5	<.03	<1	<.5	<.009	<.5
	08-10-05	<.010	<.01	<.5	<.004	<.5	<.03	<1	<.5	<.009	<.5
NBRT15-F 030N23W3	08-10-05	<.010	<.01	<.5	<.004	<.5	<.03	<1	<.5	<.009	<.5
	08-10-05	<.010	<.01	<.5	<.004	<.5	<.03	<1	<.5	<.009	M
CARVER COUNTY											
CHAN3 116N05W3	11-12-04	--	--	<.5	--	<.5	<.03	<1	<.5	<.009	<.5
CHAN5 116N23W1	12-01-04	--	--	<.5	--	<.5	<.03	<1	<.5	<.009	<.5
HENNEPIN COUNTY											
EDN13 117N21W3	11-15-04	--	--	<.5	--	<.5	<.03	<1	<.5	<.009	<.5
	08-09-05	--	--	--	--	--	--	--	--	--	--
EDN13-F 117N21W3	08-09-05	--	--	--	--	--	--	--	--	--	--
EDPR 116N22W1	11-15-04	--	--	<.5	--	<.5	<.03	<1	<.5	<.009	<.5
BLM6 027N24W1	11-12-04	--	--	<.5	--	<.5	<.03	<1	<.5	<.009	<.5
	08-09-05	<.010	<.01	<.5	<.004	<.5	--	<1	<.5	<.009	<.5
BLM6-F 027N24W1	08-09-05	<.010	<.01	E.1	<.004	<.5	--	<1	<.5	<.009	<.5
RICE COUNTY											
FARB9 110N21W2	11-16-04	--	--	<.5	--	<.5	<.03	<1	<.5	<.009	<.5
	08-08-05	--	--	--	--	--	--	--	--	--	--
FARB9-F 110N21W2	08-08-05	--	--	--	--	--	--	--	--	--	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	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)	1,1,1,2 -Tetra-chloro-ethane, water, unfltrd ug/L (77562)	1,1,1-Tri-chloro-ethane, water, unfltrd ug/L (34506)	1,1,2,2 -Tetra-chloro-ethane, water, unfltrd ug/L (34516)	CFC-113 water unfltrd ug/L (77652)	1,1,2-Tri-chloro-ethane, water, unfltrd ug/L (34511)	1,1-Di-chloro-ethane, water unfltrd ug/L (34496)	1,1-Di-chloro-ethene, water, unfltrd ug/L (34501)
DAKOTA COUNTY											
SSP1 28N22W2	11-08-04	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02
HENNEPIN COUNTY											
HOPK4 117N22W1	11-09-04	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02
	08-24-05	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02
HOPK4-F 117N22W1	08-24-05	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02
BRCN5 119N21W2	11-09-04	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02
DAKOTA COUNTY											
IGH3 27N23W	11-10-04	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02
RAMSEY COUNTY											
NBRT1515030N23W 30	11-10-04	<.5	<.5	<.5	<.03	5.31	<.08	.20	E.08	4.88	6.53
	11-10-04	<.5	<.5	<.5	<.03	4.90	<.08	E.19	E.08	4.78	6.41
	08-10-05	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02
	08-10-05	<.5	<.5	<.5	<.03	5.07	<.08	E.18	<.04	5.11	7.02
NBRT15-F 030N23W3	08-10-05	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02
	08-10-05	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02
CARVER COUNTY											
CHAN3 116N05W3	11-12-04	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02
CHAN5 116N23W1	12-01-04	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02
HENNEPIN COUNTY											
EDN13 117N21W3	11-15-04	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	.13	E.04
	08-09-05	--	--	--	<.03	<.03	<.08	<.04	<.04	.13	E.04
EDN13-F 117N21W3	08-09-05	--	--	--	<.03	<.03	<.08	<.04	<.04	.14	<.02
EDPR 116N22W1	11-15-04	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02
BLM6 027N24W1	11-12-04	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02
	08-09-05	<.5	<.5	<.5	--	--	--	--	--	--	--
BLM6-F 027N24W1	08-09-05	<.5	<.5	<.5	--	--	--	--	--	--	--
RICE COUNTY											
FARB9 110N21W2	11-16-04	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02
	08-08-05	--	--	--	<.03	<.03	<.08	<.04	<.04	<.04	<.02
FARB9-F 110N21W2	08-08-05	--	--	--	<.03	<.03	<.08	<.04	<.04	E.05	E.02

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	1,1-Dichloropropene water unfltrd ug/L (77168)	1,2,3,4 Tetramethylbenzene water unfltrd ug/L (49999)	1,2,3,5 Tetramethylbenzene water unfltrd ug/L (50000)	1,2,3-Trichlorobenzene water unfltrd ug/L (77613)	1,2,3-Trichloropropane water unfltrd ug/L (77443)	1,2,3-Trimethylbenzene water unfltrd ug/L (77221)	1,2,4-Trichlorobenzene water unfltrd ug/L (34551)	1,2,4-Trimethylbenzene water unfltrd ug/L (77222)	Dibromochloropropane water unfltrd ug/L (82625)	1,2-Dibromoethane, water, unfltrd ug/L (77651)
DAKOTA COUNTY											
SSP1 28N22W2	11-08-04	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
HENNEPIN COUNTY											
HOPK4 117N22W1	11-09-04	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
	08-24-05	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
HOPK4-F 117N22W1	08-24-05	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
BRCN5 119N21W2	11-09-04	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
DAKOTA COUNTY											
IGH3 27N23W	11-10-04	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
RAMSEY COUNTY											
NBRT1515030N23W 30	11-10-04	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
	11-10-04	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
	08-10-05	<.03	<.1	<.1	<.2	<.18	<.1	<.1	E.01	<.5	<.04
	08-10-05	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
NBRT15-F 030N23W3	08-10-05	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
	08-10-05	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
CARVER COUNTY											
CHAN3 116N05W3	11-12-04	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
CHAN5 116N23W1	12-01-04	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
HENNEPIN COUNTY											
EDN13 117N21W3	11-15-04	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
	08-09-05	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
EDN13-F 117N21W3	08-09-05	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
EDPR 116N22W1	11-15-04	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
BLM6 027N24W1	11-12-04	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
	08-09-05	--	--	--	--	--	--	--	--	--	--
BLM6-F 027N24W1	08-09-05	--	--	--	--	--	--	--	--	--	--
RICE COUNTY											
FARB9 110N21W2	11-16-04	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
	08-08-05	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
FARB9-F 110N21W2	08-08-05	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	1,2-Dichlorobenzene water unfltrd ug/L (34536)	1,2-Dichloroethane, water, unfltrd ug/L (32103)	1,2-Dichloropropane water unfltrd ug/L (34541)	1,3,5-Trimethylbenzene water unfltrd ug/L (77226)	1,3-Dichlorobenzene water unfltrd ug/L (34566)	1,3-Dichloropropane water unfltrd ug/L (77173)	1,4-Dichlorobenzene water unfltrd ug/L (34571)	2,2-Dichloropropane water unfltrd ug/L (77170)	2-Chlorotoluene water unfltrd ug/L (77275)	2-Ethyltoluene water unfltrd ug/L (77220)
DAKOTA COUNTY											
SSP1 28N22W2	11-08-04	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
HENNEPIN COUNTY											
HOPK4 117N22W1	11-09-04	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
	08-24-05	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
HOPK4-F 117N22W1	08-24-05	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
BRCN5 119N21W2	11-09-04	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
DAKOTA COUNTY											
IGH3 27N23W	11-10-04	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
RAMSEY COUNTY											
NBRT1515030N23W 30	11-10-04	<.05	.2	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
	11-10-04	<.05	.2	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
	08-10-05	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
	08-10-05	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
NBRT15-F 030N23W3	08-10-05	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
	08-10-05	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
CARVER COUNTY											
CHAN3 116N05W3	11-12-04	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
CHAN5 116N23W1	12-01-04	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
HENNEPIN COUNTY											
EDN13 117N21W3	11-15-04	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
	08-09-05	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
EDN13-F 117N21W3	08-09-05	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
EDPR 116N22W1	11-15-04	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
BLM6 027N24W1	11-12-04	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
	08-09-05	--	--	--	--	--	--	--	--	--	--
BLM6-F 027N24W1	08-09-05	--	--	--	--	--	--	--	--	--	--
RICE COUNTY											
FARB9 110N21W2	11-16-04	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
	08-08-05	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
FARB9-F 110N21W2	08-08-05	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	3-Chloropropene water unfltrd ug/L (78109)	4-Chlorotoluene water unfltrd ug/L (77277)	4-Isopropyltoluene water unfltrd ug/L (77356)	Acetone water unfltrd ug/L (81552)	Acrylonitrile water unfltrd ug/L (34215)	Benzene water unfltrd ug/L (34030)	Bromobenzene water unfltrd ug/L (81555)	Bromochloromethane water unfltrd ug/L (77297)	Bromodichloromethane water unfltrd ug/L (32101)	Bromoethene, water, unfltrd ug/L (50002)
DAKOTA COUNTY											
SSP1 28N22W2	11-08-04	<.50	<.05	<.08	<6	<.8	<.02	<.03	<.12	<.03	<.1
HENNEPIN COUNTY											
HOPK4 117N22W1	11-09-04	<.50	<.05	<.08	<6	<.8	<.02	<.03	<.12	<.03	<.1
	08-24-05	<.50	<.05	<.08	<6	<.8	E.02	<.03	<.12	<.03	<.1
HOPK4-F 117N22W1	08-24-05	<.50	<.05	<.08	E2	<.8	<.02	<.03	<.12	.32	<.1
BRCN5 119N21W2	11-09-04	<.50	<.05	<.08	<6	<.8	<.02	<.03	<.12	<.03	<.1
DAKOTA COUNTY											
IGH3 27N23W	11-10-04	<.50	<.05	<.08	<6	<.8	<.02	<.03	<.12	<.03	<.1
RAMSEY COUNTY											
NBRT1515030N23W 30	11-10-04	<.50	<.05	<.08	<6	<.8	E.02	<.03	<.12	<.03	<.1
	11-10-04	<.50	<.05	<.08	<6	<.8	E.02	<.03	<.12	<.03	<.1
	08-10-05	<.50	<.05	<.08	E2	<.8	<.02	<.03	<.12	<.03	<.1
	08-10-05	<.50	<.05	<.08	<6	<.8	E.02	<.03	<.12	<.03	<.1
NBRT15-F 030N23W3	08-10-05	<.50	<.05	<.08	<6	<.8	<.02	<.03	<.12	<.03	<.1
	08-10-05	<.50	<.05	<.08	<6	<.8	<.02	<.03	<.12	<.03	<.1
CARVER COUNTY											
CHAN3 116N05W3	11-12-04	<.50	<.05	<.08	<6	<.8	<.02	<.03	<.12	<.03	<.1
CHAN5 116N23W1	12-01-04	<.50	<.05	<.08	<6	<.8	<.02	<.03	<.12	<.03	<.1
HENNEPIN COUNTY											
EDN13 117N21W3	11-15-04	<.50	<.05	<.08	<6	<.8	.10	<.03	<.12	<.03	<.1
	08-09-05	<.50	<.05	<.08	<6	<.8	.13	<.03	<.12	<.03	<.1
EDN13-F 117N21W3	08-09-05	<.50	<.05	<.08	E2	<.8	.12	<.03	<.12	1.21	<.1
EDPR 116N22W1	11-15-04	<.50	<.05	<.08	<6	<.8	<.02	<.03	<.12	<.03	<.1
BLM6 027N24W1	11-12-04	<.50	<.05	<.08	<6	<.8	<.02	<.03	<.12	<.03	<.1
	08-09-05	--	--	--	--	--	--	--	--	--	--
BLM6-F 027N24W1	08-09-05	--	--	--	--	--	--	--	--	--	--
RICE COUNTY											
FARB9 110N21W2	11-16-04	<.50	<.05	<.08	<6	<.8	<.02	<.03	<.12	<.03	<.1
	08-08-05	<.50	<.05	<.08	E2	<.8	<.02	<.03	<.12	<.03	<.1
FARB9-F 110N21W2	08-08-05	<.50	<.05	<.08	E3	<.8	<.02	<.03	<.12	<.03	<.1

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Bromomethane water unfltrd ug/L (34413)	Carbon disulfide water unfltrd ug/L (77041)	Chlorobenzene water unfltrd ug/L (34301)	Chloroethane, water, unfltrd ug/L (34311)	Chloromethane water unfltrd ug/L (34418)	cis-1,2-Dichloroethene, water, unfltrd ug/L (77093)	cis-1,3-Dichloropropene water unfltrd ug/L (34704)	Dibromochloromethane water unfltrd ug/L (32105)	Dibromomethane water unfltrd ug/L (30217)	Dichlorodifluoromethane wat unf ug/L (34668)
					DAKOTA COUNTY						
SSP1 28N22W2	11-08-04	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05	<.18
					HENNEPIN COUNTY						
HOPK4 117N22W1	11-09-04	<.3	<.04	<.03	<.1	<.2	E.06	<.05	<.1	<.05	<.18
	08-24-05	<.3	<.04	<.03	<.1	<.2	.30	<.05	<.1	<.05	<.18
HOPK4-F 117N22W1	08-24-05	<.3	<.04	<.03	<.1	<.2	.27	<.05	.2	<.05	<.18
BRCN5 119N21W2	11-09-04	<.3	<.04	<.03	<.1	<.2	E.01	<.05	<.1	<.05	<.18
					DAKOTA COUNTY						
IGH3 27N23W	11-10-04	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05	<.18
					RAMSEY COUNTY						
NBRT1515030N23W 30	11-10-04	<.3	<.04	<.03	<.1	<.2	1.46	<.05	<.1	<.05	<.18
	11-10-04	<.3	<.04	<.03	<.1	<.2	1.44	<.05	<.1	<.05	<.18
	08-10-05	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05	<.18
	08-10-05	<.3	<.04	<.03	<.1	<.2	1.17	<.05	<.1	<.05	<.18
NBRT15-F 030N23W3	08-10-05	<.3	E.07	<.03	<.1	<.2	<.02	<.05	<.1	<.05	<.18
	08-10-05	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05	<.18
					CARVER COUNTY						
CHAN3 116N05W3	11-12-04	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05	<.18
CHAN5 116N23W1	12-01-04	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05	<.18
					HENNEPIN COUNTY						
EDN13 117N21W3	11-15-04	<.3	<.04	<.03	<.1	<.2	1.50	<.05	<.1	<.05	<.18
	08-09-05	<.3	<.04	<.03	<.1	<.2	2.40	<.05	<.1	<.05	<.18
EDN13-F 117N21W3	08-09-05	<.3	<.04	<.03	<.1	E.1	1.79	<.05	.4	<.05	<.18
EDPR 116N22W1	11-15-04	<.3	<.04	<.03	<.1	<.2	.37	<.05	<.1	<.05	<.18
BLM6 027N24W1	11-12-04	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05	<.18
	08-09-05	--	--	--	--	--	--	--	--	--	--
BLM6-F 027N24W1	08-09-05	--	--	--	--	--	--	--	--	--	--
					RICE COUNTY						
FARB9 110N21W2	11-16-04	<.3	<.04	<.03	<.1	<.2	E.09	<.05	<.1	<.05	<.18
	08-08-05	<.3	<.04	<.03	<.1	<.2	E.08	<.05	<.1	<.05	<.18
FARB9-F 110N21W2	08-08-05	<.3	<.04	<.03	<.1	<.2	.94	<.05	<.1	<.05	<.18

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Dichloromethane water unfltrd ug/L (34423)	Diethyl ether, water, unfltrd ug/L (81576)	Diisopropyl ether, water, unfltrd ug/L (81577)	Ethyl methacrylate, water, unfltrd ug/L (73570)	Ethyl methyl ketone, water, unfltrd ug/L (81595)	Ethylbenzene water unfltrd ug/L (34371)	Hexachlorobutadiene, water, unfltrd ug/L (39702)	Hexachloroethane, water, unfltrd ug/L (34396)	Iodomethane water unfltrd ug/L (77424)	Isobutyl methyl ketone, water, unfltrd ug/L (78133)
DAKOTA COUNTY											
SSP1 28N22W2	11-08-04	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
HENNEPIN COUNTY											
HOPK4 117N22W1	11-09-04	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
	08-24-05	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
HOPK4-F 117N22W1	08-24-05	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
BRCN5 119N21W2	11-09-04	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
DAKOTA COUNTY											
IGH3 27N23W	11-10-04	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
RAMSEY COUNTY											
NBRT1515030N23W 30	11-10-04	<.1	<.1	<.13	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
	11-10-04	<.1	<.1	<.13	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
	08-10-05	<.1	<.1	<.10	<.2	<2.0	E.03	<.1	<.1	<.50	<.4
	08-10-05	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
NBRT15-F 030N23W3	08-10-05	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
	08-10-05	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
CARVER COUNTY											
CHAN3 116N05W3	11-12-04	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
CHAN5 116N23W1	12-01-04	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
HENNEPIN COUNTY											
EDN13 117N21W3	11-15-04	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
	08-09-05	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
EDN13-F 117N21W3	08-09-05	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
EDPR 116N22W1	11-15-04	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
BLM6 027N24W1	11-12-04	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
	08-09-05	--	--	--	--	--	--	--	--	--	--
BLM6-F 027N24W1	08-09-05	--	--	--	--	--	--	--	--	--	--
RICE COUNTY											
FARB9 110N21W2	11-16-04	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
	08-08-05	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
FARB9-F 110N21W2	08-08-05	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Iso-propyl-benzene water unfltrd ug/L (77223)	Methyl acrylo-nitrile water unfltrd ug/L (81593)	Methyl acryl-ate, water, unfltrd ug/L (49991)	Methyl methac-rylate, water, unfltrd ug/L (81597)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	Naphth-alene, water, unfltrd ug/L (34696)	Methyl n-butyl ketone, water, unfltrd ug/L (77103)	n-Butyl benzene water unfltrd ug/L (77342)	n-propyl-benzene water unfltrd ug/L (77224)
DAKOTA COUNTY											
SSP1 28N22W2	11-08-04	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
HENNEPIN COUNTY											
HOPK4 117N22W1	11-09-04	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
	08-24-05	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
HOPK4-F 117N22W1	08-24-05	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
BRCN5 119N21W2	11-09-04	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
DAKOTA COUNTY											
IGH3 27N23W	11-10-04	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
RAMSEY COUNTY											
NBRT1515030N23W 30	11-10-04	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
	11-10-04	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
	08-10-05	<.04	<.4	<1.0	<.2	<.04	E.08	<.5	<.4	<.1	<.04
	08-10-05	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
NBRT15-F 030N23W3	08-10-05	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
	08-10-05	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
CARVER COUNTY											
CHAN3 116N05W3	11-12-04	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
CHAN5 116N23W1	12-01-04	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
HENNEPIN COUNTY											
EDN13 117N21W3	11-15-04	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
	08-09-05	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
EDN13-F 117N21W3	08-09-05	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
EDPR 116N22W1	11-15-04	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
BLM6 027N24W1	11-12-04	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
	08-09-05	--	--	--	--	--	--	--	--	--	--
BLM6-F 027N24W1	08-09-05	--	--	--	--	--	--	--	--	--	--
RICE COUNTY											
FARB9 110N21W2	11-16-04	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
	08-08-05	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
FARB9-F 110N21W2	08-08-05	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	o-Xylene, water, unfltrd ug/L (77135)	sec-Butyl-benzene water unfltrd ug/L (77350)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)	tert-Butyl-benzene water unfltrd ug/L (77353)	Tetra-chloro-ethene, water, unfltrd ug/L (34475)	Tetra-chloro-methane water unfltrd ug/L (32102)	Tetra-hydro-furan, water, unfltrd ug/L (81607)	Toluene water unfltrd ug/L (34010)
DAKOTA COUNTY											
SSP1 28N22W2	11-08-04	<.04	<.06	<.04	<.03	<.1	<.06	<.03	<.06	<1	<.02
HENNEPIN COUNTY											
HOPK4 117N22W1	11-09-04	<.04	<.06	<.04	<.03	<.1	<.06	<.03	<.06	<1	<.02
	08-24-05	<.04	<.06	<.04	<.03	<.1	<.06	E.02	<.06	<1	<.02
HOPK4-F 117N22W1	08-24-05	<.04	<.06	<.04	<.03	<.1	<.06	E.02	<.06	<1	<.02
BRCN5 119N21W2	11-09-04	<.04	<.06	<.04	<.03	<.1	<.06	<.03	<.06	<1	<.02
DAKOTA COUNTY											
IGH3 27N23W	11-10-04	<.04	<.06	<.04	<.03	<.1	<.06	<.03	<.06	<1	E.01
RAMSEY COUNTY											
NBRT1515030N23W 30	11-10-04	<.04	<.06	<.04	<.03	<.1	<.06	.11	<.06	<1	<.02
	11-10-04	<.04	<.06	<.04	<.03	<.1	<.06	.11	<.06	<1	<.02
	08-10-05	E.03	<.06	<.04	<.03	<.1	<.06	<.03	<.06	<1	E.02
	08-10-05	<.04	<.06	<.04	<.03	<.1	<.06	E.14	<.06	<1	<.02
NBRT15-F 030N23W3	08-10-05	<.04	<.06	<.04	<.03	<.1	<.06	<.03	<.06	<1	E.02
	08-10-05	<.04	<.06	<.04	<.03	<.1	<.06	<.03	<.06	<1	<.02
CARVER COUNTY											
CHAN3 116N05W3	11-12-04	<.04	<.06	<.04	<.03	<.1	<.06	<.03	<.06	<1	<.02
CHAN5 116N23W1	12-01-04	<.04	<.06	<.04	<.03	<.1	<.06	<.03	<.06	<1	<.02
HENNEPIN COUNTY											
EDN13 117N21W3	11-15-04	<.04	<.06	<.04	<.03	<.1	<.06	<.03	<.06	<1	<.02
	08-09-05	<.04	<.06	<.04	<.03	<.1	<.06	<.03	<.06	<1	<.02
EDN13-F 117N21W3	08-09-05	<.04	<.06	<.04	<.03	<.1	<.06	<.03	<.06	<1	<.02
EDPR 116N22W1	11-15-04	<.04	<.06	<.04	<.03	<.1	<.06	<.03	<.06	<1	<.02
BLM6 027N24W1	11-12-04	<.04	<.06	<.04	<.03	<.1	<.06	<.03	<.06	<1	<.02
	08-09-05	--	--	--	--	--	--	--	--	--	--
BLM6-F 027N24W1	08-09-05	--	--	--	--	--	--	--	--	--	--
RICE COUNTY											
FARB9 110N21W2	11-16-04	<.04	<.06	<.04	<.03	<.1	<.06	<.03	<.06	<1	<.02
	08-08-05	<.04	<.06	<.04	<.03	<.1	<.06	<.03	<.06	<1	<.02
FARB9-F 110N21W2	08-08-05	<.04	<.06	<.04	<.03	<.1	<.06	<.03	<.06	<1	<.02

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	trans-1,2-Di-chloro-ethene, water, unfltrd ug/L (34546)	trans-1,3-Di-chloro-propene water unfltrd ug/L (34699)	trans-1,4-Di-chloro-2-butene, wat unf ug/L (73547)	Tri-bromo-methane water unfltrd ug/L (32104)	Tri-chloro-ethene, water, unfltrd ug/L (39180)	Tri-chloro-fluoro-methane water unfltrd ug/L (34488)	Tri-chloro-methane water unfltrd ug/L (32106)	Vinyl chlor-ide, water, unfltrd ug/L (39175)	Di-chlor-vos, water fltrd, ug/L (38775)
DAKOTA COUNTY										
SSP1 28N22W2	11-08-04	<.03	<.09	<.7	<.10	<.04	<.08	<.02	<.1	<.01
HENNEPIN COUNTY										
HOPK4 117N22W1	11-09-04	E.04	<.09	<.7	<.10	<.04	<.08	<.02	<.1	<.01
	08-24-05	.18	<.09	<.7	<.10	E.02	<.08	<.02	<.1	--
HOPK4-F 117N22W1	08-24-05	.15	<.09	<.7	<.10	E.01	<.08	.49	<.1	--
BRCN5 119N21W2	11-09-04	<.03	<.09	<.7	<.10	E.10	<.08	<.02	<.1	<.01
DAKOTA COUNTY										
IGH3 27N23W	11-10-04	<.03	<.09	<.7	<.10	<.04	<.08	<.02	<.1	<.01
RAMSEY COUNTY										
NBRT1515030N23W 30	11-10-04	E.04	<.09	<.7	<.10	69.5	<.08	E.10	.7	<.01
	11-10-04	E.03	<.09	<.7	<.10	74.0	<.08	E.08	.7	<.01
	08-10-05	<.03	<.09	<.7	<.10	<.04	<.08	<.02	<.1	<.01
	08-10-05	E.03	<.09	<.7	<.10	64.0	<.08	E.07	<.1	<.01
NBRT15-F 030N23W3	08-10-05	<.03	<.09	<.7	<.10	<.04	.14	<.02	<.1	<.01
	08-10-05	<.03	<.09	<.7	<.10	<.04	<.08	<.02	<.1	<.01
CARVER COUNTY										
CHAN3 116N05W3	11-12-04	<.03	<.09	<.7	<.10	<.04	<.08	E.03	<.1	<.01
CHAN5 116N23W1	12-01-04	<.03	<.09	<.7	<.10	<.04	<.08	<.02	<.1	<.01
HENNEPIN COUNTY										
EDN13 117N21W3	11-15-04	E.11	<.09	<.7	<.10	.30	<.08	<.02	.2	<.01
	08-09-05	.17	<.09	<.7	<.10	.32	<.08	<.02	.4	--
EDN13-F 117N21W3	08-09-05	.15	<.09	<.7	<.10	.25	<.08	1.83	<.1	--
EDPR 116N22W1	11-15-04	<.03	<.09	<.7	<.10	E.06	<.08	<.02	<.1	<.01
BLM6 027N24W1	11-12-04	<.03	<.09	<.7	<.10	<.04	<.08	<.02	<.1	<.01
	08-09-05	--	--	--	--	--	--	--	--	<.01
BLM6-F 027N24W1	08-09-05	--	--	--	--	--	--	--	--	<.01
RICE COUNTY										
FARB9 110N21W2	11-16-04	<.03	<.09	<.7	<.10	E.05	<.08	<.02	<.1	<.01
	08-08-05	<.03	<.09	<.7	<.10	E.04	<.08	<.02	<.1	--
FARB9-F 110N21W2	08-08-05	E.08	<.09	<.7	<.10	.63	<.08	E.05	<.1	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Time	Sample type	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unf lab, uS/cm 25 degC (90095)	Specif. conductance, wat unf uS/cm 25 degC (00095)
			RAMSEY COUNTY							
WtBearLk3										
30N22W36BDCDCD0	11-17-04	0930	Environmental	746	.2	2	7.6	7.4	424	450
			HENNEPIN COUNTY							
BrklnPk10										
119N21W16CDCADA0	11-18-04	1200	Environmental	745	.1	1	7.6	7.7	643	700
	08-12-05	0945	Environmental	743	.2	2	7.4	7.7	819	866
BKPK10-F										
119N21W16CDCADA0	08-12-05	1100	Environmental	743	10.6	102	7.5	7.8	840	891
BrklnPk11										
119N21W17CCDBDD	11-18-04	1230	Environmental	745	.1	1	7.7	7.6	762	815
	08-12-05	1015	Environmental	--	1.2	--	7.4	7.6	892	937
			ANOKA COUNTY							
Frdley10										
030N24W11CDCCAA01	11-18-04	1030	Environmental	745	.1	1	7.6	7.7	593	645
	08-08-05	1415	Environmental	742	M	.0	7.5	7.7	563	607
FRDY10-F										
030N24W11CDCCAA0	08-08-05	1440	Environmental	742	.1	7	7.3	7.6	564	529
			DAKOTA COUNTY							
Apple Vly										
115N20W23DCBBBA0	11-22-04	0945	Environmental	748	.8	7	7.3	7.3	602	637
	08-11-05	0945	Environmental	--	.5	5	7.2	7.6	629	669
APVY11-F										
115N20W23DCBBBA0	08-11-05	1045	Environmental	--	5.4	48	7.2	7.9	702	628
			HENNEPIN COUNTY							
Medina 1										
118N23W28ADBBBC0	11-22-04	1145	Environmental	748	.4	4	7.6	7.6	722	748
			DAKOTA COUNTY							
Vermilon2										
114N18W22BAAAD01	11-29-04	0945	Environmental	742	3.9	34	7.8	7.7	380	388
	08-23-05	1030	Environmental	--	3.8	33	7.7	7.5	398	414
VERM2-F										
114N18W22BAAAD02	08-23-05	1100	Environmental	--	4.3	44	7.4	7.8	399	418
			HENNEPIN COUNTY							
MpleGrov6										
119N22W13BDDCAA	11-29-04	1200	Environmental	742	.2	2	7.5	7.5	835	828
	08-24-05	1300	Environmental	745	.2	2	7.3	7.5	850	869
	08-24-05	1305	Replicate	--	--	--	--	7.5	851	--
MPGR6-F										
119N22W13BDDCAA0	08-24-05	1415	Environmental	745	10.3	97	7.3	7.6	801	811
	08-24-05	1420	Replicate	--	--	--	--	7.7	800	--
MpleGrov3										
119N22W13BCBBDC0	11-29-04	1245	Environmental	742	.1	1	7.4	7.3	717	723
Mound 7										
117N24W13BBCBDA0	11-30-04	1000	Environmental	740	.1	1	7.5	7.6	778	818
Wayzata 3 117N22W										
6BDACBD0	11-30-04	1130	Environmental	740	.3	3	7.3	7.5	656	689

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Temperature, air, deg C (00020)	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)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Bromide water, fltrd, mg/L (71870)
					RAMSEY COUNTY						
WtBearLk3											
30N22W3	11-17-04	13.0	9.7	54.7	20.0	1.55	8.41	196	239	--	.02
					HENNEPIN COUNTY						
BrklnPk10											
119N21W1	11-18-04	19.5	10.2	87.1	34.8	2.25	5.90	260	317	--	.06
	08-12-05	--	10.1	112	43.9	2.47	7.81	259	316	.0	.21
BKPK10-F											
119N21W1	08-12-05	--	13.3	118	43.8	3.15	11.2	226	276	.0	.18
BrklnPk11											
119N21W1	11-18-04	14.0	10.0	105	37.6	1.99	4.84	250	305	--	.09
	08-12-05	--	10.3	128	44.1	2.19	7.58	259	316	.0	.22
					ANOKA COUNTY						
Frdley10 030N24W11	11-18-04	15.5	10.6	82.4	21.2	1.73	16.4	202	246	--	.03
	08-08-05	--	10.0	77.4	18.9	1.67	12.5	202	247	.0	.25
FRDY10-F											
030N24W1	08-08-05	--	17.6	61.3	19.7	3.79	12.7	202	247	.0	.26
					DAKOTA COUNTY						
Apple Vly 115N20W2	11-22-04	12.0	9.5	80.0	33.1	1.93	7.70	283	344	--	.05
	08-11-05	--	9.4	86.9	34.0	1.92	6.98	275	335	.0	.21
APVY11-F											
115N20W2	08-11-05	--	10.0	86.7	31.7	1.90	7.33	259	316	.0	.14
					HENNEPIN COUNTY						
Medina 1 118N23W2	11-22-04	17.0	9.1	89.1	45.8	3.69	11.9	428	521	--	<.02
					DAKOTA COUNTY						
Vermilon2											
114N18W2	11-29-04	11.0	9.3	48.6	21.8	.90	3.25	194	236	--	E.08
	08-23-05	--	9.5	51.5	21.5	.79	3.33	170	207	.0	.21
VERM2-F											
114N18W2	08-23-05	--	17.0	50.7	21.3	.79	3.19	170	207	.0	.11
					HENNEPIN COUNTY						
MpleGrov6											
119N22W1	11-29-04	12.5	9.9	105	39.8	3.27	14.6	303	369	--	.10
	08-24-05	--	10.1	106	41.8	3.66	17.7	307	375	.0	.23
	08-24-05	--	--	107	41.8	3.68	17.7	--	--	--	.24
MPGR6-F											
119N22W1	08-24-05	--	10.3	100	41.4	3.31	14.6	315	385	.0	.25
	08-24-05	--	--	101	41.6	3.34	14.4	323	394	.0	.25
MpleGrov3											
119N22W1	11-29-04	12.0	9.4	97.8	42.9	2.62	4.12	365	445	--	<.10
Mound 7 117N24W1	11-30-04	13.0	9.6	96.3	47.7	4.88	27.3	446	544	--	<.20
Wayzata 3 117N22W	11-30-04	16.0	11.6	84.2	30.4	2.53	20.0	279	339	--	--

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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)	Total nitrogen, wat flt by analysis, mg/L (62854)	Orthophosphate, water, fltrd, mg/L as P (00671)
					RAMSEY COUNTY						
WtBearLk3											
30N22W3	11-17-04	21.4	.2	19.4	9.5	250	.05	.28	<.008	.35	.008
					HENNEPIN COUNTY						
BrklnPk10											
119N21W1	11-18-04	40.7	.2	24.2	55.1	413	.06	<.06	<.008	.06	.017
	08-12-05	65.0	.2	23.6	89.2	543	.06	<.06	<.008	.12	.014
BKPK10-F											
119N21W1	08-12-05	55.1	.7	22.3	152	574	<.04	<.06	<.008	.28	.105
BrklnPk11											
119N21W1	11-18-04	80.6	.2	19.1	50.5	434	E.02	<.06	<.008	E.03	.011
	08-12-05	95.2	.2	19.6	80.7	560	E.02	<.06	<.008	<.06	.011
					ANOKA COUNTY						
Frdley10 030N24W11	11-18-04	56.3	.1	24.6	39.0	361	.36	<.06	<.008	.44	E.004
	08-08-05	41.0	.1	23.1	38.8	339	.34	<.06	<.008	.44	E.005
FRDY10-F											
030N24W1	08-08-05	25.4	1.9	15.1	19.5	290	.70	<.06	<.008	.93	.009
					DAKOTA COUNTY						
Apple Vly 115N20W2	11-22-04	22.1	.2	18.6	36.5	379	E.03	.60	<.008	.64	.009
	08-11-05	21.8	.2	17.9	37.0	383	E.03	.48	<.008	.60	.008
APVY11-F											
115N20W2	08-11-05	19.8	1.0	16.1	30.6	352	<.04	.12	<.008	.22	E.003
					HENNEPIN COUNTY						
Medina 1 118N23W2	11-22-04	.58	.4	30.1	9.2	438	.46	<.06	<.008	.57	.031
					DAKOTA COUNTY						
Vermilon2											
114N18W2	11-29-04	2.52	.2	15.3	16.0	225	<.04	2.69	<.008	2.65	.013
	08-23-05	2.67	.2	14.0	15.9	231	<.04	2.52	.009	2.68	.012
VERM2-F											
114N18W2	08-23-05	3.86	.7	14.3	16.1	216	<.04	2.61	<.008	2.64	.014
					HENNEPIN COUNTY						
MpleGrov6											
119N22W1	11-29-04	73.7	.2	21.8	48.1	478	<.04	<.06	<.008	E.05	.013
	08-24-05	68.5	.2	22.0	54.1	536	<.04	<.06	<.008	E.05	.011
	08-24-05	68.3	.2	22.0	54.0	526	E.02	<.06	<.008	E.06	.029
MPGR6-F											
119N22W1	08-24-05	47.3	2.7	25.4	48.2	485	<.04	<.06	<.008	.16	.389
	08-24-05	47.5	2.7	25.4	48.3	474	<.04	<.06	<.008	.10	.399
MpleGrov3											
119N22W1	11-29-04	14.5	.2	24.9	37.5	426	.07	<.06	<.008	.10	.020
Mound 7 117N24W1	11-30-04	1.30	.4	29.9	50.5	513	.76	<.06	<.008	.85	.023
Wayzata 3 117N22W	11-30-04	58.6	.3	24.9	19.4	405	.04	.10	<.008	.28	E.004

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Organic carbon, water, fltrd, mg/L (00681)	Colipge F-spec, FAMP, 2-step, pres(1) abs(2) /L (99335)	Colipge som, Ec CN13hst 2-step, pres(1) abs(2) /L (99332)	E coli, MI MF, water, col/ 100 mL (90901)	Total coli-form, MI MF, water, col/ 100 mL (90900)	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)	1-Naph-thol, water, fltrd 0.7u GF ug/L (49295)
				RAMSEY COUNTY							
WtBearLk3											
30N22W3	11-17-04	.7	2	2	<1	<1	34	59.5	<.5	<.5	<.09
				HENNEPIN COUNTY							
BrklnPk10											
119N21W1	11-18-04	.7	2	2	<1	<1	8	1,130	<.5	<.5	<.09
	08-12-05	--	--	--	--	--	E5	1,330	--	--	--
BKPK10-F											
119N21W1	08-12-05	--	--	--	--	--	<6	3.5	--	--	--
BrklnPk11											
119N21W1	11-18-04	.7	2	2	<1	<1	<6	633	<.5	<.5	<.09
	08-12-05	--	--	--	--	--	<6	784	--	--	--
				ANOKA COUNTY							
Frdley10 030N24W11	11-18-04	1.8	2	2	<1	<1	368	683	<.5	<.5	<.09
	08-08-05	--	--	--	--	--	408	631	<.5	<.5	--
FRDY10-F											
030N24W1	08-08-05	--	--	--	--	--	<6	7.8	<.5	<.5	--
				DAKOTA COUNTY							
Apple Vly 115N20W2	11-22-04	.5	2	2	<1	<1	12	28.2	<.5	<.5	<.09
	08-11-05	--	--	--	--	--	<6	28.5	--	--	--
APVY11-F											
115N20W2	08-11-05	--	--	--	--	--	<6	3.2	--	--	--
				HENNEPIN COUNTY							
Medina 1 118N23W2	11-22-04	1.8	2	2	<1	<1	8	330	<.5	<.5	<.09
				DAKOTA COUNTY							
Vermilon2											
114N18W2	11-29-04	E.2	2	2	<1	6	<6	<.6	<.5	<.5	<.09
	08-23-05	--	--	--	E.0	E.0	<6	<.6	--	--	--
VERM2-F											
114N18W2	08-23-05	--	--	--	E.0	E.0	<6	<.6	--	--	--
				HENNEPIN COUNTY							
MpleGrov6											
119N22W1	11-29-04	.8	2	2	<1	<1	<6	371	<.5	<.5	<.09
	08-24-05	--	--	--	--	--	<6	381	<.5	<.5	<.09
	08-24-05	--	--	--	--	--	E4	380	<.5	<.5	<.09
MPGR6-F											
119N22W1	08-24-05	--	--	--	--	--	<6	8.3	<.5	<.5	<.09
	08-24-05	--	--	--	--	--	E4	6.9	<.5	<.5	<.09
MpleGrov3											
119N22W1	11-29-04	1.0	2	2	<1	<1	6	495	<.5	<.5	<.09
Mound 7 117N24W1	11-30-04	1.5	2	2	<1	<1	E5	240	<.5	<.5	<.09
Wayzata 3 117N22W	11-30-04	2.0	2	2	<1	<1	68	234	<.5	<.5	<.09

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd 0.7u GF ug/L (38746)	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)	2Chloro -2',6-' diethyl acet-anilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	Ala-chlor 2nd amide, water, fltrd, ug/L (63781)
					RAMSEY COUNTY						
WtBearLk3											
30N22W3	11-17-04	<.016	<.04	<.02	<.006	<.5	<.02	<.005	<.006	<.08	<.02
					HENNEPIN COUNTY						
BrklnPk10											
119N21W1	11-18-04	<.016	<.04	<.02	<.006	<.5	<.02	<.005	<.006	<.08	<.02
	08-12-05	--	--	--	--	--	<.02	--	--	--	<.02
BKPK10-F											
119N21W1	08-12-05	--	--	--	--	--	<.02	--	--	--	<.02
BrklnPk11											
119N21W1	11-18-04	<.016	<.04	<.02	<.006	<.5	<.02	<.005	<.006	<.08	<.02
	08-12-05	--	--	--	--	--	<.02	--	--	--	<.02
					ANOKA COUNTY						
Frdley10 030N24W11	11-18-04	<.016	<.04	<.02	<.006	<.5	<.02	<.005	<.006	<.08	<.02
	08-08-05	--	--	--	--	<.5	--	--	--	--	--
FRDY10-F											
030N24W1	08-08-05	--	--	--	--	<.5	--	--	--	--	--
					DAKOTA COUNTY						
Apple Vly 115N20W2	11-22-04	<.016	<.04	<.02	<.006	<.5	<.02	<.005	E.005	<.08	<.02
	08-11-05	<.050	<.04	<.02	--	--	<.02	--	E.01	<.08	<.02
APVY11-F											
115N20W2	08-11-05	<.050	<.04	<.02	--	--	<.02	--	<.03	<.08	<.02
					HENNEPIN COUNTY						
Medina 1 118N23W2	11-22-04	<.016	<.04	<.02	<.006	<.5	<.02	<.005	<.006	<.08	<.02
					DAKOTA COUNTY						
Vermilon2											
114N18W2	11-29-04	<.016	<.04	<.02	<.006	<.5	<.02	<.005	E.006	<.08	<.02
	08-23-05	--	--	--	--	--	--	--	--	--	--
VERM2-F											
114N18W2	08-23-05	--	--	--	--	--	--	--	--	--	--
					HENNEPIN COUNTY						
MpleGrov6											
119N22W1	11-29-04	<.016	<.04	<.02	<.006	<.5	<.02	<.005	E.004	<.08	<.02
	08-24-05	<.016	<.04	<.02	<.006	<.5	<.02	<.005	<.006	<.08	<.02
	08-24-05	<.016	<.04	<.02	<.006	<.5	<.02	<.005	<.006	<.08	<.02
MPGR6-F											
119N22W1	08-24-05	<.016	<.04	<.02	<.006	<.5	<.02	<.005	<.006	<.08	<.02
	08-24-05	<.016	<.04	<.02	<.006	<.5	<.02	<.005	<.006	<.08	<.02
MpleGrov3											
119N22W1	11-29-04	<.016	<.04	<.02	<.006	<.5	--	<.005	<.006	<.08	--
Mound 7 117N24W1	11-30-04	<.016	<.04	<.02	<.006	<.5	<.02	<.005	<.006	<.08	<.02
Wayzata 3 117N22W	11-30-04	<.016	<.04	<.02	<.006	<.5	<.02	<.005	<.006	<.08	<.02

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Aceto-chlor 3rd amide, water, fltrd, ug/L (63782)	2-Ethyl -6-methyl-aniline water, fltrd, ug/L (61620)	OIET, water, fltrd, ug/L (50355)	2-Methyl-naphth-alene, water, fltrd, ug/L (62056)	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-Hydroxy carbo-furan, wat flt 0.7u GF ug/L (49308)	3-Keto-carbo-furan, water, fltrd, ug/L (50295)	3-Methyl-1H-indole, water, fltrd, ug/L (62058)
					RAMSEY COUNTY						
WtBearLk3											
30N22W3	11-17-04	<.02	<.004	<.032	<.5	<.004	--	<2	<.008	<.02	<1
					HENNEPIN COUNTY						
BrklnPk10											
119N21W1	11-18-04	<.02	<.004	<.032	<.5	<.004	--	<2	<.008	<.02	<1
	08-12-05	<.02	--	--	--	--	--	--	--	--	--
BKPK10-F											
119N21W1	08-12-05	<.02	--	--	--	--	--	--	--	--	--
BrklnPk11											
119N21W1	11-18-04	<.02	<.004	<.032	<.5	<.004	--	<2	<.008	<.02	<1
	08-12-05	<.02	--	--	--	--	--	--	--	--	--
					ANOKA COUNTY						
Frdley10 030N24W11	11-18-04	<.02	<.004	<.032	<.5	<.004	--	<2	<.008	<.02	<1
	08-08-05	--	--	--	<.5	--	--	<2	--	--	<1
FRDY10-F											
030N24W1	08-08-05	--	--	--	<.5	--	--	<2	--	--	<1
					DAKOTA COUNTY						
Apple Vly 115N20W2	11-22-04	<.02	<.004	<.032	<.5	<.004	--	<2	<.008	<.02	<1
	08-11-05	<.02	--	<.032	--	--	--	--	<.008	<.25	--
APVY11-F											
115N20W2	08-11-05	<.02	--	<.032	--	--	--	--	<.008	<.25	--
					HENNEPIN COUNTY						
Medina 1 118N23W2	11-22-04	<.02	<.004	<.032	<.5	<.004	--	<2	<.008	<.02	<1
					DAKOTA COUNTY						
Vermilon2											
114N18W2	11-29-04	<.02	<.004	<.032	<.5	<.004	--	<2	<.008	<.02	<1
	08-23-05	--	--	--	--	--	--	--	--	--	--
VERM2-F											
114N18W2	08-23-05	--	--	--	--	--	--	--	--	--	--
					HENNEPIN COUNTY						
MpleGrov6											
119N22W1	11-29-04	<.02	<.004	<.032	<.5	<.004	--	<2	<.008	<.02	<1
	08-24-05	<.02	<.004	<.032	<.5	<.004	<.004	<2	<.008	<.02	<1
	08-24-05	<.02	<.004	<.032	<.5	<.004	<.004	<2	<.008	<.02	<1
MPGR6-F											
119N22W1	08-24-05	<.02	<.004	<.032	<.5	<.004	<.004	<2	<.008	<.02	<1
	08-24-05	<.02	<.004	<.032	<.5	<.004	<.004	<2	<.008	<.02	<1
MpleGrov3											
119N22W1	11-29-04	--	<.004	<.032	<.5	<.004	--	<2	<.008	<.02	<1
Mound 7 117N24W1	11-30-04	<.02	<.004	<.032	<.5	<.004	--	<2	<.008	<.02	<1
Wayzata 3 117N22W	11-30-04	<.02	<.004	<.032	<.5	<.004	--	<2	<.008	<.02	<1

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	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 ESA, water, fltrd 0.7u GF ug/L (61029)	Acetochlor OA, water, fltrd 0.7u GF ug/L (61030)
					RAMSEY COUNTY						
WtBearLk3											
30N22W3	11-17-04	<5	<.006	<1	<1	<5	<1	<2	<.5	<.02	<.02
					HENNEPIN COUNTY						
BrklnPk10											
119N21W1	11-18-04	<5	<.006	<1	<1	<5	<1	<2	<.5	<.02	<.02
	08-12-05	--	--	--	--	--	--	--	--	.04	<.02
BKPK10-F											
119N21W1	08-12-05	--	--	--	--	--	--	--	--	<.02	<.02
BrklnPk11											
119N21W1	11-18-04	<5	<.006	<1	<1	<5	<1	<2	<.5	<.02	<.02
	08-12-05	--	--	--	--	--	--	--	--	<.02	<.02
					ANOKA COUNTY						
Frdley10 030N24W11	11-18-04	<5	<.006	<1	<1	E1	<1	<2	<.5	<.02	<.02
	08-08-05	<5	--	<1	<1	<5	<1	<2	<.5	--	--
FRDY10-F											
030N24W1	08-08-05	<5	--	<1	<1	<5	<1	<2	<.5	--	--
					DAKOTA COUNTY						
Apple Vly 115N20W2	11-22-04	<5	<.006	<1	<1	<5	<1	<2	<.5	<.02	<.02
	08-11-05	--	--	--	--	--	--	--	--	<.02	<.02
APVY11-F											
115N20W2	08-11-05	--	--	--	--	--	--	--	--	<.02	<.02
					HENNEPIN COUNTY						
Medina 1 118N23W2	11-22-04	<5	<.006	<1	<1	<5	<1	<2	<.5	<.02	<.02
					DAKOTA COUNTY						
Vermilon2											
114N18W2	11-29-04	<5	<.006	<1	<1	<5	<1	<2	<.5	<.02	<.02
	08-23-05	--	--	--	--	--	--	--	--	--	--
VERM2-F											
114N18W2	08-23-05	--	--	--	--	--	--	--	--	--	--
					HENNEPIN COUNTY						
MpleGrov6											
119N22W1	11-29-04	<5	<.006	<1	<1	<5	<1	<2	<.5	<.02	<.02
	08-24-05	<5	<.006	<1	<1	<5	<1	<2	<.5	<.02	<.02
	08-24-05	<5	<.006	<1	<1	<5	<1	<2	<.5	<.02	<.02
MPGR6-F											
119N22W1	08-24-05	<5	<.006	<1	<1	<5	<1	<2	<.5	<.02	<.02
	08-24-05	<5	<.006	<1	<1	<5	<1	<2	<.5	<.02	<.02
MpleGrov3											
119N22W1	11-29-04	<5	<.006	<1	<1	<5	<1	<2	<.5	--	--
Mound 7 117N24W1	11-30-04	<5	<.006	<1	<1	<5	<1	<2	<.5	<.02	<.02
Wayzata 3 117N22W	11-30-04	<5	<.006	<1	<1	<5	<1	<2	<.5	<.02	<.02

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Aceto-chlor SAA, water, fltrd, ug/L (62847)	Aceto-chlor, water, fltrd, ug/L (49260)	Aceto-phenone water, fltrd, ug/L (62064)	AHTN, water, fltrd, ug/L (62065)	Aci-fluor-fen, water, fltrd 0.7u GF ug/L (49315)	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)
RAMSEY COUNTY											
WtBearLk3											
30N22W3	11-17-04	<.02	<.006	<.5	<.5	<.028	<.02	<.02	<.02	<.02	<.005
HENNEPIN COUNTY											
BrklnPk10											
119N21W1	11-18-04	<.02	<.006	<.5	<.5	<.028	.05	.16	.04	<.02	<.005
	08-12-05	<.02	<.02	--	--	--	.10	.17	.14	<.02	<.02
BKPK10-F											
119N21W1	08-12-05	<.02	<.02	--	--	--	.21	.53	.32	<.02	<.02
BrklnPk11											
119N21W1	11-18-04	<.02	<.006	<.5	<.5	<.028	.05	.32	.03	<.02	<.005
	08-12-05	<.02	<.02	--	--	--	.13	.54	.09	<.02	<.02
ANOKA COUNTY											
Frdley10 030N24W11	11-18-04	<.02	<.006	<.5	M	<.028	<.02	<.02	<.02	<.02	<.005
	08-08-05	--	--	<.5	<.5	--	--	--	--	--	--
FRDY10-F											
030N24W1	08-08-05	--	--	<.5	<.5	--	--	--	--	--	--
DAKOTA COUNTY											
Apple Vly 115N20W2	11-22-04	<.02	<.006	<.5	<.5	<.028	<.02	.20	<.02	<.02	<.005
	08-11-05	<.02	<.02	--	--	<.028	.02	.14	.02	<.02	<.02
APVY11-F											
115N20W2	08-11-05	<.02	<.02	--	--	<.028	<.02	.12	.02	<.02	<.02
HENNEPIN COUNTY											
Medina 1 118N23W2	11-22-04	<.02	<.006	<.5	<.5	<.028	<.02	<.02	<.02	<.02	<.005
DAKOTA COUNTY											
Vermilon2											
114N18W2	11-29-04	<.02	<.006	<.5	<.5	<.028	.02	.31	<.02	<.02	<.005
	08-23-05	--	--	--	--	--	--	--	--	--	--
VERM2-F											
114N18W2	08-23-05	--	--	--	--	--	--	--	--	--	--
HENNEPIN COUNTY											
MpleGrov6											
119N22W1	11-29-04	<.02	<.006	<.5	<.5	<.028	.03	.21	<.02	<.02	<.005
	08-24-05	<.02	<.02	<.5	<.5	<.028	<.02	.13	<.02	<.02	<.02
	08-24-05	<.02	<.02	<.5	<.5	<.028	<.02	.13	<.02	<.02	<.02
MPGR6-F											
119N22W1	08-24-05	<.02	<.02	<.5	<.5	<.028	<.02	.11	<.02	<.02	<.02
	08-24-05	<.02	<.02	<.5	<.5	<.028	<.02	.12	<.02	<.02	<.02
MpleGrov3											
119N22W1	11-29-04	--	<.006	<.5	<.5	<.028	--	--	--	--	<.005
Mound 7 117N24W1	11-30-04	<.02	<.006	<.5	<.5	<.028	<.02	<.02	<.02	<.02	<.005
Wayzata 3 117N22W	11-30-04	<.02	<.006	<.5	<.5	<.028	<.02	.03	<.02	<.02	<.005

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Aldicarb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldicarb sulfoxide, wat flt 0.7u GF ug/L (49314)	Aldicarb, water, fltrd 0.7u GF ug/L (49312)	alpha-Endosulfan, water, fltrd, ug/L (34362)	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)	Bendiocarb, water, fltrd, ug/L (50299)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)
					RAMSEY COUNTY						
WtBearLk3											
30N22W3	11-17-04	<.02	<.022	<.04	--	<.5	<.007	<.07	<.050	<.02	<.010
					HENNEPIN COUNTY						
BrklnPk10											
119N21W1	11-18-04	<.02	<.022	<.04	--	<.5	<.007	<.07	<.050	<.02	<.010
	08-12-05	--	--	--	--	--	--	--	--	--	--
BKPK10-F											
119N21W1	08-12-05	--	--	--	--	--	--	--	--	--	--
BrklnPk11											
119N21W1	11-18-04	<.02	<.022	<.04	--	<.5	<.007	<.07	<.050	<.02	<.010
	08-12-05	--	--	--	--	--	--	--	--	--	--
					ANOKA COUNTY						
Frdley10 030N24W11	11-18-04	<.02	<.022	<.04	--	<.5	<.007	<.07	<.050	<.02	<.010
	08-08-05	--	--	--	--	<.5	--	--	--	--	--
FRDY10-F											
030N24W1	08-08-05	--	--	--	--	<.5	--	--	--	--	--
					DAKOTA COUNTY						
Apple Vly 115N20W2	11-22-04	<.02	<.022	<.04	--	<.5	.013	<.07	<.050	<.02	<.010
	08-11-05	<.02	<.022	<.04	--	--	.010	--	--	<.02	--
APVY11-F											
115N20W2	08-11-05	<.02	<.022	<.04	--	--	<.008	--	--	<.02	--
					HENNEPIN COUNTY						
Medina 1 118N23W2	11-22-04	<.02	<.022	<.04	--	<.5	<.007	<.07	<.050	<.02	<.010
					DAKOTA COUNTY						
Vermilon2											
114N18W2	11-29-04	<.02	<.022	<.04	--	<.5	<.007	<.07	<.050	<.02	<.010
	08-23-05	--	--	--	--	--	--	--	--	--	--
VERM2-F											
114N18W2	08-23-05	--	--	--	--	--	--	--	--	--	--
					HENNEPIN COUNTY						
MpleGrov6											
119N22W1	11-29-04	<.02	<.022	<.04	--	<.5	.010	<.07	<.050	<.02	<.010
	08-24-05	<.02	<.022	<.04	<.005	<.5	.008	<.07	<.050	<.02	<.010
	08-24-05	<.02	<.022	<.04	<.005	<.5	.008	<.07	<.050	<.02	<.010
MPGR6-F											
119N22W1	08-24-05	<.02	<.022	<.04	<.005	<.5	E.005	<.07	<.050	<.02	<.010
	08-24-05	<.02	<.022	<.04	<.005	<.5	E.005	<.07	<.050	<.02	<.010
MpleGrov3											
119N22W1	11-29-04	<.02	<.022	<.04	--	<.5	<.007	<.07	<.050	<.02	<.010
Mound 7 117N24W1	11-30-04	<.02	<.022	<.04	--	<.5	<.007	<.07	<.050	<.02	<.010
Wayzata 3 117N22W	11-30-04	<.02	<.022	<.04	--	<.5	<.007	<.07	<.050	<.02	<.010

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Benomyl water, fltrd, ug/L (50300)	Bensulfuron, water, fltrd, ug/L (61693)	Bentazon, water, fltrd 0.7u GF ug/L (38711)	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)	Bromacil, water, fltrd, ug/L (04029)	Bromoxynil, water, fltrd 0.7u GF ug/L (49311)
RAMSEY COUNTY											
WtBearLk3											
30N22W3	11-17-04	<.022	<.02	<.01	<.5	<.5	<2	<2	<1	<.02	<.03
HENNEPIN COUNTY											
BrklnPk10											
119N21W1	11-18-04	<.022	<.02	<.01	<.5	<.5	<2	<2	<1	<.02	<.03
	08-12-05	--	--	--	--	--	--	--	--	--	--
BKPK10-F											
119N21W1	08-12-05	--	--	--	--	--	--	--	--	--	--
BrklnPk11											
119N21W1	11-18-04	<.022	<.02	<.01	<.5	<.5	<2	<2	<1	<.02	<.03
	08-12-05	--	--	--	--	--	--	--	--	--	--
ANOKA COUNTY											
Frdley10 030N24W11	11-18-04	<.022	<.02	<.01	<.5	M	<2	<2	<1	<.02	<.03
	08-08-05	--	--	--	<.5	M	<2	<2	--	<.5	--
FRDY10-F											
030N24W1	08-08-05	--	--	--	<.5	<.5	<2	<2	--	<.5	--
DAKOTA COUNTY											
Apple Vly 115N20W2	11-22-04	<.022	<.02	<.01	<.5	<.5	<2	<2	<1	<.02	<.03
	08-11-05	<.022	<.02	<.01	--	--	--	--	--	<.02	<.03
APVY11-F											
115N20W2	08-11-05	<.022	<.02	<.01	--	--	--	--	--	<.02	<.03
HENNEPIN COUNTY											
Medina 1 118N23W2	11-22-04	<.022	<.02	<.01	<.5	<.5	<2	<2	<1	<.02	<.03
DAKOTA COUNTY											
Vermilon2											
114N18W2	11-29-04	<.022	<.02	<.01	<.5	<.5	<2	<2	<1	<.02	<.03
	08-23-05	--	--	--	--	--	--	--	--	--	--
VERM2-F											
114N18W2	08-23-05	--	--	--	--	--	--	--	--	--	--
HENNEPIN COUNTY											
MpleGrov6											
119N22W1	11-29-04	<.022	<.02	<.01	<.5	<.5	<2	<2	<1	.34	<.03
	08-24-05	<.022	<.02	<.01	<.5	M	<2	<2	--	.26	<.03
	08-24-05	<.022	<.02	<.01	<.5	<.5	<2	<2	--	.26	<.03
MPGR6-F											
119N22W1	08-24-05	<.022	<.02	<.01	<.5	<.5	<2	<2	--	<.02	<.03
	08-24-05	<.022	<.02	<.01	<.5	M	<2	<2	--	<.02	<.03
MpleGrov3											
119N22W1	11-29-04	<.022	<.02	<.01	<.5	<.5	<2	<2	<1	<.02	<.03
Mound 7 117N24W1	11-30-04	<.022	<.02	<.01	<.5	<.5	<2	<2	<1	<.02	<.03
Wayzata 3 117N22W	11-30-04	<.022	<.02	<.01	<.5	<.5	<2	<2	<1	<.02	<.03

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Caffeine, water, fltrd, ug/L (50305)	Camphor water, fltrd, ug/L (62070)	Carbaryl, water, fltrd 0.7u GF ug/L (49310)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbazole, water, fltrd, ug/L (62071)	Carbofuran, water, fltrd 0.7u GF ug/L (49309)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chloramben methyl ester, water, fltrd, ug/L (61188)	Chlorimuron, water, fltrd, ug/L (50306)	Chloro-di-amino-s-triazine, wat flt ug/L (04039)
					RAMSEY COUNTY						
WtBearLk3											
30N22W3	11-17-04	<.018	<.5	<.02	<.041	<.5	<.016	--	<.02	<.032	<.04
					HENNEPIN COUNTY						
BrklnPk10											
119N21W1	11-18-04	<.018	<.5	<.02	<.041	<.5	<.016	--	<.02	<.032	<.04
	08-12-05	--	--	--	--	--	--	--	--	--	--
BKPK10-F											
119N21W1	08-12-05	--	--	--	--	--	--	--	--	--	--
BrklnPk11											
119N21W1	11-18-04	<.018	<.5	<.02	<.041	<.5	<.016	--	<.02	<.032	<.04
	08-12-05	--	--	--	--	--	--	--	--	--	--
					ANOKA COUNTY						
Frdley10 030N24W11	11-18-04	<.018	<.5	<.02	<.041	<.5	<.016	--	<.02	<.032	<.04
	08-08-05	E.1	<.5	--	<1	<.5	--	--	--	--	--
FRDY10-F											
030N24W1	08-08-05	E.1	<.5	--	<1	<.5	--	--	--	--	--
					DAKOTA COUNTY						
Apple Vly 115N20W2	11-22-04	<.018	<.5	<.02	<.041	<.5	<.016	--	<.02	<.032	<.04
	08-11-05	<.018	--	<.02	--	--	<.016	--	<.05	<.032	<.04
APVY11-F											
115N20W2	08-11-05	<.018	--	<.02	--	--	<.016	--	<.05	<.032	<.04
					HENNEPIN COUNTY						
Medina 1 118N23W2	11-22-04	<.018	<.5	<.02	<.041	<.5	<.016	--	<.02	<.032	<.04
					DAKOTA COUNTY						
Vermilon2											
114N18W2	11-29-04	<.018	<.5	<.02	<.041	<.5	<.016	--	<.02	<.032	<.04
	08-23-05	--	--	--	--	--	--	--	--	--	--
VERM2-F											
114N18W2	08-23-05	--	--	--	--	--	--	--	--	--	--
					HENNEPIN COUNTY						
MpleGrov6											
119N22W1	11-29-04	<.018	<.5	<.02	<.041	<.5	<.016	--	<.02	<.032	<.04
	08-24-05	<.018	<.5	<.02	<.041	<.5	<.016	<.020	<.02	<.032	<.02
	08-24-05	<.018	<.5	<.02	<.041	<.5	<.016	<.020	<.02	<.032	<.02
MPGR6-F											
119N22W1	08-24-05	<.018	<.5	<.02	<.041	<.5	<.016	<.020	<.02	<.032	<.02
	08-24-05	<.018	<.5	<.02	<.041	<.5	<.016	<.020	<.02	<.032	<.02
MpleGrov3											
119N22W1	11-29-04	<.018	<.5	<.02	<.041	<.5	<.016	--	<.02	<.032	<.04
Mound 7 117N24W1	11-30-04	<.018	<.5	<.02	<.041	<.5	<.016	--	<.02	<.032	<.04
Wayzata 3 117N22W	11-30-04	<.018	<.5	<.02	<.041	<.5	<.016	--	<.02	<.032	<.04

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Chloro-thalo-nil, water, fltrd 0.7u GF ug/L (49306)	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)	cis-Propi-cona-zole, water, fltrd, ug/L (79846)	Clopyr-alid, water, fltrd 0.7u GF ug/L (49305)	Cot-inine, water, fltrd, ug/L (62005)	Cyana-zine, water, fltrd, ug/L (04041)	Cyclo-ate, water, fltrd, ug/L (04031)
					RAMSEY COUNTY						
WtBearLk3											
30N22W3	11-17-04	<.04	<.06	<.005	<2	<.006	--	<.02	<1.00	--	<.01
					HENNEPIN COUNTY						
BrklnPk10											
119N21W1	11-18-04	<.04	<.06	<.005	<2	<.006	--	<.02	<1.00	--	<.01
	08-12-05	--	--	--	--	--	--	--	--	--	--
BKPK10-F											
119N21W1	08-12-05	--	--	--	--	--	--	--	--	--	--
BrklnPk11											
119N21W1	11-18-04	<.04	<.06	<.005	<2	<.006	--	<.02	<1.00	--	<.01
	08-12-05	--	--	--	--	--	--	--	--	--	--
					ANOKA COUNTY						
Frdley10 030N24W11	11-18-04	<.04	<.06	<.005	<2	<.006	--	<.02	<1.00	--	<.01
	08-08-05	--	--	<.5	<2	--	--	--	<1.00	--	--
FRDY10-F											
030N24W1	08-08-05	--	--	<.5	<2	--	--	--	<1.00	--	--
					DAKOTA COUNTY						
Apple Vly 115N20W2	11-22-04	<.04	<.06	<.005	<2	<.006	--	<.02	<1.00	--	<.01
	08-11-05	<.04	--	--	--	--	--	<.02	--	--	<.05
APVY11-F											
115N20W2	08-11-05	<.04	--	--	--	--	--	<.02	--	--	<.05
					HENNEPIN COUNTY						
Medina 1 118N23W2	11-22-04	<.04	<.06	<.005	<2	<.006	--	<.02	<1.00	--	<.01
					DAKOTA COUNTY						
Vermilon2											
114N18W2	11-29-04	<.04	<.06	<.005	<2	<.006	--	<.02	<1.00	--	<.01
	08-23-05	--	--	--	--	--	--	--	--	--	--
VERM2-F											
114N18W2	08-23-05	--	--	--	--	--	--	--	--	--	--
					HENNEPIN COUNTY						
MpleGrov6											
119N22W1	11-29-04	<.04	<.06	<.005	<2	<.006	--	<.02	<1.00	--	<.01
	08-24-05	<.04	<.06	<.005	<2	<.006	<.008	<.02	<1.00	<.018	<.01
	08-24-05	<.04	<.06	<.005	<2	<.006	<.008	<.02	<1.00	<.018	<.01
MPGR6-F											
119N22W1	08-24-05	<.04	<.06	<.005	<2	<.006	<.008	<.02	<1.00	<.018	<.01
	08-24-05	<.04	<.06	<.005	<2	<.006	<.008	<.02	<1.00	<.018	<.01
MpleGrov3											
119N22W1	11-29-04	<.04	<.06	<.005	<2	<.006	--	<.02	<1.00	--	<.01
Mound 7 117N24W1	11-30-04	<.04	<.06	<.005	<2	<.006	--	<.02	<1.00	--	<.01
Wayzata 3 117N22W	11-30-04	<.04	<.06	<.005	<2	<.006	--	<.02	<1.00	--	<.01

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Cyfluthrin, water, fltrd, ug/L (61585)	lambda-Cyhalothrin, water, fltrd, ug/L (61595)	Cypermethrin water, fltrd, ug/L (61586)	Dacthal mono-acid, water, fltrd 0.7u GF ug/L (49304)	DCPA, water fltrd 0.7u GF ug/L (82682)	Dechloroacetochlor, water, fltrd, ug/L (63778)	Dechloroalachlor, water, fltrd, ug/L (63777)	Dechlorodimethenamid, water, fltrd, ug/L (63779)	Dechlorometolachlor, water, fltrd, ug/L (63780)	DEET, water, fltrd, ug/L (62082)
					RAMSEY COUNTY						
WtBearLk3											
30N22W3	11-17-04	<.008	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02	M
					HENNEPIN COUNTY						
BrklnPk10											
119N21W1	11-18-04	<.008	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02	<.5
	08-12-05	--	--	--	--	--	<.02	<.02	<.02	<.02	--
BKPK10-F											
119N21W1	08-12-05	--	--	--	--	--	<.02	<.02	<.02	<.02	--
BrklnPk11											
119N21W1	11-18-04	<.008	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02	<.5
	08-12-05	--	--	--	--	--	<.02	<.02	<.02	<.02	--
					ANOKA COUNTY						
Frdley10 030N24W11	11-18-04	<.008	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02	M
	08-08-05	--	--	--	--	--	--	--	--	--	E.1
FRDY10-F											
030N24W1	08-08-05	--	--	--	--	--	--	--	--	--	M
					DAKOTA COUNTY						
Apple Vly 115N20W2	11-22-04	<.008	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02	<.5
	08-11-05	--	--	--	<.03	--	<.02	<.02	<.02	<.02	--
APVY11-F											
115N20W2	08-11-05	--	--	--	<.03	--	<.02	<.02	<.02	<.02	--
					HENNEPIN COUNTY						
Medina 1 118N23W2	11-22-04	<.008	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02	<.5
					DAKOTA COUNTY						
Vermilon2											
114N18W2	11-29-04	<.008	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02	M
	08-23-05	--	--	--	--	--	--	--	--	--	--
VERM2-F											
114N18W2	08-23-05	--	--	--	--	--	--	--	--	--	--
					HENNEPIN COUNTY						
MpleGrov6											
119N22W1	11-29-04	<.008	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02	M
	08-24-05	<.027	<.009	<.009	<.03	<.003	<.02	<.02	<.02	<.02	M
	08-24-05	<.027	<.009	<.009	<.03	<.003	<.02	<.02	<.02	<.02	<.5
MPGR6-F											
119N22W1	08-24-05	<.027	<.009	<.009	<.03	<.003	<.02	<.02	<.02	<.02	M
	08-24-05	<.027	<.009	<.009	<.03	<.003	<.02	<.02	<.02	<.02	M
MpleGrov3											
119N22W1	11-29-04	<.008	--	<.009	<.03	<.003	--	--	--	--	<.5
Mound 7 117N24W1	11-30-04	<.008	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02	<.5
Wayzata 3 117N22W	11-30-04	<.008	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02	<.5

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon oxon, water, fltrd, ug/L (61638)	Diazinon, water, fltrd, ug/L (39572)	Dicamba water fltrd 0.7u GF ug/L (38442)	Dichlorprop, water, fltrd 0.7u GF ug/L (49302)	Dicrotophos, water fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)	Diethoxynonylphenol, water, fltrd, ug/L (62083)	Diethoxyoctylphenol, water, fltrd ug/L (61705)	Dimethenamid ESA, water, fltrd, ug/L (61951)
					RAMSEY COUNTY						
WtBearLk3											
30N22W3	11-17-04	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02
					HENNEPIN COUNTY						
BrklnPk10											
119N21W1	11-18-04	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02
	08-12-05	--	--	--	--	--	--	--	--	--	<.02
BKPK10-F											
119N21W1	08-12-05	--	--	--	--	--	--	--	--	--	<.02
BrklnPk11											
119N21W1	11-18-04	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02
	08-12-05	--	--	--	--	--	--	--	--	--	<.02
					ANOKA COUNTY						
Frdley10 030N24W11	11-18-04	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02
	08-08-05	--	--	<.5	--	--	--	--	<5	<1	--
FRDY10-F											
030N24W1	08-08-05	--	--	<.5	--	--	--	--	<5	<1	--
					DAKOTA COUNTY						
Apple Vly 115N20W2	11-22-04	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02
	08-11-05	--	--	--	<.04	<.03	--	--	--	--	<.02
APVY11-F											
115N20W2	08-11-05	--	--	--	<.04	<.03	--	--	--	--	<.02
					HENNEPIN COUNTY						
Medina 1 118N23W2	11-22-04	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02
					DAKOTA COUNTY						
Vermilon2											
114N18W2	11-29-04	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02
	08-23-05	--	--	--	--	--	--	--	--	--	--
VERM2-F											
114N18W2	08-23-05	--	--	--	--	--	--	--	--	--	--
					HENNEPIN COUNTY						
MpleGrov6											
119N22W1	11-29-04	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02
	08-24-05	<.012	--	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02
	08-24-05	<.012	--	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02
MPGR6-F											
119N22W1	08-24-05	<.012	--	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02
	08-24-05	<.012	--	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02
MpleGrov3											
119N22W1	11-29-04	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	--
Mound 7 117N24W1	11-30-04	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02
Wayzata 3 117N22W	11-30-04	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Dimeth-enamid OA, water, fltrd, ug/L (62482)	Dimeth-enamid water, fltrd, ug/L (61588)	Dimeth-oate, water, fltrd 0.7u GF ug/L (82662)	Dinoseb water, fltrd 0.7u GF ug/L (49301)	Diphen-amid, water, fltrd, ug/L (04033)	Disulf-oton sulfone water, fltrd, ug/L (61640)	Disul-foton, water, fltrd 0.7u GF ug/L (82677)	Diuron, water, fltrd 0.7u GF ug/L (49300)	D-Limo-nene, water, fltrd, ug/L (62073)	Endo-sulfan sulfate water, fltrd, ug/L (61590)
RAMSEY COUNTY											
WtBearLk3											
30N22W3	11-17-04	<.02	<.02	<.006	<.04	<.01	--	--	<.01	<.5	--
HENNEPIN COUNTY											
BrklnPk10											
119N21W1	11-18-04	<.02	<.02	<.006	<.04	<.01	--	--	<.01	<.5	--
	08-12-05	<.02	<.02	--	--	--	--	--	--	--	--
BKPK10-F											
119N21W1	08-12-05	<.02	<.02	--	--	--	--	--	--	--	--
BrklnPk11											
119N21W1	11-18-04	<.02	<.02	<.006	<.04	<.01	--	--	<.01	<.5	--
	08-12-05	<.02	<.02	--	--	--	--	--	--	--	--
ANOKA COUNTY											
Frdley10 030N24W11	11-18-04	<.02	<.02	<.006	<.04	<.01	--	--	<.01	<.5	--
	08-08-05	--	--	--	--	--	--	--	--	<.5	--
FRDY10-F											
030N24W1	08-08-05	--	--	--	--	--	--	--	--	<.5	--
DAKOTA COUNTY											
Apple Vly 115N20W2	11-22-04	<.02	<.02	<.006	<.04	<.01	--	--	.02	<.5	--
	08-11-05	<.02	<.02	--	<.04	<.01	--	--	E.01	--	--
APVY11-F											
115N20W2	08-11-05	<.02	<.02	--	<.04	<.01	--	--	<.02	--	--
HENNEPIN COUNTY											
Medina 1 118N23W2	11-22-04	<.02	<.02	<.006	<.04	<.01	--	--	<.01	<.5	--
DAKOTA COUNTY											
Vermilon2											
114N18W2	11-29-04	<.02	<.02	<.006	<.04	<.01	--	--	<.01	<.5	--
	08-23-05	--	--	--	--	--	--	--	--	--	--
VERM2-F											
114N18W2	08-23-05	--	--	--	--	--	--	--	--	--	--
HENNEPIN COUNTY											
MpleGrov6											
119N22W1	11-29-04	<.02	<.02	<.006	<.04	<.01	--	--	<.01	<.5	--
	08-24-05	<.02	<.02	<.006	<.04	<.01	<.01	<.02	<.01	<.5	<.014
	08-24-05	<.02	<.02	<.006	<.04	<.01	<.01	<.02	<.01	<.5	<.014
MPGR6-F											
119N22W1	08-24-05	<.02	<.02	<.006	<.04	<.01	<.01	<.02	<.01	<.5	<.014
	08-24-05	<.02	<.02	<.006	<.04	<.01	<.01	<.02	<.01	<.5	<.014
MpleGrov3											
119N22W1	11-29-04	--	--	<.006	<.04	<.01	--	--	<.01	<.5	--
Mound 7 117N24W1	11-30-04	<.02	<.02	<.006	<.04	<.01	--	--	<.01	<.5	--
Wayzata 3 117N22W	11-30-04	<.02	<.02	<.006	<.04	<.01	--	--	<.01	<.5	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Etho-prop, water, fltrd 0.7u GF ug/L (82672)	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)	Fenuron water, fltrd 0.7u GF ug/L (49297)	Desulf-inyl-fipro-nil amide, wat flt ug/L (62169)
					RAMSEY COUNTY						
WtBearLk3											
30N22W3	11-17-04	--	<.0020	<.004	--	<1	<.049	<.04	<.03	<.02	<.029
					HENNEPIN COUNTY						
BrklnPk10											
119N21W1	11-18-04	--	<.0020	<.004	--	<1	<.049	<.04	<.03	<.02	<.029
	08-12-05	--	--	--	--	--	--	--	--	--	--
BKPK10-F											
119N21W1	08-12-05	--	--	--	--	--	--	--	--	--	--
BrklnPk11											
119N21W1	11-18-04	--	<.0020	<.004	--	<1	<.049	<.04	<.03	<.02	<.029
	08-12-05	--	--	--	--	--	--	--	--	--	--
					ANOKA COUNTY						
Frdley10 030N24W11	11-18-04	--	<.0020	<.004	--	<1	<.049	<.04	<.03	<.02	<.029
	08-08-05	--	--	--	--	<1	--	--	--	--	--
FRDY10-F											
030N24W1	08-08-05	--	--	--	--	<1	--	--	--	--	--
					DAKOTA COUNTY						
Apple Vly 115N20W2	11-22-04	--	<.0020	<.004	--	<1	<.049	<.04	<.03	<.02	<.029
	08-11-05	--	--	--	--	--	--	--	--	<.02	--
APVY11-F											
115N20W2	08-11-05	--	--	--	--	--	--	--	--	<.02	--
					HENNEPIN COUNTY						
Medina 1 118N23W2	11-22-04	--	<.0020	<.004	--	<1	<.049	<.04	<.03	<.02	<.029
					DAKOTA COUNTY						
Vermilon2											
114N18W2	11-29-04	--	<.0020	<.004	--	<1	<.049	<.04	<.03	<.02	<.029
	08-23-05	--	--	--	--	--	--	--	--	--	--
VERM2-F											
114N18W2	08-23-05	--	--	--	--	--	--	--	--	--	--
					HENNEPIN COUNTY						
MpleGrov6											
119N22W1	11-29-04	--	<.0020	<.004	--	<1	<.049	<.04	<.03	<.02	<.029
	08-24-05	<.004	<.002	<.004	<.005	<1	<.049	<.04	<.03	<.03	<.029
	08-24-05	<.004	<.002	<.004	<.005	<1	<.049	<.04	<.03	<.03	<.029
MPGR6-F											
119N22W1	08-24-05	<.004	<.002	<.004	<.005	<1	<.049	<.04	<.03	<.03	<.029
	08-24-05	<.004	<.002	<.004	<.005	<1	<.049	<.04	<.03	<.03	<.029
MpleGrov3											
119N22W1	11-29-04	--	<.0020	<.004	--	<1	<.049	<.04	<.03	<.02	<.029
Mound 7 117N24W1	11-30-04	--	<.0020	<.004	--	<1	<.049	--	<.03	<.02	<.029
Wayzata 3 117N22W	11-30-04	--	<.0020	<.004	--	<1	<.049	--	<.03	<.02	<.029

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	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)	Flumetsulam, water, fltrd, ug/L (61694)	Fluometuron water fltrd 0.7u GF ug/L (38811)	Fluoranthene water, fltrd, ug/L (34377)	Fonofos oxon, water, fltrd, ug/L (61649)
					RAMSEY COUNTY						
WtBearLk3											
30N22W3	11-17-04	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02	<.5	<.003
					HENNEPIN COUNTY						
BrklnPk10											
119N21W1	11-18-04	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02	<.5	<.003
	08-12-05	--	--	--	<.02	<.02	.02	--	--	--	--
BKPK10-F											
119N21W1	08-12-05	--	--	--	<.02	<.02	<.02	--	--	--	--
BrklnPk11											
119N21W1	11-18-04	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02	<.5	<.003
	08-12-05	--	--	--	<.02	<.02	<.02	--	--	--	--
					ANOKA COUNTY						
Frdley10 030N24W11	11-18-04	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02	<.5	<.003
	08-08-05	--	--	--	--	--	--	--	--	<.5	--
FRDY10-F											
030N24W1	08-08-05	--	--	--	--	--	--	--	--	<.5	--
					DAKOTA COUNTY						
Apple Vly 115N20W2	11-22-04	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02	<.5	<.003
	08-11-05	--	--	--	<.02	<.02	<.02	<.04	<.02	--	--
APVY11-F											
115N20W2	08-11-05	--	--	--	<.02	<.02	<.02	<.04	<.02	--	--
					HENNEPIN COUNTY						
Medina 1 118N23W2	11-22-04	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02	<.5	<.003
					DAKOTA COUNTY						
Vermilon2											
114N18W2	11-29-04	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02	<.5	<.003
	08-23-05	--	--	--	--	--	--	--	--	--	--
VERM2-F											
114N18W2	08-23-05	--	--	--	--	--	--	--	--	--	--
					HENNEPIN COUNTY						
MpleGrov6											
119N22W1	11-29-04	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02	<.5	<.003
	08-24-05	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02	<.5	--
	08-24-05	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02	<.5	--
MPGR6-F											
119N22W1	08-24-05	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02	<.5	--
	08-24-05	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02	<.5	--
MpleGrov3											
119N22W1	11-29-04	<.013	<.024	<.016	--	--	--	<.04	<.02	<.5	<.003
Mound 7 117N24W1	11-30-04	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02	<.5	<.003
Wayzata 3 117N22W	11-30-04	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02	<.5	<.003

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Fonofos water, fltrd, ug/L (04095)	HHCB, water, fltrd, ug/L (62075)	Hexazinone, water, fltrd, ug/L (04025)	Hydroxyacetochlor, water, fltrd, ug/L (63784)	Hydroxyalachlor, water, fltrd, ug/L (63783)	Hydroxydimethenamid, water, fltrd, ug/L (64045)	Hydroxymetolachlor, water, fltrd, ug/L (63785)	Imazaquin, water, fltrd, ug/L (50356)	Imazethapyr, water, fltrd, ug/L (50407)	Imidacloprid water, fltrd, ug/L (61695)
RAMSEY COUNTY											
WtBearLk3											
30N22W3	11-17-04	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020
HENNEPIN COUNTY											
BrklnPk10											
119N21W1	11-18-04	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020
	08-12-05	--	--	--	<.02	<.02	<.02	<.02	--	--	--
BKPK10-F											
119N21W1	08-12-05	--	--	--	<.02	<.02	<.02	<.02	--	--	--
BrklnPk11											
119N21W1	11-18-04	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020
	08-12-05	--	--	--	<.02	<.02	<.02	<.02	--	--	--
ANOKA COUNTY											
Frdley10 030N24W11	11-18-04	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020
	08-08-05	--	<.5	--	--	--	--	--	--	--	--
FRDY10-F											
030N24W1	08-08-05	--	<.5	--	--	--	--	--	--	--	--
DAKOTA COUNTY											
Apple Vly 115N20W2	11-22-04	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020
	08-11-05	--	--	--	<.02	<.02	<.02	<.02	<.04	<.04	<.020
APVY11-F											
115N20W2	08-11-05	--	--	--	<.02	<.02	<.02	<.02	<.04	<.04	<.020
HENNEPIN COUNTY											
Medina 1 118N23W2	11-22-04	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020
DAKOTA COUNTY											
Vermilon2											
114N18W2	11-29-04	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020
	08-23-05	--	--	--	--	--	--	--	--	--	--
VERM2-F											
114N18W2	08-23-05	--	--	--	--	--	--	--	--	--	--
HENNEPIN COUNTY											
MpleGrov6											
119N22W1	11-29-04	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020
	08-24-05	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020
	08-24-05	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020
MPGR6-F											
119N22W1	08-24-05	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020
	08-24-05	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020
MpleGrov3											
119N22W1	11-29-04	<.003	<.5	<.013	--	--	--	--	<.04	<.04	<.020
Mound 7 117N24W1	11-30-04	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020
Wayzata 3 117N22W	11-30-04	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	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)	Linuron water fltrd 0.7u GF ug/L (38478)	Malaoxon, water, fltrd, ug/L (61652)	Malathion, water, fltrd, ug/L (39532)
RAMSEY COUNTY											
WtBearLk3 30N22W3	11-17-04	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
HENNEPIN COUNTY											
BrklnPk10 119N21W1	11-18-04	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
	08-12-05	--	--	--	--	--	--	--	--	--	--
BKPK10-F 119N21W1	08-12-05	--	--	--	--	--	--	--	--	--	--
BrklnPk11 119N21W1	11-18-04	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
	08-12-05	--	--	--	--	--	--	--	--	--	--
ANOKA COUNTY											
Frdley10 030N24W11	11-18-04	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
	08-08-05	<.5	--	<.5	--	<.5	<.5	<.5	--	--	--
FRDY10-F 030N24W1	08-08-05	<.5	--	<.5	--	<.5	<.5	<.5	--	--	--
DAKOTA COUNTY											
Apple Vly 115N20W2	11-22-04	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
	08-11-05	--	--	--	--	--	--	--	<.01	--	--
APVY11-F 115N20W2	08-11-05	--	--	--	--	--	--	--	<.01	--	--
HENNEPIN COUNTY											
Medina 1 118N23W2	11-22-04	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
DAKOTA COUNTY											
Vermilon2 114N18W2	11-29-04	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
	08-23-05	--	--	--	--	--	--	--	--	--	--
VERM2-F 114N18W2	08-23-05	--	--	--	--	--	--	--	--	--	--
HENNEPIN COUNTY											
MpleGrov6 119N22W1	11-29-04	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
	08-24-05	<.5	<.538	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
	08-24-05	<.5	<.538	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
MPGR6-F 119N22W1	08-24-05	<.5	<.538	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
	08-24-05	<.5	<.538	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
MpleGrov3 119N22W1	11-29-04	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
Mound 7 117N24W1	11-30-04	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
Wayzata 3 117N22W	11-30-04	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Menthol water, fltrd, ug/L (62080)	Metalaxyl, water, fltrd, ug/L (50359)	Metalaxyl, water, fltrd, ug/L (61596)	Methiathion water, fltrd, ug/L (61598)	Methiocarb, water, fltrd 0.7u GF ug/L (38501)	Methomyl, water, fltrd 0.7u GF ug/L (49296)	Methyl acetate water unfltrd ug/L (77032)	Methyl paraoxon, water, fltrd, ug/L (61664)
					RAMSEY COUNTY						
WtBearLk3											
30N22W3	11-17-04	<.03	<.01	<.5	<.01	<.005	<.006	<.010	<.020	<1.0	<.03
					HENNEPIN COUNTY						
BrklnPk10											
119N21W1	11-18-04	<.03	<.01	<.5	<.01	<.005	<.006	<.010	<.020	<1.0	<.03
	08-12-05	--	--	--	--	--	--	--	--	--	--
BKPK10-F											
119N21W1	08-12-05	--	--	--	--	--	--	--	--	--	--
BrklnPk11											
119N21W1	11-18-04	<.03	<.01	<.5	<.01	<.005	<.006	<.010	<.020	<1.0	<.03
	08-12-05	--	--	--	--	--	--	--	--	--	--
					ANOKA COUNTY						
Frdley10 030N24W11	11-18-04	<.03	<.01	<.5	<.01	<.005	<.006	<.010	<.020	<1.0	<.03
	08-08-05	--	--	<.5	<.5	--	--	--	--	--	--
FRDY10-F											
030N24W1	08-08-05	--	--	M	<.5	--	--	--	--	--	--
					DAKOTA COUNTY						
Apple Vly 115N20W2	11-22-04	<.03	<.01	<.5	<.01	<.005	<.006	<.010	<.020	<1.0	<.03
	08-11-05	--	<.01	--	<.01	--	--	<.010	<.020	--	--
APVY11-F											
115N20W2	08-11-05	--	<.01	--	<.01	--	--	<.010	<.020	--	--
					HENNEPIN COUNTY						
Medina 1 118N23W2	11-22-04	<.03	<.01	<.5	<.01	<.005	<.006	<.010	<.020	<1.0	<.03
					DAKOTA COUNTY						
Vermilon2											
114N18W2	11-29-04	<.03	<.01	<.5	<.01	<.005	<.006	<.010	<.020	<1.0	<.03
	08-23-05	--	--	--	--	--	--	--	--	--	--
VERM2-F											
114N18W2	08-23-05	--	--	--	--	--	--	--	--	--	--
					HENNEPIN COUNTY						
MpleGrov6											
119N22W1	11-29-04	<.03	<.01	E.1	<.01	<.005	<.006	<.010	<.020	<1.0	<.03
	08-24-05	<.03	<.01	<.5	<.01	<.005	<.006	<.010	<.020	--	<.03
	08-24-05	<.03	<.01	<.5	<.01	<.005	<.006	<.010	<.020	--	<.03
MPGR6-F											
119N22W1	08-24-05	<.03	<.01	<.5	<.01	<.005	<.006	<.010	<.020	--	<.03
	08-24-05	<.03	<.01	<.5	<.01	<.005	<.006	<.010	<.020	--	<.03
MpleGrov3											
119N22W1	11-29-04	<.03	<.01	E.1	<.01	<.005	<.006	<.010	<.020	<1.0	<.03
Mound 7 117N24W1	11-30-04	<.03	<.01	<.5	<.01	<.005	<.006	<.010	<.020	<1.0	<.03
Wayzata 3 117N22W	11-30-04	<.03	<.01	<.5	<.01	<.005	<.006	<.010	<.020	<1.0	<.03

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Methyl salicylate, water, fltrd, ug/L (62081)	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)	Metsulfuron, water, fltrd, ug/L (61697)	Molinate, water, fltrd 0.7u GF ug/L (82671)	Myclobutanil water, fltrd, ug/L (61599)	N-(4-Chlorophenyl) -N'-methylurea, ug/L (61692)
					RAMSEY COUNTY						
WtBearLk3											
30N22W3	11-17-04	<.015	<.5	<.02	<.02	<.006	<.006	<.03	--	<.008	<.04
					HENNEPIN COUNTY						
BrklnPk10											
119N21W1	11-18-04	<.015	<.5	.11	.40	<.006	<.006	<.03	--	<.008	<.04
	08-12-05	--	--	.10	.41	<.02	--	--	--	--	--
BKPK10-F											
119N21W1	08-12-05	--	--	.23	.62	<.02	--	--	--	--	--
BrklnPk11											
119N21W1	11-18-04	<.015	<.5	<.02	.07	<.006	<.006	<.03	--	<.008	<.04
	08-12-05	--	--	.04	.12	<.02	--	--	--	--	--
					ANOKA COUNTY						
Frdley10 030N24W11	11-18-04	<.015	<.5	<.02	<.02	<.006	<.006	<.03	--	<.008	<.04
	08-08-05	--	M	--	--	<.5	--	--	--	--	--
FRDY10-F											
030N24W1	08-08-05	--	M	--	--	<.5	--	--	--	--	--
					DAKOTA COUNTY						
Apple Vly 115N20W2	11-22-04	<.015	<.5	<.02	<.02	E.003	<.006	<.03	--	<.008	<.04
	08-11-05	--	--	.02	<.02	<.02	--	<.07	--	--	<.04
APVY11-F											
115N20W2	08-11-05	--	--	.08	.02	<.02	--	<.07	--	--	<.04
					HENNEPIN COUNTY						
Medina 1 118N23W2	11-22-04	<.015	<.5	<.02	<.02	<.006	<.006	<.03	--	<.008	<.04
					DAKOTA COUNTY						
Vermilon2											
114N18W2	11-29-04	<.015	<.5	<.02	<.02	<.006	<.006	<.03	--	<.008	<.04
	08-23-05	--	--	--	--	--	--	--	--	--	--
VERM2-F											
114N18W2	08-23-05	--	--	--	--	--	--	--	--	--	--
					HENNEPIN COUNTY						
MpleGrov6											
119N22W1	11-29-04	<.015	E.1	.03	<.02	<.006	<.006	<.03	--	<.008	<.04
	08-24-05	<.015	<.5	<.02	<.02	<.02	<.006	<.03	<.003	<.008	<.04
	08-24-05	<.015	<.5	<.02	<.02	<.02	<.006	<.03	<.003	<.008	<.04
MPGR6-F											
119N22W1	08-24-05	<.015	<.5	<.02	<.02	<.02	<.006	<.03	<.003	<.008	<.04
	08-24-05	<.015	<.5	<.02	<.02	<.02	<.006	<.03	<.003	<.008	<.04
MpleGrov3											
119N22W1	11-29-04	<.015	<.5	--	--	<.006	<.006	<.03	--	<.008	<.04
Mound 7 117N24W1	11-30-04	<.015	<.5	<.02	<.02	<.006	<.006	<.03	--	<.008	<.04
Wayzata 3 117N22W	11-30-04	<.015	<.5	<.02	<.02	<.006	<.006	<.03	--	<.008	<.04

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Naphthalene, water, fltrd, ug/L (34443)	Neburon water, fltrd 0.7u GF ug/L (49294)	Nicosulfuron, water, fltrd, ug/L (50364)	Norflurazon, water, fltrd 0.7u GF ug/L (49293)	Oryzalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	Oxyfluorfen, water, fltrd, ug/L (61600)	p-Cresol, water, fltrd, ug/L (62084)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Pentachlorophenol, water, fltrd, ug/L (34459)
RAMSEY COUNTY											
WtBearLk3											
30N22W3	11-17-04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	<2
HENNEPIN COUNTY											
BrklnPk10											
119N21W1	11-18-04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	<2
	08-12-05	--	--	--	--	--	--	--	--	--	--
BKPK10-F											
119N21W1	08-12-05	--	--	--	--	--	--	--	--	--	--
BrklnPk11											
119N21W1	11-18-04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	<2
	08-12-05	--	--	--	--	--	--	--	--	--	--
ANOKA COUNTY											
Frdley10 030N24W11	11-18-04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	<2
	08-08-05	<.5	--	--	--	--	--	--	<1	--	--
FRDY10-F											
030N24W1	08-08-05	<.5	--	--	--	--	--	--	<1	--	--
DAKOTA COUNTY											
Apple Vly 115N20W2	11-22-04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	<2
	08-11-05	--	<.01	<.04	<.02	<.01	<.03	--	--	--	--
APVY11-F											
115N20W2	08-11-05	--	<.01	<.04	<.02	<.01	<.03	--	--	--	--
HENNEPIN COUNTY											
Medina 1 118N23W2	11-22-04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	<2
DAKOTA COUNTY											
Vermilon2											
114N18W2	11-29-04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	<2
	08-23-05	--	--	--	--	--	--	--	--	--	--
VERM2-F											
114N18W2	08-23-05	--	--	--	--	--	--	--	--	--	--
HENNEPIN COUNTY											
MpleGrov6											
119N22W1	11-29-04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	<2
	08-24-05	<.5	<.01	<.04	<.02	<.01	<.03	<.007	<1	<.022	--
	08-24-05	<.5	<.01	<.04	<.02	<.01	<.03	<.007	<1	<.022	--
MPGR6-F											
119N22W1	08-24-05	<.5	<.01	<.04	<.02	<.01	<.03	<.007	<1	<.022	--
	08-24-05	<.5	<.01	<.04	<.02	<.01	<.03	<.007	<1	<.022	--
MpleGrov3											
119N22W1	11-29-04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	<2
Mound 7 117N24W1	11-30-04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	<2
Wayzata 3 117N22W	11-30-04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	<2

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	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)	Picloram, water, fltrd 0.7u GF ug/L (49291)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)
					RAMSEY COUNTY						
WtBearLk3											
30N22W3	11-17-04	<.5	<.5	<.10	<.011	<.05	<.008	<.03	<.01	<.005	<.004
					HENNEPIN COUNTY						
BrklnPk10											
119N21W1	11-18-04	<.5	.8	<.10	<.011	<.05	<.008	<.03	<.01	<.005	<.004
	08-12-05	--	--	--	--	--	--	--	--	--	--
BKPK10-F											
119N21W1	08-12-05	--	--	--	--	--	--	--	--	--	--
BrklnPk11											
119N21W1	11-18-04	<.5	.7	<.10	<.011	<.05	<.008	<.03	<.01	<.005	<.004
	08-12-05	--	--	--	--	--	--	--	--	--	--
					ANOKA COUNTY						
Frdley10 030N24W11	11-18-04	<.5	.6	<.10	<.011	<.05	<.008	<.03	<.01	<.005	<.004
	08-08-05	<.5	E.2	--	--	--	--	--	<.5	--	--
FRDY10-F											
030N24W1	08-08-05	<.5	<.5	--	--	--	--	--	<.5	--	--
					DAKOTA COUNTY						
Apple Vly 115N20W2	11-22-04	<.5	E.3	<.10	<.011	--	<.008	<.03	M	<.005	<.004
	08-11-05	--	--	--	--	--	--	<.03	--	--	--
APVY11-F											
115N20W2	08-11-05	--	--	--	--	--	--	<.03	--	--	--
					HENNEPIN COUNTY						
Medina 1 118N23W2	11-22-04	<.5	<.5	<.10	<.011	--	<.008	<.03	<.01	<.005	<.004
					DAKOTA COUNTY						
Vermilon2											
114N18W2	11-29-04	<.5	<.5	<.10	<.011	--	<.008	<.03	<.01	<.005	<.004
	08-23-05	--	--	--	--	--	--	--	--	--	--
VERM2-F											
114N18W2	08-23-05	--	--	--	--	--	--	--	--	--	--
					HENNEPIN COUNTY						
MpleGrov6											
119N22W1	11-29-04	<.5	E.3	<.10	<.011	--	<.008	<.03	.01	<.005	<.004
	08-24-05	<.5	<.5	<.10	<.011	--	<.008	<.03	E.01	<.005	<.004
	08-24-05	<.5	<.5	<.10	<.011	--	<.008	<.03	E.01	<.005	<.004
MPGR6-F											
119N22W1	08-24-05	<.5	<.5	<.10	<.011	--	<.008	<.03	E.01	<.005	<.004
	08-24-05	<.5	<.5	<.10	<.011	--	<.008	<.03	E.01	<.005	<.004
MpleGrov3											
119N22W1	11-29-04	<.5	E.3	<.10	<.011	--	<.008	<.03	<.01	<.005	<.004
Mound 7 117N24W1	11-30-04	<.5	<.5	<.10	<.011	--	<.008	<.03	<.01	<.005	<.004
Wayzata 3 117N22W	11-30-04	<.5	E.2	<.10	<.011	--	<.008	<.03	<.01	<.005	<.004

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Propachlor ESA, water, fltrd 0.7u GF ug/L (62766)	Propachlor OA, water, fltrd 0.7u GF ug/L (62767)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Propham water fltrd 0.7u GF ug/L (49236)	Propiconazole, water, fltrd, ug/L (50471)	Propoxur, water, fltrd 0.7u GF ug/L (38538)	Pyrene, water, fltrd, ug/L (34470)	Siduron water, fltrd, ug/L (38548)	Simazine, water, fltrd, ug/L (04035)
					RAMSEY COUNTY						
WtBearLk3											
30N22W3	11-17-04	<.05	<.02	--	--	<.030	<.01	<.008	<.5	<.02	<.005
					HENNEPIN COUNTY						
BrklnPk10											
119N21W1	11-18-04	<.05	<.02	--	--	<.030	<.01	<.008	<.5	<.02	<.005
	08-12-05	<.05	<.02	--	--	--	--	--	--	--	--
BKPK10-F											
119N21W1	08-12-05	<.05	<.02	--	--	--	--	--	--	--	--
BrklnPk11											
119N21W1	11-18-04	<.05	<.02	--	--	<.030	<.01	<.008	<.5	<.02	<.005
	08-12-05	<.05	<.02	--	--	--	--	--	--	--	--
					ANOKA COUNTY						
Frdley10 030N24W11	11-18-04	<.05	<.02	--	--	<.030	<.01	<.008	<.5	<.02	<.005
	08-08-05	--	--	--	--	--	--	--	<.5	--	--
FRDY10-F											
030N24W1	08-08-05	--	--	--	--	--	--	--	<.5	--	--
					DAKOTA COUNTY						
Apple Vly 115N20W2	11-22-04	<.05	<.02	--	--	<.030	<.01	<.008	<.5	<.02	<.005
	08-11-05	<.05	<.02	--	--	<.030	<.01	<.008	--	<.02	--
APVY11-F											
115N20W2	08-11-05	<.05	<.02	--	--	<.030	<.01	<.008	--	<.02	--
					HENNEPIN COUNTY						
Medina 1 118N23W2	11-22-04	<.05	<.02	--	--	<.030	<.01	<.008	<.5	<.02	<.005
					DAKOTA COUNTY						
Vermilon2											
114N18W2	11-29-04	<.05	<.02	--	--	<.030	<.01	<.008	<.5	<.02	<.005
	08-23-05	--	--	--	--	--	--	--	--	--	--
VERM2-F											
114N18W2	08-23-05	--	--	--	--	--	--	--	--	--	--
					HENNEPIN COUNTY						
MpleGrov6											
119N22W1	11-29-04	<.05	<.02	--	--	<.030	<.01	<.008	<.5	<.02	<.005
	08-24-05	<.05	<.02	<.011	<.02	<.030	<.01	<.008	<.5	<.02	<.005
	08-24-05	<.05	<.02	<.011	<.02	<.030	<.01	<.008	<.5	<.02	<.005
MPGR6-F											
119N22W1	08-24-05	<.05	<.02	<.011	<.02	<.030	<.01	<.008	<.5	<.02	<.005
	08-24-05	<.05	<.02	<.011	<.02	<.030	<.01	<.008	<.5	<.02	<.005
MpleGrov3											
119N22W1	11-29-04	--	--	--	--	<.030	<.01	<.008	<.5	<.02	<.005
Mound 7 117N24W1	11-30-04	<.05	<.02	--	--	<.030	<.01	<.008	<.5	<.02	<.005
Wayzata 3 117N22W	11-30-04	<.05	<.02	--	--	<.030	<.01	<.008	<.5	<.02	<.005

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Sulfo-met-ruron, water, fltrd, ug/L (50337)	Tebu-thiuron water fltrd 0.7u GF ug/L (82670)	Teflu-thrin, water, fltrd, ug/L (61606)	Terba-cil, water, fltrd, ug/L (04032)	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)	tert-Amyl alcohol water unfltrd ug/L (77073)	tert-Butyl-alcohol water unfltrd ug/L (77035)	Tetra-chloro-ethene, water, fltrd, ug/L (34476)
					RAMSEY COUNTY						
WtBearLk3											
30N22W3	11-17-04	<.038	<.02	--	<.016	<.07	<.02	<.01	<1.0	<2.00	<.5
					HENNEPIN COUNTY						
BrklnPk10											
119N21W1	11-18-04	<.038	<.02	--	<.016	<.07	<.02	<.01	<1.0	<2.00	<.5
	08-12-05	--	--	--	--	--	--	--	--	--	--
BKPK10-F											
119N21W1	08-12-05	--	--	--	--	--	--	--	--	--	--
BrklnPk11											
119N21W1	11-18-04	<.038	<.02	--	<.016	<.07	<.02	<.01	<1.0	<2.00	<.5
	08-12-05	--	--	--	--	--	--	--	--	--	--
					ANOKA COUNTY						
Frdley10 030N24W11	11-18-04	<.038	<.02	--	<.016	<.07	<.02	<.01	<1.0	<2.00	<.5
	08-08-05	--	--	--	--	--	--	--	--	--	<.5
FRDY10-F											
030N24W1	08-08-05	--	--	--	--	--	--	--	--	--	<.5
					DAKOTA COUNTY						
Apple Vly 115N20W2	11-22-04	<.038	<.02	--	<.016	<.07	<.02	<.01	<1.0	<2.00	<.5
	08-11-05	<.090	<.026	--	<.016	--	--	--	--	--	--
APVY11-F											
115N20W2	08-11-05	<.090	<.026	--	<.016	--	--	--	--	--	--
					HENNEPIN COUNTY						
Medina 1 118N23W2	11-22-04	<.038	<.02	--	<.016	<.07	<.02	<.01	<1.0	<2.00	<.5
					DAKOTA COUNTY						
Vermilon2											
114N18W2	11-29-04	<.038	<.02	--	<.016	<.07	<.02	<.01	<1.0	<2.00	<.5
	08-23-05	--	--	--	--	--	--	--	--	--	--
VERM2-F											
114N18W2	08-23-05	--	--	--	--	--	--	--	--	--	--
					HENNEPIN COUNTY						
MpleGrov6											
119N22W1	11-29-04	E.004	<.02	--	<.016	<.07	<.02	<.01	<1.0	<2.00	<.5
	08-24-05	<.038	<.02	<.008	<.016	<.07	<.02	<.01	--	--	<.5
	08-24-05	<.038	<.02	<.008	<.016	<.07	<.02	<.01	--	--	<.5
MPGR6-F											
119N22W1	08-24-05	<.038	<.02	<.008	<.016	<.07	<.02	<.01	--	--	M
	08-24-05	<.038	<.02	<.008	<.016	<.07	<.02	<.01	--	--	M
MpleGrov3											
119N22W1	11-29-04	<.038	<.02	--	<.016	<.07	<.02	<.01	<1.0	<2.00	<.5
Mound 7 117N24W1	11-30-04	<.038	<.02	--	<.016	<.07	<.02	<.01	<1.0	<2.00	<.5
Wayzata 3 117N22W	11-30-04	<.038	<.02	--	<.016	<.07	<.02	<.01	<1.0	<2.00	E.1

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Thio-bencarb water fltrd 0.7u GF ug/L (82681)	trans-Propi-cona-zole, water, fltrd, ug/L (79847)	Tri-bromo-methane water, fltrd, ug/L (34288)	Tribu-phos, water, fltrd, ug/L (61610)	Tri-butyl phos-phate, water, fltrd, ug/L (62089)	Tri-clopyr, water, fltrd 0.7u GF ug/L (49235)	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)
					RAMSEY COUNTY						
WtBearLk3											
30N22W3	11-17-04	--	--	<.5	--	<.5	<.03	<1	<.5	<.009	<.5
					HENNEPIN COUNTY						
BrklnPk10											
119N21W1	11-18-04	--	--	<.5	--	<.5	<.03	<1	<.5	<.009	<.5
	08-12-05	--	--	--	--	--	--	--	--	--	--
BKPK10-F											
119N21W1	08-12-05	--	--	--	--	--	--	--	--	--	--
BrklnPk11											
119N21W1	11-18-04	--	--	<.5	--	<.5	<.03	<1	<.5	<.009	<.5
	08-12-05	--	--	--	--	--	--	--	--	--	--
					ANOKA COUNTY						
Frdley10 030N24W11	11-18-04	--	--	<.5	--	M	<.03	<1	<.5	<.009	<.5
	08-08-05	--	--	<.5	--	M	--	<1	<.5	--	<.5
FRDY10-F											
030N24W1	08-08-05	--	--	E.5	--	<.5	--	<1	<.5	--	<.5
					DAKOTA COUNTY						
Apple Vly 115N20W2	11-22-04	--	--	<.5	--	<.5	<.03	<1	<.5	<.009	<.5
	08-11-05	--	--	--	--	--	<.03	--	--	--	--
APVY11-F											
115N20W2	08-11-05	--	--	--	--	--	<.03	--	--	--	--
					HENNEPIN COUNTY						
Medina 1 118N23W2	11-22-04	--	--	<.5	--	<.5	<.03	<1	<.5	<.009	<.5
					DAKOTA COUNTY						
Vermilon2											
114N18W2	11-29-04	--	--	<.5	--	<.5	<.03	<1	<.5	<.009	<.5
	08-23-05	--	--	--	--	--	--	--	--	--	--
VERM2-F											
114N18W2	08-23-05	--	--	--	--	--	--	--	--	--	--
					HENNEPIN COUNTY						
MpleGrov6											
119N22W1	11-29-04	--	--	<.5	--	<.5	<.03	<1	<.5	<.009	<.5
	08-24-05	<.010	<.01	<.5	<.004	<.5	<.03	<1	<.5	<.009	<.5
	08-24-05	<.010	<.01	<.5	<.004	<.5	<.03	<1	<.5	<.009	<.5
MPGR6-F											
119N22W1	08-24-05	<.010	<.01	E8.9	<.004	<.5	<.03	<1	<.5	<.009	<.5
	08-24-05	<.010	<.01	E8.0	<.004	<.5	<.03	<1	<.5	<.009	<.5
MpleGrov3											
119N22W1	11-29-04	--	--	<.5	--	<.5	<.03	<1	<.5	<.009	<.5
Mound 7 117N24W1	11-30-04	--	--	<.5	--	<.5	<.03	<1	<.5	<.009	<.5
Wayzata 3 117N22W	11-30-04	--	--	<.5	--	<.5	<.03	<1	<.5	<.009	<.5

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	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)	1,1,1,2 -Tetra-chloro-ethane, water, unfltrd ug/L (77562)	1,1,1-Tri-chloro-ethane, water, unfltrd ug/L (34506)	1,1,2,2 -Tetra-chloro-ethane, water, unfltrd ug/L (34516)	CFC-113 water unfltrd ug/L (77652)	1,1,2-Tri-chloro-ethane, water, unfltrd ug/L (34511)	1,1-Di-chloro-ethane, water unfltrd ug/L (34496)	1,1-Di-chloro-ethene, water, unfltrd ug/L (34501)
					RAMSEY COUNTY						
WtBearLk3											
30N22W3	11-17-04	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02
					HENNEPIN COUNTY						
BrklnPk10											
119N21W1	11-18-04	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02
	08-12-05	--	--	--	--	--	--	--	--	--	--
BKPK10-F											
119N21W1	08-12-05	--	--	--	--	--	--	--	--	--	--
BrklnPk11											
119N21W1	11-18-04	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02
	08-12-05	--	--	--	--	--	--	--	--	--	--
					ANOKA COUNTY						
Frdley10 030N24W11	11-18-04	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02
	08-08-05	<.5	<.5	<.5	--	--	--	--	--	--	--
FRDY10-F											
030N24W1	08-08-05	<.5	<.5	<.5	--	--	--	--	--	--	--
					DAKOTA COUNTY						
Apple Vly 115N20W2	11-22-04	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02
	08-11-05	--	--	--	--	--	--	--	--	--	--
APVY11-F											
115N20W2	08-11-05	--	--	--	--	--	--	--	--	--	--
					HENNEPIN COUNTY						
Medina 1 118N23W2	11-22-04	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02
					DAKOTA COUNTY						
Vermilon2											
114N18W2	11-29-04	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02
	08-23-05	--	--	--	--	--	--	--	--	--	--
VERM2-F											
114N18W2	08-23-05	--	--	--	--	--	--	--	--	--	--
					HENNEPIN COUNTY						
MpleGrov6											
119N22W1	11-29-04	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02
	08-24-05	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02
	08-24-05	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02
MPGR6-F											
119N22W1	08-24-05	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02
	08-24-05	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02
MpleGrov3											
119N22W1	11-29-04	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02
Mound 7 117N24W1	11-30-04	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02
Wayzata 3 117N22W	11-30-04	<.5	<.5	<.5	<.03	E.02	<.08	<.04	<.04	<.04	<.02

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	1,1-Dichloropropene water unfltrd ug/L (77168)	1,2,3,4 Tetramethylbenzene water unfltrd ug/L (49999)	1,2,3,5 Tetramethylbenzene water unfltrd ug/L (50000)	1,2,3-Trichlorobenzene water unfltrd ug/L (77613)	1,2,3-Trichloropropane water unfltrd ug/L (77443)	1,2,3-Trimethylbenzene water unfltrd ug/L (77221)	1,2,4-Trichlorobenzene water unfltrd ug/L (34551)	1,2,4-Trimethylbenzene water unfltrd ug/L (77222)	Dibromochloropropane water unfltrd ug/L (82625)	1,2-Dibromoethane, water, unfltrd ug/L (77651)
					RAMSEY COUNTY						
WtBearLk3											
30N22W3	11-17-04	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
					HENNEPIN COUNTY						
BrklnPk10											
119N21W1	11-18-04	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
	08-12-05	--	--	--	--	--	--	--	--	--	--
BKPK10-F											
119N21W1	08-12-05	--	--	--	--	--	--	--	--	--	--
BrklnPk11											
119N21W1	11-18-04	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
	08-12-05	--	--	--	--	--	--	--	--	--	--
					ANOKA COUNTY						
Frdley10 030N24W11	11-18-04	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
	08-08-05	--	--	--	--	--	--	--	--	--	--
FRDY10-F											
030N24W1	08-08-05	--	--	--	--	--	--	--	--	--	--
					DAKOTA COUNTY						
Apple Vly 115N20W2	11-22-04	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
	08-11-05	--	--	--	--	--	--	--	--	--	--
APVY11-F											
115N20W2	08-11-05	--	--	--	--	--	--	--	--	--	--
					HENNEPIN COUNTY						
Medina 1 118N23W2	11-22-04	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
					DAKOTA COUNTY						
Vermilon2											
114N18W2	11-29-04	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
	08-23-05	--	--	--	--	--	--	--	--	--	--
VERM2-F											
114N18W2	08-23-05	--	--	--	--	--	--	--	--	--	--
					HENNEPIN COUNTY						
MpleGrov6											
119N22W1	11-29-04	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
	08-24-05	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
	08-24-05	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
MPGR6-F											
119N22W1	08-24-05	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
	08-24-05	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
MpleGrov3											
119N22W1	11-29-04	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
Mound 7 117N24W1	11-30-04	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
Wayzata 3 117N22W	11-30-04	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	1,2-Dichlorobenzene water unfltrd ug/L (34536)	1,2-Dichloroethane, water, unfltrd ug/L (32103)	1,2-Dichloropropane water unfltrd ug/L (34541)	1,3,5-Trimethylbenzene water unfltrd ug/L (77226)	1,3-Dichlorobenzene water unfltrd ug/L (34566)	1,3-Dichloropropane water unfltrd ug/L (77173)	1,4-Dichlorobenzene water unfltrd ug/L (34571)	2,2-Dichloropropane water unfltrd ug/L (77170)	2-Chlorotoluene water unfltrd ug/L (77275)	2-Ethyltoluene water unfltrd ug/L (77220)
					RAMSEY COUNTY						
WtBearLk3											
30N22W3	11-17-04	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
					HENNEPIN COUNTY						
BrklnPk10											
119N21W1	11-18-04	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
	08-12-05	--	--	--	--	--	--	--	--	--	--
BKPK10-F											
119N21W1	08-12-05	--	--	--	--	--	--	--	--	--	--
BrklnPk11											
119N21W1	11-18-04	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
	08-12-05	--	--	--	--	--	--	--	--	--	--
					ANOKA COUNTY						
Frdley10 030N24W11	11-18-04	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
	08-08-05	--	--	--	--	--	--	--	--	--	--
FRDY10-F											
030N24W1	08-08-05	--	--	--	--	--	--	--	--	--	--
					DAKOTA COUNTY						
Apple Vly 115N20W2	11-22-04	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
	08-11-05	--	--	--	--	--	--	--	--	--	--
APVY11-F											
115N20W2	08-11-05	--	--	--	--	--	--	--	--	--	--
					HENNEPIN COUNTY						
Medina 1 118N23W2	11-22-04	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
					DAKOTA COUNTY						
Vermilon2											
114N18W2	11-29-04	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
	08-23-05	--	--	--	--	--	--	--	--	--	--
VERM2-F											
114N18W2	08-23-05	--	--	--	--	--	--	--	--	--	--
					HENNEPIN COUNTY						
MpleGrov6											
119N22W1	11-29-04	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
	08-24-05	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
	08-24-05	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
MPGR6-F											
119N22W1	08-24-05	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
	08-24-05	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
MpleGrov3											
119N22W1	11-29-04	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
Mound 7 117N24W1	11-30-04	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
Wayzata 3 117N22W	11-30-04	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	3-Chloropropene water unfltrd ug/L (78109)	4-Chlorotoluene water unfltrd ug/L (77277)	4-Isopropyltoluene water unfltrd ug/L (77356)	Acetone water unfltrd ug/L (81552)	Acrylonitrile water unfltrd ug/L (34215)	Benzene water unfltrd ug/L (34030)	Bromobenzene water unfltrd ug/L (81555)	Bromochloromethane water unfltrd ug/L (77297)	Bromodichloromethane water unfltrd ug/L (32101)	Bromoethene, water, unfltrd ug/L (50002)
					RAMSEY COUNTY						
WtBearLk3											
30N22W3	11-17-04	<.50	<.05	<.08	<6	<.8	<.02	<.03	<.12	<.03	<.1
					HENNEPIN COUNTY						
BrklnPk10											
119N21W1	11-18-04	<.50	<.05	<.08	<6	<.8	<.02	<.03	<.12	<.03	<.1
	08-12-05	--	--	--	--	--	--	--	--	--	--
BKPK10-F											
119N21W1	08-12-05	--	--	--	--	--	--	--	--	--	--
BrklnPk11											
119N21W1	11-18-04	<.50	<.05	<.08	<6	<.8	<.02	<.03	<.12	<.03	<.1
	08-12-05	--	--	--	--	--	--	--	--	--	--
					ANOKA COUNTY						
Frdley10 030N24W11	11-18-04	<.50	<.05	<.08	<6	<.8	<.02	<.03	<.12	<.03	<.1
	08-08-05	--	--	--	--	--	--	--	--	--	--
FRDY10-F											
030N24W1	08-08-05	--	--	--	--	--	--	--	--	--	--
					DAKOTA COUNTY						
Apple Vly 115N20W2	11-22-04	<.50	<.05	<.08	<6	<.8	<.02	<.03	<.12	<.03	<.1
	08-11-05	--	--	--	--	--	--	--	--	--	--
APVY11-F											
115N20W2	08-11-05	--	--	--	--	--	--	--	--	--	--
					HENNEPIN COUNTY						
Medina 1 118N23W2	11-22-04	<.50	<.05	<.08	<6	<.8	<.02	<.03	<.12	<.03	<.1
					DAKOTA COUNTY						
Vermilon2											
114N18W2	11-29-04	<.50	<.05	<.08	<6	<.8	<.02	<.03	<.12	<.03	<.1
	08-23-05	--	--	--	--	--	--	--	--	--	--
VERM2-F											
114N18W2	08-23-05	--	--	--	--	--	--	--	--	--	--
					HENNEPIN COUNTY						
MpleGrov6											
119N22W1	11-29-04	<.50	<.05	<.08	<6	<.8	<.02	<.03	<.12	<.03	<.1
	08-24-05	<.50	<.05	<.08	<6	<.8	<.02	<.03	<.12	<.03	<.1
	08-24-05	<.50	<.05	<.08	<6	<.8	<.02	<.03	<.12	<.03	<.1
MPGR6-F											
119N22W1	08-24-05	<.50	<.05	<.08	E3	<.8	<.02	<.03	<.12	.82	<.1
	08-24-05	<.50	<.05	<.08	E3	<.8	<.02	<.03	<.12	.83	<.1
MpleGrov3											
119N22W1	11-29-04	<.50	<.05	<.08	<6	<.8	<.02	<.03	<.12	<.03	<.1
Mound 7 117N24W1	11-30-04	<.50	<.05	<.08	<6	<.8	<.02	<.03	<.12	<.03	<.1
Wayzata 3 117N22W	11-30-04	<.50	<.05	<.08	<6	<.8	<.02	<.03	<.12	<.03	<.1

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Bromo-methane water unfltrd ug/L (34413)	Carbon di-sulfide water unfltrd ug/L (77041)	Chloro-benzene water unfltrd ug/L (34301)	Chloro-ethane, water, unfltrd ug/L (34311)	Chloro-methane water unfltrd ug/L (34418)	cis-1,2-Di-chloro-ethene, water, unfltrd ug/L (77093)	cis-1,3-Di-chloro-propene water unfltrd ug/L (34704)	Di-bromo-chloro-methane water unfltrd ug/L (32105)	Di-bromo-methane water unfltrd ug/L (30217)	Di-chloro-di-fluoro-methane wat unf ug/L (34668)
					RAMSEY COUNTY						
WtBearLk3											
30N22W3	11-17-04	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05	<.18
					HENNEPIN COUNTY						
BrklnPk10											
119N21W1	11-18-04	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05	<.18
	08-12-05	--	--	--	--	--	--	--	--	--	--
BKPK10-F											
119N21W1	08-12-05	--	--	--	--	--	--	--	--	--	--
BrklnPk11											
119N21W1	11-18-04	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05	<.18
	08-12-05	--	--	--	--	--	--	--	--	--	--
					ANOKA COUNTY						
Frdley10 030N24W11	11-18-04	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05	<.18
	08-08-05	--	--	--	--	--	--	--	--	--	--
FRDY10-F											
030N24W1	08-08-05	--	--	--	--	--	--	--	--	--	--
					DAKOTA COUNTY						
Apple Vly 115N20W2	11-22-04	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05	<.18
	08-11-05	--	--	--	--	--	--	--	--	--	--
APVY11-F											
115N20W2	08-11-05	--	--	--	--	--	--	--	--	--	--
					HENNEPIN COUNTY						
Medina 1 118N23W2	11-22-04	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05	<.18
					DAKOTA COUNTY						
Vermilon2											
114N18W2	11-29-04	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05	<.18
	08-23-05	--	--	--	--	--	--	--	--	--	--
VERM2-F											
114N18W2	08-23-05	--	--	--	--	--	--	--	--	--	--
					HENNEPIN COUNTY						
MpleGrov6											
119N22W1	11-29-04	<.3	<.04	<.03	<.1	<.2	E.01	<.05	<.1	<.05	E.07
	08-24-05	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05	E.05
	08-24-05	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05	E.05
MPGR6-F											
119N22W1	08-24-05	<.3	<.04	<.03	<.1	<.2	E.03	<.05	.8	<.05	<.18
	08-24-05	<.3	E.03	<.03	<.1	<.2	E.03	<.05	.9	<.05	<.18
MpleGrov3											
119N22W1	11-29-04	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05	<.18
Mound 7 117N24W1	11-30-04	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05	<.18
Wayzata 3 117N22W	11-30-04	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05	<.18

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Dichloromethane water unfltrd ug/L (34423)	Diethyl ether, water, unfltrd ug/L (81576)	Diisopropyl ether, water, unfltrd ug/L (81577)	Ethyl methacrylate, water, unfltrd ug/L (73570)	Ethyl methyl ketone, water, unfltrd ug/L (81595)	Ethylbenzene water unfltrd ug/L (34371)	Hexachlorobutadiene, water, unfltrd ug/L (39702)	Hexachloroethane, water, unfltrd ug/L (34396)	Iodomethane water unfltrd ug/L (77424)	Isobutyl methyl ketone, water, unfltrd ug/L (78133)
					RAMSEY COUNTY						
WtBearLk3											
30N22W3	11-17-04	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
					HENNEPIN COUNTY						
BrklnPk10											
119N21W1	11-18-04	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
	08-12-05	--	--	--	--	--	--	--	--	--	--
BKPK10-F											
119N21W1	08-12-05	--	--	--	--	--	--	--	--	--	--
BrklnPk11											
119N21W1	11-18-04	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
	08-12-05	--	--	--	--	--	--	--	--	--	--
					ANOKA COUNTY						
Frdley10 030N24W11	11-18-04	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
	08-08-05	--	--	--	--	--	--	--	--	--	--
FRDY10-F											
030N24W1	08-08-05	--	--	--	--	--	--	--	--	--	--
					DAKOTA COUNTY						
Apple Vly 115N20W2	11-22-04	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
	08-11-05	--	--	--	--	--	--	--	--	--	--
APVY11-F											
115N20W2	08-11-05	--	--	--	--	--	--	--	--	--	--
					HENNEPIN COUNTY						
Medina 1 118N23W2	11-22-04	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
					DAKOTA COUNTY						
Vermilon2											
114N18W2	11-29-04	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
	08-23-05	--	--	--	--	--	--	--	--	--	--
VERM2-F											
114N18W2	08-23-05	--	--	--	--	--	--	--	--	--	--
					HENNEPIN COUNTY						
MpleGrov6											
119N22W1	11-29-04	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
	08-24-05	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
	08-24-05	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
MPGR6-F											
119N22W1	08-24-05	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
	08-24-05	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
MpleGrov3											
119N22W1	11-29-04	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
Mound 7 117N24W1	11-30-04	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
Wayzata 3 117N22W	11-30-04	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Iso-propyl-benzene water unfltrd ug/L (77223)	Methyl acrylo-nitrile water unfltrd ug/L (81593)	Methyl acryl-ate, water, unfltrd ug/L (49991)	Methyl methac-rylate, water, unfltrd ug/L (81597)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	Naphth-alene, water, unfltrd ug/L (34696)	Methyl n-butyl ketone, water, unfltrd ug/L (77103)	n-Butyl benzene water unfltrd ug/L (77342)	n-propyl-benzene water unfltrd ug/L (77224)
					RAMSEY COUNTY						
WtBearLk3											
30N22W3	11-17-04	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
					HENNEPIN COUNTY						
BrklnPk10											
119N21W1	11-18-04	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
	08-12-05	--	--	--	--	--	--	--	--	--	--
BKPK10-F											
119N21W1	08-12-05	--	--	--	--	--	--	--	--	--	--
BrklnPk11											
119N21W1	11-18-04	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
	08-12-05	--	--	--	--	--	--	--	--	--	--
					ANOKA COUNTY						
Frdley10 030N24W11	11-18-04	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
	08-08-05	--	--	--	--	--	--	--	--	--	--
FRDY10-F											
030N24W1	08-08-05	--	--	--	--	--	--	--	--	--	--
					DAKOTA COUNTY						
Apple Vly 115N20W2	11-22-04	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
	08-11-05	--	--	--	--	--	--	--	--	--	--
APVY11-F											
115N20W2	08-11-05	--	--	--	--	--	--	--	--	--	--
					HENNEPIN COUNTY						
Medina 1 118N23W2	11-22-04	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
					DAKOTA COUNTY						
Vermilon2											
114N18W2	11-29-04	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
	08-23-05	--	--	--	--	--	--	--	--	--	--
VERM2-F											
114N18W2	08-23-05	--	--	--	--	--	--	--	--	--	--
					HENNEPIN COUNTY						
MpleGrov6											
119N22W1	11-29-04	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
	08-24-05	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
	08-24-05	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
MPGR6-F											
119N22W1	08-24-05	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
	08-24-05	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
MpleGrov3											
119N22W1	11-29-04	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
Mound 7 117N24W1	11-30-04	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
Wayzata 3 117N22W	11-30-04	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	o-Xylene, water, unfltrd ug/L (77135)	sec-Butyl-benzene water unfltrd ug/L (77350)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)	tert-Butyl-benzene water unfltrd ug/L (77353)	Tetra-chloro-ethene, water, unfltrd ug/L (34475)	Tetra-chloro-methane water unfltrd ug/L (32102)	Tetra-hydro-furan, water, unfltrd ug/L (81607)	Toluene water unfltrd ug/L (34010)
					RAMSEY COUNTY						
WtBearLk3											
30N22W3	11-17-04	<.04	<.06	<.04	<.03	<.1	<.06	<.03	<.06	<1	<.02
					HENNEPIN COUNTY						
BrklnPk10											
119N21W1	11-18-04	<.04	<.06	<.04	<.03	<.1	<.06	<.03	<.06	<1	<.02
	08-12-05	--	--	--	--	--	--	--	--	--	--
BKPK10-F											
119N21W1	08-12-05	--	--	--	--	--	--	--	--	--	--
BrklnPk11											
119N21W1	11-18-04	<.04	<.06	<.04	<.03	<.1	<.06	<.03	<.06	<1	<.02
	08-12-05	--	--	--	--	--	--	--	--	--	--
					ANOKA COUNTY						
Frdley10 030N24W11	11-18-04	<.04	<.06	<.04	<.03	<.1	<.06	<.03	<.06	<1	<.02
	08-08-05	--	--	--	--	--	--	--	--	--	--
FRDY10-F											
030N24W1	08-08-05	--	--	--	--	--	--	--	--	--	--
					DAKOTA COUNTY						
Apple Vly 115N20W2	11-22-04	<.04	<.06	<.04	<.03	<.1	<.06	<.03	<.06	<1	<.02
	08-11-05	--	--	--	--	--	--	--	--	--	--
APVY11-F											
115N20W2	08-11-05	--	--	--	--	--	--	--	--	--	--
					HENNEPIN COUNTY						
Medina 1 118N23W2	11-22-04	<.04	<.06	<.04	<.03	<.1	<.06	<.03	<.06	<1	<.02
					DAKOTA COUNTY						
Vermilon2											
114N18W2	11-29-04	<.04	<.06	<.04	<.03	<.1	<.06	<.03	<.06	<1	<.02
	08-23-05	--	--	--	--	--	--	--	--	--	--
VERM2-F											
114N18W2	08-23-05	--	--	--	--	--	--	--	--	--	--
					HENNEPIN COUNTY						
MpleGrov6											
119N22W1	11-29-04	<.04	<.06	<.04	<.03	.1	<.06	<.03	<.06	<1	<.02
	08-24-05	<.04	<.06	<.04	<.03	.1	<.06	<.03	<.06	<1	<.02
	08-24-05	<.04	<.06	<.04	<.03	.1	<.06	<.03	<.06	<1	<.02
MPGR6-F											
119N22W1	08-24-05	<.04	<.06	<.04	<.03	<.1	<.06	E.09	<.06	<1	<.02
	08-24-05	<.04	<.06	<.04	<.03	<.1	<.06	E.10	<.06	<1	<.02
MpleGrov3											
119N22W1	11-29-04	<.04	<.06	<.04	<.03	<.1	<.06	<.03	<.06	<1	<.02
Mound 7 117N24W1	11-30-04	<.04	<.06	<.04	<.03	<.1	<.06	<.03	<.06	<1	<.02
Wayzata 3 117N22W	11-30-04	<.04	<.06	<.04	<.03	<.1	<.06	.29	<.06	<1	<.02

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	trans-1,2-Dichloroethene, water, unfltrd ug/L (34546)	trans-1,3-Dichloropropene water unfltrd ug/L (34699)	trans-1,4-Dichloro-2-butene, wat unf ug/L (73547)	Tribromomethane water unfltrd ug/L (32104)	Trichloroethene, water, unfltrd ug/L (39180)	Trichlorofluoromethane water unfltrd ug/L (34488)	Trichloromethane water unfltrd ug/L (32106)	Vinyl chloride, water, unfltrd ug/L (39175)	Dichlorvos, water fltrd, ug/L (38775)
				RAMSEY COUNTY						
WtBearLk3										
30N22W3	11-17-04	<.03	<.09	<.7	<.10	<.04	<.08	<.02	<.1	<.01
				HENNEPIN COUNTY						
BrklnPk10										
119N21W1	11-18-04	<.03	<.09	<.7	<.10	<.04	<.08	<.02	<.1	<.01
	08-12-05	--	--	--	--	--	--	--	--	--
BKPK10-F										
119N21W1	08-12-05	--	--	--	--	--	--	--	--	--
BrklnPk11										
119N21W1	11-18-04	<.03	<.09	<.7	<.10	<.04	<.08	<.02	<.1	<.01
	08-12-05	--	--	--	--	--	--	--	--	--
				ANOKA COUNTY						
Frdley10 030N24W11	11-18-04	<.03	<.09	<.7	<.10	<.04	<.08	<.02	<.1	<.01
	08-08-05	--	--	--	--	--	--	--	--	--
FRDY10-F										
030N24W1	08-08-05	--	--	--	--	--	--	--	--	--
				DAKOTA COUNTY						
Apple Vly 115N20W2	11-22-04	<.03	<.09	<.7	<.10	<.04	<.08	<.02	<.1	<.01
	08-11-05	--	--	--	--	--	--	--	--	--
APVY11-F										
115N20W2	08-11-05	--	--	--	--	--	--	--	--	--
				HENNEPIN COUNTY						
Medina 1 118N23W2	11-22-04	<.03	<.09	<.7	<.10	<.04	<.08	<.02	<.1	<.01
				DAKOTA COUNTY						
Vermilon2										
114N18W2	11-29-04	<.03	<.09	<.7	<.10	<.04	<.08	<.02	<.1	<.01
	08-23-05	--	--	--	--	--	--	--	--	--
VERM2-F										
114N18W2	08-23-05	--	--	--	--	--	--	--	--	--
				HENNEPIN COUNTY						
MpleGrov6										
119N22W1	11-29-04	<.03	<.09	<.7	<.10	<.04	<.08	<.02	<.1	<.01
	08-24-05	<.03	<.09	<.7	<.10	<.04	<.08	<.02	<.1	<.01
	08-24-05	<.03	<.09	<.7	<.10	<.04	<.08	<.02	<.1	<.01
MPGR6-F										
119N22W1	08-24-05	<.03	<.09	<.7	.29	E.05	<.08	.49	<.1	<.01
	08-24-05	<.03	<.09	<.7	.27	E.05	<.08	.49	<.1	<.01
MpleGrov3										
119N22W1	11-29-04	<.03	<.09	<.7	<.10	<.04	<.08	<.02	<.1	<.01
Mound 7 117N24W1	11-30-04	<.03	<.09	<.7	<.10	<.04	<.08	<.02	<.1	<.01
Wayzata 3 117N22W	11-30-04	<.03	<.09	<.7	<.10	<.04	<.08	<.02	<.1	<.01

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Time	Sample type	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unf lab, uS/cm 25 degC (90095)	Specif. conductance, wat unf uS/cm 25 degC (00095)
SCOTT COUNTY										
Savage 5										
115N21W20ADCCDD01	12-01-04	0930	Environmental	744	3.0	26	7.2	7.5	696	757
	12-01-04	0932	Spike	--	--	--	--	--	--	--
	12-01-04	0932	Replicate	--	--	--	--	--	--	--
	08-17-05	1043	Environmental	--	2.5	22	7.2	7.4	761	749
SAV5-F										
115N21W20ADCCDD0	08-17-05	1105	Environmental	--	10.3	93	7.5	7.5	657	649
WRIGHT COUNTY										
Mnticllo2										
121N25W11ACACCC0	12-08-04	0930	Environmental	736	1.0	9	7.4	7.5	547	596
Buffalo 6 120N25W30ADDA01	12-08-04	1100	Environmental	734	1.4	12	7.6	E7.3	458	510
DAKOTA COUNTY										
Eagan 5 27N23W27CCCCAC0	12-13-04	1130	Environmental	748	2.0	18	7.4	7.5	552	546
HENNEPIN COUNTY										
StLuisPk8 117N22W										
1DACDAD0	12-13-04	0930	Environmental	747	2.1	18	7.4	7.4	576	568
	08-04-05	0915	Environmental	743	.1	.0	7.2	7.5	601	625
STLPK8-F										
117N22W01DACDAD0	08-04-05	0945	Environmental	743	.2	1	7.2	7.4	600	622

Local identifier	Date	Temperature, air, deg C (00020)	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)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Bromide water, fltrd, mg/L (71870)
SCOTT COUNTY											
Savage 5 115N21W20	12-01-04	16.5	10.0	103	37.9	2.89	5.93	317	387	--	<.20
	12-01-04	--	--	--	--	--	--	--	--	--	--
	12-01-04	--	--	--	--	--	--	--	--	--	--
	08-17-05	--	9.8	102	38.2	2.71	6.65	311	380	.0	.19
SAV5-F 115N21W2	08-17-05	--	10.6	81.8	31.9	3.99	12.5	274	335	.0	.15
WRIGHT COUNTY											
Mnticllo2 121N25W1	12-08-04	19.0	9.5	78.0	31.4	2.59	3.38	295	359	--	<.20
Buffalo 6 120N25W3	12-08-04	20.0	9.3	64.6	25.3	2.73	5.97	280	340	--	.24
DAKOTA COUNTY											
Eagan 5 27N23W2	12-13-04	23.5	10.4	76.0	31.5	1.85	3.37	273	333	--	<.20
HENNEPIN COUNTY											
StLuisPk8 117N22W	12-13-04	23.5	9.7	83.3	30.5	1.80	5.67	314	383	--	<.20
	08-04-05	--	9.8	80.3	31.3	1.75	5.69	323	394	.0	.25
STLPK8-F 117N22W0	08-04-05	--	9.7	81.5	31.4	1.78	5.70	323	394	.0	.24

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	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)	Total nitro-gen, wat flt by anal ysis, mg/L (62854)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)
SCOTT COUNTY											
Savage 5 115N21W20	12-01-04	32.0	.2	25.3	34.6	446	<.04	2.79	<.008	2.82	.018
	12-01-04	--	--	--	--	--	--	--	--	--	--
	12-01-04	--	--	--	--	--	--	--	--	--	--
	08-17-05	33.3	.2	24.7	34.8	449	<.04	2.33	<.008	2.34	.014
SAV5-F 115N21W2	08-17-05	20.1	1.2	19.4	32.3	391	<.04	.37	<.008	.41	.012
WRIGHT COUNTY											
Mnticllo2 121N25W1	12-08-04	4.81	.2	27.6	29.8	359	.26	<.06	<.008	.35	.037
Buffalo 6 120N25W3	12-08-04	.98	.2	22.7	<.2	280	.62	<.06	<.008	.70	E.003
DAKOTA COUNTY											
Eagan 5 27N23W2	12-13-04	5.06	.2	18.6	25.8	329	<.04	<.06	<.008	<.06	<.006
HENNEPIN COUNTY											
StLuisPk8 117N22W	12-13-04	2.35	.3	20.3	5.9	337	.45	<.06	<.008	.53	.008
	08-04-05	3.26	.2	18.6	5.9	356	.46	<.06	<.008	.69	E.004
STLPK8-F 117N22W0	08-04-05	4.76	1.0	18.8	6.0	357	.42	<.06	<.008	.51	<.006

Local identifier	Date	Organic carbon, water, fltrd, mg/L (00681)	Colipge F-spec, FAMP, 2-step, pres(1) abs(2) /L (99335)	Colipge som, Ec CN13hst 2-step, pres(1) abs(2) /L (99332)	E coli, MI MF, water, col/ 100 mL (90901)	Total coli-form, MI MF, water, col/ 100 mL (90900)	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)	1-Naph-thol, water, fltrd 0.7u GF ug/L (49295)
SCOTT COUNTY											
Savage 5 115N21W20	12-01-04	.8	2	2	<1	<1	9	97.7	<.5	<.5	<.09
	12-01-04	--	--	--	--	--	--	--	E.6	.7	--
	12-01-04	.7	--	--	--	--	--	--	--	--	--
	08-17-05	--	--	--	--	--	E4	96.9	--	--	<.09
SAV5-F 115N21W2	08-17-05	--	--	--	--	--	<6	<.6	--	--	<.09
WRIGHT COUNTY											
Mnticllo2 121N25W1	12-08-04	1.6	2	2	<1	<1	E4	729	<.5	<.5	<.09
Buffalo 6 120N25W3	12-08-04	1.2	2	2	<1	<1	735	348	<.5	<.5	<.09
DAKOTA COUNTY											
Eagan 5 27N23W2	12-13-04	.4	2	2	<1	<1	53	97.1	<.5	<.5	<.09
HENNEPIN COUNTY											
StLuisPk8 117N22W	12-13-04	1.1	2	2	<1	<1	233	113	<.5	<.5	<.09
	08-04-05	--	--	--	--	--	10	105	<.5	<.5	--
STLPK8-F 117N22W0	08-04-05	--	--	--	--	--	<6	75.7	<.5	<.5	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd 0.7u GF ug/L (38746)	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)	2Chloro -2',6-' diethyl acet-anilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	Ala-chlor 2nd amide, water, fltrd, ug/L (63781)
SCOTT COUNTY											
Savage 5 115N21W20	12-01-04	<.016	<.04	<.02	<.006	<.5	<.02	<.005	E.012	E.06	<.02
	12-01-04	--	--	--	--	.7	--	--	--	--	--
	12-01-04	--	--	--	--	--	--	--	--	--	--
	08-17-05	<.016	<.04	<.02	<.006	--	<.02	<.005	E.009	E.05	<.02
SAV5-F 115N21W2	08-17-05	<.016	<.04	<.02	<.006	--	<.02	<.005	E.004	E.01	<.02
WRIGHT COUNTY											
Mnticllo2 121N25W1	12-08-04	<.016	<.04	<.02	<.006	<.5	<.02	<.005	<.006	<.08	<.02
Buffalo 6 120N25W3	12-08-04	<.016	<.04	<.02	<.006	<.5	<.02	<.005	<.006	<.08	<.02
DAKOTA COUNTY											
Eagan 5 27N23W2	12-13-04	<.016	<.04	<.02	<.006	<.5	<.02	<.005	<.006	<.08	<.02
HENNEPIN COUNTY											
StLuisPk8 117N22W	12-13-04	<.016	<.04	<.02	<.006	<.5	<.02	<.005	<.006	<.08	<.02
	08-04-05	--	--	--	--	<.5	--	--	--	--	--
STLPK8-F 117N22W0	08-04-05	--	--	--	--	<.5	--	--	--	--	--

Local identifier	Date	Aceto-chlor 3rd amide, water, fltrd, ug/L (63782)	2-Ethyl -6-methyl-aniline water, fltrd, ug/L (61620)	OIET, water, fltrd, ug/L (50355)	2-Methyl-naphth-alene, water, fltrd, ug/L (62056)	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-Hydroxy carbo-furan, wat flt 0.7u GF ug/L (49308)	3-Keto-carbo-furan, water, fltrd, ug/L (50295)	3-Methyl-1H-indole, water, fltrd, ug/L (62058)
SCOTT COUNTY											
Savage 5 115N21W20	12-01-04	<.02	<.004	<.032	<.5	<.004	--	<2	<.008	<.02	<1
	12-01-04	--	--	--	.7	--	--	2	--	--	M
	12-01-04	--	--	--	--	--	--	--	--	--	--
	08-17-05	<.02	<.004	<.032	--	<.004	<.004	--	<.008	<.02	--
SAV5-F 115N21W2	08-17-05	<.02	<.004	<.032	--	<.004	<.004	--	<.008	<.02	--
WRIGHT COUNTY											
Mnticllo2 121N25W1	12-08-04	<.02	<.004	<.032	<.5	<.004	--	<2	<.008	<.02	<1
Buffalo 6 120N25W3	12-08-04	<.02	<.004	<.032	<.5	<.004	--	<2	<.008	<.02	<1
DAKOTA COUNTY											
Eagan 5 27N23W2	12-13-04	<.02	<.004	<.032	<.5	<.004	--	<2	<.008	<.02	<1
HENNEPIN COUNTY											
StLuisPk8 117N22W	12-13-04	<.02	<.004	<.032	<.5	<.004	--	<2	<.008	<.02	<1
	08-04-05	--	--	--	<.5	--	--	<2	--	--	<1
STLPK8-F 117N22W0	08-04-05	--	--	--	<.5	--	--	<2	--	--	<1

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	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 ESA, water, fltrd 0.7u GF ug/L (61029)	Acetochlor OA, water, fltrd 0.7u GF ug/L (61030)
SCOTT COUNTY											
Savage 5 115N21W20	12-01-04	<5	<.006	<1	<1	<5	<1	<2	<.5	<.02	<.02
	12-01-04	M	--	M	M	E5	M	4	.8	--	--
	12-01-04	--	--	--	--	--	--	--	--	--	--
	08-17-05	--	<.006	--	--	--	--	--	--	.02	<.02
SAV5-F 115N21W2	08-17-05	--	<.006	--	--	--	--	--	--	<.02	<.02
WRIGHT COUNTY											
Mnticllo2 121N25W1	12-08-04	<5	<.006	<1	<1	M	<1	<2	<.5	<.02	<.02
Buffalo 6 120N25W3	12-08-04	<5	<.006	<1	<1	<5	<1	<2	<.5	<.02	<.02
DAKOTA COUNTY											
Eagan 5 27N23W2	12-13-04	<5	<.006	<1	<1	<5	<1	<2	<.5	<.02	<.02
HENNEPIN COUNTY											
StLuisPk8 117N22W	12-13-04	<5	<.006	<1	<1	<5	<1	<2	<.5	<.02	<.02
	08-04-05	<5	--	<1	<1	M	<1	<2	<.5	--	--
STLPK8-F 117N22W0	08-04-05	<5	--	<1	<1	<5	<1	<2	<.5	--	--

Local identifier	Date	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)	Acifluorfen, water, fltrd 0.7u GF ug/L (49315)	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)
SCOTT COUNTY											
Savage 5 115N21W20	12-01-04	<.02	<.006	<.5	<.5	<.028	<.02	.17	<.02	<.02	<.005
	12-01-04	--	--	.9	.7	--	--	--	--	--	--
	12-01-04	--	--	--	--	--	--	--	--	--	--
	08-17-05	<.02	<.02	--	--	<.028	<.02	.09	<.02	<.02	<.02
SAV5-F 115N21W2	08-17-05	<.02	<.02	--	--	<.028	<.02	.03	<.02	<.02	<.02
WRIGHT COUNTY											
Mnticllo2 121N25W1	12-08-04	<.02	<.006	<.5	<.5	<.028	<.02	.10	<.02	<.02	<.005
Buffalo 6 120N25W3	12-08-04	<.02	<.006	<.5	<.5	<.028	<.02	<.02	<.02	<.02	<.005
DAKOTA COUNTY											
Eagan 5 27N23W2	12-13-04	<.02	<.006	<.5	<.5	<.028	<.02	<.02	<.02	<.02	<.005
HENNEPIN COUNTY											
StLuisPk8 117N22W	12-13-04	<.02	<.006	<.5	M	<.028	<.02	<.02	<.02	<.02	<.005
	08-04-05	--	--	<.5	M	--	--	--	--	--	--
STLPK8-F 117N22W0	08-04-05	--	--	<.5	<.5	--	--	--	--	--	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Aldicarb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldicarb sulfoxide, wat flt 0.7u GF ug/L (49314)	Aldicarb, water, fltrd 0.7u GF ug/L (49312)	alpha-Endosulfan, water, fltrd, ug/L (34362)	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)	Bendiocarb, water, fltrd, ug/L (50299)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)
SCOTT COUNTY											
Savage 5 115N21W20	12-01-04	<.02	<.022	<.04	--	<.5	.009	<.07	<.050	<.02	<.010
	12-01-04	--	--	--	--	.7	--	--	--	--	--
	12-01-04	--	--	--	--	--	--	--	--	--	--
	08-17-05	<.02	<.022	<.04	<.005	--	E.007	<.07	<.050	<.02	<.010
SAV5-F 115N21W2	08-17-05	<.02	<.022	<.04	<.005	--	E.004	<.07	<.050	<.02	<.010
WRIGHT COUNTY											
Mnticllo2 121N25W1	12-08-04	<.02	<.022	<.04	--	<.5	<.007	<.07	<.050	<.02	<.010
Buffalo 6 120N25W3	12-08-04	<.02	<.022	<.04	--	<.5	<.007	<.07	<.050	<.02	<.010
DAKOTA COUNTY											
Eagan 5 27N23W2	12-13-04	<.02	<.022	<.04	--	<.5	<.007	<.07	<.050	<.02	<.010
HENNEPIN COUNTY											
StLuisPk8 117N22W	12-13-04	<.02	<.022	<.04	--	<.5	<.007	<.07	<.050	<.02	<.010
	08-04-05	--	--	--	--	<.5	--	--	--	--	--
STLPK8-F 117N22W0	08-04-05	--	--	--	--	<.5	--	--	--	--	--

Local identifier	Date	Benomyl water, fltrd, ug/L (50300)	Bensulfuron, water, fltrd, ug/L (61693)	Bentazon, water, fltrd 0.7u GF ug/L (38711)	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)	Bromacil, water, fltrd, ug/L (04029)	Bromoxynil, water, fltrd 0.7u GF ug/L (49311)
SCOTT COUNTY											
Savage 5 115N21W20	12-01-04	<.022	<.02	<.01	<.5	<.5	<2	<2	<1	<.02	<.03
	12-01-04	--	--	--	.7	.8	E1	E2	M	3.1	--
	12-01-04	--	--	--	--	--	--	--	--	--	--
	08-17-05	<.022	<.02	<.01	--	--	--	--	--	<.02	<.03
SAV5-F 115N21W2	08-17-05	<.022	<.02	<.01	--	--	--	--	--	<.02	<.03
WRIGHT COUNTY											
Mnticllo2 121N25W1	12-08-04	<.022	<.02	<.01	<.5	<.5	<2	<2	<1	<.02	<.03
Buffalo 6 120N25W3	12-08-04	<.022	<.02	<.01	<.5	<.5	<2	<2	<1	<.02	<.03
DAKOTA COUNTY											
Eagan 5 27N23W2	12-13-04	<.022	<.02	<.01	<.5	<.5	<2	<2	<1	<.02	<.03
HENNEPIN COUNTY											
StLuisPk8 117N22W	12-13-04	<.022	<.02	<.01	<.5	<.5	<2	<2	<1	<.02	<.03
	08-04-05	--	--	--	<.5	M	<2	<2	<1	<.5	--
STLPK8-F 117N22W0	08-04-05	--	--	--	<.5	M	<2	<2	<1	<.5	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Caffeine, water, fltrd, ug/L (50305)	Camphor water, fltrd, ug/L (62070)	Carbaryl, water, fltrd 0.7u GF ug/L (49310)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbazole, water, fltrd, ug/L (62071)	Carbofuran, water, fltrd 0.7u GF ug/L (49309)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chloramben methyl ester, water, fltrd, ug/L (61188)	Chlorimuron, water, fltrd, ug/L (50306)	Chloro-diamino-s-triazine, wat flt ug/L (04039)
SCOTT COUNTY											
Savage 5 115N21W20	12-01-04	<.018	<.5	<.02	<.041	<.5	<.016	--	<.02	<.032	E.07
	12-01-04	.8	.8	--	M	.7	--	--	--	--	--
	12-01-04	--	--	--	--	--	--	--	--	--	--
	08-17-05	<.018	--	<.02	<.041	--	<.016	<.020	<.02	<.032	E.05
SAV5-F 115N21W2	08-17-05	<.018	--	<.02	<.041	--	<.016	<.020	<.02	<.032	<.04
WRIGHT COUNTY											
Mnticllo2 121N25W1	12-08-04	<.018	<.5	<.02	<.041	<.5	<.016	--	<.02	<.032	<.04
Buffalo 6 120N25W3	12-08-04	<.018	<.5	<.02	<.041	<.5	<.016	--	<.02	<.032	<.04
DAKOTA COUNTY											
Eagan 5 27N23W2	12-13-04	<.018	<.5	<.02	<.041	<.5	<.016	--	<.02	<.032	<.04
HENNEPIN COUNTY											
StLuisPk8 117N22W	12-13-04	E.010	<.5	<.02	<.041	<.5	<.016	--	<.02	<.032	<.04
	08-04-05	<.5	<.5	--	<1	<.5	--	--	--	--	--
STLPK8-F 117N22W0	08-04-05	<.5	<.5	--	<1	<.5	--	--	--	--	--

Local identifier	Date	Chlorothalonil, water, fltrd 0.7u GF ug/L (49306)	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)	cis-Propiconazole, water, fltrd, ug/L (79846)	Clopyralid, water, fltrd 0.7u GF ug/L (49305)	Cotinine, water, fltrd, ug/L (62005)	Cyanazine, water, fltrd, ug/L (04041)	Cycloate, water, fltrd, ug/L (04031)
SCOTT COUNTY											
Savage 5 115N21W20	12-01-04	<.04	<.06	<.005	<2	<.006	--	<.02	<1.00	--	<.01
	12-01-04	--	--	.7	2	--	--	--	2.90	--	--
	12-01-04	--	--	--	--	--	--	--	--	--	--
	08-17-05	<.04	<.06	<.005	--	<.006	<.008	<.02	--	<.018	<.01
SAV5-F 115N21W2	08-17-05	<.04	<.06	<.005	--	<.006	<.008	<.02	--	<.018	<.01
WRIGHT COUNTY											
Mnticllo2 121N25W1	12-08-04	<.04	<.06	<.005	<2	<.006	--	<.02	<1.00	--	<.01
Buffalo 6 120N25W3	12-08-04	<.04	<.06	<.005	<2	<.006	--	<.02	<1.00	--	<.01
DAKOTA COUNTY											
Eagan 5 27N23W2	12-13-04	<.04	<.06	<.005	<2	<.006	--	<.02	<1.00	--	<.01
HENNEPIN COUNTY											
StLuisPk8 117N22W	12-13-04	<.04	<.06	<.005	<2	<.006	--	<.02	<1.00	--	<.01
	08-04-05	--	--	<.5	<2	--	--	--	<1.00	--	--
STLPK8-F 117N22W0	08-04-05	--	--	<.5	<2	--	--	--	<1.00	--	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Cyfluthrin, water, fltrd, ug/L (61585)	lambda-Cyhalothrin, water, fltrd, ug/L (61595)	Cypermethrin water, fltrd, ug/L (61586)	Dacthal mono-acid, water, fltrd 0.7u GF ug/L (49304)	DCPA, water fltrd 0.7u GF ug/L (82682)	Dechloroacetochlor, water, fltrd, ug/L (63778)	Dechloroalachlor, water, fltrd, ug/L (63777)	Dechlorodimethenamid, water, fltrd, ug/L (63779)	Dechlorometolachlor, water, fltrd, ug/L (63780)	DEET, water, fltrd, ug/L (62082)
SCOTT COUNTY											
Savage 5 115N21W20	12-01-04	<.008	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02	<.5
	12-01-04	--	--	--	--	--	--	--	--	--	.8
	12-01-04	--	--	--	--	--	--	--	--	--	--
	08-17-05	<.027	<.009	<.009	<.03	<.003	<.02	<.02	<.02	<.02	--
SAV5-F 115N21W2	08-17-05	<.027	<.009	<.009	<.03	<.003	<.02	<.02	<.02	<.02	--
WRIGHT COUNTY											
Mnticllo2 121N25W1	12-08-04	<.008	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02	<.5
Buffalo 6 120N25W3	12-08-04	<.008	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02	<.5
DAKOTA COUNTY											
Eagan 5 27N23W2	12-13-04	<.008	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02	<.5
HENNEPIN COUNTY											
StLuisPk8 117N22W	12-13-04	<.008	--	<.009	<.03	<.003	<.02	<.02	<.02	<.02	M
	08-04-05	--	--	--	--	--	--	--	--	--	E.2
STLPK8-F 117N22W0	08-04-05	--	--	--	--	--	--	--	--	--	M

Local identifier	Date	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon oxon, water, fltrd, ug/L (61638)	Diazinon, water, fltrd, ug/L (39572)	Dicamba water fltrd 0.7u GF ug/L (38442)	Dichlorprop, water, fltrd 0.7u GF ug/L (49302)	Dicrotophos, water fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)	Diethoxynonylphenol, water, fltrd, ug/L (62083)	Diethoxyoctylphenol, water, fltrd ug/L (61705)	Dimethenamid ESA, water, fltrd, ug/L (61951)
SCOTT COUNTY											
Savage 5 115N21W20	12-01-04	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02
	12-01-04	--	--	.8	--	--	--	--	E10	M	--
	12-01-04	--	--	--	--	--	--	--	--	--	--
	08-17-05	<.012	--	<.005	<.04	<.03	<.08	<.009	--	--	<.02
SAV5-F 115N21W2	08-17-05	<.012	--	<.005	<.04	<.03	<.08	<.009	--	--	<.02
WRIGHT COUNTY											
Mnticllo2 121N25W1	12-08-04	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02
Buffalo 6 120N25W3	12-08-04	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02
DAKOTA COUNTY											
Eagan 5 27N23W2	12-13-04	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02
HENNEPIN COUNTY											
StLuisPk8 117N22W	12-13-04	<.012	<.01	<.005	<.04	<.03	<.08	<.009	<5	<1	<.02
	08-04-05	--	--	<.5	--	--	--	--	<5	<1	--
STLPK8-F 117N22W0	08-04-05	--	--	<.5	--	--	--	--	<5	<1	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Dimeth-enamid OA, water, fltrd, ug/L (62482)	Dimeth-enamid water, fltrd, ug/L (61588)	Dimeth-oate, water, fltrd 0.7u GF ug/L (82662)	Dinoseb water, fltrd 0.7u GF ug/L (49301)	Diphen-amid, water, fltrd, ug/L (04033)	Disulf-oton sulfone water, fltrd, ug/L (61640)	Disul-foton, water, fltrd 0.7u GF ug/L (82677)	Diuron, water, fltrd 0.7u GF ug/L (49300)	D-Limo-nene, water, fltrd, ug/L (62073)	Endo-sulfan sulfate water, fltrd, ug/L (61590)
SCOTT COUNTY											
Savage 5 115N21W20	12-01-04	<.02	<.02	<.006	<.04	<.01	--	--	<.01	<.5	--
	12-01-04	--	--	--	--	--	--	--	--	E.5	--
	12-01-04	--	--	--	--	--	--	--	--	--	--
	08-17-05	<.02	<.02	<.006	<.04	<.01	<.01	<.02	<.01	--	<.014
SAV5-F 115N21W2	08-17-05	<.02	<.02	<.006	<.04	<.01	<.01	<.02	<.01	--	<.014
WRIGHT COUNTY											
Mnticllo2 121N25W1	12-08-04	<.02	<.02	<.006	<.04	<.01	--	--	<.01	<.5	--
Buffalo 6 120N25W3	12-08-04	<.02	<.02	<.006	<.04	<.01	--	--	<.01	<.5	--
DAKOTA COUNTY											
Eagan 5 27N23W2	12-13-04	<.02	<.02	<.006	<.04	<.01	--	--	<.01	<.5	--
HENNEPIN COUNTY											
StLuisPk8 117N22W	12-13-04	<.02	<.02	<.006	<.04	<.01	--	--	<.01	<.5	--
	08-04-05	--	--	--	--	--	--	--	--	<.5	--
STLPK8-F 117N22W0	08-04-05	--	--	--	--	--	--	--	--	<.5	--

Local identifier	Date	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Etho-prop, water, fltrd 0.7u GF ug/L (82672)	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)	Fenuron water, fltrd 0.7u GF ug/L (49297)	Desulf-inyl-fipro-nil amide, wat flt ug/L (62169)
SCOTT COUNTY											
Savage 5 115N21W20	12-01-04	--	<.0020	<.004	--	<1	<.049	--	<.03	<.02	<.029
	12-01-04	--	--	--	--	E1	--	--	--	--	--
	12-01-04	--	--	--	--	--	--	--	--	--	--
	08-17-05	<.004	<.002	<.004	<.005	--	<.049	<.04	<.03	<.02	<.029
SAV5-F 115N21W2	08-17-05	<.004	<.002	<.004	<.005	--	<.049	<.04	<.03	<.02	<.029
WRIGHT COUNTY											
Mnticllo2 121N25W1	12-08-04	--	<.0020	<.004	--	<1	<.049	<.04	<.03	<.02	<.029
Buffalo 6 120N25W3	12-08-04	--	<.0020	<.004	--	<1	<.049	<.04	<.03	<.02	<.029
DAKOTA COUNTY											
Eagan 5 27N23W2	12-13-04	--	<.0020	<.004	--	<1	<.049	<.04	<.03	<.02	<.029
HENNEPIN COUNTY											
StLuisPk8 117N22W	12-13-04	--	<.0020	<.004	--	<1	<.049	<.04	<.03	<.02	<.029
	08-04-05	--	--	--	--	<1	--	--	--	--	--
STLPK8-F 117N22W0	08-04-05	--	--	--	--	<1	--	--	--	--	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	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)	Flumetsulam, water, fltrd, ug/L (61694)	Fluometuron water fltrd 0.7u GF ug/L (38811)	Fluoranthene water, fltrd, ug/L (34377)	Fonofos oxon, water, fltrd, ug/L (61649)
SCOTT COUNTY											
Savage 5 115N21W20	12-01-04	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02	<.5	<.003
	12-01-04	--	--	--	--	--	--	--	--	.7	--
	12-01-04	--	--	--	--	--	--	--	--	--	--
	08-17-05	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02	--	--
SAV5-F 115N21W2	08-17-05	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02	--	--
WRIGHT COUNTY											
Mnticllo2 121N25W1	12-08-04	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02	<.5	<.003
Buffalo 6 120N25W3	12-08-04	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02	<.5	<.003
DAKOTA COUNTY											
Eagan 5 27N23W2	12-13-04	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02	<.5	<.003
HENNEPIN COUNTY											
StLuisPk8 117N22W	12-13-04	<.013	<.024	<.016	<.02	<.02	<.02	<.04	<.02	<.5	<.003
	08-04-05	--	--	--	--	--	--	--	--	<.5	--
STLPK8-F 117N22W0	08-04-05	--	--	--	--	--	--	--	--	<.5	--

Local identifier	Date	Fonofos water, fltrd, ug/L (04095)	HHCB, water, fltrd, ug/L (62075)	Hexazinone, water, fltrd, ug/L (04025)	Hydroxyacetochlor, water, fltrd, ug/L (63784)	Hydroxyalachlor, water, fltrd, ug/L (63783)	Hydroxydimethenamid, water, fltrd, ug/L (64045)	Hydroxymetolachlor, water, fltrd, ug/L (63785)	Imazaquin, water, fltrd, ug/L (50356)	Imazethapyr, water, fltrd, ug/L (50407)	Imidacloprid water, fltrd, ug/L (61695)
SCOTT COUNTY											
Savage 5 115N21W20	12-01-04	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020
	12-01-04	--	.7	--	--	--	--	--	--	--	--
	12-01-04	--	--	--	--	--	--	--	--	--	--
	08-17-05	<.003	--	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020
SAV5-F 115N21W2	08-17-05	<.003	--	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020
WRIGHT COUNTY											
Mnticllo2 121N25W1	12-08-04	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020
Buffalo 6 120N25W3	12-08-04	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020
DAKOTA COUNTY											
Eagan 5 27N23W2	12-13-04	<.003	<.5	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020
HENNEPIN COUNTY											
StLuisPk8 117N22W	12-13-04	<.003	M	<.013	<.02	<.02	<.02	<.02	<.04	<.04	<.020
	08-04-05	--	<.5	--	--	--	--	--	--	--	--
STLPK8-F 117N22W0	08-04-05	--	<.5	--	--	--	--	--	--	--	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	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)	Linuron water fltrd 0.7u GF ug/L (38478)	Malaoxon, water, fltrd, ug/L (61652)	Malathion, water, fltrd, ug/L (39532)
SCOTT COUNTY											
Savage 5 115N21W20	12-01-04	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
	12-01-04	.7	--	.7	--	.8	E.5	.7	--	--	--
	12-01-04	--	--	--	--	--	--	--	--	--	--
	08-17-05	--	<.538	--	<.003	--	--	--	<.01	<.030	<.027
SAV5-F 115N21W2	08-17-05	--	<.538	--	<.003	--	--	--	<.01	<.030	<.027
WRIGHT COUNTY											
Mnticllo2 121N25W1	12-08-04	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
Buffalo 6 120N25W3	12-08-04	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
DAKOTA COUNTY											
Eagan 5 27N23W2	12-13-04	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
HENNEPIN COUNTY											
StLuisPk8 117N22W	12-13-04	<.5	<.387	<.5	<.003	<.5	<.5	<.5	<.01	<.030	<.027
	08-04-05	<.5	--	<.5	--	<.5	<.5	<.5	--	--	--
STLPK8-F 117N22W0	08-04-05	<.5	--	<.5	--	<.5	<.5	<.5	--	--	--

Local identifier	Date	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Menthol water, fltrd, ug/L (62080)	Metalaxyl, water, fltrd, ug/L (50359)	Metalaxyl, water, fltrd, ug/L (61596)	Methialthion water, fltrd, ug/L (61598)	Methiocarb, water, fltrd 0.7u GF ug/L (38501)	Methomyl, water, fltrd 0.7u GF ug/L (49296)	Methyl acetate water unfltrd ug/L (77032)	Methyl paraoxon, water, fltrd, ug/L (61664)
SCOTT COUNTY											
Savage 5 115N21W20	12-01-04	<.03	<.01	<.5	<.01	<.005	<.006	<.010	<.020	<1.0	<.03
	12-01-04	--	--	.7	.8	--	--	--	--	E4.9	--
	12-01-04	--	--	--	--	--	--	--	--	--	--
	08-17-05	<.03	<.01	--	<.01	<.005	<.006	<.010	<.020	--	<.03
SAV5-F 115N21W2	08-17-05	<.03	<.01	--	<.01	<.005	<.006	<.010	<.020	--	<.03
WRIGHT COUNTY											
Mnticllo2 121N25W1	12-08-04	<.03	<.01	<.5	<.01	<.005	<.006	<.010	<.020	<1.0	<.03
Buffalo 6 120N25W3	12-08-04	<.03	<.01	<.5	<.01	<.005	<.006	<.010	<.020	<1.0	<.03
DAKOTA COUNTY											
Eagan 5 27N23W2	12-13-04	<.03	<.01	<.5	<.01	<.005	<.006	<.010	<.020	<1.0	<.03
HENNEPIN COUNTY											
StLuisPk8 117N22W	12-13-04	<.03	<.01	M	<.01	<.005	<.006	<.010	<.020	<1.0	<.03
	08-04-05	--	--	<.5	<.5	--	--	--	--	--	--
STLPK8-F 117N22W0	08-04-05	--	--	<.5	<.5	--	--	--	--	--	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Methyl salicylate, water, fltrd, ug/L (62081)	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)	Metsulfuron, water, fltrd, ug/L (61697)	Molinate, water, fltrd 0.7u GF ug/L (82671)	Myclobutanil water, fltrd, ug/L (61599)	N-(4-Chlorophenyl) -N'-methylurea, ug/L (61692)
SCOTT COUNTY											
Savage 5 115N21W20	12-01-04	<.015	<.5	.25	.03	<.006	<.006	<.03	--	<.008	<.04
	12-01-04	--	.8	--	--	.8	--	--	--	--	--
	12-01-04	--	--	--	--	--	--	--	--	--	--
	08-17-05	<.015	--	.14	.02	<.02	<.006	<.03	<.003	<.008	<.04
SAV5-F 115N21W2	08-17-05	<.015	--	.03	<.02	<.02	<.006	<.03	<.003	<.008	<.04
WRIGHT COUNTY											
Mnticllo2 121N25W1	12-08-04	<.015	<.5	.04	<.02	<.006	<.006	<.03	--	<.008	<.04
Buffalo 6 120N25W3	12-08-04	<.015	<.5	<.02	<.02	<.006	<.006	<.03	--	<.008	<.04
DAKOTA COUNTY											
Eagan 5 27N23W2	12-13-04	<.015	M	<.02	<.02	<.006	<.006	<.03	--	<.008	<.04
HENNEPIN COUNTY											
StLuisPk8 117N22W	12-13-04	<.015	M	<.02	<.02	<.006	<.006	<.03	--	<.008	<.04
	08-04-05	--	<.5	--	--	<.5	--	--	--	--	--
STLPK8-F 117N22W0	08-04-05	--	<.5	--	--	<.5	--	--	--	--	--

Local identifier	Date	Naphthalene, water, fltrd, ug/L (34443)	Neburon water, fltrd 0.7u GF ug/L (49294)	Nicosulfuron, water, fltrd, ug/L (50364)	Norflurazon, water, fltrd 0.7u GF ug/L (49293)	Oryzalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	Oxyfluorfen, water, fltrd, ug/L (61600)	p-Cresol, water, fltrd, ug/L (62084)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Pentachlorophenol, water, fltrd, ug/L (34459)
SCOTT COUNTY											
Savage 5 115N21W20	12-01-04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	<2
	12-01-04	.7	--	--	--	--	--	--	M	--	E2
	12-01-04	--	--	--	--	--	--	--	--	--	--
	08-17-05	--	<.01	<.04	<.02	E.01	<.03	<.007	--	<.022	--
SAV5-F 115N21W2	08-17-05	--	<.01	<.04	<.02	<.01	<.03	<.007	--	<.022	--
WRIGHT COUNTY											
Mnticllo2 121N25W1	12-08-04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	<2
Buffalo 6 120N25W3	12-08-04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	<2
DAKOTA COUNTY											
Eagan 5 27N23W2	12-13-04	<.5	<.01	<.04	<.02	<.01	<.03	--	<1	<.022	<2
HENNEPIN COUNTY											
StLuisPk8 117N22W	12-13-04	<.5	<.01	<.04	<.02	<.01	<.03	--	M	<.022	<2
	08-04-05	<.5	--	--	--	--	--	--	<1	--	<2
STLPK8-F 117N22W0	08-04-05	<.5	--	--	--	--	--	--	<1	--	<2

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	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)	Picloram, water, fltrd 0.7u GF ug/L (49291)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)
SCOTT COUNTY											
Savage 5 115N21W20	12-01-04	<.5	<.5	<.10	<.011	--	<.008	<.03	<.01	<.005	<.004
	12-01-04	.7	1.0	--	--	--	--	--	.8	--	--
	12-01-04	--	--	--	--	--	--	--	--	--	--
	08-17-05	--	--	<.10	<.011	<.05	<.008	<.03	<.01	<.005	<.004
SAV5-F 115N21W2	08-17-05	--	--	<.10	<.011	<.05	<.008	<.03	<.01	<.005	<.004
WRIGHT COUNTY											
Mnticllo2 121N25W1	12-08-04	<.5	E.2	<.10	<.011	<.05	<.008	<.03	<.01	<.005	<.004
Buffalo 6 120N25W3	12-08-04	<.5	E.4	<.10	<.011	<.05	<.008	<.03	<.01	<.005	<.004
DAKOTA COUNTY											
Eagan 5 27N23W2	12-13-04	<.5	.6	<.10	<.011	<.05	<.008	<.03	<.01	<.005	<.004
HENNEPIN COUNTY											
StLuisPk8 117N22W	12-13-04	<.5	E.2	<.10	<.011	<.05	<.008	<.03	<.01	<.005	<.004
	08-04-05	<.5	E.1	--	--	--	--	--	<.5	--	--
STLPK8-F 117N22W0	08-04-05	<.5	<.5	--	--	--	--	--	<.5	--	--

Local identifier	Date	Propachlor ESA, water, fltrd 0.7u GF ug/L (62766)	Propachlor OA, water, fltrd 0.7u GF ug/L (62767)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Propham water fltrd 0.7u GF ug/L (49236)	Propiconazole, water, fltrd, ug/L (50471)	Propoxur, water, fltrd 0.7u GF ug/L (38538)	Pyrene, water, fltrd, ug/L (34470)	Siduron water, fltrd, ug/L (38548)	Simazine, water, fltrd, ug/L (04035)
SCOTT COUNTY											
Savage 5 115N21W20	12-01-04	<.05	<.02	--	--	<.030	<.01	<.008	<.5	<.02	<.005
	12-01-04	--	--	--	--	--	--	--	.7	--	--
	12-01-04	--	--	--	--	--	--	--	--	--	--
	08-17-05	<.05	<.02	<.011	<.02	<.030	<.01	<.008	--	<.02	<.005
SAV5-F 115N21W2	08-17-05	<.05	<.02	<.011	<.02	<.030	<.01	<.008	--	<.02	<.005
WRIGHT COUNTY											
Mnticllo2 121N25W1	12-08-04	<.05	<.02	--	--	<.030	<.01	<.008	<.5	<.02	<.005
Buffalo 6 120N25W3	12-08-04	<.05	<.02	--	--	<.030	<.01	<.008	<.5	<.02	<.005
DAKOTA COUNTY											
Eagan 5 27N23W2	12-13-04	<.05	<.02	--	--	<.030	<.01	<.008	<.5	<.02	<.005
HENNEPIN COUNTY											
StLuisPk8 117N22W	12-13-04	<.05	<.02	--	--	<.030	<.01	<.008	<.5	<.02	<.005
	08-04-05	--	--	--	--	--	--	--	<.5	--	--
STLPK8-F 117N22W0	08-04-05	--	--	--	--	--	--	--	<.5	--	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Sulfometruron, water, fltrd, ug/L (50337)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Tefluthrin, water, fltrd, ug/L (61606)	Terbacil, water, fltrd, ug/L (04032)	Terbufos oxon sulfone water, fltrd, ug/L (61674)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Terbuthylazine, water, fltrd, ug/L (04022)	tert-Amyl alcohol water unfltrd ug/L (77073)	tert-Butyl alcohol water unfltrd ug/L (77035)	Tetrachloroethene, water, fltrd, ug/L (34476)
SCOTT COUNTY											
Savage 5 115N21W20	12-01-04	<.038	<.02	--	<.016	<.07	<.02	<.01	<1.0	<2.00	<.5
	12-01-04	--	--	--	--	--	--	--	10.1	9.24	E.4
	12-01-04	--	--	--	--	--	--	--	--	--	--
	08-17-05	<.038	<.02	<.008	<.016	<.07	<.02	<.01	--	--	--
SAV5-F 115N21W2	08-17-05	<.038	<.02	<.008	<.016	<.07	<.02	<.01	--	--	--
WRIGHT COUNTY											
Mnticllo2 121N25W1	12-08-04	<.038	<.02	--	<.016	<.07	<.02	<.01	<1.0	<2.00	<.5
Buffalo 6 120N25W3	12-08-04	<.038	<.02	--	<.016	<.07	<.02	<.01	<1.0	<2.00	<.5
DAKOTA COUNTY											
Eagan 5 27N23W2	12-13-04	<.038	<.02	--	<.016	<.07	<.02	<.01	<1.0	<2.00	<.5
HENNEPIN COUNTY											
StLuisPk8 117N22W	12-13-04	<.038	<.02	--	<.016	<.07	<.02	<.01	<1.0	<2.00	<.5
	08-04-05	--	--	--	--	--	--	--	--	--	<.5
STLPK8-F 117N22W0	08-04-05	--	--	--	--	--	--	--	--	--	<.5

Local identifier	Date	Thiobencarb water fltrd 0.7u GF ug/L (82681)	trans-Propiconazole, water, fltrd, ug/L (79847)	Tribromomethane water, fltrd, ug/L (34288)	Tribuphos, water, fltrd, ug/L (61610)	Tributyl phosphate, water, fltrd, ug/L (62089)	Triclopyr, water, fltrd 0.7u GF ug/L (49235)	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)
SCOTT COUNTY											
Savage 5 115N21W20	12-01-04	--	--	<.5	--	<.5	<.03	<1	<.5	<.009	<.5
	12-01-04	--	--	E.6	--	.8	--	M	.8	--	.7
	12-01-04	--	--	--	--	--	--	--	--	--	--
	08-17-05	<.010	<.01	--	<.004	--	<.03	--	--	<.009	--
SAV5-F 115N21W2	08-17-05	<.010	<.01	--	<.004	--	<.03	--	--	<.009	--
WRIGHT COUNTY											
Mnticllo2 121N25W1	12-08-04	--	--	<.5	--	<.5	<.03	<1	<.5	<.009	<.5
Buffalo 6 120N25W3	12-08-04	--	--	<.5	--	<.5	<.03	<1	<.5	<.009	<.5
DAKOTA COUNTY											
Eagan 5 27N23W2	12-13-04	--	--	<.5	--	<.5	<.03	<1	<.5	<.009	<.5
HENNEPIN COUNTY											
StLuisPk8 117N22W	12-13-04	--	--	<.5	--	E.1	<.03	<1	<.5	<.009	M
	08-04-05	--	--	<.5	--	E.1	--	<1	<.5	--	<.5
STLPK8-F 117N22W0	08-04-05	--	--	<.5	--	<.5	--	<1	<.5	--	<.5

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	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)	1,1,1,2 -Tetra-chloro-ethane, water, unfltrd ug/L (77562)	1,1,1-Tri-chloro-ethane, water, unfltrd ug/L (34506)	1,1,2,2 -Tetra-chloro-ethane, water, unfltrd ug/L (34516)	CFC-113 water unfltrd ug/L (77652)	1,1,2-Tri-chloro-ethane, water, unfltrd ug/L (34511)	1,1-Di-chloro-ethane, water unfltrd ug/L (34496)	1,1-Di-chloro-ethene, water, unfltrd ug/L (34501)
SCOTT COUNTY											
Savage 5 115N21W20	12-01-04	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02
	12-01-04	.9	.8	.7	.53	.59	1.37	.61	.60	.77	.56
	12-01-04	--	--	--	--	--	--	--	--	--	--
	08-17-05	--	--	--	--	--	--	--	--	--	--
SAV5-F 115N21W2	08-17-05	--	--	--	--	--	--	--	--	--	--
WRIGHT COUNTY											
Mnticllo2 121N25W1	12-08-04	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02
Buffalo 6 120N25W3	12-08-04	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02
DAKOTA COUNTY											
Eagan 5 27N23W2	12-13-04	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02
HENNEPIN COUNTY											
StLuisPk8 117N22W	12-13-04	<.5	<.5	<.5	<.03	<.03	<.08	<.04	<.04	<.04	<.02
	08-04-05	<.5	<.5	<.5	--	--	--	--	--	--	--
STLPK8-F 117N22W0	08-04-05	<.5	<.5	<.5	--	--	--	--	--	--	--

Local identifier	Date	1,1-Di-chloro-propene water unfltrd ug/L (77168)	1,2,3,4 Tetra-methyl-benzene water unfltrd ug/L (49999)	1,2,3,5 Tetra-methyl-benzene water unfltrd ug/L (50000)	1,2,3-Tri-chloro-benzene water unfltrd ug/L (77613)	1,2,3-Tri-chloro-propane water unfltrd ug/L (77443)	1,2,3-Tri-methyl-benzene water unfltrd ug/L (77221)	1,2,4-Tri-chloro-benzene water unfltrd ug/L (34551)	1,2,4-Tri-methyl-benzene water unfltrd ug/L (77222)	Dibromo chloro-propane water unfltrd ug/L (82625)	1,2-Di-bromo-ethane, water, unfltrd ug/L (77651)
SCOTT COUNTY											
Savage 5 115N21W20	12-01-04	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
	12-01-04	.79	2.2	2.7	2.6	1.63	1.2	1.1	.63	5.2	.55
	12-01-04	--	--	--	--	--	--	--	--	--	--
	08-17-05	--	--	--	--	--	--	--	--	--	--
SAV5-F 115N21W2	08-17-05	--	--	--	--	--	--	--	--	--	--
WRIGHT COUNTY											
Mnticllo2 121N25W1	12-08-04	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
Buffalo 6 120N25W3	12-08-04	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
DAKOTA COUNTY											
Eagan 5 27N23W2	12-13-04	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
HENNEPIN COUNTY											
StLuisPk8 117N22W	12-13-04	<.03	<.1	<.1	<.2	<.18	<.1	<.1	<.06	<.5	<.04
	08-04-05	--	--	--	--	--	--	--	--	--	--
STLPK8-F 117N22W0	08-04-05	--	--	--	--	--	--	--	--	--	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	1,2-Dichlorobenzene water unfltrd ug/L (34536)	1,2-Dichloroethane, water, unfltrd ug/L (32103)	1,2-Dichloropropane water unfltrd ug/L (34541)	1,3,5-Trimethylbenzene water unfltrd ug/L (77226)	1,3-Dichlorobenzene water unfltrd ug/L (34566)	1,3-Dichloropropane water unfltrd ug/L (77173)	1,4-Dichlorobenzene water unfltrd ug/L (34571)	2,2-Dichloropropane water unfltrd ug/L (77170)	2-Chlorotoluene water unfltrd ug/L (77275)	2-Ethyltoluene water unfltrd ug/L (77220)
SCOTT COUNTY											
Savage 5 115N21W20	12-01-04	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
	12-01-04	.52	1.5	.51	.51	.53	1.2	.50	.86	.54	.60
	12-01-04	--	--	--	--	--	--	--	--	--	--
	08-17-05	--	--	--	--	--	--	--	--	--	--
SAV5-F 115N21W2	08-17-05	--	--	--	--	--	--	--	--	--	--
WRIGHT COUNTY											
Mnticllo2 121N25W1	12-08-04	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
Buffalo 6 120N25W3	12-08-04	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
DAKOTA COUNTY											
Eagan 5 27N23W2	12-13-04	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
HENNEPIN COUNTY											
StLuisPk8 117N22W	12-13-04	<.05	<.1	<.03	<.04	<.03	<.1	<.03	<.05	<.04	<.06
	08-04-05	--	--	--	--	--	--	--	--	--	--
STLPK8-F 117N22W0	08-04-05	--	--	--	--	--	--	--	--	--	--

Local identifier	Date	3-Chloropropene water unfltrd ug/L (78109)	4-Chlorotoluene water unfltrd ug/L (77277)	4-Isopropyltoluene water unfltrd ug/L (77356)	Acetone water unfltrd ug/L (81552)	Acrylonitrile water unfltrd ug/L (34215)	Benzene water unfltrd ug/L (34030)	Bromobenzene water unfltrd ug/L (81555)	Bromochloromethane water unfltrd ug/L (77297)	Bromodichloromethane water unfltrd ug/L (32101)	Bromoethene, water, unfltrd ug/L (50002)
SCOTT COUNTY											
Savage 5 115N21W20	12-01-04	<.50	<.05	<.08	<6	<.8	<.02	<.03	<.12	<.03	<.1
	12-01-04	E1.60	.60	1.13	10	13	.55	.52	1.24	.57	2.3
	12-01-04	--	--	--	--	--	--	--	--	--	--
	08-17-05	--	--	--	--	--	--	--	--	--	--
SAV5-F 115N21W2	08-17-05	--	--	--	--	--	--	--	--	--	--
WRIGHT COUNTY											
Mnticllo2 121N25W1	12-08-04	<.50	<.05	<.08	<6	<.8	<.02	<.03	<.12	<.03	<.1
Buffalo 6 120N25W3	12-08-04	<.50	<.05	<.08	<6	<.8	<.02	<.03	<.12	<.03	<.1
DAKOTA COUNTY											
Eagan 5 27N23W2	12-13-04	<.50	<.05	<.08	<6	<.8	<.02	<.03	<.12	<.03	<.1
HENNEPIN COUNTY											
StLuisPk8 117N22W	12-13-04	<.50	<.05	<.08	<6	<.8	<.02	<.03	<.12	<.03	<.1
	08-04-05	--	--	--	--	--	--	--	--	--	--
STLPK8-F 117N22W0	08-04-05	--	--	--	--	--	--	--	--	--	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Bromomethane water unfltrd ug/L (34413)	Carbon disulfide water unfltrd ug/L (77041)	Chlorobenzene water unfltrd ug/L (34301)	Chloroethane, water, unfltrd ug/L (34311)	Chloromethane water unfltrd ug/L (34418)	cis-1,2-Dichloroethene, water, unfltrd ug/L (77093)	cis-1,3-Dichloropropene water unfltrd ug/L (34704)	Dibromochloromethane water unfltrd ug/L (32105)	Dibromomethane water unfltrd ug/L (30217)	Dichlorodifluoromethane wat unf ug/L (34668)
					SCOTT COUNTY						
Savage 5 115N21W20	12-01-04	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05	<.18
	12-01-04	E2.7	.74	.52	1.3	E1.8	.56	.92	1.9	.55	E1.90
	12-01-04	--	--	--	--	--	--	--	--	--	--
	08-17-05	--	--	--	--	--	--	--	--	--	--
SAV5-F 115N21W2	08-17-05	--	--	--	--	--	--	--	--	--	--
					WRIGHT COUNTY						
Mnticllo2 121N25W1	12-08-04	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05	<.18
Buffalo 6 120N25W3	12-08-04	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05	<.18
					DAKOTA COUNTY						
Eagan 5 27N23W2	12-13-04	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05	<.18
					HENNEPIN COUNTY						
StLuisPk8 117N22W	12-13-04	<.3	<.04	<.03	<.1	<.2	<.02	<.05	<.1	<.05	<.18
	08-04-05	--	--	--	--	--	--	--	--	--	--
STLPK8-F 117N22W0	08-04-05	--	--	--	--	--	--	--	--	--	--

Local identifier	Date	Dichloromethane water unfltrd ug/L (34423)	Diethyl ether, water, unfltrd ug/L (81576)	Diisopropyl ether, water, unfltrd ug/L (81577)	Ethyl methacrylate, water, unfltrd ug/L (73570)	Ethyl methyl ketone, water, unfltrd ug/L (81595)	Ethylbenzene water unfltrd ug/L (34371)	Hexachlorobutadiene, water, unfltrd ug/L (39702)	Hexachloroethane, water, unfltrd ug/L (34396)	Iodomethane water unfltrd ug/L (77424)	Isobutyl methyl ketone, water, unfltrd ug/L (78133)
					SCOTT COUNTY						
Savage 5 115N21W20	12-01-04	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
	12-01-04	1.9	1.8	2.42	2.8	46.7	.52	1.4	2.0	E3.58	5.1
	12-01-04	--	--	--	--	--	--	--	--	--	--
	08-17-05	--	--	--	--	--	--	--	--	--	--
SAV5-F 115N21W2	08-17-05	--	--	--	--	--	--	--	--	--	--
					WRIGHT COUNTY						
Mnticllo2 121N25W1	12-08-04	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
Buffalo 6 120N25W3	12-08-04	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
					DAKOTA COUNTY						
Eagan 5 27N23W2	12-13-04	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
					HENNEPIN COUNTY						
StLuisPk8 117N22W	12-13-04	<.1	<.1	<.10	<.2	<2.0	<.03	<.1	<.1	<.50	<.4
	08-04-05	--	--	--	--	--	--	--	--	--	--
STLPK8-F 117N22W0	08-04-05	--	--	--	--	--	--	--	--	--	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	Iso-propyl-benzene water unfltrd ug/L (77223)	Methyl acrylo-nitrile water unfltrd ug/L (81593)	Methyl acryl-ate, water, unfltrd ug/L (49991)	Methyl methac-rylate, water, unfltrd ug/L (81597)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	Naphth-alene, water, unfltrd ug/L (34696)	Methyl n-butyl ketone, water, unfltrd ug/L (77103)	n-Butyl benzene water unfltrd ug/L (77342)	n-propyl-benzene water unfltrd ug/L (77224)
SCOTT COUNTY											
Savage 5 115N21W20	12-01-04	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
	12-01-04	.54	6.1	14.9	3.5	2.45	.63	E4.6	7.9	1.8	.51
	12-01-04	--	--	--	--	--	--	--	--	--	--
	08-17-05	--	--	--	--	--	--	--	--	--	--
SAV5-F 115N21W2	08-17-05	--	--	--	--	--	--	--	--	--	--
WRIGHT COUNTY											
Mnticllo2 121N25W1	12-08-04	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
Buffalo 6 120N25W3	12-08-04	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
DAKOTA COUNTY											
Eagan 5 27N23W2	12-13-04	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
HENNEPIN COUNTY											
StLuisPk8 117N22W	12-13-04	<.04	<.4	<1.0	<.2	<.04	<.06	<.5	<.4	<.1	<.04
	08-04-05	--	--	--	--	--	--	--	--	--	--
STLPK8-F 117N22W0	08-04-05	--	--	--	--	--	--	--	--	--	--

Local identifier	Date	o-Xylene, water, unfltrd ug/L (77135)	sec-Butyl-benzene water unfltrd ug/L (77350)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)	tert-Butyl-benzene water unfltrd ug/L (77353)	Tetra-chloro-ethene, water, unfltrd ug/L (34475)	Tetra-chloro-methane water unfltrd ug/L (32102)	Tetra-hydro-furan, water, unfltrd ug/L (81607)	Toluene water unfltrd ug/L (34010)
SCOTT COUNTY											
Savage 5 115N21W20	12-01-04	<.04	<.06	<.04	<.03	<.1	<.06	<.03	<.06	<1	<.02
	12-01-04	.65	.54	.52	2.4	2.33	1.15	.54	.72	22	.52
	12-01-04	--	--	--	--	--	--	--	--	--	--
	08-17-05	--	--	--	--	--	--	--	--	--	--
SAV5-F 115N21W2	08-17-05	--	--	--	--	--	--	--	--	--	--
WRIGHT COUNTY											
Mnticllo2 121N25W1	12-08-04	<.04	<.06	<.04	<.03	<.1	<.06	<.03	<.06	<1	<.02
Buffalo 6 120N25W3	12-08-04	<.04	<.06	<.04	<.03	<.1	<.06	<.03	<.06	<1	<.02
DAKOTA COUNTY											
Eagan 5 27N23W2	12-13-04	<.04	<.06	<.04	<.03	<.1	<.06	<.03	<.06	<1	<.02
HENNEPIN COUNTY											
StLuisPk8 117N22W	12-13-04	<.04	<.06	<.04	<.03	<.1	<.06	<.03	<.06	<1	<.02
	08-04-05	--	--	--	--	--	--	--	--	--	--
STLPK8-F 117N22W0	08-04-05	--	--	--	--	--	--	--	--	--	--

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MULTIPLE STATION ANALYSES—CONTINUED

Local identifier	Date	trans-1,2-Dichloroethene, water, unfltrd ug/L (34546)	trans-1,3-Dichloropropene water unfltrd ug/L (34699)	trans-1,4-Dichloro-2-butene, wat unf ug/L (73547)	Tribromomethane water unfltrd ug/L (32104)	Trichloroethene, water, unfltrd ug/L (39180)	Trichlorofluoromethane water unfltrd ug/L (34488)	Trichloromethane water unfltrd ug/L (32106)	Vinyl chloride, water, unfltrd ug/L (39175)	Dichlorvos, water fltrd, ug/L (38775)
SCOTT COUNTY										
Savage 5 115N21W20	12-01-04	<.03	<.09	<.7	<.10	<.04	<.08	<.02	<.1	<.01
	12-01-04	.51	1.31	9.6	1.09	.53	1.12	.55	1.4	<1.00
	12-01-04	--	--	--	--	--	--	--	--	--
	08-17-05	--	--	--	--	--	--	--	--	<.01
SAV5-F 115N21W2	08-17-05	--	--	--	--	--	--	--	--	<.01
WRIGHT COUNTY										
Mnticllo2 121N25W1	12-08-04	<.03	<.09	<.7	<.10	<.04	<.08	<.02	<.1	<.01
Buffalo 6 120N25W3	12-08-04	<.03	<.09	<.7	<.10	<.04	<.08	<.02	<.1	<.01
DAKOTA COUNTY										
Eagan 5 27N23W2	12-13-04	<.03	<.09	<.7	<.10	<.04	<.08	<.02	<.1	<.01
HENNEPIN COUNTY										
StLuisPk8 117N22W	12-13-04	<.03	<.09	<.7	<.10	<.04	<.08	<.02	<.1	<.01
	08-04-05	--	--	--	--	--	--	--	--	--
STLPK8-F 117N22W0	08-04-05	--	--	--	--	--	--	--	--	--

GROUND-WATER ASSESSMENT STUDY- CONTINUED

MISCELLANEOUS STATION ANALYSES

Date	Time	Sample type	Ala-chlor 2nd amide, water, fltrd, ug/L (63781)	Aceto-chlor 3rd amide, water, fltrd, ug/L (63782)	2-Ethyl -6-methyl-aniline water, fltrd, ug/L (61620)	Aceto-chlor ESA, water, fltrd 0.7u GF ug/L (61029)	Aceto-chlor OA, water, fltrd 0.7u GF ug/L (61030)	Aceto-chlor SAA, water, fltrd, ug/L (62847)	Aceto-chlor, water, fltrd, ug/L (49260)	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)
APVY11-F 115N20W23DCBBBA02													
AUG 2005 11...	1045	Environmental	<.02	<.02	--	<.02	<.02	<.02	<.02	<.02	.12	.02	<.02
BLM6-F 027N24W18ACA02													
AUG 2005 09...	1040	Environmental	--	--	<.004	--	--	--	<.006	--	--	--	--
EDN13-F 117N21W30BABBAA02													
AUG 2005 09...	1230	Environmental	--	--	--	--	--	--	--	--	--	--	--
FARB9-F 110N21W2502													
AUG 2005 08...	1145	Environmental	<.02	<.02	--	.02	.04	<.02	<.02	<.02	.07	.02	<.02
HOPK4-F 117N22W13CCDCBB02													
AUG 2005 24...	1130	Environmental	--	--	--	--	--	--	--	--	--	--	--
HUD9-F 029N19W32CD02													
AUG 2005 10...	1100	Environmental	--	--	--	--	--	--	--	--	--	--	--
NBRT15-F 030N23W30ADC													
AUG 2005 10...	1455	Blank	--	--	<.004	--	--	--	<.006	--	--	--	--
10...	1515	Environmental	--	--	<.004	--	--	--	<.006	--	--	--	--
STLPK8-F 117N22W01DACDAD02													
AUG 2005 04...	0945	Environmental	--	--	--	--	--	--	--	--	--	--	--
BKPK10-F 119N21W16CDCADA02													
AUG 2005 12...	1100	Environmental	<.02	<.02	--	<.02	<.02	<.02	<.02	.21	.53	.32	<.02
FRDY10-F 030N24W11CDCCAA02													
AUG 2005 08...	1440	Environmental	--	--	--	--	--	--	--	--	--	--	--
MPGR6-F 119N22W13BDDCAA02													
AUG 2005 24...	1415	Environmental	<.02	<.02	<.004	<.02	<.02	<.02	<.02	<.02	.11	<.02	<.02
24...	1420	Replicate	<.02	<.02	<.004	<.02	<.02	<.02	<.02	<.02	.12	<.02	<.02
SAV5-F 115N21W20ADCCDD02													
AUG 2005 17...	1105	Environmental	<.02	<.02	<.004	<.02	<.02	<.02	<.02	<.02	.03	<.02	<.02
SPON5-F 039N12W05CA02													
AUG 2005 15...	1330	Environmental	--	--	--	--	--	--	--	--	--	--	--
VERM2-F 114N18W22BAAAD02													
AUG 2005 23...	1100	Environmental	--	--	--	--	--	--	--	--	--	--	--

GROUND-WATER ASSESSMENT STUDY - CONTINUED

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	Ala-chlor, water, fltrd, ug/L (46342)	Dimeth-enamid ESA, water, fltrd, ug/L (61951)	Dimeth-enamid OA, water, fltrd, ug/L (62482)	Dimeth-enamid water, fltrd, ug/L (61588)	Flufen-acet ESA, water, fltrd, ug/L (61952)	Flufe-nacet OA, water, fltrd, ug/L (62483)	Flufe-nacet, water, fltrd, ug/L (62481)	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)	Propa-chlor ESA, water, fltrd 0.7u GF ug/L (62766)	Propa-chlor OA, water, fltrd 0.7u GF ug/L (62767)	Propa-chlor, water, fltrd, ug/L (04024)
APVY11-F 115N20W23DCBBBA02													
AUG 2005 11...	<.02	<.02	<.02	<.02	<.02	<.02	<.02	.08	.02	<.02	<.05	<.02	<.02
BLM6-F 027N24W18ACA02 (													
AUG 2005 09...	<.005	--	--	--	--	--	--	--	--	<.006	--	--	--
EDN13-F 117N21W30BABBAA02													
AUG 2005 09...	--	--	--	--	--	--	--	--	--	--	--	--	--
FARB9-F 110N21W2502													
AUG 2005 08...	<.02	<.02	<.02	<.02	<.02	<.02	<.02	.08	.04	<.02	<.05	<.02	<.02
HOPK4-F 117N22W13CCDCBB02													
AUG 2005 24...	--	--	--	--	--	--	--	--	--	<.5	--	--	--
HUD9-F 029N19W32CD02													
AUG 2005 10...	--	--	--	--	--	--	--	--	--	--	--	--	--
NBRT15-F 030N23W30ADC													
AUG 2005 10...	<.005	--	--	--	--	--	--	--	--	<.006	--	--	--
10...	<.005	--	--	--	--	--	--	--	--	<.006	--	--	--
STLPK8-F 117N22W01DACDAD02													
AUG 2005 04...	--	--	--	--	--	--	--	--	--	<.5	--	--	--
BKPK10-F 119N21W16CDCADA02													
AUG 2005 12...	<.02	<.02	<.02	<.02	<.02	<.02	<.02	.23	.62	<.02	<.05	<.02	<.02
FRDY10-F 030N24W11CDCCAA02													
AUG 2005 08...	--	--	--	--	--	--	--	--	--	<.5	--	--	--
MPGR6-F 119N22W13BDDCAA02													
AUG 2005 24...	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.05	<.02	<.02
24...	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.05	<.02	<.02
SAV5-F 115N21W20ADCCDD02													
AUG 2005 17...	<.02	<.02	<.02	<.02	<.02	<.02	<.02	.03	<.02	<.02	<.05	<.02	<.02
SPON5-F 039N12W05CA02													
AUG 2005 15...	--	--	--	--	--	--	--	--	--	<.5	--	--	--
VERM2-F 114N18W22BAAAD02													
AUG 2005 23...	--	--	--	--	--	--	--	--	--	--	--	--	--

TERBUFOS-CRADA DEGRADATE DEVELOPMENT WATER QUALITY

MISCELLANEOUS STATION ANALYSES

Date	Time	Sample type	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)	1-Naphthol, water, fltrd 0.7u GF ug/L (49295)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	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)
05062000 BUFFALO RIVER NEAR DILWORTH, MN (LAT 46 57 40N LONG 096 39 40W)												
JUN 2005												
08...	0815	Environmental	729	7.2	8.1	831	20.2	<.09	<.006	<.005	E.017	<.004
21...	1610	Environmental	744	4.3	7.8	844	25.2	<.09	<.006	<.005	E.034	<.004
28...	0750	Environmental	741	6.1	8.0	777	22.7	<.09	<.006	<.005	E.021	<.004
JUL												
26...	0840	Environmental	744	6.4	8.3	623	20.9	<.09	<.006	<.005	E.014	<.004
AUG												
08...	1340	Environmental	736	6.8	8.2	637	26.6	<.09	<.006	<.005	E.009	<.004
08...	1345	Replicate	736	6.8	8.2	637	26.6	<.09	<.006	<.005	E.008	<.004
19...	0830	Environmental	737	6.8	7.9	476	14.5	<.09	<.006	<.005	E.011	<.004
SEP												
07...	0920	Environmental	747	7.2	8.0	718	20.8	<.09	<.006	<.005	<.008	<.004
19...	1250	Environmental	740	8.2	8.1	793	18.3	<.09	<.006	<.005	E.010	<.004
05086000 SNAKE RIVER AT ALVARADO, MN (LAT 48 11 50N LONG 097 00 20W)												
JUN 2005												
07...	1200	Environmental	736	7.7	8.0	800	16.3	<.09	<.006	<.005	E.015	<.004
21...	0915	Environmental	747	6.3	7.9	625	23.1	<.09	<.006	<.005	E.013	<.004
21...	1530	Blank	--	--	--	--	--	<.09	<.006	<.005	<.006	<.004
28...	1315	Environmental	743	7.7	8.0	757	19.3	<.09	<.006	<.005	E.014	<.004
JUL												
26...	1400	Environmental	747	6.9	8.1	618	20.4	<.09	<.006	<.005	E.008	<.004
AUG												
09...	0830	Environmental	742	5.4	7.9	795	22.1	<.09	<.006	<.005	E.006	<.004
18...	1430	Environmental	736	7.0	7.7	335	17.6	--	--	--	--	--
26...	1200	Environmental	--	--	--	--	--	<.09	<.006	<.005	<.006	<.004
26...	1205	Matrix spike	--	--	--	--	--	<.09	.092	<.005	<.006	<.004
SEP												
06...	1430	Environmental	746	7.5	8.0	759	20.6	<.09	<.006	<.005	<.006	<.004
20...	0900	Environmental	741	6.7	8.0	746	15.4	<.09	<.006	<.005	E.008	<.004

TERBUFOS DEGRADATE DEVELOPMENT WATER QUALITY—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	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)	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)
05062000 BUFFALO RIVER NEAR DILWORTH, MN (LAT 46 57 40N LONG 096 39 40W)													
JUN 2005													
08...	<.004	<.006	.016	<.005	106	.044	<.07	<.050	<.010	<.041	<.06	<.005	<.006
21...	<.004	E.006	.013	<.005	105	.195	<.07	<.050	<.010	<.041	<.06	E.004	<.006
28...	<.004	<.006	.008	<.005	101	.072	<.07	<.050	<.010	<.041	<.06	E.004	<.006
JUL													
26...	<.004	<.006	<.006	<.005	97.3	.029	<.07	<.050	<.010	<.041	<.06	<.005	<.006
AUG													
08...	<.004	<.006	<.006	<.005	84.8	.017	<.07	<.050	<.010	<.041	<.06	<.005	<.006
08...	<.004	<.006	<.006	<.005	82.5	.016	<.07	<.050	<.010	<.041	<.06	<.005	<.006
19...	<.004	<.006	<.006	<.005	105	.027	<.07	<.050	<.010	<.041	<.06	.025	<.006
SEP													
07...	<.004	<.006	<.006	<.005	91.7	.028	<.07	<.050	<.010	<.041	<.06	E.005	<.006
19...	<.004	<.006	<.006	<.005	105	.019	<.07	<.050	<.010	<.041	<.06	<.005	<.006
05086000 SNAKE RIVER AT ALVARADO, MN (LAT 48 11 50N LONG 097 00 20W)													
JUN 2005													
07...	<.004	<.006	.007	<.005	117	.028	<.07	<.050	<.010	<.041	<.06	<.005	<.006
21...	<.004	E.008	<.006	<.005	106	.035	<.07	<.050	<.010	<.041	<.06	<.005	<.006
21...	<.004	<.006	<.006	<.005	105	<.007	<.07	<.050	<.010	<.041	<.06	<.005	<.006
28...	<.004	E.006	<.006	<.005	99.9	.036	<.07	<.050	<.010	<.041	<.06	.008	<.006
JUL													
26...	<.004	<.006	<.006	<.005	96.7	.013	<.07	<.050	<.010	<.041	<.06	<.005	<.006
AUG													
09...	<.004	<.006	<.006	<.005	86.6	.009	<.07	<.050	<.010	<.041	<.06	<.005	<.006
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.004	<.006	<.006	<.005	95.7	<.007	<.07	<.050	<.010	<.041	<.06	<.005	<.006
26...	<.004	<.006	.087	.084	104	.081	<.07	<.050	.067	E.104	<.06	.105	<.006
SEP													
06...	<.004	<.006	<.006	<.005	94.8	<.007	<.07	<.050	<.010	<.041	<.06	<.005	<.006
20...	<.004	<.006	<.006	<.005	97.2	.010	<.07	<.050	<.010	<.041	<.06	<.005	<.006

TERBUFOS DEGRADATE DEVELOPMENT WATER QUALITY—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

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)	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)
05062000 BUFFALO RIVER NEAR DILWORTH, MN (LAT 46 57 40N LONG 096 39 40W)													
JUN 2005													
08...	<.027	<.009	<.003	<.012	<.01	<.005	109	<.08	<.009	<.006	<.0020	<.004	<.049
21...	<.027	<.009	<.003	<.012	--	<.005	114	<.08	<.009	<.006	<.0020	<.004	<.049
28...	<.027	<.009	<.003	<.012	--	<.005	108	<.08	<.009	<.006	<.0020	<.004	<.049
JUL													
26...	<.027	<.009	<.003	<.012	--	<.005	111	<.08	<.009	<.006	<.0020	<.004	<.049
AUG													
08...	<.027	<.009	<.003	<.012	--	<.005	96.3	<.08	<.009	<.006	<.002	<.004	<.049
08...	<.027	<.009	<.003	<.012	--	<.005	88.8	<.08	<.009	<.006	<.002	<.004	<.049
19...	<.027	<.009	E.002	<.012	--	<.005	110	<.08	<.009	<.006	<.002	<.004	<.049
SEP													
07...	<.027	<.009	<.003	<.012	--	<.005	101	--	<.009	<.006	<.002	<.004	<.049
19...	<.027	<.009	<.003	<.012	--	<.005	118	<.08	<.009	<.006	<.002	<.004	<.049
05086000 SNAKE RIVER AT ALVARADO, MN (LAT 48 11 50N LONG 097 00 20W)													
JUN 2005													
07...	<.027	<.009	<.003	<.012	<.01	<.005	116	<.08	<.009	<.006	<.0020	<.004	<.049
21...	<.027	<.009	<.003	<.012	--	<.005	111	<.08	<.009	<.006	<.0020	<.004	<.049
21...	<.027	<.009	<.003	<.012	--	<.005	105	<.08	<.009	<.006	<.0020	<.004	<.049
28...	<.027	<.009	<.003	<.012	--	<.005	109	<.08	<.009	<.006	<.0020	<.004	<.049
JUL													
26...	<.027	<.009	<.003	<.012	--	<.005	107	<.08	<.009	<.006	<.0020	<.004	<.049
AUG													
09...	<.027	<.009	<.003	<.012	--	<.005	98.0	<.08	<.009	<.006	<.002	<.004	<.049
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.027	<.009	<.003	<.012	--	<.005	104	<.08	<.009	<.006	<.002	<.004	<.049
26...	<.027	<.009	.106	.066	--	.081	102	<.08	.136	<.006	E.03	.046	<.049
SEP													
06...	<.027	<.009	<.003	<.012	--	<.005	106	--	<.009	<.006	<.002	<.004	<.049
20...	<.027	<.009	<.003	<.012	--	<.005	113	<.08	<.009	<.006	<.002	<.004	<.049

TERBUFOS DEGRADATE DEVELOPMENT WATER QUALITY—Continued

MISCELLANEOUS STATION ANALYSES—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)	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)
05062000 BUFFALO RIVER NEAR DILWORTH, MN (LAT 46 57 40N LONG 096 39 40W)													
JUN 2005													
08...	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.013	<.538	<.003	<.030	<.027	<.009
21...	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.013	<.538	<.003	<.030	<.027	<.005
28...	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.013	<.538	<.003	<.030	<.027	<.005
JUL													
26...	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.013	<.538	<.003	<.030	<.027	<.005
AUG													
08...	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.013	<.538	<.003	<.030	<.027	<.005
08...	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.013	<.538	<.003	<.030	<.027	<.005
19...	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.013	<.538	<.003	<.030	<.027	.040
SEP													
07...	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.013	<.538	<.003	<.030	<.027	<.005
19...	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.013	<.538	<.003	<.030	<.027	<.005
05086000 SNAKE RIVER AT ALVARADO, MN (LAT 48 11 50N LONG 097 00 20W)													
JUN 2005													
07...	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.013	<.538	<.003	<.030	<.027	<.005
21...	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.013	<.538	<.003	<.030	<.027	<.005
21...	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.013	<.538	<.003	<.030	<.027	<.005
28...	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.013	<.538	<.003	<.030	<.027	<.005
JUL													
26...	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.013	<.538	<.003	<.030	<.027	<.005
AUG													
09...	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.013	<.538	<.003	<.030	<.027	<.005
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.013	<.538	<.003	<.030	E.009	<.005
26...	<.04	<.03	E.043	.053	.056	E.062	.087	<.013	<.538	<.003	<.030	<.027	<.005
SEP													
06...	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.013	<.538	<.003	<.030	<.027	<.005
20...	<.04	<.03	<.029	<.013	<.024	<.016	<.003	<.013	<.538	<.003	<.030	<.027	<.005

TERBUFOS DEGRADATE DEVELOPMENT WATER QUALITY—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)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Mycl-butanil water, fltrd, ug/L (61599)	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)
05062000 BUFFALO RIVER NEAR DILWORTH, MN (LAT 46 57 40N LONG 096 39 40W)													
JUN 2005													
08...	<.006	<.03	<.015	.023	.011	<.008	<.022	<.10	<.011	<.05	<.008	E.01	<.005
21...	<.006	<.03	<.015	.095	<.006	<.008	<.022	<.10	<.011	--	--	<.01	<.005
28...	<.006	<.03	<.015	.097	<.006	<.008	<.022	<.10	<.011	<.05	<.008	<.01	<.005
JUL													
26...	<.006	<.03	<.015	.035	<.006	<.008	<.022	<.10	<.011	<.05	<.008	<.01	<.005
AUG													
08...	<.006	<.03	<.015	.014	<.006	<.008	<.022	<.10	<.011	<.05	<.008	<.01	<.005
08...	<.006	<.03	<.015	.013	<.006	<.008	<.022	<.10	<.011	<.05	<.008	<.01	<.005
19...	<.006	<.03	<.015	.038	<.006	<.008	<.022	<.10	<.011	<.05	<.008	<.01	<.005
SEP													
07...	<.006	<.03	<.015	.008	<.006	<.008	<.022	<.10	<.011	--	<.008	<.01	<.005
19...	<.006	<.03	<.015	E.006	<.006	<.008	<.022	<.10	<.011	--	--	<.01	<.005
05086000 SNAKE RIVER AT ALVARADO, MN (LAT 48 11 50N LONG 097 00 20W)													
JUN 2005													
07...	<.006	<.03	<.015	.007	<.006	<.008	<.022	<.10	<.011	<.05	<.008	<.01	<.005
21...	<.006	<.03	<.015	<.006	<.006	<.008	<.022	<.10	<.011	--	--	E.01	<.005
21...	<.006	<.03	<.015	<.006	<.006	<.008	<.022	<.10	<.011	--	--	<.01	<.005
28...	<.006	<.03	E.011	E.005	<.006	<.008	<.022	<.10	<.011	<.05	<.008	<.01	<.005
JUL													
26...	<.006	<.03	<.015	<.006	<.006	<.008	<.022	<.10	<.011	<.05	<.008	<.01	<.005
AUG													
09...	<.006	<.03	<.015	<.006	<.006	<.008	<.022	<.10	<.011	<.05	<.008	<.01	<.005
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.006	<.03	<.015	<.006	<.006	<.008	<.022	<.10	<.011	<.05	<.008	E.01	<.005
26...	<.006	<.03	.065	.177	<.006	<.008	.101	<.10	.508	<.05	<.008	.08	<.005
SEP													
06...	<.006	<.03	<.015	<.006	<.006	<.008	<.022	<.10	<.011	--	<.008	<.01	<.005
20...	<.006	<.03	<.015	<.006	<.006	<.008	<.022	<.10	<.011	--	--	<.01	<.005

TERBUFOS DEGRADATE DEVELOPMENT WATER QUALITY—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	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)
05062000 BUFFALO RIVER NEAR DILWORTH, MN (LAT 46 57 40N LONG 096 39 40W)								
JUN 2005								
08...	<.004	<.005	<.02	<.07	<.02	<.01	E.005	<.01
21...	<.004	<.005	<.02	<.07	<.02	<.01	E.005	<.01
28...	<.004	<.005	<.02	<.07	<.02	<.01	<.009	<.01
JUL								
26...	<.004	<.005	<.02	<.07	<.02	<.01	<.009	<.01
AUG								
08...	<.004	<.005	<.02	<.07	<.02	<.01	<.009	<.01
08...	<.004	<.005	<.02	<.07	<.02	<.01	<.009	<.01
19...	<.004	<.005	<.02	<.07	<.02	<.01	E.004	<.01
SEP								
07...	<.004	<.005	<.02	<.07	<.02	<.01	<.009	<.01
19...	<.004	<.005	<.02	<.07	<.02	<.01	<.009	<.01
05086000 SNAKE RIVER AT ALVARADO, MN (LAT 48 11 50N LONG 097 00 20W)								
JUN 2005								
07...	<.004	<.005	<.02	<.07	<.02	<.01	E.006	<.01
21...	<.004	<.005	<.02	<.07	<.02	<.01	E.006	<.01
21...	<.004	<.005	<.02	<.07	<.02	<.01	<.009	<.01
28...	<.004	<.005	<.02	<.07	<.02	<.01	<.009	<.01
JUL								
26...	<.004	<.005	<.02	<.07	<.02	<.01	<.009	<.01
AUG								
09...	<.004	<.005	<.02	<.07	<.02	<.01	<.009	<.01
18...	--	--	--	--	--	--	--	--
26...	<.004	<.005	<.02	<.07	<.02	<.01	<.009	<.01
26...	.078	.075	.09	<.07	.31	<.01	.085	<.01
SEP								
06...	<.004	<.005	<.02	<.07	<.02	<.01	<.009	<.01
20...	<.004	<.005	<.02	<.07	<.02	<.01	<.009	<.01

QUALITY of WATER at Sites in Main Channel of Pool 5 of the Mississippi River near Buffalo, WI

SUSPENDED-SEDIMENT AND BOTTOM MATERIAL DATA

REMARKS.-- Suspended-sediment and bottom material samples were collected at five verticals or points in a river cross-section. Results listed are aggregates of discrete results for each vertical.

05375700 - MISSISSIPPI RIVER AT MILE 746 NEAR BUFFALO, WI

SUSPENDED-SEDIMENT CONCENTRATIONS and

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, JUNE - JULY, 2005

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT SUS-SPENDED MG/L (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .063 MM (70331)	SED SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .212 MM (69327)	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM (70335)	SED. SUSP. SIEVE DIAM. % FINER THAN .750 MM (69322)
JUN 01	1100	28,300	9.6	98	99	100	--	--
JUN 09	1040	29,600	460	99	100	--	--	--
JUL 06	1205	26,000	12	92	93	94	100	--
JUL 13	1130	21,600	9.3	98	99	99	100	--

PARTICLE-SIZE DISTRIBUTION OF BED-MATERIAL SEDIMENT, JUNE - JULY, 2005

DATE	TIME	BED MAT. SIEVE DIAM. % FINER THAN .063 MM (80164)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM (80165)	BED MAT. SIEVE DIAM. % FINER THAN .212 MM (69072)	BED MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)	BED MAT. SIEVE DIAM. % FINER THAN 1.18 MM (69067)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)
JUN 01	1100	0.0	0.1	1.1	48	90	96
JUN 09	1040	0.0	0.1	1.0	55	97	100
JUL 06	1205	0.0	0.6	4.3	62	95	100
JUN 13	1130	0.0	0.1	1.0	41	89	100

QUALITY of WATER at Sites in Main Channel of Pool 5 of the Mississippi River near Buffalo, WI--Continued

SUSPENDED-SEDIMENT AND BOTTOM MATERIAL DATA

05375850 - MISSISSIPPI RIVER AT MILE 744.8 NEAR BUFFALO, WI

SUSPENDED-SEDIMENT CONCENTRATIONS and

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, JUNE - JULY, 2005

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT SUS-SPENDED MG/L (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .063 MM (70331)	SED SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .212 MM (69327)	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM (70335)	SED. SUSP. SIEVE DIAM. % FINER THAN .750 MM (69322)
JUN 01	1310	20,400	9.6	97	98	99	100	--
JUN 09	1230	21,300	445	99	100	--	--	--
JUL 06	1015	20,600	15	84	85	87	92	100
JUL 13	1415	17,600	8.9	98	98	99	100	--

PARTICLE-SIZE DISTRIBUTION OF BED-MATERIAL SEDIMENT, JUNE - JULY, 2005

DATE	TIME	BED MAT. SIEVE DIAM. % FINER THAN .063 MM (80164)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM (80165)	BED MAT. SIEVE DIAM. % FINER THAN .212 MM (69072)	BED MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)	BED MAT. SIEVE DIAM. % FINER THAN 1.18 MM (69067)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)
JUN 01	1310	0.0	0.2	5.1	69	98	100
JUN 09	1230	0.0	0.2	3.6	63	98	100
JUL 06	1015	0.0	0.2	3.7	66	98	100
JUN 13	1415	0.0	0.0	2.0	59	97	100

Ground-Water Wells by County

———————

Ground-Water Levels

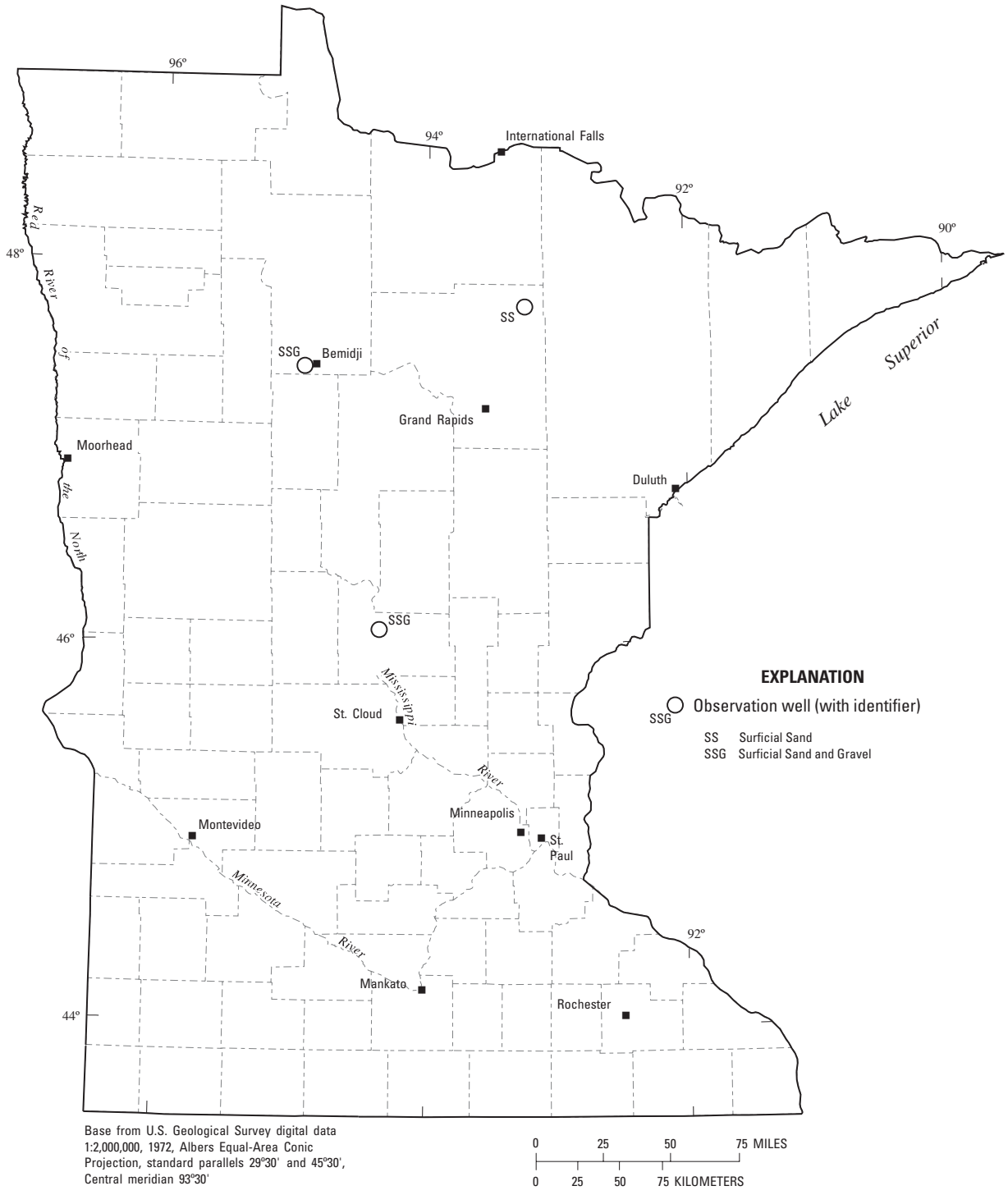


Figure 8. Location of ground-water wells.

BELTRAMI COUNTY

473423095053301. Local number, 147N35W02CDCBDD.

LOCATION.-- Lat 47°34'23", long 95°05'33", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.2, T.147 N., R.35 W., Hydrologic Unit 07010101, northwest of Bemidji.

Owner: U.S. Geological Survey

AQUIFER.-- Surficial outwash sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.-- Drilled water-table observation well, diameter 2 in., depth 35 ft., screened 30 to 33 ft.

INSTRUMENTATION.-- Monthly measurements by USGS; continuous recordings with a data logger.

DATUM.-- Land-surface datum is 1,420.49 ft. above sea level. Measuring point: floor of shelter, 2.70 ft. above land-surface datum.

REMARKS.-- Well number 310D, at crude-oil spill research site near Bemidji.

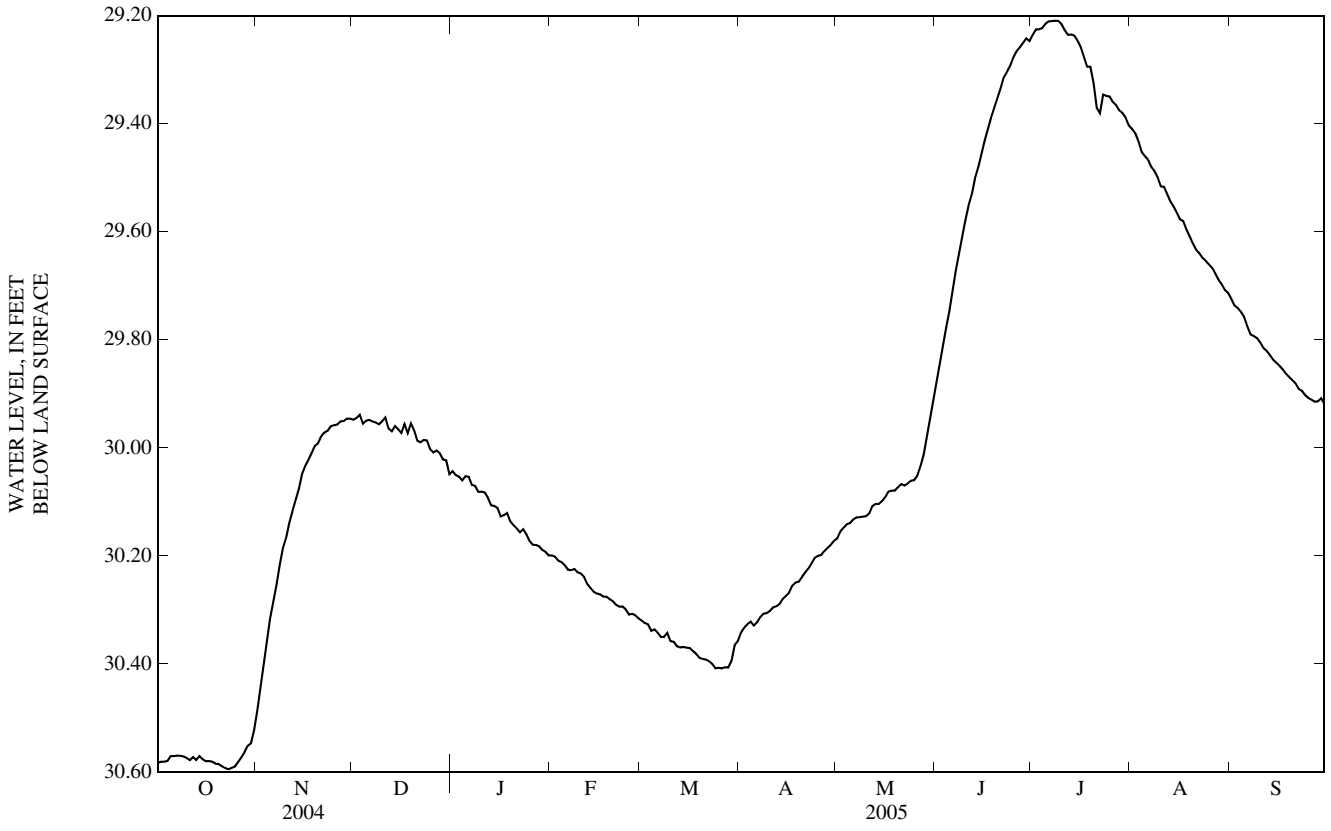
PERIOD OF RECORD.-- Apr. 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.-- Highest water level observed, 27.59 ft. below land-surface datum Jun. 21, 2001; lowest observed, 30.69 ft. below land-surface datum, Feb. 27, 1997, Sep. 13, 14, 2004.

EXTREMES FOR CURRENT WATER YEAR.-- Highest water level recorded, 29.20 ft. below land-surface datum, July 7; lowest recorded, 30.60 ft. below land-surface datum, Oct. 21.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	30.57	30.32	29.95	30.05	30.22	30.34	30.33	30.14	29.75	29.21	29.46	29.76
10	30.57	30.17	29.95	30.08	30.23	30.36	30.30	30.13	29.58	29.22	29.52	29.80
15	30.58	30.05	29.97	30.11	30.27	30.37	30.27	30.10	29.46	29.25	29.56	29.84
20	30.59	29.99	29.97	30.14	30.28	30.39	30.24	30.07	29.35	29.32	29.62	29.87
25	30.59	29.96	30.00	30.17	30.31	30.41	30.20	30.06	29.28	29.35	29.66	29.91
EOM	30.52	29.95	30.05	30.20	30.32	30.36	30.17	29.92	29.25	29.40	29.71	29.92
MAX	30.60	30.49	30.05	30.20	30.32	30.41	30.34	30.17	29.88	29.40	29.71	29.92



MORRISON COUNTY

460444094212501. Local number, 130N29W08DCC01.

LOCATION.-- Lat 46°04'44", long 94°21'25", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.8, T.130 N., R.29 W., Hydrologic Unit 07010104, at Camp Ripley.

Owner: Minnesota Army National Guard, Camp Ripley.

AQUIFER.-- Surficial outwash sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.-- Drilled water-table observation well, diameter 2 in., depth 59 ft., screened 56 to 59 ft.

INSTRUMENTATION.-- Measurements approximately monthly by USGS personnel. Continuous recordings with a datalogger, Dec. 12, 2003 to Sep. 28, 2005, recorder removed.

DATUM.-- Land-surface datum is 1,149.0 ft. above sea level. Measuring point: Top of casing, 2.10 ft above land-surface datum.

REMARKS.-- Water level affected by pumping.

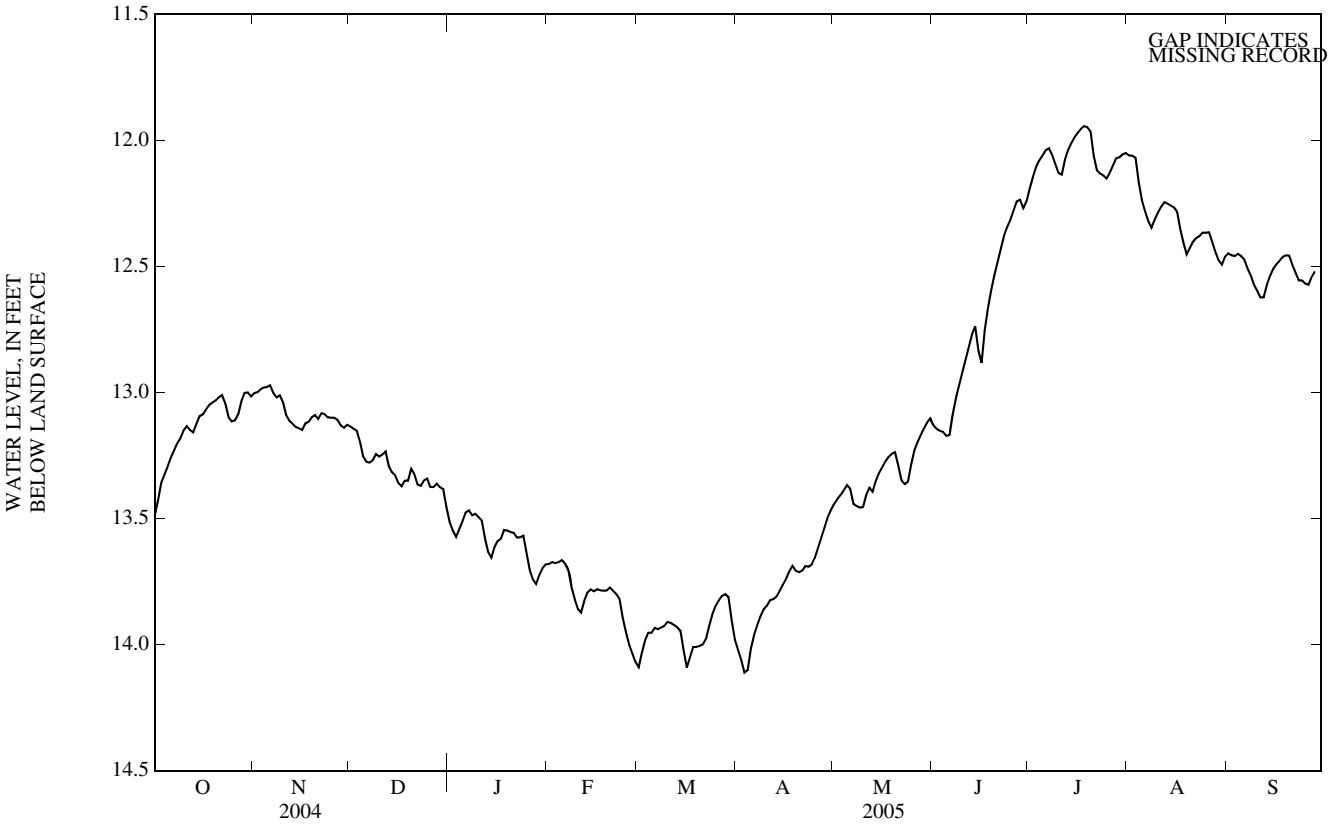
PERIOD OF RECORD.-- Apr. 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.-- Highest water level observed, 7.35 ft. below land-surface datum, July 28, 1972; lowest observed, 19.75 ft. below land-surface datum, Aug. 4, 1961.

EXTREMES FOR CURRENT WATER YEAR.-- Highest water level, 11.94 ft. below land-surface datum, July 18; lowest, 14.12 ft. below land-surface datum, Apr. 3.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.29	12.98	13.25	13.51	13.66	13.95	14.02	13.37	13.17	12.06	12.24	12.46
10	13.15	13.04	13.25	13.49	13.86	13.91	13.85	13.45	12.92	12.13	12.29	12.60
15	13.09	13.14	13.33	13.61	13.79	14.02	13.76	13.32	12.83	11.99	12.27	12.51
20	13.03	13.09	13.30	13.55	13.77	14.01	13.71	13.24	12.53	11.96	12.43	12.46
25	13.12	13.10	13.34	13.64	13.95	13.85	13.65	13.28	12.32	12.15	12.37	12.57
EOM	13.02	13.13	13.45	13.68	14.07	13.98	13.47	13.10	12.24	12.05	12.46	---
MAX	13.48	13.15	13.45	13.76	14.07	14.09	14.11	13.46	13.17	12.19	12.49	---



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Conversion Factors

Multiply	By	To obtain
	Length	
inch (in.)	2.54×10^{1}	millimeter (mm)
	2.54×10^{-2}	meter (m)
foot (ft)	3.048×10^{-1}	meter (m)
mile (mi)	1.609×10^{0}	kilometer (km)
	Area	
acre	4.047×10^{3}	square meter (m^2)
	4.047×10^{-1}	square hectometer (hm^2)
	4.047×10^{-3}	square kilometer (km^2)
square mile (mi^2)	2.590×10^{0}	square kilometer (km^2)
	Volume	
gallon (gal)	3.785×10^{0}	liter (L)
	3.785×10^{-3}	cubic meter (m^3)
	3.785×10^{0}	cubic decimeter (dm^3)
million gallons (Mgal)	3.785×10^{3}	cubic meter (m^3)
	3.785×10^{-3}	cubic hectometer (hm^3)
cubic foot (ft^3)	2.832×10^{-2}	cubic meter (m^3)
	2.832×10^{1}	cubic decimeter (dm^3)
cubic-foot-per-second day [(ft^3/s) d]	2.447×10^{3}	cubic meter (m^3)
	2.447×10^{-3}	cubic hectometer (hm^3)
acre-foot (acre-ft)	1.233×10^{3}	cubic meter (m^3)
	1.233×10^{-3}	cubic hectometer (hm^3)
	1.233×10^{-6}	cubic kilometer (km^3)
	Flow	
cubic foot per second (ft^3/s)	2.832×10^{1}	liter per second (L/s)
	2.832×10^{-2}	cubic meter per second (m^3/s)
	2.832×10^{1}	cubic decimeter per second (dm^3/s)
gallon per minute (gal/min)	6.309×10^{-2}	liter per second (L/s)
	6.309×10^{-5}	cubic meter per second (m^3/s)
	6.309×10^{-2}	cubic decimeter per second (dm^3/s)
million gallons per day (Mgal/d)	4.381×10^{-2}	cubic meter per second (m^3/s)
	4.381×10^{1}	cubic decimeter per second (dm^3/s)
	Mass	
ton (short)	9.072×10^{-1}	megagram (Mg) or metric ton

Temperature in degrees Celsius (°C) may be converted to degrees Fahrenheit (°F) as follows:

°F = (1.8 x °C) + 32