

Prepared in cooperation with the State of Ohio and other agencies

Water Resources Data Ohio Water Year 2004

Volume 1
Ohio River Basin Excluding Project Data



Water-Data Report OH-04-1

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



Calendar for Water Year 2004

2003

October							November							December						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
			1	2	3	4							1		1	2	3	4	5	6
5	6	7	8	9	10	11	2	3	4	5	6	7	8	7	8	9	10	11	12	13
12	13	14	15	16	17	18	9	10	11	12	13	14	15	14	15	16	17	18	19	20
19	20	21	22	23	24	25	16	17	18	19	20	21	22	21	22	23	24	25	26	27
26	27	28	29	30			23	24	25	26	27	28	29	28	29	30	31			
							30													

2004

January							February							March						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3	1	2	3	4	5	6	7		1	2	3	4	5	6
4	5	6	7	8	9	10	8	9	10	11	12	13	14	7	8	9	10	11	12	13
11	12	13	14	15	16	17	15	16	17	18	19	20	21	14	15	16	17	18	19	20
18	19	20	21	22	23	24	22	23	24	25	26	27	28	21	22	23	24	25	26	27
25	26	27	28	29	30	31	29							28	29	30	31			

April							May							June						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3							1			1	2	3	4	5
4	5	6	7	8	9	10	2	3	4	5	6	7	8	6	7	8	9	10	11	12
11	12	13	14	15	16	17	9	10	11	12	13	14	15	13	14	15	16	17	18	19
18	19	20	21	22	23	24	16	17	18	19	20	21	22	20	21	22	23	24	25	26
25	26	27	28	29	30		23	24	25	26	27	28	29	27	28	29	30			
							30	31												

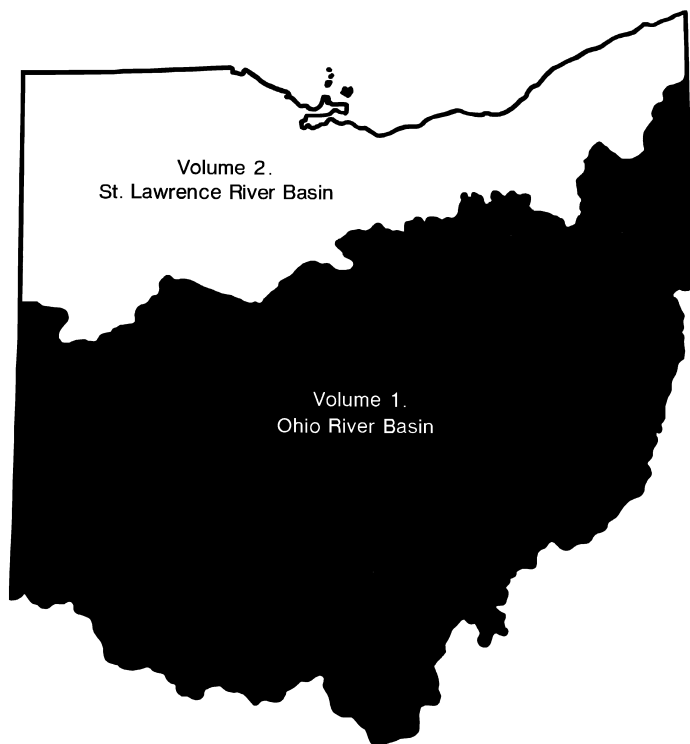
July							August							September						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3	1	2	3	4	5	6	7				1	2	3	4
4	5	6	7	8	9	10	8	9	10	11	12	13	14	5	6	7	8	9	10	11
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25	26	27	28	29	30	31	29	30	31					26	27	28	29	30		

Water Resources Data Ohio Water Year 2004

Volume 1. Ohio River Basin Excluding Project Data

By H.L. Shindel, J.P. Mangus, and S.R. Frum

Water-Data Report OH-04-1



Prepared in cooperation with the
State of Ohio and with other agencies

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



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via the World Wide Web at <http://www.usgs.gov/>

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Preface

This volume of the annual hydrologic data report of Ohio is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and Trust Territories. These records of streamflow, ground-water levels, and quality of water 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 Ohio are contained in two volumes:

Volume 1. Ohio Rier Basin Excluding Project Data

Volume 2. St. Lawrence River Basin and Statewide Project Data

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. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data

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[Letters after station names designate type of data: (c) chemical, (d) discharge, (e) contents and (or) elevation, (M) water-quality monitor, (HBM hydrologic bench mark, (S) daily suspended-sediment data]

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South of Circleville (I)	393327082571600	PK-7.....	309
South of Circleville (I)	393402082572500	PK-4.....	310
Circleville (I)	393637082572200	PK-6A.....	311
North of Ashville (I).....	394503082583800	PK-10.....	312
North of Ashville (I).....	394503082583801	PK-11.....	313
Orient (I).....	394742083094800	PK-9.....	314
PIKE COUNTY			315
West of Piketon (I)	390359083015100	PI-2.....	315
PORTAGE COUNTY			316
Windham (I).....	411401081025000	PO-1	316
PREBLE COUNTY			317
East of Eaton (I)	394438084335900	PR-2.....	317
RICHLAND COUNTY			318
Mansfield (I).....	404625082305100	R-4	318
Shiloh (I).....	405753082360800	R-3	319

	Well number	Local number	Page
ROSS COUNTY			320
West of Bainbridge (I)	391341083172200	RO-7	320
Southwest of Bournesville (I)	391544083095700	RO-6	321
SHELBY COUNTY			322
Sidney (I)	401707084103100	SH-5	322
STARK COUNTY			323
Canton (I)	404939081203800	ST-5A	323
North Canton (I)	405211081253500	ST-27	324
TUSCARAWAS COUNTY			325
Dover (I)	403207081293800	TU-3	325
Strasburg (I)	403557081313600	TU-4	326
North of Strasburg (I)	403653081321800	TU-1	327
Strasburg (I)	403823081324200	TU-5	328
UNION COUNTY			329
Southeast of Raymond (I)	401826083255200	U-4	329
East of East Liberty (I)	402010083321900	U-5	330
VINTON COUNTY			331
McArthur (I)	391452082282900	V-1	331
North of McArthur (I)	392016082272400	V-100	332
WARREN COUNTY			333
Kings Mill (I)	392119084142000	W-6	333
Lebanon (I)	392517084181700	W-7	334
Lebanon (I)	392517084181701	W-8	335
East of Monroe (I)	392712084191700	W-5	336
WASHINGTON COUNTY			337
North of Marietta (I)	392553081281600	WA-2	337
WAYNE COUNTY			338
Wooster (I)	404655081553100	WN-8	338
Wooster (I)	404802081583100	WN-2A	339
Sterling (I)	405745081510200	WN-7	340
Rittman (I)	405805081462300	WN-6	341

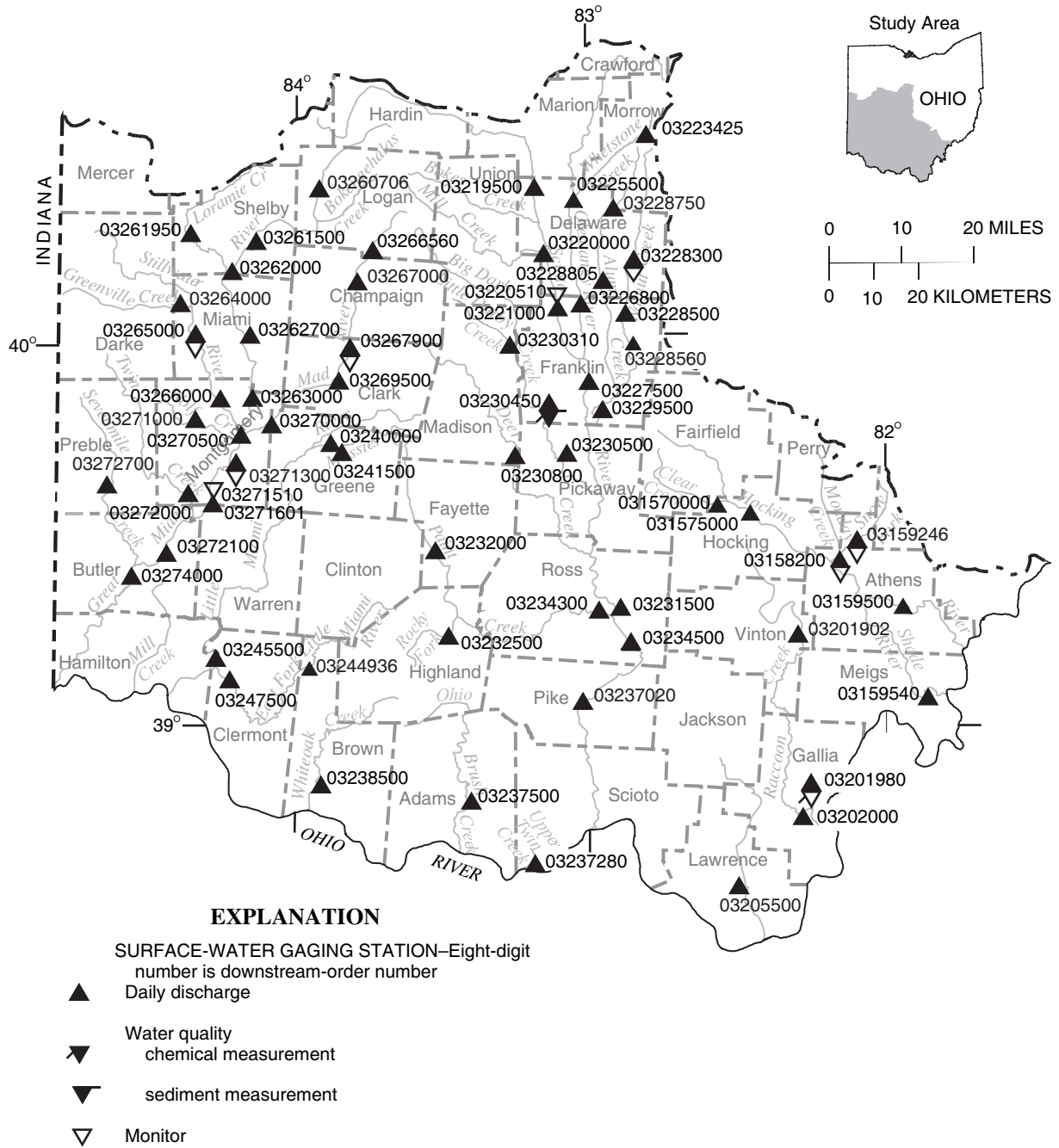


Figure 1a. Location of data-collection stations.

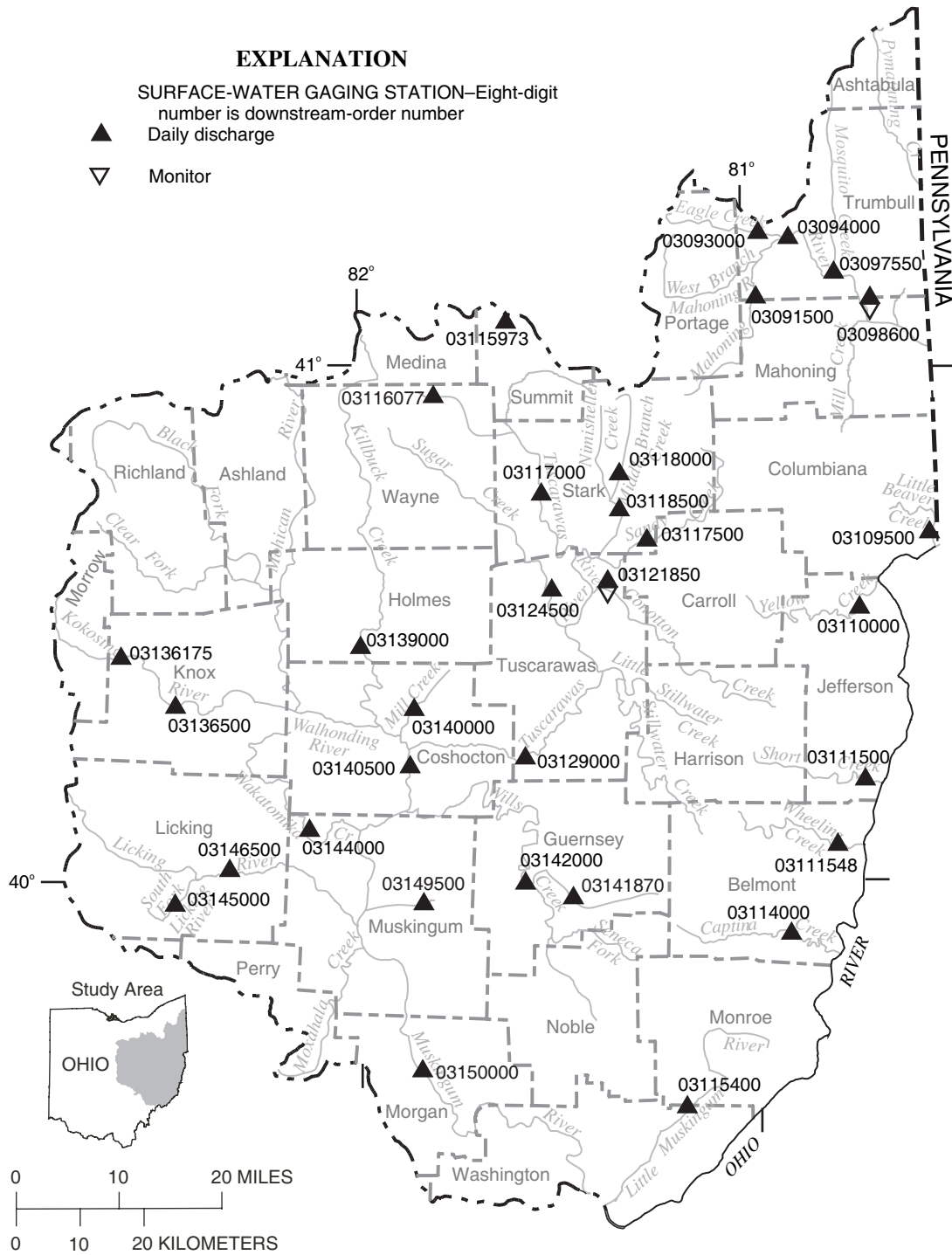


Figure 1b. Location of data-collection stations.

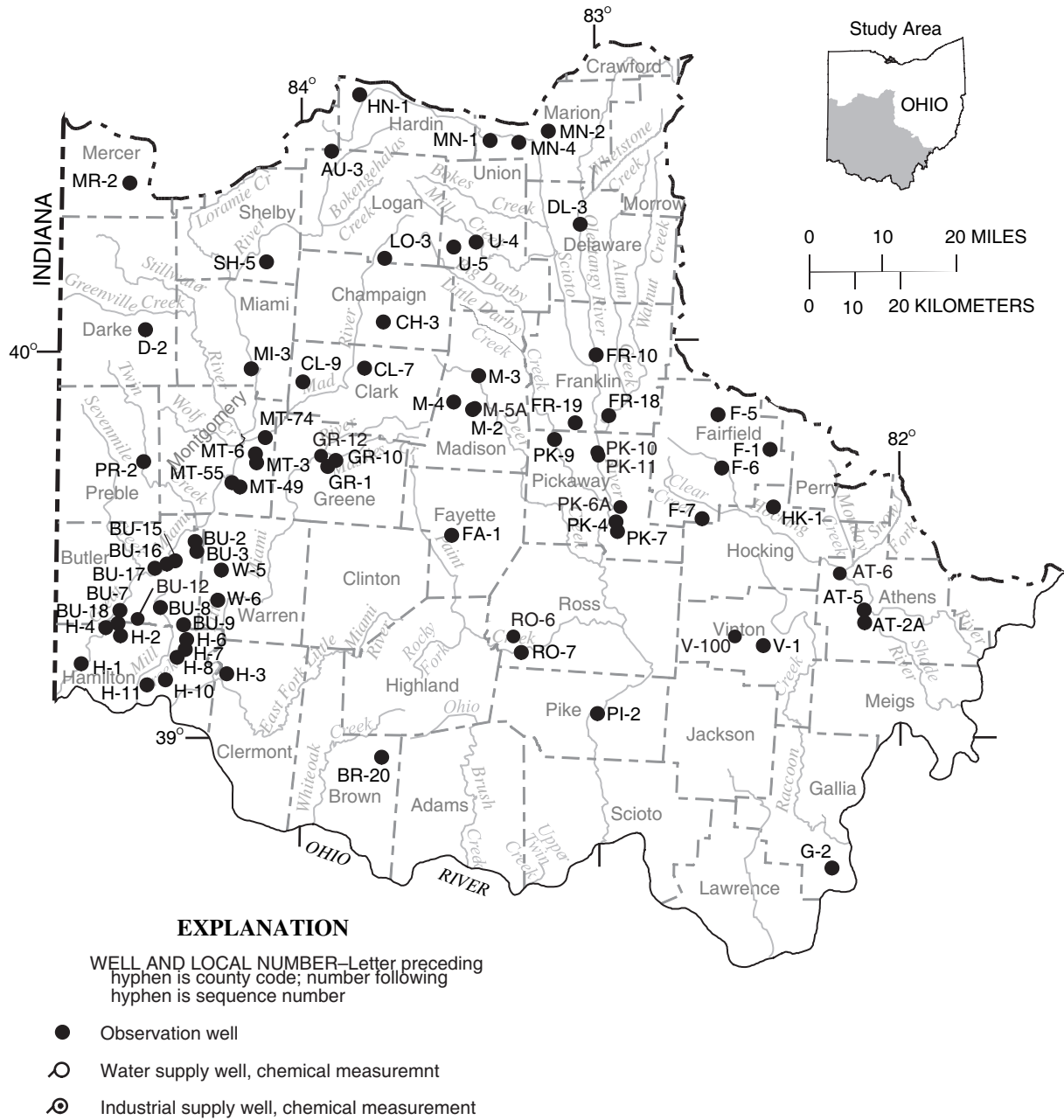


Figure 1c. Location of data-collection wells.

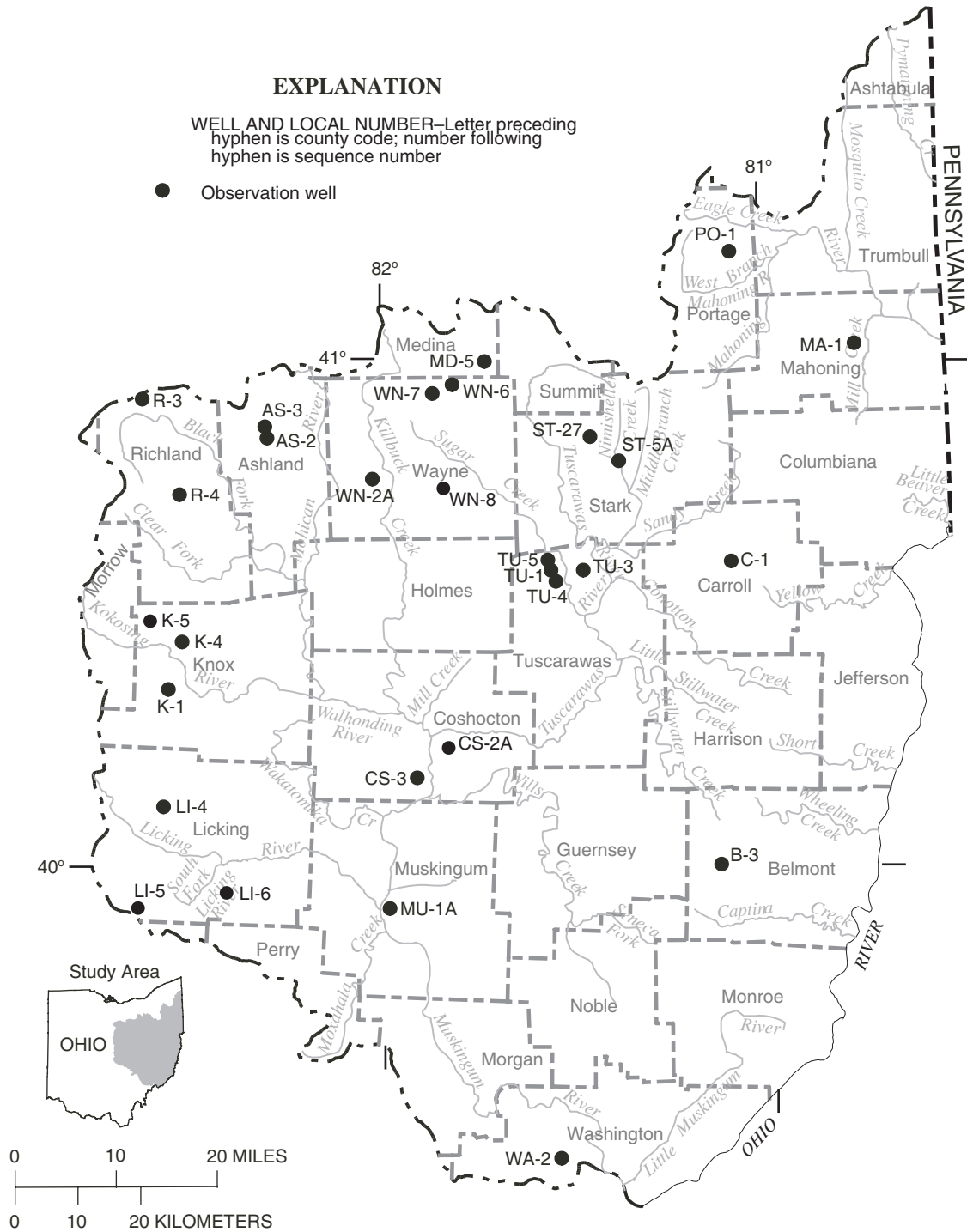


Figure 1d. Location of data-collection wells.

Discontinued Surface-Water-Discharge Stations

The following continuous-record surface-water-discharge or stage-only stations (gaging stations) have been discontinued. Daily discharge 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 have not been included. Information regarding these stations may be obtained from the USGS Ohio Water Science Center at the address given on the back side of the title page of this report.

Station name	Station number	Drainage area (in square miles)	Period of record
Mahoning River at Alliance	03086500*	89.2	1941–93
Beech Creek near Bolton	03087000	17.4	1944–51
Deer Creek at Limaville	03088000	33.2	1942–51
Mahoning River near Deerfield	03088500	175	1924–31
Willow Creek near Deerfield	03089000	11.6	1941–43
Mill Creek near Berlin Center	03089500	19.1	1942–72
Mahoning River below Berlin Dam near Berlin Center	03090500	48	1931–91
Kale Creek near Pricetown	03092000	21.9	1941–93
West Branch Mahoning River near Ravenna	03092090*	21.8	1966–93
West Branch Mahoning River below MJ Kerwin Dam at Wayland	03092460	81.7	1969–91
West Branch Mahoning River near Newton Falls	03092500	96.3	1927–82
Duck Creek at Leavittsburg	03093500	32.3	1941–48
Mahoning River at Warren	03094500	594	1925–35
Mosquito Creek below Mosquito Creek Dam near Cortland	03095500	97.5	1926–29 1943–91
Mosquito Creek at Niles	03096000	138	1929–51
Meander Creek at Ohlestown	03096500	78.4	1926–29
Meander Creek at Mineral Ridge	03097500	84.3	1929–51
Mahoning River at Youngstown	03098000	898	1922–82
Mill Creek at Youngstown	03098500	66.3	1944–71 1999–2000
Mahoning River at Lowellville	03099500	1073	1944–72 1974–1991 1999–2000
Pymatuning Creek at Kinsman	03102950*	96.7	1966–94
Lisbon Creek at Lisbon	03109000	6.19	1947–62
Stateline Creek near Negley	03109320	3.09	1977–79
Yellow Creek at Hammondsville	03110500	164	1915–35
Consol Run near Bloomingdale	03110983	.98	1979–81
Captina Creek at Armstrongs Mill	03114000	134	1986–35 1958–2003
Little Muskingum River at Fay	03115500	258	1915–18 1926–35
Montrose Run at Montrose	03115969	0.263	1993–98
Schocalog Run at Montrose	03115970	1.59	1994–98
Schocalog Run at Fairlawn	03115971	2.13	1992–98

Station name	Station number	Drainage area (in square miles)	Period of record
Tuscarawas River at Clinton	03116000	174	1926–79
Chippewa Creek at Easton	03116200	146	1961–82
Tuscarawas River at Crystal Springs	03116500	435	1922–29
Sandy Creek at Sandyville	03119000	481	1924–47
McGuire Creek below Leesville Dam near Leesville	03120500*	48.3	1939–91 1992
Indian Fork below Atwood Dam near New Cumberland	03121500	70	1961–75
Tuscarawas River below Dover Dam near Dover	03122500*	1,045	1924–91
Sugar Creek above Beach City Dam at Beach City	03123000	160	1945–75
Sugar Creek below Beach City Dam near Beach City	03124000	300	1939–91
Home Creek near New Philadelphia	03125000	1.64	1937–80
Stillwater Creek at Piedmont	03126000*	122	1939–91
Stillwater Creek at Tippecanoe	03127000*	282	1939–91
Stillwater Creek at Urichsville	03127500	367	1922–91
Clear Fork Tributary near Hanover	03127970	.68	1978–81
Little Stillwater Creek below Tappan Dam at Tappan	03128500	71.1	1939–91
Black Fork below Charles Mills Dam near Mifflin	03130000	217	1939–91
Touby Run at Mansfield	03130500	5.44	1947–78
Rocky Fork near Mansfield	03131000	39	1925–32
Black Fork at Loudonville	03131500*	349	1931–91
Clear Fork at Butler	03132000	136	1945–75
Clear Fork at Newville	03132500	174	1935–39
Clear Fork below Pleasant Hill Dam near Perrysville	03133500*	198	1939–91
Jerome Fork at Jeromeville	03134000	120	1926–49
Lake Fork below Mohicanville Dam	03135000*	271	1939–93
Lake Fork near Loudonville	03135500	344	1931–32 1935–39
Mohican River at Greer	03136000	948	1922–82
North Branch Kokosing River near Federicktown	03136400	45.5	1973–78
Kokosing River at Millwood	03137000	455	1922–74
Walhonding River below Mohawk Dam at Nellie	03138500	1,505	1922–91
Killbuck Creek at Layland	03139500	503	1924–30
Seneca Fork below Senecaville Dam near Senecaville	03141500*	118	1938–91
Salt Fork near Cambridge	03142200	55.6	1956–68
Salt Fork below Salt Fork Dam near Cambridge	03142295	159	1971–79
Wills Creek at Birds Run	03142500	730	1928–39
Wills Creek below Wills Creek Dam at Wills Creek	03143500	842	1939–91
Sand Fork near Wakatomika	03144400	1.34	1978–83
Opossum Run Tributary near Wakatomika	03144450	1.27	1978–83
Muskingum River at Dresden	03144500	5,993	1922–85
Raccoon Creek at Granville	03145500	82.7	1940–48
North Fork Licking River at Utica	03146000	116	1940–48 1970–83
Licking River at Toboso	03147000	672	1903–06 1922–61

Station name	Station number	Drainage area (in square miles)	Period of record
Licking River below Dillon Dam near Dillon Falls	03147500*	742	1940–92
Meigs Creek near Beverly	03150250	136	1972–75
Muskingum River at Beverly	03150300	7,627	1993–99
Hunters Run at Lancaster	03156000	10.0	1956–80
Hocking River at Lancaster	03156400	48.2	1956–75
Hocking River near Lancaster	03156500	90.3	1924–32
Clear Fork near Logan	03158000	14.8	1942–47
Snow Fork Monday Creek at Buchtel	03158195	24.4	1981 1997–2002
Sunday Creek at Glouster	03159000	104	1952–81
Hocking River below Athens	03159510	957	1977–93
East Branch Shade River near Tupper Plains	03159555	37.5	1980–82 1983–85
Sandy Run above Big Four Hollow Creek near Lake Hope	03201600	.98	1971–82
Big Four Hollow Creek below East Fork near Lake Hope	03201660	.73	1979–81
Big Four Hollow Creek near Lake Hope	03201700	1.01	1971–83
Hull Hollow Creek near Lake Hope	03201720	.22	1979–81
Sandy Run near Lake Hope	03201800	4.99	1958–79
Zinns Run near Radcliff	03201929	3.41	1988–91
Strongs Run near Ewington	03201947	15.8	1988–91
Symmec Creek at Getaway	03205500	335	1938–47
Scioto River at LaRue	03217500	257	1927–35 1939–51
Little Scioto River above Marion	03218000	72.4	1939–72
Little Scioto River at Sewage Treatment Plant near Marion	03218500	85.8	1925–36 1938–39
Little Scioto River near Marion	03219000	93.3	1924–25 1939
Bokes Creek near Warrenburg	03219590	83.2	1982–97
Eagon Run near Warrenburg	03219600	.123	1950–62
Olentangy River near New Winchester	03222500	49.4	1947–49
Olentangy River at Clairdon	03223000	157	1947–98
Whetstone Creek near Shawtown	03223500	61.8	1947–55
Shaw Creek at Shawtown	03224000	25.4	1947–55
Whetstone Creek near Ashley	03224500	98.7	1955–74
Olentangy River at Delaware	03226000	421	1922–24
Olentangy River at Stratford	03226500	445	1934–36 1938–58
Rush Run at Worthington	03226865	1.65	1979–82
Linworth Road Creek at Columbus	03226870	2.03	1979–82
Bethel Road Creek at Columbus	03226875	.22	1979–82
Olentangy River at Henderson Road at Columbus	03226885	518	1978–82
Scioto Big Run at Briggsdale	03228000	11.0	1947–58
Alum Creek at Columbus	03229000	189	1923–35 1938–98
Scioto River near Circleville	03230000	2,638	1939–56

Station name	Station number	Drainage area (in square miles)	Period of record
Scioto River at Circleville	03230700*	3,217	1974–79 1990
Deer Creek at Pancoastburg	03230900*	277	1964–98
Deer Creek at Williamsport	03231000	333	1927–35 1939–56 1962–92
Rattlesnake Creek at Centerfield	03232300	209	1971–82
Paint Creek below Paint Creek Dam near Bainbridge	03232470	570	1968–92
Paint Creek at Bourneville	03234000*	807	1921–37 1938–98
Salt Creek at Tarlton	03235000	11.5	1947–61
Tar Hollow Creek at Tar Hollow State Park	03235500	1.35	1947–79
Salt Creek near Londonderry	03236000	286	1939–50
Little Salt Creek near Jackson	03236500	76.1	1925–32
Little Miami River near Selma	03239000	48.9	1952–58
North Fork Little Miami River near Pitchin	03239500	28.9	1951–58
North Fork Massies Creek at Cedarville	03240500	28.9	1954–68
South Fork Massies Creek at Cedarville	03241000	17.1	1954–68
Little Miami River at Spring Valley	03242000	360	1926–35 1940–51
Little Miami River near Spring Valley	03242050	366	1968–85
Caesar Creek near Xenia	03242150	71.4	1900 1968–84
Anderson Fork near New Burlington	03242200	77.8	1968–84
Caesar Creek at Harveysburg	03242300	209	1961–75
Caesar Creek near Wellman	03242350	239	1965–74
Little Miami River near Fort Ancient	03242500	680	1940–51
Todd Fork near Wilmington	03243000	22.2	1923 1943–44
Cowan Creek near Wilmington	03243500	32.0	1943–50
Todd Fork near Roachester	03244000	219	1952–75
East Fork Little Miami River near Dodsonville	03246000	91.4	1947–48
East Fork Little Miami River near Marathon	03246200	195	1968–84
East Fork Little Miami River near Williamsburg	03246500	237	1949–53 1961–74 1999–2000
East Fork Little Miami River near Bantam	03247000	330	1949–53
East Fork Little Miami River near Batavia	03247050	352	1965–94
Shayler Run near Perintown	03247400	11.8	1968–73
Little Miami River at Plainville	03248000	1,713	1965–71
Mill Creek at Reading	03255500	73.0	1939–91
West Fork Mill Creek at Mount Healthy	03256000	7.90	1949–53
West Fork Mill Creek near Greenhills	03257000	29.9	1945–53
West Fork Mill Creek at Woodlawn	03257500	32.2	1953–86
West Fork Mill Creek at Lockland	03258000	35.6	1939–57
Mill Creek at Carthage	03259000*	115	1946–2002

Station name	Station number	Drainage area (in square miles)	Period of record
Mill Creek at Mitchell Avenue at Cincinnati	03259500	135	1941–44 1990
Stony Creek near DeGraff	03260800	59.1	1958–76
Bokengehalas Creek near DeGraff	03260700	36.3	1957–92
Great Miami River at Quincy	03261000	405	1947–49
Great Miami River at Piqua	03262500	866	1915–17
Greenville Creek near Greenville	03263500	142	1930–31
Mad River at Zanesfield	03266500	7.31	1947–78
Mad River at Tremont City	03267500	264	1931–33 1966–75
Chapman Creek at Tremont City	03267600	24.0	1968–69
Moore Run near Eagle City	03267700	18.2	1966–72
Buck Creek near New Moorefield	03267950	30.5	1967–77
East Fork Buck Creek near New Moorefield	03267960	28.7	1967–77
Buck Creek at New Moorefield	03268000	65.3	1943–58
Beaver Creek near Springfield	03268500	39.2	1943–58 1973–76
Buck Creek at Springfield	03269000	139	1915–21 1925–49 1973–74
Wolf Creek at Trotwood	03270800	22.7	1963–86
Great Miami River at Miamisburg	03271500*	2,711	1916–20 1924–35 1952–95
Twin Creek near Ingomar	03271800	197	1962–99
Sevenmile Creek at Collinsville	03272800	120	1960–72
Sevenmile Creek at Sevenmile	03273000	135	1915–20
Fourmile Creek near Hamilton	03273500	307	1938–60
Great Miami River at Venice	03274500	3,789	1915–27 1932–33

Discontinued Surface-Water-Quality Stations

The following continuous-record surface-water-quality stations have been discontinued. Daily records of temperature, specific conductance, pH, dissolved oxygen, or sediment were collected and published for the period of record, expressed in water years, shown for each station. Discontinued project stations with less than 3 years of record have not been included. Information regarding these stations may be obtained from the USGS Ohio Water Science Center at the address given on the back side of the title page of this report.

[Letters designate type of record: do, dissolved oxygen; pH, pH; s, sediment; sc, specific conductance; t, temperature]

Station name	Station number	Drainage area (in square miles)	Type of record	Period of record
Beech Creek near Bolton	03087000	17.4	t	1943–51
Mahoning River above Duck Creek at Leavittsburg	03093800	542	do, pH, sc, t	1968–81
Mahoning River at Warren	03094500	594	t	1924–35
Mahoning River at Lowellville	03099500	1,073	t	1953–61
			do, pH, sc, t	1963–67
Mahoning River at Ohio–Pennsylvania State Line	03099510	1,075	do, pH, sc, t	1967–91
Ohio River at Stratton	03110700	23,500	t	1961
			sc	1964–70
Consol Run near Bloomingdale	03110983	.98	s	1979–81
Tuscarawas River at Navarre	03117100	534	do, pH, sc, t	1968–84
			do, pH, sc, t	1987–91
Black Fork at Londonville	03131500	349	do, pH, sc, t	1968–76
Sand Fork near Wakatomika	03144400	1.34	s	1978–81
North Fork Licking River at Utica	03146000	116	t	1970–73
Licking River near Newark	03146500	537	t	1962–68
			do, pH, sc, t	1968–80
Muskingum River at Philo	03149200	7,196	do, pH, sc, t	1965–74
Muskingum River near Beverly	03150300	7,626	t	1963–70
			sc	1964–70
North Branch Hunters Run near Hooker	03155900	104	s	1956–62
Hocking River at Athens	03159500	943	t	1954–64
			s	1956–65
			sc	1964–65
Hocking River below Athens	03159510	957	do, sc, t	1966–80
			pH	1972–80
Sandy Run above Big Four Hollow Creek near Lake Hope	03201600	98	pH, sc, t	1971–78
Big Four Hollow Creek near Lake Hope	03201700	1.01	pH, sc, t	1971–83
			s	1978–83
Sandy Run near Lake Hope	03201800	4.99	do, sc, t.	1970–78
Raccoon Creek at Adamsville	03202000	585	do, pH, sc, t	1967–84
			s	1969–74
			s	1985
Whetstone Creek near Ashley	03224500	98.7	sc	1964–68
Olentangy River near Worthington	03226800	497	t	1955–68
			s	1978–81
Rush Run at Worthington	03226865	1.65	s	1978–81

[Letters designate type of record: do, dissolved oxygen; pH, pH; s, sediment; sc, specific conductance; t, temperature]

Station name	Station number	Drainage area (in square miles)	Type of record	Period of record
Linworth Road Creek at Columbus	03226870	2.03	s	1978–81
Bethel Road Creek at Columbus	03226875	.22	s	1978–81
Olentangy River at Henderson Road at Columbus	03226885	518	s	1978–81
Alum Creek at Africa	03228805	122	sc, t	1965–70
Scioto River below Shadeville	03229600	2,266	do, sc, t pH	1965–80 1971–80
Little Darby Creek at West Jefferson	03230310	162	s	1992–98
Big Darby Creek at Darbyville	03230500	534	s	1965–77 1992–98
Scioto River at Chillicothe	03231500	3,849	t	1951 1953–81 do 1965–81 sc 1965–81 pH 1971–81 do, pH, sc, t 1985–2002
Paint Creek near Greenfield	03232000	249	t	1974–78
Rattlesnake Creek at Centerfield	03232300	209	t	1974–78
Paint Creek at Chillicothe	03234300	1,136	do, pH, sc, t	1985–2002
Scioto River at Higby	03234500	5,131	s	1959–74 1979–82 do, pH, sc, t 1967–93 1996–2002
Salt Creek near Londonderry	03235995	268	t	1973–74
Scioto River at Lucasville	03237100	6,178	t sc	1956–74 1965–74
Little Miami River near Selma	03239000	48.9	s, t	1952–58
North Fork Little Miami River near Pitchin	03239500	28.9	s, t	1952–58
North Fork Massies Creek at Cedarville	03240500	28.9	s, t	1954–68
South Fork Massies Creek near Cedarville	03241000	17.1	s, t	1954–68
Little Miami River near Spring Valley	03242050	366	do, pH, sc, t	1968–80
Caesar Creek at Harveysburg	03242300	209	sc, t	1970–75
Todd Fork near Roachester	03244000	219	s, t	1952–58
Little Miami River at Miamiville	03245300	1,189	do, pH, sc, t	1970–75
Little Miami River at Milford	03245500	1,203	do, pH, sc, t s	1975–84 1978–84
East Fork Little Miami River at Williamsburg	03246500	237	sc, t	1970–75
Great Miami River at Tipp City	03262745	970	do, pH, sc, t	1978–80
Mad River at Eagle City	03267800	307	s, t	1965–69
Buck Creek at New Moorefield	03268000	65.3	sc, t	1970–76
Mad River near Dayton	03270000	635	do, pH, sc, t	1968–80
Great Miami River near Stewart Street at Dayton	03271075	2,587	do, pH, sc, t	1978–80
Great Miami River near Miamisburg	03271600	2,715	do, pH, sc, t	1964–78
Great Miami River at Rockdale	03272410	3,275	do, pH, sc, t	1978–80
Great Miami River at New Baltimore	03274600	3,814	sc, t do, sc, t pH	1966 1968–82 1975–82

[Letters designate type of record: do, dissolved oxygen; pH, pH; s, sediment; sc, specific conductance; t, temperature]

Station name	Station number	Drainage area (in square miles)	Type of record	Period of record
Great Miami River at Elizabethtown	03276600	5,356	t	1956-74
			sc	1964-74

Introduction

The Water Resources Discipline of the U.S. Geological Survey (USGS), in cooperation with state agencies, obtains a large amount of data each water year (a water year is the 12-month period from October 1 through September 30 and is identified by the calendar year in which it ends) pertaining to the water resources of Ohio. 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, they are published annually in this report series entitled "Water Resources Data—Ohio."

This report (in two volumes) includes records on surface water and ground water in the State. Specifically, it contains (1) discharge records for streamflow-gaging stations, miscellaneous sites, and crest-stage stations, (2) stage and content records for streams, lakes, and reservoirs, (3) water-quality data for streamflow-gaging stations, wells, synoptic sites, and partial-record sites, and (4) water-level data for observation wells. Locations of lake- and streamflow-gaging stations, water-quality stations, and observation wells for which data are presented in this volume are shown in figures 1a and 1d (located after "contents"). The data in this report represent that part of the National Water Information System collected by the USGS and cooperating State and Federal agencies in Ohio.

This series of annual reports for Ohio 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 two or three volumes) data on quantities of surface water, quality of surface and ground water, and ground-water levels.

Prior to the introduction of this series, and for several years concurrent with it, water-resources data for Ohio were published in a series of USGS 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 3 and 4." 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 ground-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 found in libraries of the principal cities of the United States and can be purchased from the U.S. Geological Survey, Information Services, Box 25286, Denver, CO 80225.

Publications similar to this report are published annually by the USGS for all states. These official USGS reports are identified by means of a number consisting of the two-letter

state abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report OH-04-1." For archiving and general distribution, the reports for 1971–74 water years are also identified as water-data reports. These water-data reports can be purchased in paper copy or in microfiche from the National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, VA 22161.

USGS water data can be accessed on the World Wide Web at <http://water.usgs.gov>. Data at this Web site include historical daily values and peaks, real-time water data, and spatial data. (The USGS Ohio District's Web site can be accessed at <http://oh.water.usgs.gov>.)

Additional information for specific reports may be obtained by writing to the address given on the back of title page or by telephoning (614) 430-7700.

Cooperation

The USGS has had cooperative agreements for the collection of water-resources data since 1898. The following organizations assisted in collecting data in this report:

- Cities of Akron, Canton, Columbus (Water Division and Sewerage and Drainage Division), Fremont, Oregon, Toledo, and Westerville
- Counties of Geauga, Knox, Lake, Lucas, Lorain, Madison, Medina, Ross, and Summit
- Eastgate Development and Transportation Agency
- Miami Conservancy District
- Northeast Ohio Regional Sewer District
- Ohio Departments of Health, Natural Resources (Mineral Resources Management and Water Divisions), and Transportation
- Ohio Environmental Protection Agency
- Ohio Water Development Authority
- Ohio Lake Erie Office
- Ottawa Soil and Water District
- Toledo Metropolitan Area Council of Governments
- University of Toledo
- U.S. Air Force, Air Force Materiel Command, Aeronautical Systems Center, Environmental Management Directorate, Restoration Branch
- U.S. Army Corps of Engineers (Buffalo, Huntington, Louisville, and Pittsburgh Districts)
- U.S. Air Force, Air Force Material Command, 88th Air Base Wing, Environmental Management
- Villages of North Olmstead and South Russell

Summary of Hydrologic Conditions

Ohio is part of three physiographic provinces. Each province has its own distinctive hydrologic characteristics. The topography of the Till Plains Section of the Central Lowlands Physiographic Province (fig. 2) consists of gently rolling ground moraine, bands of terminal moraine, and outwash-filled valleys. Glaciation altered the courses of most streams in this area. The Eastern Lake Section (fig. 2) consists of wide expanses of level or nearly level land interrupted only by the sporadic sandy ridges that are the last visible remnants of glacial-lake beaches. Much of the area was swamp prior to development, and marshes are still present along Lake Erie near Toledo. The Lexington Plain Section of the Interior Low Plateaus Province (fig. 2) is characterized by rolling terrain and a few isolated large hills and ridges. The “barbed” drainage pattern formed when small streams were captured as their headwaters cut back into the hills over time. Streams have carved the Kanawha Section of the Appalachian Plateaus Province (fig. 2) into an intricate series of hollows and steep-sided ridges. Only the large streams in the section have any appreciable flood plain. In the southern New York Section (fig. 2), successive waves of glaciation have subdued the relief, buried many preglacial valleys, and rerouted many streams.

Precipitation

The average annual precipitation in Ohio is about 38 inches. The annual precipitation decreases from around 42 inches on the southern border to about 32 inches in the northwest. An anomalous area of high precipitation (as much as 44 inches) in northeastern Ohio results from air masses that pick up moisture and heat from Lake Erie and subsequently release precipitation over a range of hills stretching northeastward from Cleveland.

Monthly precipitation typically is greatest from May through July and least in October, December, and February. Of the approximate 38 inches of average annual precipitation, about 10 inches runs off immediately, 2 inches is retained at or near the surface and evaporates and transpires, and 26 inches enters the ground. Of the 26 inches that enters the ground, 20 inches is retained in the unsaturated zone and is later lost by evapotranspiration. The remaining 6 inches reaches the water table. Of this 6 inches, 2 inches eventually discharges to streams, and the rest is lost by evapotranspiration and consumptive use. Average runoff ranges from about 15 to 18 inches along the southern border to about 8 to 12 inches along most of the northern border, except in the northeast, where runoff is as much as 20 inches. The pattern of streamflow

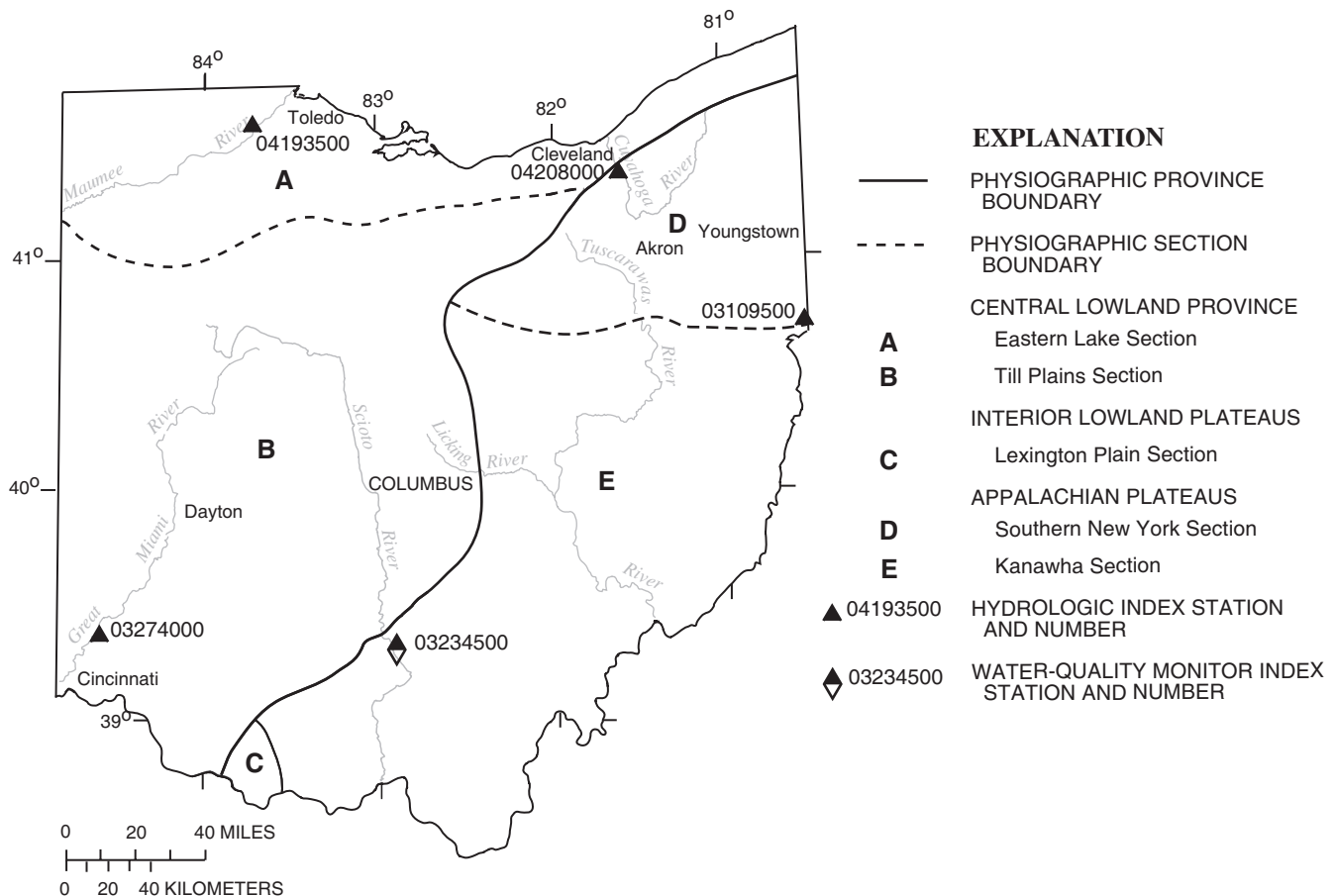


Figure 2. Physiographic divisions and location of hydrologic index stations.

differs from the pattern of precipitation because of the contributions of snowmelt to streamflow in the early spring and the reduction in flows by evapotranspiration from June through September.

Surface Water

Streamflow

Streamflow-data-collection stations are distributed irregularly throughout the State and tend to be concentrated on the main river systems. The stations are used to sample a wide variety of conditions. The drainage areas range from less than four to more than 6,330 square miles and represent a wide diversity of topography and other physical characteristics. Streamflow ranges from unregulated to highly regulated.

Statewide Streamflow, Water Year 2004.

Streamflow conditions during water year 2004 were as follows:

October. At the beginning of water year 2004, streamflow was above normal throughout the State. Above-normal precipitation for most of the State kept flows in the excessive range during October.

November-December. Excessive flows prevailed statewide in response to above-normal precipitation. Significant flooding occurred throughout much of the State in early January.

February-April. Flows declined throughout the State during the period. Streamflow was generally in the normal range for February and March. In April, streamflow fell into the deficient range in western Ohio but remained normal elsewhere.

May-June. Near record precipitation in May produced excessive flows statewide. Some severe flooding occurred in parts of eastern Ohio in late May. Streamflow remained in the above-normal range through June.

July. Streamflow declined into the normal range for most of the state.

August-September. Flows remained normal in southwest Ohio but rose into the excessive range for the rest of the State in response to above-normal precipitation. Rainfall produced by the remnants of two hurricanes caused serious flooding in eastern Ohio, and record September flows occurred at some streams. At the end of water year 2004, streamflow was in the normal range in southwest Ohio and above normal elsewhere.

A comparison of streamflows for 2004 with long-term median flows at four representative stations is shown in figure 3.

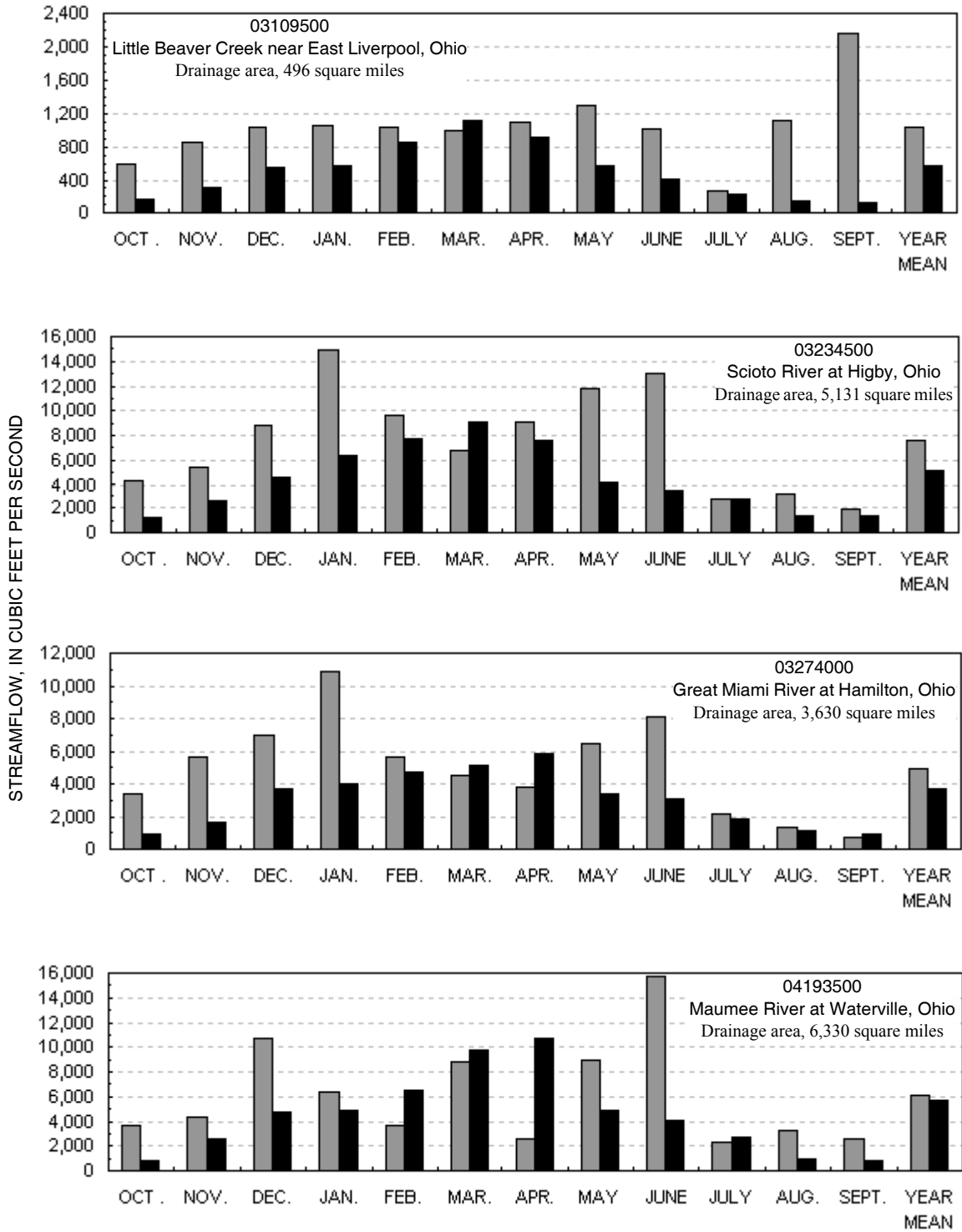
Water Quality

Water-quality data in Ohio are collected on a short-term basis in conjunction with local or regional studies. On a long-term basis, water-quality data in Ohio are collected at fixed stations. The only active long-term monitoring program in Ohio is the National Water-Quality Assessment (NAWQA) Program, a program designed to assess the status and trends in the quality of ground- and surface-water resources in major hydrologic systems (study units) of the United States. Sampling in NAWQA began in 1991 in the Nation and in March 1996 at some sites in Ohio as part of the Lake Erie-Lake St. Clair (LERI) study unit. Sampling began in 1999 at some sites as part of the Great Miami and Little Miami River Basins (MIAM) study unit. In 2001, watersheds in the MIAM study unit were combined with those in the White River Basin study unit in Indiana to form the White and Great and Little Miami River Basins study unit (WHMI). During 2004, the LERI NAWQA was in its low-intensity data-collection phase; water-quality data were collected at five fixed stations eight times per year. During 2004, the WHMI was in its high-intensity data-collection phase and collected water-quality data 10 times per year at two fixed sites in Ohio. Samples at NAWQA sites are collected over a range of streamflows and are analyzed for major anions and cations, nutrients, pesticides, suspended sediment, and selected physical properties.

Several continuous years of water-quality data collected as part of the NAWQA program for two sites are shown in figures 4 and 5—the Maumee River at Waterville and the Mad River at St. Paris Pike at Eagle City. Streamflows and concentrations of selected constituents measured during the previous 8-year period (1996 to 2003) for the Maumee River and previous 5-year period (1999 to 2003) for the Mad River are shown in boxplots along with results of analysis of samples collected in water year 2004.

The values for streamflow measured at the time of water-quality sampling during 2004 were higher than those found during the previous 8-year period. For both rivers, none of the samples were collected at low flow during 2004 (below the 25th percentile for the previous 8- or 5-year period). For the Maumee River, seven samples were collected at moderate flow (between the 25th and 75th percentile) and one was collected at high flow (above the 75th percentile). For the Mad River, seven samples were collected at moderate flow and three at high flow.

Elevated chloride concentrations are commonly associated with municipal or industrial point sources of wastewater. For the Maumee River, chloride concentrations in 2004 were in the same range as concentrations measured during the previous period, with no outside values in 2004.



EXPLANATION

- MONTHLY AND YEARLY MEAN STREAMFLOW FOR WATER YEAR 2004
- MEDIAN OF MONTHLY AND YEARLY MEAN STREAMFLOW FOR PERIOD OF 1971-2000

Figure 3. Streamflow during water year 2004 compared with median streamflow for period 1971–2000 for four representative gaging stations.

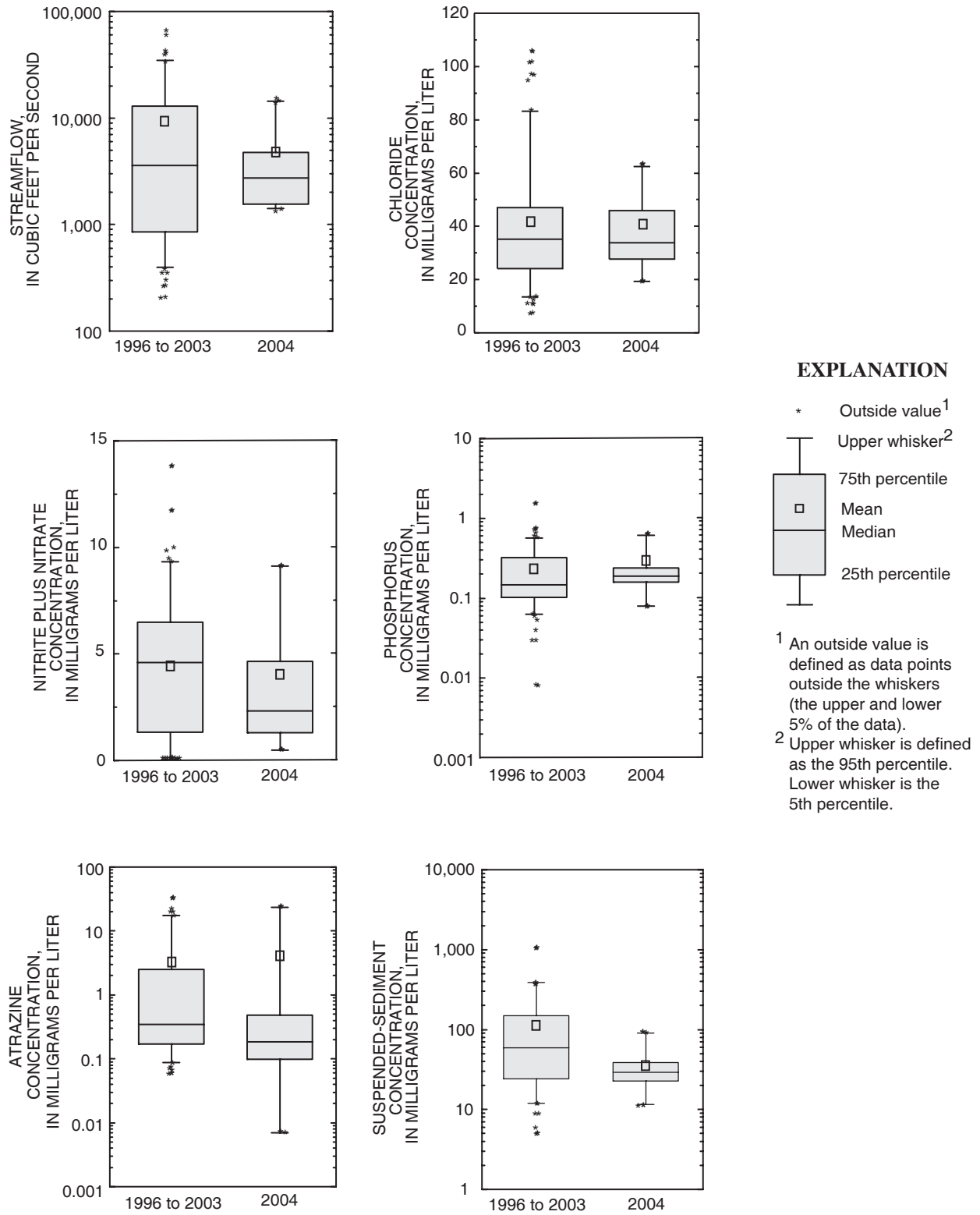


Figure 4. Streamflow and concentration of selected constituents measured in water year 2004 and the distribution of those characteristics from measurements made during water years 1996–2002 for the Maumee River at Waterville, Ohio.

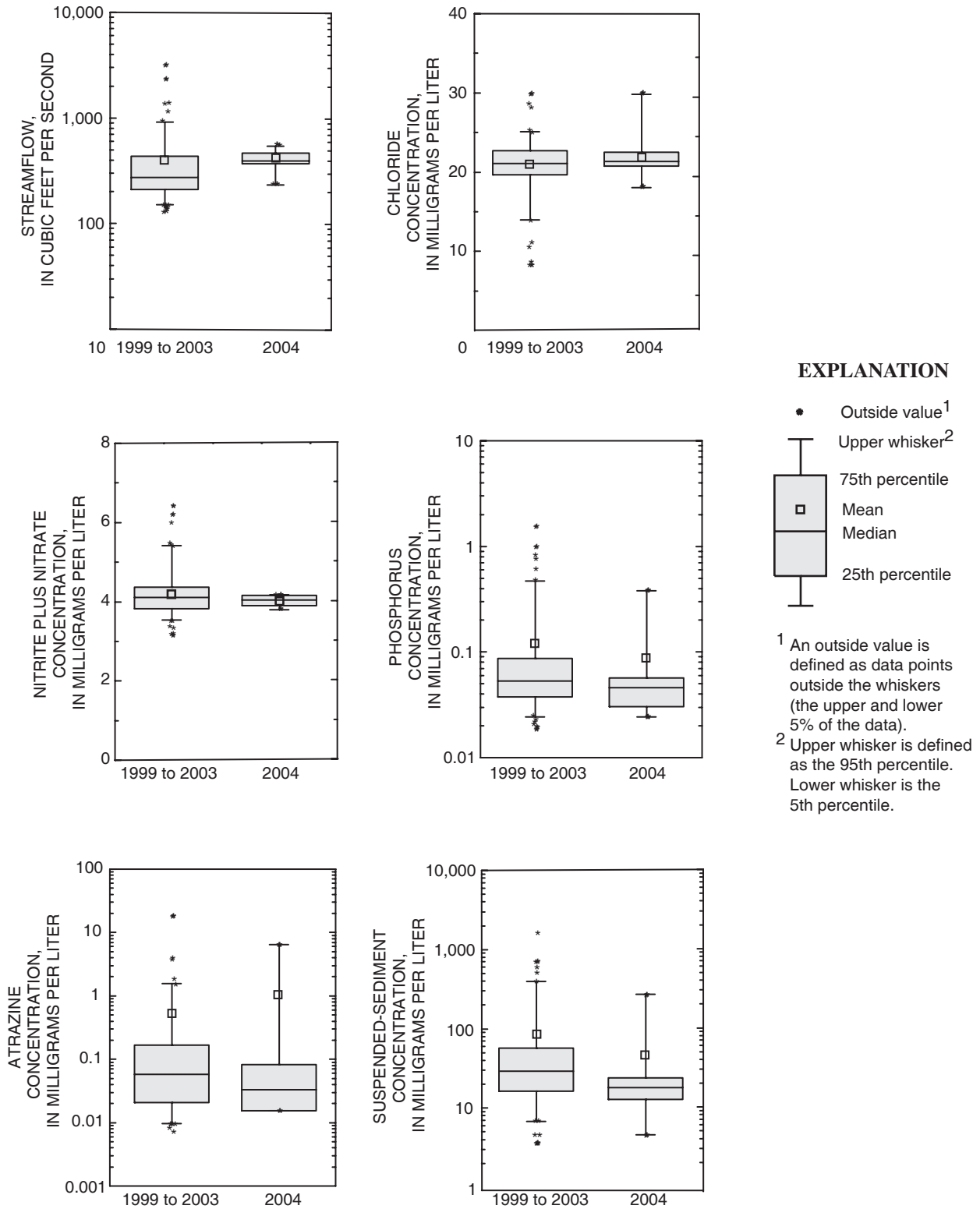


Figure 5. Streamflow and concentration of selected constituents measured in water year 2004 and the distribution of those characteristics from measurements made during water years 1999–2002 for the Mad River at St. Paris Pike at Eagle City, Ohio.

For the Maumee River, chloride concentrations determined in eight samples collected during 2004 ranged from 19.6 to 62.7 milligrams per liter (mg/L) with a median of 35.2 mg/L. For the Mad River, concentrations determined in 10 samples collected in 2004 were higher than those measured during the previous period, ranging from 18.1 to 30.5 mg/L with a median of 22.2 mg/L.

Out of the 18 samples collected for nitrate plus nitrite during 2004 at these two sites, none exceeded the U.S. Environmental Protection Agency maximum contaminant level for finished drinking water (10 mg/L, as N). In Ohio, fertilizers are a major source of nitrate. Concentrations in the Maumee River in 2004 were in the same range as those found during the previous 8-year period. Similarly, in the Mad River, nitrate plus nitrite concentrations during 2004 were in the same range as those found during the previous 5 years, except that no outside values were found during 2004.

Agricultural runoff and municipal and industrial point sources are the principal sources of phosphorus in Ohio. Increased phosphorus concentrations may lead to a high rate of production of plant materials in water and eutrophication of the receiving water. During 2004, median concentrations of total phosphorus were 0.199 mg/L for the Maumee River and 0.044 mg/L for the Mad River. Phosphorus concentrations are affected by streamflow. For 2004 in the Maumee River, seven out of eight samples were greater than the median phosphorus concentration for the previous 8-year period (0.148 mg/L), probably the result of higher streamflows during 2004.

The Maumee and Mad Rivers drain areas of heavy herbicide use. Not surprisingly, atrazine was detected in 100 percent of the water samples collected during 2004. Atrazine concentrations found in samples collected during 2004 were generally in the same range as those found during the previous periods. In the Maumee River during 2004, atrazine concentrations ranged from 0.007 to 23.4 micrograms per liter ($\mu\text{g/L}$); in the Mad River, atrazine concentrations were lower and ranged from 0.013 to 7.5 $\mu\text{g/L}$. The atrazine concentration in one sample from each river exceeded the U.S. Environmental Protection Agency's Maximum Contaminant Level of 3 $\mu\text{g/L}$. Both samples were collected in mid May 2004.

Elevated suspended-sediment concentrations result from periods of high streamflows and are exacerbated by increased development and agriculture. Suspended-sediment concentrations in the Maumee River in 2004 were lower than those found during the previous 8-year period; the median value for 2004 was 31 mg/L, whereas the median for the previous period was 62 mg/L. At the Mad River, concentrations during 2004 were slightly lower than those measured during 1999-2003; median concentrations were 17.5 and 28.5 mg/L, respectively.

Ground Water

Ground water serves the needs of 46 percent of Ohio's population. An estimated 800 million gallons of ground water per day is withdrawn for public-supply, domestic, industrial, and agricultural purposes. Many people in Ohio depend on ground water as the only practical source of supply.

Ohio's unconsolidated aquifers are composed of either coarse- or fine-grained sediments. Both types are composed mainly of materials of glacial origin. The coarse-grained unconsolidated aquifers generally consist of highly permeable sand and gravel. Much of the sand and gravel is alluvium derived from glaciofluvial outwash along the courses of some modern streams; thus, these aquifers sometimes are referred to as "watercourse" aquifers. Coarse-grained unconsolidated aquifers in the northwestern corner of the State (fig. 6) underlie glacial till, are locally confined under artesian pressure, and are highly productive. Extensive kame-terrace deposits of water-bearing gravel and sand are widely used ground-water sources in northeastern Ohio. The fine-grained unconsolidated aquifers are similar to the coarse-grained unconsolidated aquifers in form and origin but are less permeable because of higher percentages of mixed fine sand, silt, and clay. Included in the fine-grained unconsolidated aquifers are tills that contain thin or localized stratified lenses of sand and gravel.

Ground-water supply for much of the unglaciated upland area of southeastern Ohio is from bedrock aquifers composed of shaly sandstone and thin limestone. These strata, which range from Mississippian to Permian in age, are dominated by low-yielding shales and shaly sandstones that include numerous coal-bearing strata. In some places, small water supplies are available from fractured coal beds. Several sandstone aquifers in northeastern Ohio are of regional extent and are major ground-water sources for individual and small public supplies. These include the Berea and Black Hand Sandstones of Mississippian age and several sandstone members of the Pottsville and Allegheny Formations of Pennsylvanian age. The Lake Erie coastline of northeastern Ohio is underlain by shale of Devonian and Mississippian age (fig. 6) that yields only small amounts of water to wells. Silurian-age limestone and dolomite and Devonian limestone comprise the carbonate aquifer system (fig. 6) of much of western Ohio. Glacial cover is uneven and consists of valley fill and terminal moraine in some places. The northeastern part of western Ohio contains an area of high-yielding wells that tap a preferentially weathered zone, which developed when a carbonate section was periodically exposed as land mass during the Paleozoic Era. The southwestern corner of Ohio near Cincinnati is underlain by shale and a thin limestone aquifer of Ordovician age. Away from the watercourse (coarse unconsolidated) aquifers that traverse the area, the rocks that form the uplands yield only very small amounts of ground water.

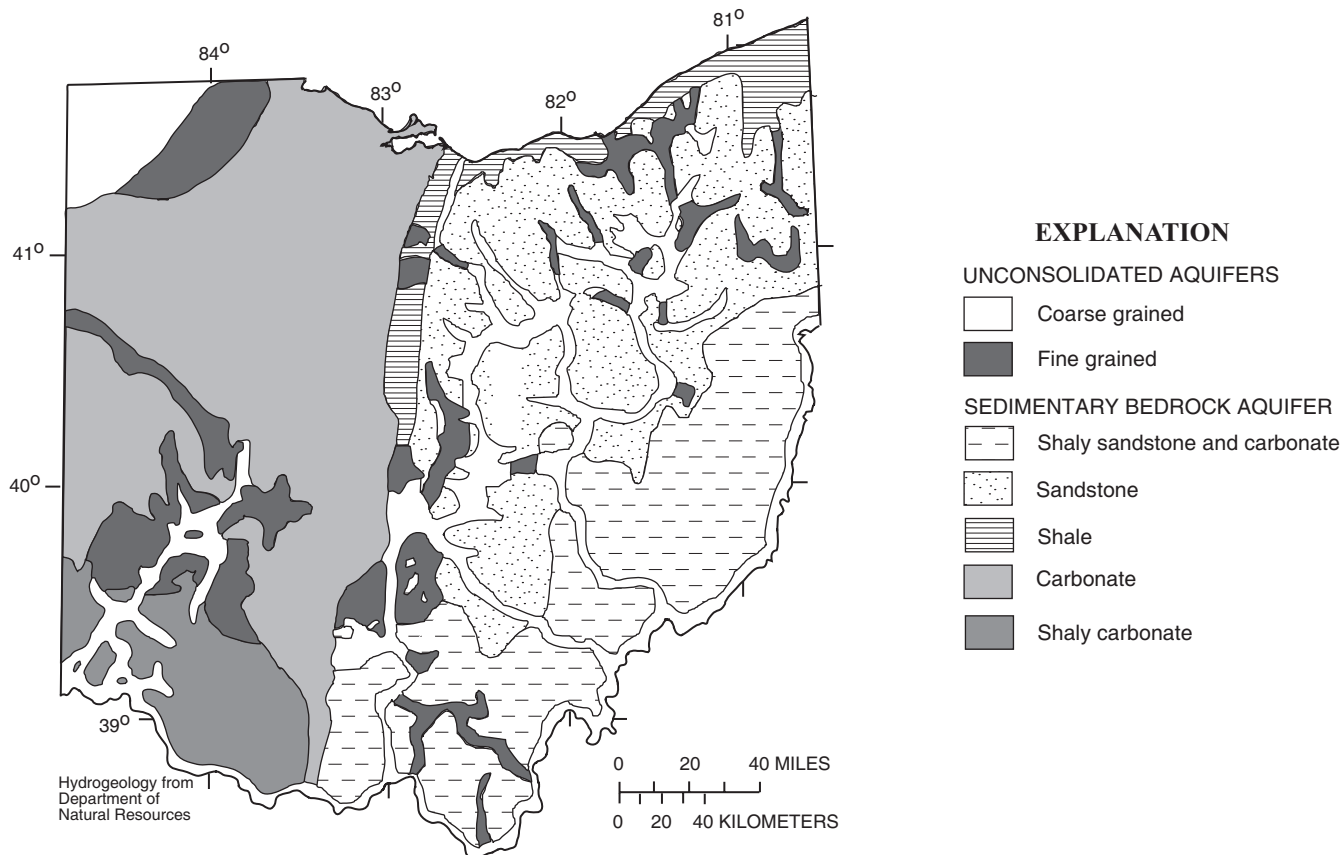


Figure 6. Geographic distribution of principal aquifers in Ohio.

Ground-Water Levels

Most ground-water observation wells in Ohio tap unconsolidated sand and gravel aquifers associated with the State's principal streams. Sample 1-year and 5-year hydrographs of a well completed in an unconfined unconsolidated sand-and-gravel aquifer are shown in figure 7. The observation-well network also includes some bedrock wells in areas where consolidated aquifers are heavily used for water supply, such as in the carbonate-rock region of northwestern Ohio. Sample 1-year and 5-year hydrographs of a well completed in a confined carbonate-rock aquifer are shown in figure 8. The yearly low for most wells occurs during the winter months, especially in cold, dry years or near the end of the growing season. Highs for the year usually occur from March through June, which is the peak of the recharge season. The yearly water-level fluctuation due to climatic conditions in water-table and confined-aquifer wells is commonly 3 to 5 feet but can be as much as 10 feet.

Ground-water conditions in Ohio during water year 2004 were as follows:

October-November. At the beginning of water year 2004, ground-water levels were above normal for most of the State in response to above normal precipitation late in water year 2003.

Levels were generally stable and remained above normal through November.

December-January. Above-normal precipitation produced net rises in ground-water levels, and they remained above-normal statewide.

February. Ground-water levels declined in response to colder and drier conditions. Levels remained in the above-normal range except for southwest Ohio, where they were slightly below normal.

March-May. Generally, there were seasonal increases in ground-water levels statewide. For the most part, levels were above normal in consolidated aquifers and below normal in unconsolidated aquifers.

June. In response to well above normal precipitation late in May, ground-water levels rose and were in the above normal range except for southwest Ohio, where they remained below-normal.

July-September. The remainder of the water year was characterized by seasonal declines throughout the period. Above-normal ground-water levels prevailed statewide except for southwest Ohio, where they were below normal.

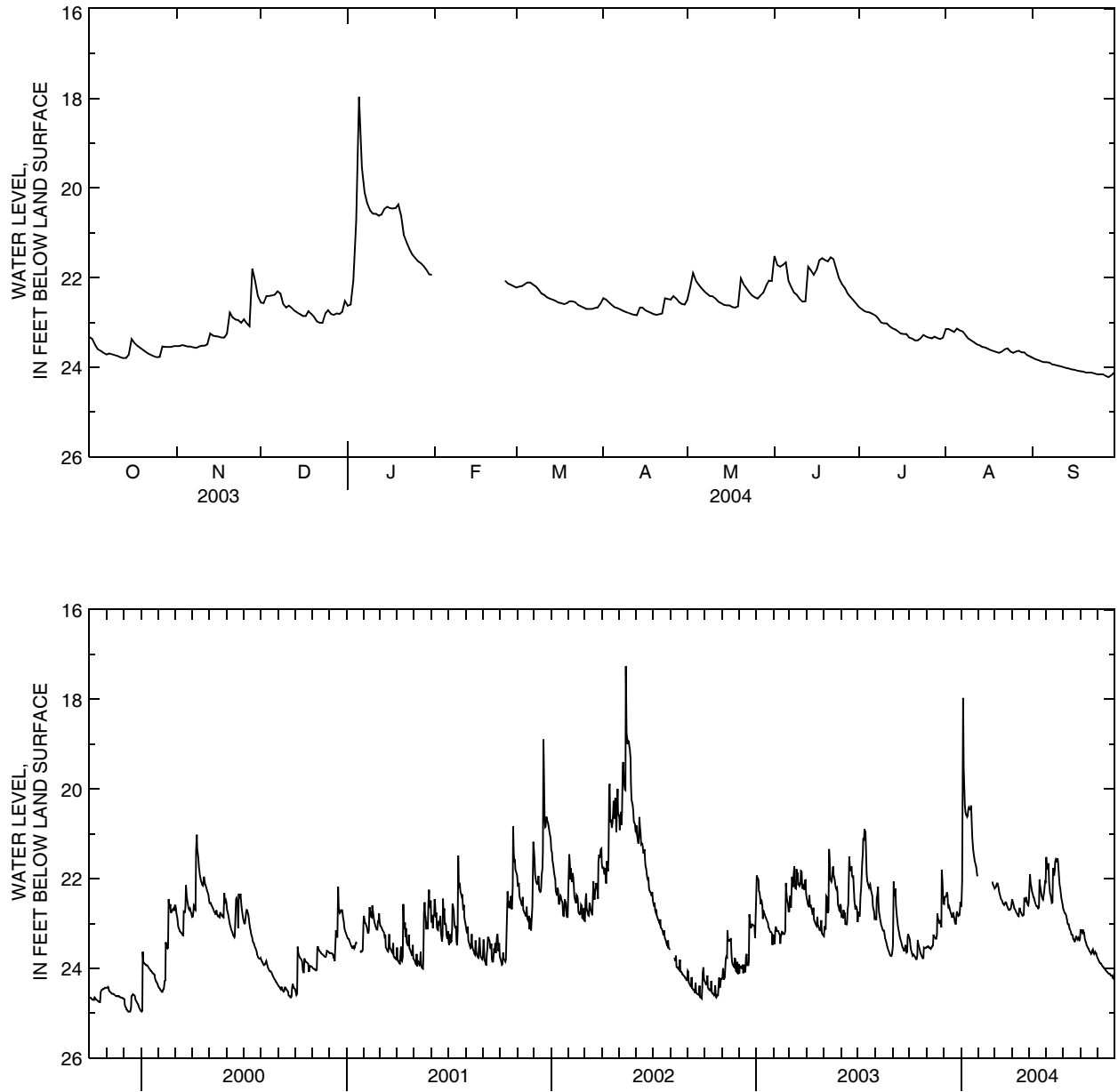


Figure 7. Sample of 1-year and 5-year hydrographs of well H-1 (391717084393300), completed in a unconfined unconsolidated aquifer.

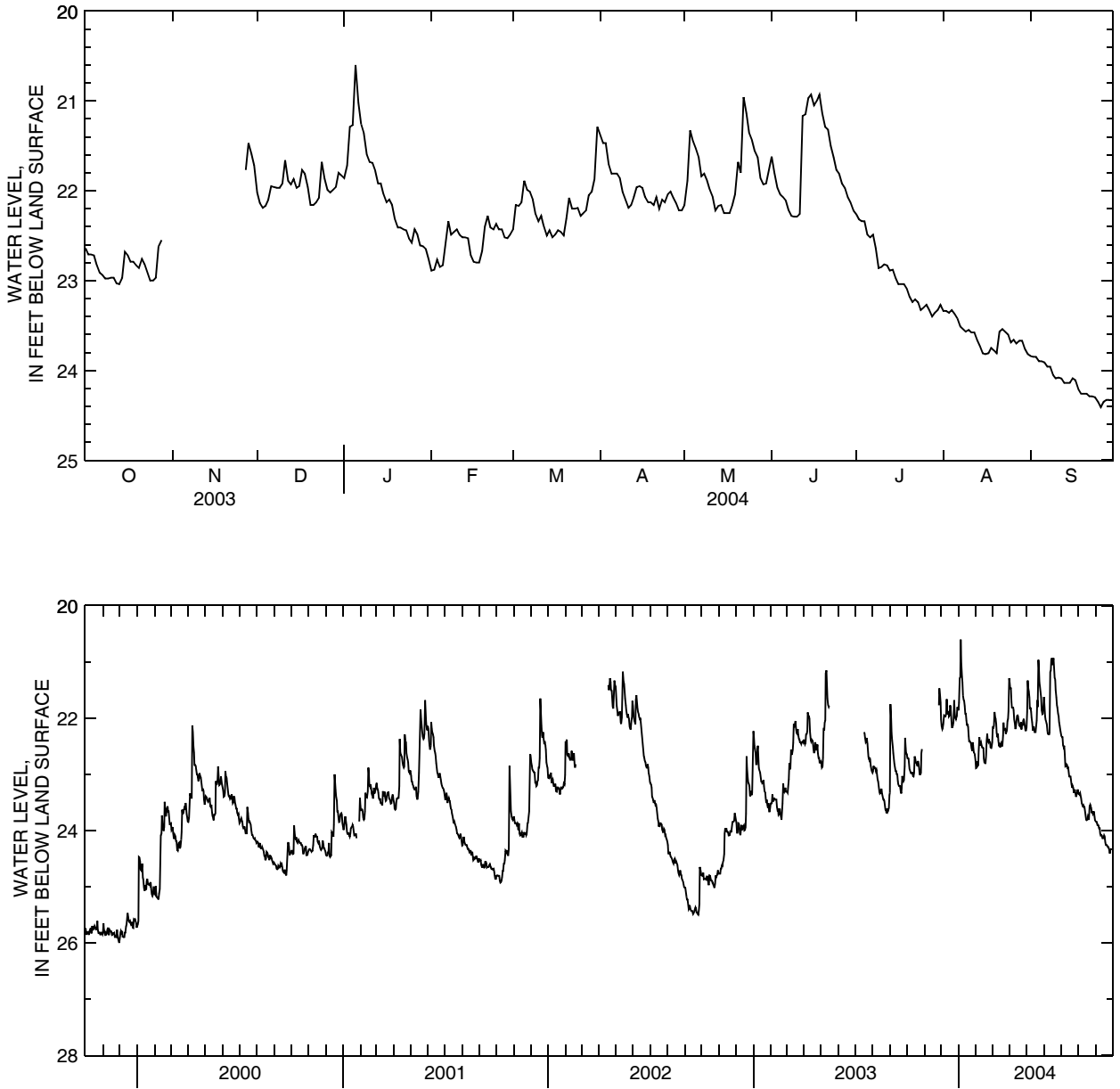


Figure 8. Sample of 1-year and 5-year hydrographs of well U-4 (401826083255200), completed in a confined carbonate-rock aquifer.

Downstream Order and Station Number

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

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

Numbering System for Wells and Miscellaneous Sites

The USGS well and miscellaneous site-numbering system is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, and the next 7 digits denote degrees, minutes, and seconds of longitude; the last 2 digits are a sequential number for wells within a 1-second grid. In the event that the latitude-longitude coordinates for a well and miscellaneous site are the same, a sequential number such as "01," "02," and so forth, would be assigned as one would for wells (see fig. 9). The 8-digit, downstream order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken.

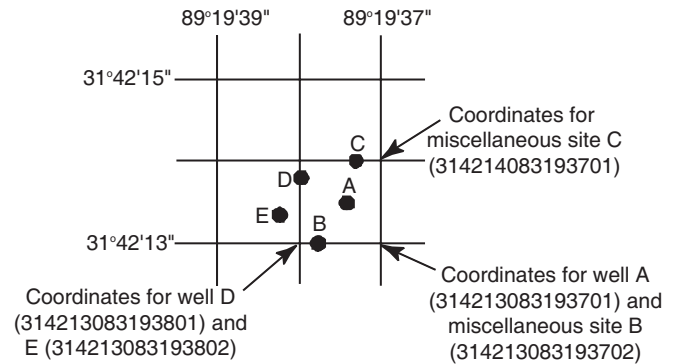


Figure 9. System for numbering wells and miscellaneous sites (latitude and longitude).

Special Networks and Programs

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

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

water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals. Additional information about the NASQAN Program may be accessed from <http://water.usgs.gov/nasqan/>.

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

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

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

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

The USGS National Streamflow Information Program (NSIP) is a long-term program with goals to provide

framework streamflow data across the Nation. Included in the program are creation of a permanent Federally funded streamflow network, research on the nature of streamflow, regional assessments of streamflow data and databases, and upgrades in the streamflow information delivery systems. Additional information about NSIP may be accessed from <http://water.usgs.gov/nsip/>.

Explanation of Stage- and Water-Discharge Records

Data Collection and Computation

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

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

relation for a station is temporarily changed by the presence of aquatic growth or debris on the controlling section, the daily mean discharge is computed by the shifting-control method.

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

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

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

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

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

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

For some stream-gaging stations, periods of time occur when no gage-height record is obtained or the recorded gage height is faulty and cannot be used to compute daily discharge or contents. Such a situation can happen when the recorder stops or otherwise fails to operate properly, the intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records from other stations in the same or nearby basins. Likewise, lake or reservoir volumes may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

Data Presentation

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

Station Manuscript

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

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

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

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

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

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

REMARKS.—All periods of estimated daily discharge either will be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily discharge table. (See section titled Identifying Estimated Daily Discharge.) Information is presented relative to the accuracy of

the records, to special methods of computation, and to conditions that affect natural flow at the station. In addition, information may be presented pertaining to average discharge data for the period of record; to extremes data for the period of record and the current year; and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, the outlet works and spillway, and the purpose and use of the reservoir.

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

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

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

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

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

Peak Discharge Greater than Base Discharge

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

Data Table of Daily Mean Values

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

Statistics of Monthly Mean Data

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

Summary Statistics

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

in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (see line headings below), except for the ANNUAL 7-DAY MINIMUM statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

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

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

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

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

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

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

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

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

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

MAXIMUM PEAK FLOW.—The maximum instantaneous peak discharge occurring for the

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

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

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

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

Acre-foot (AC-FT) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Cubic feet per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming the runoff is distributed uniformly in time and area.

Inches (INCHES) indicate the depth to which the drainage area would be covered if all of the runoff for a given time period were uniformly distributed on it.

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

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

90 PERCENT EXCEEDS.—The discharge that has

been exceeded 90 percent of the time for the designated period.

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

Identifying Estimated Daily Discharge

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

Accuracy of Field Data and Computed Results

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

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

Values of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft³/s; to the nearest tenths between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures above 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharge values listed for partial-record stations.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, values of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident

to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other Data Records Available

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

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

Explanation of Precipitation Records

Data Collection and Computation

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

Data Presentation

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

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

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

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

(same comments apply).

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

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

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

Explanation of Water-Quality Records

Collection and Examination of Data

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

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

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

Water Analysis

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

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

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

inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

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

Surface-Water-Quality Records

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

Classification of Records

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

A careful distinction needs to be made between *continuous records* as used in this report and *continuous recordings* that refer to a continuous graph or a series of discrete values recorded at short intervals. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently. Locations of stations for which records on the quality of surface water appear in this report are shown in figures 1a and 1b.

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.

On-Site Measurements and Sample Collection

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

Water Temperature

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

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

Sediment

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

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

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

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

Laboratory Measurements

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

Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings

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

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

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

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

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

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

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

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

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

REVISIONS.—Records are revised if errors in published water-quality records are discovered.

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

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

Remark Codes

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

Printed Output	Remark
E or 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.
M	Presence of material verified, but not quantified.
N	Presumptive evidence of presence of material.
U	Material specifically analyzed for, but not detected.
A	Value is an average.
V	Analyte was detected in both the environmental sample and the associated blanks.
S	Most probable value.

Water-Quality Control Data

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

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

Accordingly, concentrations are reported as less than LRL

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

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

Blank Samples

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

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

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

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

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

Filter blank—A blank solution that is filtered in the same manner and through the same filter

apparatus used for an environmental sample.

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

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

Reference Samples

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

Replicate Samples

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

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

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

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

Spike Samples

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

the analyte concentration during sample processing and analysis.

Explanation of Ground-Water-Level Records

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

Site Identification Numbers

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

Data Collection and Computation

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

Most methods for collecting and analyzing water samples are described in the TWRI's referred to in the On-site Measurements and Sample Collection and the Laboratory Measurements sections in this report. In addition, TWRI Book 1, Chapter D2, describes guidelines for the collection and field analysis of ground-water samples for selected unstable constituents. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in TWRI's 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 figures 1c and 1d each well is identified on the map by its local well or county well number.

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

The following comments clarify information presented in these various headings.

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

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

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

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

frequency of measurement.

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

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

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

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

Water-Level Tables

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

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

Hydrographs

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

Ground-Water-Quality Data

Data Collection and Computation

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

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

Laboratory Measurements

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

Access to USGS Water Data

The USGS provides near real-time stage and discharge data for many of the gaging stations equipped with the necessary

telemetry and historic daily mean and peak-flow discharge data for most current or discontinued gaging stations through the World Wide Web (WWW). These data may be accessed from <http://water.usgs.gov>.

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

Definition of Terms

Specialized technical terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. Definitions of common terms such as algae, water level, and precipitation are given in standard dictionaries. Not all terms defined in this alphabetical list apply to every State. See also table for converting inch/pound units to International System (SI) units on the inside of the back cover.

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

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

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

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

Alkalinity is the capacity of solutes in an aqueous system to neutralize acid. This term designates

titration of a “filtered” sample.

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

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

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

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

Ash mass is the mass or amount of residue present after the residue from a dry-mass determination has been ashed in a muffle furnace at a temperature of 500 °C for 1 hour. Ash mass of zooplankton and phytoplankton is expressed in grams per cubic meter (g/m³), and periphyton and benthic organisms in grams per square meter (g/m²). (See also “Biomass” and “Dry mass”)

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

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

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

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

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

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

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

Bedload discharge (tons per day) is the rate of sediment moving as bedload, reported as dry weight, that passes through a cross section in a given time. NOTE: Bedload discharge values in this report may include a component of the suspended-sediment discharge. A correction may be necessary when computing the total sediment discharge by summing the bedload discharge and the suspended-sediment discharge. (See also “Bedload,” “Dry weight,” “Sediment,” and “Suspended-sediment discharge”)

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

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

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

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

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

Bottom material (See “Bed material”)

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

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

Cell volume (biovolume) determination is one of several common methods used to estimate biomass of algae in aquatic systems. Cell members of algae are used frequently in aquatic surveys as an indicator of algal production. However, cell numbers alone cannot represent true biomass because of considerable cell-size variation among the algal species. Cell volume (μm^3) is determined by obtaining critical cell measurements or cell dimensions (for example, length, width, height, or radius) for 20 to 50 cells of each important species to obtain an average

biovolume per cell. Cells are categorized according to the correspondence of their cellular shape to the nearest geometric solid or combinations of simple solids (for example, spheres, cones, or cylinders). Representative formulae used to compute biovolume are as follows:

sphere $\frac{4}{3} \pi r^3$ cone $\frac{1}{3} \pi r^2 h$ cylinder $\pi r^2 h$

pi (π) is the ratio of the circumference to the diameter of a circle; $\pi = 3.14159\dots$

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

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

Cfs-day (See “Cubic foot per second-day”)

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

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

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

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 where data are collected with sufficient frequency to define daily mean values and variations within a day.

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

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

Cubic foot per second (CFS, ft³/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point in 1 second. It is equivalent to approximately 7.48 gallons per second or approximately 449 gallons per minute, or 0.02832 cubic meters per second. The term “second-foot” sometimes is used synonymously with “cubic foot per second” but is now obsolete.

Cubic foot per second-day (CFS-DAY, Cfs-day, [(ft³/s)/d]) is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.98347 acre-feet, 646,317 gallons, or 2,446.6 cubic meters. The daily mean discharges reported in the daily value data tables numerically are equal to the daily volumes in cfs-days, and the totals also represent volumes in cfs-days.

Cubic foot per second per square mile [CFSM, (ft³/s)/mi²] is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming the runoff is distributed uniformly in time and area. (See also “Annual runoff”)

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

“Sediment” and “Suspended-sediment concentration”)

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

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

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

Datum is a surface or point relative to which measurements of height and/or horizontal position are reported. A vertical datum is a horizontal surface used as the zero point for measurements of gage height, stage, or elevation; a horizontal datum is a reference for positions given in terms of latitude-longitude, State Plane coordinates, or Universal Transverse Mercator (UTM) 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 ($\mu\text{m}^3/\text{mL}$). The abundance of diatoms in periphyton samples is given in cells per square centimeter (cells/cm²) or biovolume per square centimeter ($\mu\text{m}^3/\text{cm}^2$). (See also “Phytoplankton” and “Periphyton”)

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

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

sediment, bedload, and dissolved or suspended chemicals, pass through a cross section, in which cases the quantity is expressed as the mass of constituent that passes the cross section in a given period of time (tons per day).

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

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

Dissolved-solids concentration in water is the quantity of dissolved material in a sample of water. It is determined either analytically by the “residue-on-evaporation” method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. In the mathematical calculation, the bicarbonate value, in milligrams per liter, is multiplied by 0.4917 to convert it to carbonate. Alternatively, alkalinity concentration (as mg/L CaCO₃) 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:

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

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

Drainage area of a stream at a specific location is

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

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

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

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

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

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

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

Escherichia coli (*E. coli*) are bacteria present in the intestine and feces of warmblooded animals. *E. coli* are a member species of the fecal coliform group of indicator bacteria. In the laboratory,

they are defined as those bacteria that produce yellow or yellow-brown colonies on a filter pad saturated with urea substrate broth after primary culturing for 22 to 24 hours at 44.5 °C on mTEC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

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

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

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

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

Fecal streptococcal bacteria are present in the

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

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

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

Fire algae (Pyrrophyta) are free-swimming unicells characterized by a red pigment spot. (See also “Phytoplankton”)

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

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

then the gage readings can be converted to elevations above the national datum by adding the elevation of the gage datum to the gage reading.

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

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

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

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

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

Green algae (Chlorophyta) are unicellular or colonial algae with chlorophyll pigments similar to those in terrestrial green plants. Some forms of green algae produce mats or floating “moss” in lakes. The abundance of green algae in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic micrometers per milliliter ($\mu\text{m}^3/\text{mL}$). The abundance of green algae in periphyton samples is given in cells per square centimeter (cells/cm²) or biovolume per square centimeter ($\mu\text{m}^3/\text{cm}^2$). (See also “Phytoplankton” and “Periphyton”)

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

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

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

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

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

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

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

Horizontal datum (See “Datum”)

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

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

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

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

International Boundary Commission Survey Datum refers to a geodetic datum established at

numerous monuments along the United States-Canada boundary by the International Boundary Commission.

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

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

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

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

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

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

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

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

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

environmental contaminants such as organochlorine pesticides are lipophilic.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Micrograms per gram (UG/G, $\mu\text{g/g}$) 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, $\mu\text{g/kg}$) 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, $\mu\text{g/L}$) is a unit expressing the concentration of chemical constituents in water as mass (micrograms) of constituent per unit volume (liter) of water. One thousand micrograms per liter is equivalent to 1 milligram per liter. One microgram per liter is equivalent to 1 part per billion.

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

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

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

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

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

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

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

National Geodetic Vertical Datum of 1929 (NGVD 29) is a fixed reference adopted as a standard geodetic datum for elevations determined by leveling. It formerly was called "Sea Level Datum of 1929" or "mean sea level." Although the datum was derived from the mean sea level at 26 tide stations, it does not

necessarily represent local mean sea level at any particular place. See NOAA Web site: <http://www.ngs.noaa.gov/faq.shtml#WhatVD29VD88> (See "North American Vertical Datum of 1988")

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

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

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

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

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

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

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

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

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

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meter (m²), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

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

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

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

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

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

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

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

The particle-size distributions given in this

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Primary productivity is a measure of the rate at which new organic matter is formed and

accumulated through photo-synthetic and chemosynthetic activity of producer organisms (chiefly, green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated (carbon method) by the plants.

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

Radioisotopes are isotopic forms of elements that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus; for example, ordinary chlorine is a mixture of isotopes having atomic weights of 35 and 37, and the natural mixture has an atomic weight of about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron. There are 275 isotopes of the 81 stable elements, in addition to more than 800 radioactive isotopes.

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

unit for collecting physical, chemical, and biological data.

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

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

Replicate samples are a group of samples collected in a manner such that the samples are thought to

be essentially identical in composition.

Return period (See “Recurrence interval”)

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

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

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

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

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

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

Sediment is solid material that originates mostly from disintegrated rocks; when transported by, suspended in, or deposited from water, it is referred to as “fluvial sediment.” Sediment includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are affected by environmental and land-use factors. Some major factors are topography, soil characteristics, land cover, and depth and intensity of precipitation.

Sensible heat flux (often used interchangeably with latent sensible heat-flux density) is the amount of heat energy that moves by turbulent transport

through the air across a specified cross-sectional area per unit time and goes to heating (cooling) the air. Usually expressed in watts per square meter.

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

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

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

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

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

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

Stable isotope ratio (per MIL) is a unit expressing the ratio of the abundance of two radioactive isotopes. Isotope ratios are used in hydrologic studies to determine the age or source of specific

water, to evaluate mixing of different water, as an aid in determining reaction rates, and other chemical or hydrologic processes.

Stage (See “Gage height”)

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

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

Substrate is the physical surface upon which an organism lives.

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

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

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

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

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

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

retained on a 0.45-micrometer filter.

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

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

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

Suspended-sediment discharge (tons/d) is the rate of sediment transport, as measured by dry mass or volume, that passes a cross section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft³/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 hydrologic periods to provide improved spatial resolution for critical water-quality conditions. For the period and conditions sampled, they assess the spatial distribution of selected water-quality conditions in relation to causative factors, such as land use and contaminant sources.

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

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

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

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

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term “temperature recorder” is used in the table descriptions and refers to any instrument that records temperature whether on

a chart, a tape, or any other medium.

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

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

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

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

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

(See also "Bacteria")

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

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

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

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

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

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

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

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

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

Turbidity is an expression of the optical properties of a liquid that causes light rays to be scattered and absorbed rather than transmitted in straight lines through water. Turbidity, which can make water appear cloudy or muddy, is caused by the presence of suspended and dissolved matter, such as clay, silt, finely divided organic matter, plankton and other microscopic organisms, organic acids, and dyes (ASTM International, 2003, D1889–00 Standard test method for turbidity of water, *in* ASTM International, Annual Book of ASTM Standards, Water and Environmental Technology, v. 11.01: West Conshohocken, Pennsylvania, 6 p.). The color of water, whether resulting from dissolved compounds or suspended particles, can affect a turbidity measurement. To ensure that USGS turbidity data can be understood and interpreted properly within the context of the instrument used and site conditions encountered, data from each instrument type are stored and reported in the National Water Information System (NWIS) using parameter codes and measurement reporting units that are specific to the instrument type, with specific instruments designated by the method code. The respective measurement units, many of which also are in use internationally, fall into two categories: (1) the designations NTU, NTRU, BU, AU, and NTMU signify the use of a broad spectrum incident light in the wavelength range of 400–680 nanometers (nm), but having different light detection configurations; (2) The designations FNU, FNRU, FBU, FAU, and FNMU generally signify an incident light in the range between 780–900 nm, also with varying light detection configurations. These reporting units are equivalent when measuring a calibration

solution (for example, formazin or polymer beads), but their respective instruments may not produce equivalent results for environmental samples. Specific reporting units are as follows:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Vertical datum (See “Datum”)

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

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

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

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

Watershed (See “Drainage basin”)

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

1976.)

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

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

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

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

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

Surface-Water Records—Beaver River Basin

03091500 Mahoning River at Pricetown, Ohio

LOCATION.—Latitude 41°07'53", longitude 80°58'17", in T.2 N., R.5 W., Mahoning County, Hydrologic Unit 05030103, on left bank 0.3 mi downstream from Milton Dam, 0.5 mi southwest of Pricetown, Ohio, and 3 mi upstream from Kale Creek.

DRAINAGE AREA.—273 mi².

PERIOD OF RECORD.—July 1929 to current year.

REVISED RECORDS.—WSP 728: 1930(M). WSP 1907: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 905.00 ft, National Geodetic Vertical Datum of 1912. Prior to Aug. 14, 1929, nonrecording gage at same site and datum.

REMARKS.—Records excellent. Flow regulated by Berlin Lake beginning 1942 and Milton Reservoir 1923. Diversion upstream from station from Berlin Lake for part of municipal supply of Mahoning Valley Sanitary District. Water-quality data formerly collected at this site. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 6,770 ft³/s Jan. 25, 1937, gage height, 15.01 ft, from rating curve extended above 4,200 ft³/s on basis of velocity-area studies.

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	1880	390	1040	445	120	324	210	338	1850	160	180	1480
2	1380	390	1350	508	120	324	475	346	1760	160	213	1210
3	727	390	1000	553	120	221	620	867	1770	160	237	752
4	568	264	662	386	120	236	619	1290	986	160	238	605
5	565	181	540	270	119	458	681	1150	745	159	238	605
6	564	181	453	570	121	512	715	1060	589	158	238	605
7	558	181	453	1260	121	512	708	640	396	158	235	605
8	557	181	453	1620	120	391	708	337	246	158	235	392
9	412	181	453	1620	528	311	780	337	169	156	235	281
10	330	181	453	1620	1060	311	822	337	171	156	235	738
11	330	181	586	1610	1110	311	820	337	170	156	235	1110
12	330	181	661	1590	1060	194	465	337	226	169	235	1100
13	330	181	661	1490	776	118	302	253	265	179	238	1440
14	332	181	661	1430	601	118	343	198	269	165	235	1720
15	560	181	661	1190	597	120	938	200	845	156	235	1720
16	740	181	623	784	598	90	1510	199	1560	156	238	1640
17	737	181	601	606	361	74	1560	199	1880	156	251	1060
18	734	181	637	601	125	74	1560	293	2000	156	242	292
19	731	181	658	601	125	60	1250	362	2000	156	245	895
20	728	457	661	328	126	53	752	594	2000	156	246	1710
21	566	686	661	125	127	52	582	746	1810	156	248	1790
22	460	683	661	125	125	138	586	926	1470	168	310	1820
23	284	682	662	125	244	198	586	1190	1040	175	517	1850
24	186	682	669	125	320	201	584	1840	401	175	630	1850
25	186	680	669	124	320	203	585	2170	164	175	627	1850
26	187	484	669	123	320	205	586	2140	164	175	627	1840
27	189	356	669	123	320	207	586	2120	164	175	967	1780
28	309	363	669	123	320	207	435	2070	164	175	1180	1610
29	387	535	531	123	321	206	335	2030	164	175	1180	1540
30	389	652	446	123	---	205	334	1970	162	176	1230	1540
31	390	---	445	122	---	209	---	1940	---	178	1340	---
TOTAL	16626	10409	20018	20443	10445	6843	21037	28816	25600	5093	13540	37430
MEAN	536	347	646	659	360	221	701	930	853	164	437	1248
MAX	1880	686	1350	1620	1110	512	1560	2170	2000	179	1340	1850
MIN	186	181	445	122	119	52	210	198	162	156	180	281

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942-2004, BY WATER YEAR (WY)

MEAN	228	228	275	285	322	352	298	292	289	246	257	280
MAX	855	891	987	1059	1211	1098	867	1324	983	979	904	1248
(WY)	1991	1986	1997	1991	1959	1956	1994	1996	1947	2003	1958	2004
MIN	61.8	37.9	28.3	47.0	31.4	11.1	10.0	21.5	37.0	41.6	92.9	77.2
(WY)	1943	1966	1966	1966	1967	1944	1944	1943	1971	1982	1942	1942

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1942-2004	
ANNUAL TOTAL	183829		216300			
ANNUAL MEAN	504		591		279	
HIGHEST ANNUAL MEAN					591	
LOWEST ANNUAL MEAN					131	
HIGHEST DAILY MEAN	1960	Jul 31	2170	May 25	3370	Jun 10
LOWEST DAILY MEAN	68	Apr 24	52	Mar 21	0.40	Nov 9
ANNUAL SEVEN-DAY MINIMUM	85	Apr 22	75	Mar 15	0.94	Feb 24
MAXIMUM PEAK FLOW			2170	May 25	4120	Apr 10
MAXIMUM PEAK STAGE			7.21	May 25	10.62	Apr 10
INSTANTANEOUS LOW FLOW					0.40	Nov 9
10 PERCENT EXCEEDS	1050		1560		687	
50 PERCENT EXCEEDS	376		390		175	
90 PERCENT EXCEEDS	92		156		62	

03093000 Eagle Creek at Phalanx Station, Ohio

LOCATION.—Latitude 41°15'40", longitude 80°57'16", Trumbull County, Hydrologic Unit 05030103, on right bank 75 ft downstream from county road bridge, 1 mi north of Phalanx Station, Ohio, 2 mi downstream from Tinkers Creek, and 4 mi upstream from mouth.

DRAINAGE AREA.—97.6 mi².

PERIOD OF RECORD.—June 1926 to September 1934, October 1937 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.—WSP 953: 1938-41. WSP 1385: 1927-30, 1931-32(M), 1934, 1938-41(P). WSP 1555: 1928(M), 1929. WSP 1907: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 887.14 ft, above sea level (levels by Mahoning Valley Sanitary District). Prior to Sept. 14, 1929, nonrecording gage at same site and datum; Sept. 14, 1929-Sept. 30, 1977, at same site and datum 0.28 ft higher.

REMARKS.—Records fair except for periods of estimated record, which are poor. Water-quality data formerly collected at this site. U.S. Army Corps of Engineers satellite telemeter at station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	103	364	165	e74	240	656	122	231	37	507	35
2	65	104	234	288	e70	308	1080	386	149	33	271	25
3	59	104	146	439	e90	278	904	526	224	30	78	22
4	63	99	121	489	223	186	469	260	133	28	44	21
5	97	101	114	1240	201	284	407	173	98	30	37	20
6	66	115	121	706	177	244	306	146	83	31	30	19
7	57	97	121	153	312	172	260	127	75	26	25	18
8	52	79	118	e110	257	185	235	153	63	26	22	32
9	50	71	114	e94	184	219	262	122	54	24	20	824
10	50	67	152	e90	145	196	213	99	69	23	19	766
11	52	78	604	e86	e110	158	179	114	148	23	21	186
12	52	171	484	e83	e100	168	167	150	252	27	20	92
13	51	235	162	e80	e92	165	554	110	140	135	22	56
14	55	158	127	e78	e84	148	884	74	231	45	27	43
15	243	118	122	e76	e76	137	562	118	251	43	21	37
16	248	108	122	e74	e68	127	300	198	156	41	20	33
17	115	100	318	e72	e64	134	228	115	113	39	20	356
18	87	87	213	e72	e60	138	195	223	291	95	18	1500
19	73	109	145	e70	e66	157	174	531	170	54	24	627
20	67	199	129	e68	124	368	257	662	98	40	105	157
21	66	138	115	e68	497	1190	211	588	62	27	200	86
22	70	113	112	e68	553	529	290	2080	51	23	100	57
23	102	100	156	e66	224	224	319	1790	46	22	42	43
24	93	87	514	e66	227	220	254	351	41	21	29	34
25	79	106	474	e64	185	408	177	215	86	19	23	30
26	107	93	186	e64	166	479	166	175	104	23	21	28
27	193	80	145	e72	150	722	142	141	55	50	21	26
28	141	316	130	e110	170	515	130	365	42	31	30	26
29	120	995	132	e94	200	223	115	264	58	25	41	26
30	115	526	300	e88	---	186	106	150	48	24	122	26
31	104	---	387	e80	---	464	---	252	---	120	65	---
TOTAL	2869	4857	6682	5373	4949	9172	10202	10780	3622	1215	2045	5251
MEAN	92.5	162	216	173	171	296	340	348	121	39.2	66.0	175
MAX	248	995	604	1240	553	1190	1080	2080	291	135	507	1500
MIN	50	67	112	64	60	127	106	74	41	19	18	18
CFSM	0.95	1.66	2.21	1.78	1.75	3.03	3.48	3.56	1.24	0.40	0.68	1.79
IN.	1.09	1.85	2.55	2.05	1.89	3.50	3.89	4.11	1.38	0.46	0.78	2.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926-2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	46.0	85.0	137	161	196	235	201	128	74.4	53.1	32.0	43.0
MAX	338	458	511	547	469	436	550	359	330	452	172	409
(WY)	1927	1986	1991	1952	1981	1963	1957	1984	1989	2003	1956	1926
MIN	8.31	12.3	18.5	26.3	10.3	68.6	37.1	10.6	10.5	8.09	7.16	7.14
(WY)	1964	1954	1964	1961	1934	1931	1946	1934	1933	1934	1962	1964

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1926-2004
ANNUAL TOTAL	70483	67017	
ANNUAL MEAN	193	183	115
HIGHEST ANNUAL MEAN			183
LOWEST ANNUAL MEAN			34.3
HIGHEST DAILY MEAN	3990	2080	5500
LOWEST DAILY MEAN	17	18	0.90
ANNUAL SEVEN-DAY MINIMUM	18	21	4.1
MAXIMUM PEAK FLOW		3050	8150
MAXIMUM PEAK STAGE		12.68	13.71
INSTANTANEOUS LOW FLOW			0.90
ANNUAL RUNOFF (CFSM)	1.98	1.88	1.18
ANNUAL RUNOFF (INCHES)	26.86	25.54	16.01
10 PERCENT EXCEEDS	474	417	262
50 PERCENT EXCEEDS	109	114	45
90 PERCENT EXCEEDS	26	26	13

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

03094000 Mahoning River at Leavittsburg, Ohio

LOCATION.—Latitude 41°14'21", longitude 80°52'51", in T.4 N., R.4 W., Trumbull County, Hydrologic Unit 05030103, on right bank at upstream side of Leavitt Road Bridge at Leavittsburg, Ohio, 300 ft downstream from Duck Creek, and 1.2 mi downstream from Eagle Creek.

DRAINAGE AREA.—575 mi².

PERIOD OF RECORD.—October 1940 to current year. Prior to June 1941 monthly discharge only, published in WSP 1305.

REVISED RECORDS.—WSP 1907: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 871.25 ft, National Geodetic Vertical Datum of 1912. Prior to July 2, 1941, nonrecording gage; July 2, 1941–July 22, 1952, water-stage recorder, at site 50 ft downstream at same datum.

REMARKS.—Records good except for periods of estimated record, which are poor. Flow regulated by Berlin Lake, 25 mi upstream, beginning in 1942, by Milton Reservoir, 17 mi upstream, and by Michael J. Kirwan Reservoir, 20 mi upstream on West Branch, beginning in 1966. Diversion upstream from station from Berlin Lake for part of municipal supply of Mahoning Valley Sanitary District (see station 03090500). Water-quality data formerly collected at this site. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 20,300 ft³/s Jan. 22, 1959, gage height, 19.37 ft; minimum daily, 60 ft³/s July 6, 1952.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Mar. 26, 1913 reached a stage of about 24 ft.

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	2340	672	1760	1100	e300	874	2100	618	2570	306	872	1460				
2	2290	658	2220	1250	e290	999	3300	1870	2320	297	748	1530				
3	1460	657	2050	1940	e360	1050	3170	2640	2370	298	442	1100				
4	1110	626	1380	2700	e520	681	1950	2070	2080	302	373	715				
5	1130	424	1150	3990	730	1110	1660	1770	1240	305	358	703				
6	1100	397	958	2870	745	1230	1560	1490	1020	300	352	687				
7	1070	391	922	1750	1310	1010	1320	1350	928	303	345	678				
8	1060	378	905	2160	1100	957	1250	809	663	305	340	713				
9	1010	369	866	2340	863	908	1220	687	540	289	337	3530				
10	809	362	1010	e2200	1490	822	1250	626	519	275	326	3280				
11	689	366	1890	e2100	1590	715	1220	634	652	291	319	1730				
12	661	511	2020	e2000	1550	655	1070	675	838	326	319	1640				
13	652	773	1350	e1900	1410	500	1280	616	754	457	322	1740				
14	670	648	1160	e1800	988	445	2670	448	850	358	322	2190				
15	1070	484	1120	e1700	e860	416	1910	523	1140	298	320	2310				
16	1680	439	1120	e1400	e660	392	2010	744	1920	297	319	2310				
17	1380	420	1560	e1100	e520	360	2060	538	2170	319	319	3390				
18	1280	405	1470	e920	e440	367	2020	754	2560	347	313	5070				
19	1240	466	1220	e620	e350	450	1950	1880	2560	346	337	2600				
20	1220	823	1140	e410	e320	1050	1570	2250	2420	322	440	2060				
21	1170	1120	1090	e310	e1000	2590	1180	2390	2270	299	851	2320				
22	859	1060	1060	e290	1370	1760	1380	5180	1950	286	681	2310				
23	782	1020	1120	e280	1000	904	1490	6610	1540	308	519	2320				
24	551	994	1890	e290	1100	753	1320	3350	939	311	694	2310				
25	463	964	2100	e280	1020	971	1090	3040	520	310	703	2300				
26	491	900	1470	e270	915	1180	1030	3180	431	322	697	2280				
27	801	620	1260	e300	757	1890	983	3140	358	341	782	2240				
28	799	1230	1200	e330	745	1790	913	3300	326	338	1300	2110				
29	793	2670	1110	e360	794	1000	638	3130	330	327	1430	1810				
30	756	2260	1240	e340	---	800	595	2630	324	365	1370	1720				
31	721	---	1520	e310	---	1520	---	2560	---	469	1440	---				
TOTAL	32107	23107	42331	39610	25097	30149	47159	61502	39102	10017	18290	61156				
MEAN	1036	770	1366	1278	865	973	1572	1984	1303	323	590	2039				
MAX	2340	2670	2220	3990	1590	2590	3300	6610	2570	469	1440	5070				
MIN	463	362	866	270	290	360	595	448	324	275	313	678				
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967-2004, BY WATER YEAR (WY)																
MEAN	443	573	815	759	800	913	868	728	582	456	397	526				
MAX	1575	2077	2010	2105	2262	1909	2089	2267	2116	2398	1246	2039				
(WY)	1991	1986	1978	1993	1990	1993	1994	1996	1989	2003	2003	2004				
MIN	145	139	156	171	226	212	243	261	253	237	236	227				
(WY)	1967	1992	1992	1992	1992	1969	1986	1992	1988	1988	1967	1967				
SUMMARY STATISTICS																
ANNUAL TOTAL				FOR 2003 CALENDAR YEAR				FOR 2004 WATER YEAR				WATER YEARS 1967-2004				
ANNUAL MEAN				391487				429627								
HIGHEST ANNUAL MEAN				1073				1174				654				
LOWEST ANNUAL MEAN												1174	2004			
HIGHEST DAILY MEAN				9580				Jul 23				6610	May 23	9580	Jul 23	2003
LOWEST DAILY MEAN				145				Jan 31				270	Jan 26	106	Oct 30	1966
ANNUAL SEVEN-DAY MINIMUM				151				Jan 27				289	Jan 21	116	Oct 26	1966
MAXIMUM PEAK FLOW												7470	May 23	11600	Jul 23	2003
MAXIMUM PEAK STAGE												14.16	May 23	17.16	Jul 23	2003
INSTANTANEOUS LOW FLOW														106	Oct 30	1966
10 PERCENT EXCEEDS				2160				2310				1530				
50 PERCENT EXCEEDS				880				968				358				
90 PERCENT EXCEEDS				274				321				211				

e Estimated.

03097550 Mahoning River at Ohio Edison Power Plant at Niles, Ohio

LOCATION.—Latitude 41°10'21", longitude 80°45'26", Trumbull County, Hydrologic Unit 05030103, on right bank 20 ft downstream from Conrail Spur Line, 100 ft downstream from Meander Creek, 0.2 mi upstream from Belmont Road, 0.4 mi. downstream from Mosquito Creek in Niles, Ohio.

DRAINAGE AREA.—854 mi².

PERIOD OF RECORD.—October 1987 to current year.

GAGE.—Water-stage recorder. Datum of gage is 843.08 ft above sea level.

REMARKS.—Records good except for periods of estimated record, which are poor. Water diverted upstream from station for municipal supply for cities of Niles, Warren, and Youngstown. Some sewage returned to river upstream from station. Water also diverted upstream and downstream from station for industrial use, some of which is returned to river upstream from station. Flow regulated by Berlin Lake, 37 mi upstream, beginning in 1942, by Milton Reservoir, 29 mi upstream, by Michael J. Kirwan Reservoir, 32 mi upstream on West Branch, beginning in 1966 by Mosquito Creek Lake, 11 mi upstream, beginning in 1943, by Meander Creek Reservoir. U.S. Army Corps of Engineers satellite telemeter at station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2620	884	2450	1810	489	1130	3360	769	2970	402	1190	1810
2	2830	843	2650	2000	466	1310	5120	2210	2770	374	1280	1730
3	2280	833	2810	3150	613	1500	5180	3850	2720	376	748	1260
4	1790	800	2320	4350	801	1170	3370	2880	2480	398	559	889
5	1710	620	1970	6410	974	1510	2640	2410	1520	403	491	947
6	1610	477	1740	5200	1320	1810	2300	2070	1190	381	467	951
7	1470	469	1540	2560	2180	1470	2030	1900	1060	380	454	856
8	1410	444	1440	2680	1940	1300	1830	1430	821	380	443	1800
9	1330	425	1370	3080	1310	1240	1630	1190	682	376	429	7680
10	1030	414	1580	2930	1580	1160	1540	1030	720	357	432	5820
11	820	452	2710	2920	1910	1040	1410	915	848	362	416	2730
12	730	622	2930	2880	1850	974	1320	880	1050	475	421	2410
13	717	1250	2150	2860	1750	806	1710	811	976	630	476	2320
14	885	1170	1780	2700	1310	690	4370	630	1170	565	438	e2400
15	1670	757	1680	2530	1130	631	3150	736	2310	459	426	e2200
16	2280	612	1600	2100	1040	589	2320	1010	2660	426	416	e2200
17	1850	564	2260	1470	946	562	2330	798	2370	569	418	e4700
18	1650	542	2390	1340	581	577	2270	1170	2680	605	418	e6600
19	1560	813	1890	1250	377	755	2270	2820	2680	554	586	e4100
20	1500	1600	1670	1180	616	1670	2040	3290	2490	458	791	e2400
21	1500	1730	1580	717	2100	3690	1670	4030	2340	408	1480	e2300
22	1180	1560	1510	533	2200	3270	1810	8140	2090	381	1200	e2300
23	977	1450	1550	462	1600	1850	2130	8600	1740	387	802	e2250
24	714	1420	2640	490	1540	1340	1980	5280	1250	407	897	e2200
25	508	1350	3140	465	1420	1510	1540	3400	974	404	877	e2300
26	579	1230	2400	471	1220	1850	1340	3540	662	454	848	e2500
27	1090	951	1920	521	1030	2810	1260	3510	508	448	985	e2450
28	1240	1800	1760	542	966	2920	1210	3630	447	432	1810	e2400
29	1180	3690	1650	576	1020	1950	929	3640	469	418	1900	e2400
30	1110	3320	1850	556	---	1570	735	3140	435	629	1780	e2300
31	978	---	2260	503	---	2360	---	2990	---	868	1840	---
TOTAL	42798	33092	63190	61236	36279	47014	66794	82699	47082	14166	25718	79203
MEAN	1381	1103	2038	1975	1251	1517	2226	2668	1569	457	830	2640
MAX	2830	3690	3140	6410	2200	3690	5180	8600	2970	868	1900	7680
MIN	508	414	1370	462	377	562	735	630	435	357	416	856
MED	1330	838	1890	1810	1220	1340	2000	2410	1220	408	586	2300
CFSM	1.62	1.29	2.39	2.31	1.46	1.78	2.61	3.12	1.84	0.54	0.97	3.09
IN.	1.86	1.44	2.75	2.67	1.58	2.05	2.91	3.60	2.05	0.62	1.12	3.45

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

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	594	693	947	1175	1161	1149	1244	1117	982	766	610	741					
MAX	2074	1935	2736	3088	2853	2881	2946	3113	3117	3176	1545	2640					
(WY)	1991	1993	1997	1993	1990	1993	1994	1996	1989	2003	2003	2004					
MIN	247	212	272	268	333	421	540	293	293	370	392	326					
(WY)	1989	1992	1992	1992	1992	2000	1988	1992	1992	1988	2001	2001					

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1988-2004

ANNUAL TOTAL	551366	599271		
ANNUAL MEAN	1511	1637		930
HIGHEST ANNUAL MEAN				1637
LOWEST ANNUAL MEAN				546
HIGHEST DAILY MEAN	12600	Jul 23	8600	May 23
LOWEST DAILY MEAN	250	Jan 23	357	Jul 10
ANNUAL SEVEN-DAY MINIMUM	256	Jan 22	377	Jul 5
MAXIMUM PEAK FLOW			9920	May 22
MAXIMUM PEAK STAGE			13.02	May 22
INSTANTANEOUS LOW FLOW				183
ANNUAL RUNOFF (CFSM)	1.77	1.92		1.09
ANNUAL RUNOFF (INCHES)	24.02	26.10		14.80
10 PERCENT EXCEEDS	2940	2930		2260
50 PERCENT EXCEEDS	1250	1410		494
90 PERCENT EXCEEDS	387	451		281

e Estimated.

03098600 Mahoning River below West Avenue at Youngstown, Ohio

LOCATION.—Latitude 41°06'18", longitude 80°39'46", Mahoning County, Hydrologic Unit 05030103, on left bank 200 ft below West Avenue Bridge, 0.4 mi upstream from Spring Common Bridge, 0.6 mi downstream from Mill Creek, in Youngstown, Ohio.

DRAINAGE AREA.—978 mi².

PERIOD OF RECORD.—October 1987 to current year.

GAGE.—Water-stage recorder. Datum of gage is 824.10 ft above sea level.

REMARKS.—Records excellent except for periods of estimated record, which are fair. Water diverted upstream from station for municipal supply for city of Youngstown. Some sewage returned to river upstream from station. Water also diverted upstream and downstream from station by a private company for industrial use, some of which is returned to river upstream from station. Flow regulated by Berlin Lake, 49 mi upstream, beginning in 1942; by Milton Reservoir, 41 mi upstream; by Michael J. Kirwan Reservoir, 44 mi upstream on West Branch, beginning in 1966; by Mosquito Creek Lake, 23 mi upstream, beginning in 1943; by Meander Creek Reservoir, 12 mi upstream, beginning in 1929; and by reservoir on Squaw Creek, 6 mi upstream, and 2 small reservoirs on Mill Creek, 0.6 mi upstream. U.S. Army Corps of Engineers satellite telemeter at station. Water-quality data collected at this site.

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	2700	1000	2630	1750	594	1250	3970	937	3150	465	1780	1790
2	2930	961	2700	2000	842	1480	7070	2450	2940	435	1510	1710
3	2370	948	2830	3660	800	1650	6780	4280	2870	423	896	1350
4	1850	923	2320	5710	1000	1340	4070	3090	2580	437	676	963
5	1730	817	1920	9310	1130	1640	2940	2520	1600	438	618	904
6	1620	693	1700	6850	1970	1950	2480	2170	1260	457	581	936
7	1510	674	1510	2820	2850	1610	2170	2030	1100	460	547	877
8	1450	642	1430	2700	2360	1450	1940	1620	907	557	531	1910
9	1400	619	1390	3090	1570	1370	1720	1300	768	466	517	12000
10	1130	604	1610	2730	1680	1260	1610	1120	847	440	519	9610
11	956	682	2910	2890	1990	1110	1510	1040	1010	438	489	3680
12	886	871	3100	2830	1910	1050	1480	994	1160	715	484	2550
13	875	1380	2180	2840	1800	910	2380	927	1040	765	568	2370
14	1380	1230	1720	2870	1420	800	6050	767	1400	655	534	2450
15	2210	907	1620	2600	1230	751	3990	899	3280	567	501	2400
16	2510	780	1550	2000	1140	706	2610	1090	3350	511	484	2400
17	1950	734	2410	1410	1080	691	2520	925	2760	685	474	7350
18	1640	703	2490	1290	839	713	2420	1510	3020	859	461	11300
19	1530	1130	1880	1190	653	923	2420	3310	2910	833	722	6790
20	1480	1720	1610	1260	949	2110	2240	3720	2560	591	1030	2760
21	1490	1760	1500	788	2530	4530	1800	5850	2340	521	2340	2730
22	1230	1540	1450	632	2590	3790	1930	12500	2070	481	1940	2750
23	1040	1420	1500	556	1830	2010	2410	12300	1670	480	1120	2710
24	872	1380	2890	588	1700	1460	2230	7150	1300	498	961	2680
25	707	1320	3330	563	1600	1570	1690	3870	1140	494	928	2730
26	817	1190	2470	569	1360	1940	1490	3980	733	623	879	2870
27	1330	996	1860	620	1160	3120	1390	3850	576	599	925	2860
28	1420	2240	1660	649	1090	3170	1320	4100	514	579	1970	2750
29	1330	4280	1560	670	1140	2080	1070	4000	563	531	2250	2530
30	1210	3800	1920	655	---	1660	895	3350	510	947	2070	2380
31	1080	---	2270	604	---	2450	---	3240	---	1180	1890	---
TOTAL	46633	37944	63920	68694	42807	52544	78595	100889	51928	18130	31195	103090
MEAN	1504	1265	2062	2216	1476	1695	2620	3254	1731	585	1006	3436
MAX	2930	4280	3330	9310	2850	4530	7070	12500	3350	1180	2340	12000
MIN	707	604	1390	556	594	691	895	767	510	423	461	877
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988-2004, BY WATER YEAR (WY)												
MEAN	663	779	1094	1385	1327	1358	1506	1313	1140	924	698	880
MAX	2303	2117	3184	3608	3323	3456	3502	3639	3693	4041	1916	3436
(WY)	1991	1993	1997	1993	1990	1993	1994	1996	1989	2003	2003	2004
MIN	264	222	312	302	432	517	684	437	377	430	419	346
(WY)	1992	1992	1992	1992	1992	2000	1995	1992	1988	1988	1991	1991
SUMMARY STATISTICS												
				FOR 2003 CALENDAR YEAR			FOR 2004 WATER YEAR			WATER YEARS 1988-02004		
ANNUAL TOTAL				649409			696369					
ANNUAL MEAN				1779			1903			1087		
HIGHEST ANNUAL MEAN										1903		
LOWEST ANNUAL MEAN										643		
HIGHEST DAILY MEAN				15600			Jul 23			12500		
LOWEST DAILY MEAN				314			Jan 23			423		
ANNUAL SEVEN-DAY MINIMUM				320			Jan 22			445		
MAXIMUM PEAK FLOW										14300		
MAXIMUM PEAK STAGE										15.91		
INSTANTANEOUS LOW FLOW										405		
10 PERCENT EXCEEDS				3380			3250			2550		
50 PERCENT EXCEEDS				1420			1490			571		
90 PERCENT EXCEEDS				529			569			333		

Surface-Water Records—Little Beaver River Basin

03109500 Little Beaver Creek near East Liverpool, Ohio

LOCATION.—Latitude 40°40'33", longitude 80°32'27", Columbiana County, Hydrologic Unit 05030101, on right bank at downstream side of Grimms Bridge, 1.5 mi upstream from Island Run, 4 mi upstream from mouth, and 4 mi northeast of East Liverpool, Ohio.

DRAINAGE AREA.—496 mi².

PERIOD OF RECORD.—May 1915 to current year.

REVISED RECORDS.—WSP 873: 1937(M). WSP 1305: 1916-18(M), 1921-22(M), 1924-30(M), 1933(M), 1936(M). WSP 1907: 1950(P), drainage area.

GAGE.—Water-stage recorder. Datum of gage is 702.77 ft, National Geodetic Vertical Datum of 1912. Prior to Sept. 22, 1926, nonrecording gage at same site and datum.

REMARKS.—Records good except for periods of estimated record, which are poor. Water-quality and sediment data formerly collected at this site. Satellit telemeter at station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
1	590	597	1350	900	e390	701	1420	e700	707	315	1390	839			
2	503	560	1110	1350	e380	1050	2160	e660	565	337	614	664			
3	454	518	911	1500	e780	1050	1810	e740	487	365	390	556			
4	457	478	830	2970	1840	1020	1400	e640	428	289	344	493			
5	491	509	816	6100	1300	1120	1120	e560	392	276	458	482			
6	410	504	813	3670	3030	1250	1020	e520	385	256	340	411			
7	365	449	747	1930	3100	1210	908	e490	358	247	258	366			
8	336	412	683	1470	1690	1060	869	e560	323	307	222	1460			
9	317	375	647	e1100	1190	980	844	e480	301	273	195	16800			
10	299	351	836	e900	981	843	752	e430	388	228	178	7880			
11	280	380	1940	e800	830	737	750	e700	450	213	169	2530			
12	268	530	1510	e740	e720	716	760	571	705	205	162	1450			
13	256	e500	1110	e680	e660	654	1340	497	476	250	170	1060			
14	361	e560	976	e640	e600	606	2220	429	900	231	190	847			
15	2090	e490	913	e600	e540	601	1530	441	4530	209	171	726			
16	1210	e410	836	e560	e490	583	1090	497	4490	197	151	629			
17	821	e350	1430	e520	e470	587	1010	420	3760	180	138	4760			
18	626	444	1340	e500	e450	574	998	461	3030	194	133	9920			
19	528	1290	1080	e490	e580	768	923	1250	1840	222	634	4090			
20	455	2280	943	e480	981	1510	921	1050	1090	236	1620	1780			
21	418	1500	797	e470	2060	3020	896	2150	818	188	5160	1260			
22	408	1170	760	e460	1330	1730	859	8420	706	166	3420	991			
23	403	973	804	e450	994	1240	1240	8800	597	159	1160	817			
24	372	885	1600	e440	1040	1030	1090	2690	506	169	698	708			
25	339	796	1570	e430	924	940	946	1420	459	148	527	639			
26	374	701	1160	e540	794	884	1060	1060	431	468	431	581			
27	1270	645	980	e680	699	998	934	964	384	518	399	535			
28	1390	2290	880	e490	669	940	860	818	367	316	7100	504			
29	1020	2950	e820	e430	665	757	e780	692	421	240	4760	471			
30	880	1730	e1200	e420	---	754	e740	589	362	206	2010	434			
31	692	---	e1100	e400	---	928	---	721	---	791	1180	---			
TOTAL	18683	25627	32492	33110	30177	30841	33250	40420	30656	8399	34772	64683			
MEAN	603	854	1048	1068	1041	995	1108	1304	1022	271	1122	2156			
MAX	2090	2950	1940	6100	3100	3020	2220	8800	4530	791	7100	16800			
MIN	256	350	647	400	380	574	740	420	301	148	133	366			
MED	454	545	943	600	794	940	972	660	481	236	399	771			
CFSM	1.22	1.72	2.11	2.15	2.10	2.01	2.23	2.63	2.06	0.55	2.26	4.35			
IN.	1.40	1.92	2.44	2.48	2.26	2.31	2.49	3.03	2.30	0.63	2.61	4.85			
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916-2004, BY WATER YEAR (WY)															
MEAN	180	323	540	712	849	1104	918	662	400	263	189	175			
MAX	1380	2102	2012	3993	1957	2493	2187	1876	1784	1554	1567	2156			
(WY)	1955	1986	1991	1937	1956	1945	1940	1929	1989	1990	1980	2004			
MIN	25.7	38.2	50.7	63.9	50.8	241	202	79.9	40.8	29.6	22.0	17.4			
(WY)	1964	1931	1931	1931	1934	1969	1946	1934	1934	1930	1930	1932			
SUMMARY STATISTICS															
ANNUAL TOTAL				FOR 2003 CALENDAR YEAR				FOR 2004 WATER YEAR				WATER YEARS 1916-2004			
ANNUAL MEAN				320174				383110							
HIGHEST ANNUAL MEAN				877				1047				525			
LOWEST ANNUAL MEAN												1047			
HIGHEST DAILY MEAN				6120				Jul 28				16800			
LOWEST DAILY MEAN				160				Jan 31				133			
ANNUAL SEVEN-DAY MINIMUM				165				Jan 26				159			
MAXIMUM PEAK FLOW												22300			
MAXIMUM PEAK STAGE												16.48			
INSTANTANEOUS LOW FLOW												129			
ANNUAL RUNOFF (CFSM)				1.77				2.11				1.06			
ANNUAL RUNOFF (INCHES)				24.01				28.73				14.37			
10 PERCENT EXCEEDS				1750				1820				1230			
50 PERCENT EXCEEDS				640				700				252			
90 PERCENT EXCEEDS				248				279				52			

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.
e Estimated.

Surface-Water Records—Yellow Creek Basin

03110000 Yellow Creek near Hammondsville, Ohio

LOCATION.—Latitude 40°32'16", longitude 80°43'31", in sec. 29, T.8 N., R.2 W., Jefferson County, Hydrologic Unit 05030101, on right bank 1,000 ft upstream from Lowery Run, 0.9 mi upstream from Brush Creek and 1.6 mi southwest of Hammondsville, Ohio.

DRAINAGE AREA.—147 mi².

PERIOD OF RECORD.—October 1940 to current year.

REVISED RECORDS.—WSP 1907: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 692.10 ft above sea level (Ohio State Highway Department benchmark).

REMARKS.—Records excellent except for periods of estimated record, which are poor. Water-quality and sediment data formerly collected at this site. U.S. Army Corps of Engineers satellite telemeter at station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	145	173	418	248	e98	171	1230	236	305	86	357	193
2	126	164	309	449	e98	273	1490	222	207	79	182	151
3	111	177	244	497	e240	294	861	243	182	73	130	124
4	110	126	210	1740	550	317	628	199	146	68	188	121
5	110	128	207	3650	291	347	471	180	128	97	294	125
6	92	156	205	1310	1510	435	372	166	121	79	161	98
7	83	139	179	727	1170	408	325	157	106	67	121	85
8	76	136	158	519	506	356	298	192	93	74	98	796
9	71	141	150	417	367	305	273	154	86	61	83	7820
10	68	107	177	e290	300	262	227	138	95	53	76	1350
11	65	107	708	e230	257	234	203	144	274	103	75	626
12	62	124	502	e200	233	231	200	137	692	74	67	411
13	59	122	354	e170	e200	197	586	119	307	89	70	319
14	68	133	304	e160	e170	182	1460	109	1760	70	71	268
15	362	127	264	e150	e150	179	857	108	1200	76	58	223
16	229	117	228	e145	e140	173	559	128	855	67	51	190
17	191	102	473	e140	e130	172	430	102	735	57	48	2150
18	155	96	412	e135	e125	163	346	142	1100	67	46	5390
19	135	289	334	e130	e150	239	291	360	624	63	110	955
20	119	648	280	e125	230	400	262	298	412	85	451	623
21	109	396	228	e120	449	948	236	1400	301	63	1800	389
22	111	295	209	e115	308	593	240	1810	264	51	665	281
23	109	254	218	e115	248	419	734	735	211	48	327	243
24	95	278	432	e110	249	339	618	452	170	46	217	205
25	85	220	406	e110	229	298	433	310	153	39	164	169
26	89	164	330	e140	206	266	399	258	135	257	135	133
27	320	140	274	e220	188	246	324	220	116	229	122	119
28	344	595	244	e150	174	226	286	194	110	119	120	109
29	279	820	228	e110	169	203	249	168	125	87	233	100
30	231	570	302	e105	---	206	235	138	98	71	381	91
31	193	---	281	e100	---	262	---	385	---	348	305	---
TOTAL	4402	7044	9268	12827	9135	9344	15123	9604	11111	2846	7206	23857
MEAN	142	235	299	414	315	301	504	310	370	91.8	232	795
MAX	362	820	708	3650	1510	948	1490	1810	1760	348	1800	7820
MIN	59	96	150	100	98	163	200	102	86	39	46	85
CFSM	0.97	1.60	2.03	2.81	2.14	2.05	3.43	2.11	2.52	0.62	1.58	5.41
IN.	1.11	1.78	2.35	3.25	2.31	2.36	3.83	2.43	2.81	0.72	1.82	6.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941-2004, BY WATER YEAR (WY)

MEAN	47.3	94.0	171	220	271	342	300	216	122	65.7	52.2	51.9
MAX	242	611	879	745	649	848	627	538	588	266	492	795
(WY)	1991	1986	1991	1952	1956	1945	1948	1956	1989	1958	1980	2004
MIN	4.92	5.08	10.8	20.8	23.6	55.1	75.9	40.0	10.1	6.12	3.95	2.26
(WY)	1954	1992	1964	1977	1954	1969	1941	1988	1988	1965	1962	1999

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1941-2004	
	Value	Date	Value	Date	Value	Date
ANNUAL TOTAL	78472		121767			
ANNUAL MEAN	215		333		163	
HIGHEST ANNUAL MEAN					333	2004
LOWEST ANNUAL MEAN					73.9	1992
HIGHEST DAILY MEAN	1680	May 10	7820	Sep 9	7820	Sep 9 2004
LOWEST DAILY MEAN	28	Aug 26	39	Jul 25	0.80	Sep 25 1963
ANNUAL SEVEN-DAY MINIMUM	36	Aug 20	56	Jul 19	0.80	Sep 25 1963
MAXIMUM PEAK FLOW			10500	Sep 9a	10500	Sep 9 2004
MAXIMUM PEAK STAGE			12.98	Sep 9	12.98	Sep 9 2004
INSTANTANEOUS LOW FLOW			36	Jul 26	0.80	Sep 24 1963
ANNUAL RUNOFF (CFSM)	1.46		2.26		1.11	
ANNUAL RUNOFF (INCHES)	19.86		30.81		15.04	
10 PERCENT EXCEEDS	469		623		388	
50 PERCENT EXCEEDS	155		200		77	
90 PERCENT EXCEEDS	51		79		11	

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

Surface-Water Records—Short Creek Basin

03111500 Short Creek near Dillonvale, Ohio

LOCATION.—Latitude 40°11'36", longitude 80°44'04", in sec. 30, T.4 N., R.2 W., Jefferson County, Hydrologic Unit 05030106, on right bank 350 ft downstream from bridge on State Highway 150, 2.1 mi east of Dillonvale, Ohio, 2.2 mi downstream from Jug Run, and 2.9 mi upstream from Little Short Creek.

DRAINAGE AREA.—123 mi².

PERIOD OF RECORD.—October 1941 to current year.

REVISED RECORDS.—WSP 1003: 1942-43. WSP 1907: Drainage area. WDR-OH-82-1: 1981.

GAGE.—Water-stage recorder. Datum of gage is 675.1 ft above sea level (State of Ohio benchmark). Prior to Oct. 21, 1982, at datum 1.00 ft higher; prior to Oct. 21, 1941, nonrecording gage at same site at 676.1 ft datum.

REMARKS.—Record good except for periods of estimated record, which are poor. Water-quality and sediment data formerly collected at this site. U.S. Army Corps of Engineers satellite telemeter at station. Water year 1986 streamflow records published in water year 1987 report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97	96	207	207	e135	159	436	170	200	93	176	170
2	90	91	178	566	e130	277	509	165	168	96	105	135
3	86	85	160	921	e270	234	340	165	205	101	86	116
4	95	82	154	3770	455	240	308	144	152	86	84	105
5	90	90	178	2650	259	240	268	137	140	84	97	98
6	82	96	189	886	1790	302	233	133	134	79	75	90
7	80	84	168	609	706	280	217	149	121	80	68	86
8	77	76	153	e460	382	247	209	186	111	82	63	1430
9	73	73	152	e380	e270	219	199	140	107	72	59	3440
10	73	69	253	e320	e230	196	180	127	122	69	57	662
11	71	75	627	e280	e200	186	168	118	366	71	82	423
12	70	140	309	e260	e170	181	213	120	483	74	65	326
13	68	149	238	e230	e160	164	696	111	227	75	69	270
14	119	118	228	e200	e150	160	666	108	942	68	66	233
15	322	104	208	e180	e140	156	395	111	685	68	57	207
16	145	98	196	e170	e130	171	314	110	346	64	52	190
17	174	91	368	e160	e125	176	275	101	275	73	50	3620
18	143	87	273	e150	e120	169	247	241	241	81	48	2930
19	123	669	232	e140	e160	221	223	466	199	70	372	785
20	110	495	207	e135	243	215	209	277	173	67	293	503
21	103	266	186	e130	325	316	196	1010	155	61	1080	399
22	98	209	182	e125	231	244	196	760	148	59	307	365
23	95	182	220	e120	200	209	494	359	137	66	177	316
24	90	178	478	e115	208	194	303	267	124	70	134	289
25	89	164	320	e110	203	194	257	214	126	56	113	263
26	105	146	257	e110	178	181	241	218	119	356	108	243
27	286	141	224	e100	165	177	215	194	110	192	101	225
28	190	467	209	e180	157	166	197	209	109	115	177	216
29	143	374	200	e160	153	156	175	202	105	90	432	204
30	121	250	276	e150	---	169	167	160	96	77	361	193
31	104	---	235	e140	---	206	---	242	---	193	263	---
TOTAL	3612	5245	7465	14114	8045	6405	8746	7114	6626	2888	5277	18532
MEAN	117	175	241	455	277	207	292	229	221	93.2	170	618
MAX	322	669	627	3770	1790	316	696	1010	942	356	1080	3620
MIN	68	69	152	100	120	156	167	101	96	56	48	86
CFSM	0.95	1.42	1.96	3.70	2.26	1.68	2.37	1.87	1.80	0.76	1.38	5.02
IN.	1.09	1.59	2.26	4.27	2.43	1.94	2.65	2.15	2.00	0.87	1.60	5.60
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942-2004, BY WATER YEAR (WY)												
MEAN	52.6	75.5	116	160	200	242	221	173	117	77.0	64.2	60.1
MAX	195	515	414	469	459	725	488	391	422	331	610	618
(WY)	1955	1986	1991	1950	1975	1945	1961	1967	1989	1990	1980	2004
MIN	13.8	13.8	12.1	20.9	24.8	54.7	69.3	51.4	28.1	17.4	11.5	8.62
(WY)	1954	1954	1944	1967	1954	1969	1946	1976	1988	1954	1945	1947
SUMMARY STATISTICS												
ANNUAL TOTAL				FOR 2003 CALENDAR YEAR				FOR 2004 WATER YEAR				WATER YEARS 1942-2004
ANNUAL MEAN				60070				94069				
HIGHEST ANNUAL MEAN				165				257				129
LOWEST ANNUAL MEAN												257
HIGHEST DAILY MEAN				902				3770				46.1
LOWEST DAILY MEAN				49				48				204
ANNUAL SEVEN-DAY MINIMUM				58				58				204
MAXIMUM PEAK FLOW								9110				1947
MAXIMUM PEAK STAGE								12.65				1943
INSTANTANEOUS LOW FLOW								45				1947
ANNUAL RUNOFF (CFSM)				1.34				2.09				1.05
ANNUAL RUNOFF (INCHES)				18.17				28.45				14.30
10 PERCENT EXCEEDS				304				406				267
50 PERCENT EXCEEDS				128				172				80
90 PERCENT EXCEEDS				68				76				23

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

Surface-Water Records—Wheeling Creek Basin

03111548 Wheeling Creek below Blaine, Ohio

LOCATION.—Latitude 40°04'01", longitude 80°48'31", Belmont County, Hydrologic Unit 05030106, on left bank at bridge on Pease Township Road 320 near U.S. Route 40, 0.5 mi east of Blaine, Ohio, and 4.8 mi upstream from mouth.

DRAINAGE AREA.—97.7 mi².

PERIOD OF RECORD.—December 1982 to September 1987, October 1988 to current year.

GAGE.—Water-stage recorder. Datum of gage is 699.11 ft above sea level. Prior to Oct. 1, 1988, at datum 1.00 ft higher.

REMARKS.—Records fair except for periods of estimated record, which are poor. U.S. Army Corps of Engineers satellite telemeter at station. Sediment data formerly collected at this site.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	65	129	160	733	106	369	109	126	86	120	88
2	48	64	112	394	546	207	363	112	128	84	81	73
3	44	63	100	1030	997	157	241	109	166	84	71	66
4	53	61	96	3890	329	155	230	98	119	83	75	64
5	48	88	117	2390	202	157	199	97	107	82	88	99
6	44	90	132	627	1860	209	175	93	102	77	67	69
7	49	74	110	405	530	180	163	101	93	76	61	62
8	41	65	98	e290	251	163	159	111	89	77	57	1370
9	40	59	98	e250	206	150	150	93	85	70	57	2680
10	40	56	258	e220	e180	137	137	83	87	68	82	460
11	40	65	569	e200	e160	130	128	80	292	70	75	283
12	41	e190	237	e190	e140	126	192	106	326	69	63	225
13	40	e210	184	e180	e130	114	702	85	153	69	67	191
14	132	e130	178	e160	e120	111	545	76	917	63	62	171
15	209	e94	165	e150	e110	110	295	80	272	63	53	159
16	82	e78	166	e140	e105	131	232	79	201	59	52	149
17	93	e70	369	e130	e100	136	205	70	188	72	51	e4000
18	79	e64	221	e125	e96	129	184	209	167	84	50	e2100
19	67	e560	185	e120	e110	164	167	711	142	76	160	e720
20	60	e350	166	e115	142	155	163	233	127	66	722	e480
21	57	e200	149	e110	185	237	153	315	121	60	985	354
22	56	e140	149	e105	142	168	150	497	120	56	174	299
23	53	e110	195	e100	124	147	217	225	115	58	103	263
24	48	e100	448	e98	131	138	160	177	105	54	81	235
25	46	e94	251	e96	131	137	145	149	105	50	68	215
26	60	90	202	e94	115	129	140	231	98	251	77	198
27	223	86	179	e130	109	139	131	166	91	153	69	181
28	128	339	167	154	105	136	120	164	92	88	187	175
29	94	258	161	126	102	125	112	151	100	71	183	164
30	79	152	230	117	---	134	105	123	92	66	147	151
31	70	---	182	215	---	187	---	143	---	138	138	---
TOTAL	2214	4065	6003	12511	8191	4604	6432	5076	4926	2523	4326	15744
MEAN	71.4	136	194	404	282	149	214	164	164	81.4	140	525
MAX	223	560	569	3890	1860	237	702	711	917	251	985	4000
MIN	40	56	96	94	96	106	105	70	85	50	50	62
CFSM	0.73	1.39	1.98	4.13	2.89	1.52	2.19	1.68	1.68	0.83	1.43	5.37
IN.	0.84	1.55	2.29	4.76	3.12	1.75	2.45	1.93	1.88	0.96	1.65	5.99

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984-2004, BY WATER YEAR (WY)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	
MEAN	43.9	86.1	108	149	157	179	164	146	120	71.9	53.1	66.6										
MAX	138	402	395	404	282	330	279	344	345	230	140	525										
(WY)	1991	1986	1991	2004	2004	1993	1994	1996	1998	1990	2004	2004										
MIN	17.9	23.7	44.4	51.5	66.0	72.7	73.9	52.8	34.7	31.3	16.6	9.53										
(WY)	1989	1992	1989	1992	2002	1987	1986	1986	1992	1999	1986	1985										

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1984-2004

ANNUAL TOTAL	47425	76615		
ANNUAL MEAN	130	209	112	
HIGHEST ANNUAL MEAN			209	2004
LOWEST ANNUAL MEAN			70.6	1992
HIGHEST DAILY MEAN	967	Mar 9	4000	Sep 17 2004
LOWEST DAILY MEAN	40	Oct 9	40	Oct 9 1985
ANNUAL SEVEN-DAY MINIMUM	42	Oct 7	42	Oct 7 1985
MAXIMUM PEAK FLOW			8500	Sep 17a 2004
MAXIMUM PEAK STAGE			12.54	Sep 17 2004
INSTANTANEOUS LOW FLOW				7.0 Sep 21 1985
ANNUAL RUNOFF (CFSM)	1.33	2.14	1.14	
ANNUAL RUNOFF (INCHES)	18.06	29.17	15.54	
10 PERCENT EXCEEDS	247	318	213	
50 PERCENT EXCEEDS	95	128	71	
90 PERCENT EXCEEDS	53	62	24	

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

Surface-Water Records—Captina Creek Basin

031139900 Captina Creek at State Route 148 at Armstrongs Mills, Ohio

LOCATION.—Latitude 39°54'24", longitude 80°56'10", Belmont County, Hydrologic Unit 05030106, on left bank at downstream side of bridge on State Highway 148, at intersection of State Highway 9 at Armstrongs Mills, Ohio.

DRAINAGE AREA.—127 mi².

PERIOD OF RECORD.—June 2003 to September 2004.

GAGE.—Water-stage recorder. Datum of gage is 757.11 ft above sea level.

REMARKS.—Records good except for periods of estimated record, which are poor. Station relocated 1.5 mi upstream from Station 03114000 Captina Creek at Armstrong Mills.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	196	13	e170	1330
2	---	---	---	---	---	---	---	---	116	13	e90	3910
3	---	---	---	---	---	---	---	---	300	9.5	e700	1050
4	---	---	---	---	---	---	---	---	414	7.6	e900	503
5	---	---	---	---	---	---	---	---	251	6.5	e300	326
6	---	---	---	---	---	---	---	---	183	50	e170	255
7	---	---	---	---	---	---	---	---	318	24	e190	205
8	---	---	---	---	---	---	---	---	276	63	e400	168
9	---	---	---	---	---	---	---	---	434	83	e350	124
10	---	---	---	---	---	---	---	---	218	262	e270	90
11	---	---	---	---	---	---	---	---	167	295	e190	76
12	---	---	---	---	---	---	---	---	283	202	e120	70
13	---	---	---	---	---	---	---	---	159	187	e70	63
14	---	---	---	---	---	---	---	---	128	65	e47	60
15	---	---	---	---	---	---	---	---	108	39	e34	79
16	---	---	---	---	---	---	---	---	88	238	e480	77
17	---	---	---	---	---	---	---	---	194	62	e140	54
18	---	---	---	---	---	---	---	---	426	74	e60	48
19	---	---	---	---	---	---	---	---	218	378	e45	3450
20	---	---	---	---	---	---	---	---	144	75	e36	742
21	---	---	---	---	---	---	---	---	110	40	e30	306
22	---	---	---	---	---	---	---	---	89	90	e27	464
23	---	---	---	---	---	---	---	---	68	1740	e23	697
24	---	---	---	---	---	---	---	---	52	1530	e20	297
25	---	---	---	---	---	---	---	---	39	293	e18	232
26	---	---	---	---	---	---	---	---	31	130	e16	185
27	---	---	---	---	---	---	---	---	26	84	e3600	191
28	---	---	---	---	---	---	---	---	23	72	966	214
29	---	---	---	---	---	---	---	---	19	56	305	165
30	---	---	---	---	---	---	---	---	15	36	2370	147
31	---	---	---	---	---	---	---	---	---	e27	780	---
TOTAL	---	---	---	---	---	---	---	---	5093	6244.6	12917	15578
MEAN	---	---	---	---	---	---	---	---	170	201	417	519
MAX	---	---	---	---	---	---	---	---	434	1740	3600	3910
MIN	---	---	---	---	---	---	---	---	15	6.5	16	48
CFSM	---	---	---	---	---	---	---	---	1.34	1.59	3.28	4.09
IN.	---	---	---	---	---	---	---	---	1.49	1.83	3.78	4.56

e Estimated.

031139900 Captina Creek at State Route 148 at Armstrongs Mills, Ohio—Continued

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	150	167	291	237	e54	101	851	80	89	38	215	79
2	130	155	245	463	e64	258	850	74	80	29	81	64
3	115	144	209	1180	2660	202	477	64	142	32	54	51
4	131	132	191	5570	456	208	357	46	87	34	44	46
5	132	147	218	3470	263	211	234	65	83	35	47	49
6	110	177	247	273	4380	659	182	49	78	26	34	41
7	99	147	216	e140	992	373	157	63	65	36	25	37
8	94	131	191	e100	e140	250	150	72	55	37	22	3230
9	89	120	185	e88	e70	191	142	63	46	21	21	4450
10	87	114	700	e76	e60	150	116	55	50	25	23	e755
11	84	134	1780	e72	e50	129	107	52	453	29	47	338
12	81	3250	430	e66	e47	120	255	58	468	18	32	208
13	77	539	259	e62	e44	106	1740	50	163	18	35	149
14	1260	305	274	e58	e42	102	1330	46	802	16	31	116
15	812	250	243	e56	e40	98	569	52	291	13	22	102
16	243	215	228	e54	e38	130	349	79	152	14	19	88
17	223	187	687	e52	e37	153	240	53	128	37	15	e9600
18	214	166	349	e50	e36	148	193	818	162	54	14	e6800
19	179	2930	289	e49	e37	374	155	1960	103	32	271	e1700
20	149	1060	249	e47	115	246	137	504	89	22	256	e600
21	137	379	210	e46	158	304	129	1210	77	21	1010	e340
22	127	286	204	e45	118	209	116	1660	74	16	175	e180
23	114	245	273	e43	103	164	140	474	65	16	100	e140
24	102	228	1030	e42	121	145	114	237	56	11	75	e110
25	95	208	391	e41	128	132	105	153	70	12	62	e92
26	120	182	296	e40	102	114	115	146	57	489	56	e84
27	761	168	254	e39	94	116	101	115	48	133	60	e76
28	340	552	233	e190	89	111	81	104	43	70	63	e72
29	268	484	217	e110	87	102	87	96	62	50	87	68
30	217	324	328	e84	---	110	80	85	45	29	178	62
31	185	---	270	e50	---	266	---	95	---	366	118	---
TOTAL	6925	13526	11187	12893	10625	5982	9659	8678	4183	1779	3292	29727
MEAN	223	451	361	416	366	193	322	280	139	57.4	106	991
MAX	1260	3250	1780	5570	4380	659	1740	1960	802	489	1010	9600
MIN	77	114	185	39	36	98	80	46	43	11	14	37
CFSM	1.76	3.55	2.84	3.27	2.88	1.52	2.54	2.20	1.10	0.45	0.84	7.80
IN.	2.03	3.96	3.28	3.78	3.11	1.75	2.83	2.54	1.23	0.52	0.96	8.71
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003-2004, BY WATER YEAR (WY)												
MEAN	223	451	361	416	366	193	322	280	155	129	261	755
MAX	223	451	361	416	366	193	322	280	170	201	417	991
(WY)	2004	2004	2004	2004	2004	2004	2004	2004	2003	2003	2003	2004
MIN	223	451	361	416	366	193	322	280	139	57.4	106	519
(WY)	2004	2004	2004	2004	2004	2004	2004	2004	2004	2004	2004	2003

SUMMARY STATISTICS	FOR 2004 WATER YEAR		WATER YEARS 2003-2004	
	ANNUAL TOTAL	118456		
ANNUAL MEAN	324		324	
HIGHEST ANNUAL MEAN			324	2004
LOWEST ANNUAL MEAN			324	2004
HIGHEST DAILY MEAN	9600	Sep 17	9600	Sep 17 2004
LOWEST DAILY MEAN	11	Jul 24	6.5	Jul 5 2003
ANNUAL SEVEN-DAY MINIMUM	19	Jul 19	12	Jun 29 2003
MAXIMUM PEAK FLOW	28100	Sep 17a	28100	Sep 17 2004
MAXIMUM PEAK STAGE	23.54	Sep 17	23.54	Sep 17 2004
ANNUAL RUNOFF (CFSM)	2.55		2.55	
ANNUAL RUNOFF (INCHES)	34.70		34.63	
10 PERCENT EXCEEDS	543		543	
50 PERCENT EXCEEDS	116		116	
90 PERCENT EXCEEDS	37		37	

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

Surface-Water Records—Muskingum River Basin

03115973 Schocalog Run at Copley Junction, Ohio

LOCATION.—Latitude 41°06'11", longitude 81°36'12", Summit County, Hydrologic Unit 05040001, on right upstream side of six barrel culvert under the Akron Canton and Youngstown Railroad, 150 ft east of Schocalog Road, 0.25 mi west of Copley Junction, Ohio, 0.3 mi downstream of Schocalog Lake, and 0.8 mi southeast of intersection of I-77 and Ridgewood Road.

DRAINAGE AREA.—3.65 mi².

PERIOD OF RECORD.—October 1, 1991 to current year.

GAGE.—Water-stage recorder. Datum of gage is 963.39 ft above sea level (North American Vertical Datum of 1988).

REMARKS.—Records fair except for discharges less than 0.5 ft³/s, which are poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	2.1	7.8	4.6	2.7	3.0	22	6.2	5.5	2.2	23	1.6
2	2.9	2.6	4.4	11	2.7	4.6	31	28	6.0	1.6	5.0	1.1
3	2.9	2.4	3.5	20	13	4.2	13	12	7.7	1.7	3.1	1.1
4	8.2	2.2	3.3	35	8.5	6.0	18	5.0	4.0	2.6	2.8	0.91
5	4.1	1.8	3.4	41	4.8	12	15	3.6	3.2	3.7	2.5	0.96
6	2.5	2.2	5.2	9.9	13	5.5	9.6	3.0	3.2	1.8	1.9	0.89
7	2.5	2.1	4.8	5.9	11	4.8	8.0	4.2	2.6	1.7	1.4	1.00
8	2.7	2.2	3.7	4.8	5.5	6.6	6.6	5.0	2.2	1.9	1.2	23
9	2.5	2.2	3.8	4.4	4.8	5.8	6.0	3.0	2.9	1.2	1.3	45
10	2.7	2.0	20	4.0	4.3	4.8	5.0	8.4	15	0.97	1.7	6.4
11	3.1	3.9	19	3.7	3.9	4.0	4.8	5.3	28	1.3	1.6	3.1
12	2.5	7.0	5.9	3.8	3.7	5.2	4.9	6.6	21	1.8	1.2	2.1
13	3.3	8.3	4.2	4.1	3.4	4.1	22	3.2	6.8	8.9	0.68	1.7
14	6.7	4.0	3.6	3.6	3.3	3.8	31	2.2	27	4.0	1.2	1.6
15	15	3.3	3.8	3.5	3.6	3.5	9.8	6.4	17	6.0	0.89	1.4
16	4.2	3.5	4.4	3.1	3.3	3.7	5.9	4.5	9.3	2.7	1.3	2.0
17	2.5	3.6	7.3	2.7	3.3	5.1	4.8	2.6	10	2.7	0.96	48
18	2.0	3.9	4.5	3.2	3.1	5.0	5.3	12	7.2	5.0	1.3	28
19	1.9	8.4	3.5	3.2	3.4	9.9	4.6	16	4.6	3.5	14	4.5
20	1.7	5.9	3.2	2.6	7.2	20	4.6	4.3	3.9	2.2	13	2.7
21	1.9	3.9	2.9	2.4	14	17	6.9	85	3.5	1.9	15	2.1
22	6.9	3.5	2.6	2.4	5.9	8.1	12	170	3.2	4.1	3.5	1.4
23	5.3	2.7	12	2.3	4.6	6.0	12	32	2.8	3.4	1.6	1.1
24	2.6	3.2	21	2.4	4.7	5.7	5.6	16	2.3	1.8	1.4	1.1
25	2.2	4.4	9.0	2.4	4.4	14	4.8	7.2	5.2	2.3	1.3	1.0
26	9.5	2.8	5.3	2.7	3.8	17	5.1	6.2	4.4	8.7	1.2	0.92
27	5.4	4.6	4.7	7.7	3.5	31	4.2	5.0	2.3	7.5	1.6	0.68
28	3.0	31	4.2	6.0	3.0	10	4.3	4.0	3.4	3.5	3.0	0.46
29	2.5	18	4.3	3.9	2.8	6.5	3.7	3.6	6.2	2.7	5.6	0.74
30	2.5	9.7	23	3.6	---	29	3.3	3.3	2.8	2.4	6.4	0.80
31	2.6	---	6.6	3.0	---	29	---	16	---	54	2.3	---
TOTAL	121.3	157.4	214.9	212.9	155.2	294.9	293.8	489.8	223.2	149.77	122.93	187.36
MEAN	3.91	5.25	6.93	6.87	5.35	9.51	9.79	15.8	7.44	4.83	3.97	6.25
MAX	15	31	23	41	14	31	31	170	28	54	23	48
MIN	1.7	1.8	2.6	2.3	2.7	3.0	3.3	2.2	2.2	0.97	0.68	0.46
CFSM	1.07	1.44	1.90	1.88	1.47	2.61	2.68	4.33	2.04	1.32	1.09	1.71
IN.	1.24	1.60	2.19	2.17	1.58	3.01	2.99	4.99	2.27	1.53	1.25	1.91

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992-2004, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	2.67	4.25	4.45	5.89	4.69	6.22	7.69	6.32	5.32	5.12	3.32	3.96	
MAX	5.32	9.51	9.83	10.9	6.80	11.0	12.2	15.8	9.73	20.1	6.96	9.96	
(WY)	1997	1993	1997	1993	1997	1993	1994	2004	1997	2003	1992	1992	
MIN	0.28	1.44	1.81	2.37	1.99	3.18	4.09	2.52	1.86	0.95	0.28	0.61	
(WY)	1995	2001	1996	2002	1995	2000	2001	1992	1999	1993	1993	1994	

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1992-2004	
ANNUAL TOTAL	2646.08		2623.46			
ANNUAL MEAN	7.25		7.17		4.99	
HIGHEST ANNUAL MEAN					7.17 2004	
LOWEST ANNUAL MEAN					3.04 2001	
HIGHEST DAILY MEAN	174	Jul 22	170	May 22	174	Jul 22 2003
LOWEST DAILY MEAN	0.82	Sep 14	0.46	Sep 28	0.01	May 23 1993
ANNUAL SEVEN-DAY MINIMUM	1.1	Sep 8	0.81	Sep 24	0.03	Aug 23 1993
MAXIMUM PEAK FLOW			267 May 22a		275 Jul 22 2003	
MAXIMUM PEAK STAGE			13.59 May 22		13.64 Jul 22 2003	
INSTANTANEOUS LOW FLOW			0.24 Nov 24		0.01 May 19 1993	
ANNUAL RUNOFF (CFSM)	1.99		1.96		1.37	
ANNUAL RUNOFF (INCHES)	26.97		26.74		18.57	
10 PERCENT EXCEEDS	16		16		10	
50 PERCENT EXCEEDS	3.5		3.9		2.5	
90 PERCENT EXCEEDS	1.8		1.6		0.79	

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

03116077 Chippewa Creek at Miller Road at Sterling, Ohio

LOCATION.—Latitude 40°57'59", longitude 81°51'02", Wayne County, Hydrologic Unit 05040001, on right upstream bridge abutment of Miller Road bridge, 800 ft southwest of Seville Road and Chestnut Street in the Village of Sterling.

DRAINAGE AREA.—50.4 mi².

PERIOD OF RECORD.—October 2001 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 960 ft above sea level (from topographic map).

REMARKS.—Records good except for periods of estimated record, which are poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	29	115	119	31	61	237	66	63	13	34	23
2	49	26	90	142	29	82	353	245	66	10	16	17
3	35	23	72	350	69	77	225	193	61	9.2	11	12
4	31	20	59	445	87	82	202	124	45	11	9.7	13
5	27	19	54	664	51	142	191	99	38	11	9.9	18
6	21	17	54	242	82	105	153	82	33	8.1	6.5	12
7	17	15	48	165	103	88	127	204	29	7.7	5.0	9.2
8	14	14	41	128	72	83	106	202	26	7.1	4.2	125
9	12	12	40	103	60	83	92	134	17	6.3	3.9	399
10	12	11	204	86	55	e78	79	111	35	6.0	3.8	151
11	12	13	248	72	e46	e76	68	e120	137	5.6	3.5	102
12	12	20	128	e52	e42	e68	63	e92	140	5.5	3.5	77
13	22	26	95	e41	e39	e60	99	e74	78	5.3	3.7	56
14	22	23	80	e35	e36	e52	254	e60	426	4.9	3.4	39
15	48	20	67	e32	e32	e51	131	e56	366	5.4	e3.2	29
16	38	20	62	e29	e29	50	102	e64	178	4.3	3.1	55
17	30	18	90	e26	e27	50	86	e58	135	4.2	3.1	501
18	27	16	73	e24	e26	51	76	86	108	4.1	4.4	302
19	24	27	61	e22	e30	89	66	85	83	3.8	24	107
20	21	39	54	e21	72	238	68	64	62	4.5	31	75
21	17	35	45	e30	128	237	68	526	45	9.8	57	54
22	14	30	42	e46	79	133	119	1020	34	4.2	22	38
23	12	26	147	e20	73	106	139	501	27	3.7	14	29
24	10	25	257	e18	80	93	110	265	23	3.2	9.9	24
25	9.5	23	162	e16	71	103	95	196	33	3.1	7.8	20
26	29	20	124	e18	65	122	102	150	24	9.3	6.9	17
27	58	33	99	38	60	294	92	117	18	6.4	6.6	14
28	48	239	86	52	57	149	81	96	21	4.8	6.7	12
29	43	211	97	49	57	117	70	79	24	4.0	18	11
30	37	141	270	37	---	388	64	66	16	3.8	51	9.5
31	31	---	152	32	---	283	---	77	---	57	32	---
TOTAL	848.5	1191	3216	3154	1688	3691	3718	5312	2391	246.3	418.8	2350.7
MEAN	27.4	39.7	104	102	58.2	119	124	171	79.7	7.95	13.5	78.4
MAX	66	239	270	664	128	388	353	1020	426	57	57	501
MIN	9.5	11	40	16	26	50	63	56	16	3.1	3.1	9.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001-2004, BY WATER YEAR (WY)

MEAN	14.6	19.2	54.0	53.0	57.1	106	107	115	83.0	44.1	20.1	32.7
MAX	27.4	39.7	104	102	71.9	127	124	171	93.1	156	57.2	78.4
(WY)	2004	2004	2004	2004	2002	2003	2004	2004	2003	2003	2003	2004
MIN	2.08	8.29	27.9	18.0	41.2	72.5	78.4	83.9	76.3	5.54	3.82	2.44
(WY)	2003	2003	2002	2002	2003	2002	2003	2002	2002	2002	2002	2002

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 2001-2004
ANNUAL TOTAL	27410.1	28225.3	
ANNUAL MEAN	75.1	77.1	61.0
HIGHEST ANNUAL MEAN			77.1 2004
LOWEST ANNUAL MEAN			41.7 2002
HIGHEST DAILY MEAN	938 Jul 28	1020 May 22	1020 May 22 2004
LOWEST DAILY MEAN	1.4 Sep 18	3.1 Jul 25	0.82 Sep 12 2002
ANNUAL SEVEN-DAY MINIMUM	2.8 Aug 23	3.4 Aug 11	1.2 Sep 6 2002
MAXIMUM PEAK FLOW		1040 May 22	1040 May 22 2004
MAXIMUM PEAK STAGE		9.96 May 22	9.96 May 22 2004
INSTANTANEOUS LOW FLOW			0.33 Sep 18 2003
10 PERCENT EXCEEDS	176	169	145
50 PERCENT EXCEEDS	46	49	32
90 PERCENT EXCEEDS	6.9	7.0	3.0

e Estimated.

03117000 Tuscarawas River at Massillon, Ohio

LOCATION.—Latitude 40°46'13", longitude 81°31'27", in sec. 20 T.10 N., R.9 W., Stark County, Hydrologic Unit 05040001, on left bank at sewage-treatment works, 0.7 mi south of Massillon, Ohio, and 3 mi downstream from Newman Creek.

DRAINAGE AREA.—518 mi².

PERIOD OF RECORD.—October 1937 to current year. Prior to April 1938 monthly discharge only, published in WSP 1305.

REVISED RECORDS.—WSP 1907: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 916.00 ft, National Geodetic Vertical Datum of 1912. Prior to Aug. 19, 1944, nonrecording gage at same site and datum.

REMARKS.—Records good except for periods of estimated record, which are poor. Some water diverted through the Portage Lakes into the Ohio Canal at Long Lake, 28 mi and 3 mi south of Akron. Part of the diverted water flows through the Ohio Canal into the Cuyahoga River basin. Flow affected by industrial plants upstream from station and supplemented at times by diversion from Nimisila Reservoir, capacity, 6,500 acre-ft, since 1939. Water-quality data formerly collected at this site. U.S. Army Corps of Engineers satellite telemeter at station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	574	266	981	1160	311	504	2440	520	768	370	906	343
2	393	245	713	1100	308	665	2730	1060	580	342	574	276
3	325	230	530	1340	543	753	2850	1810	669	309	431	240
4	326	238	419	2770	1160	719	2160	1540	571	279	298	217
5	321	217	425	4590	832	1150	1870	936	435	324	245	233
6	276	213	467	4380	1200	1150	1550	663	387	287	220	219
7	250	212	456	3180	1850	806	1180	596	365	325	182	196
8	212	196	416	1760	1260	681	906	1230	342	367	147	466
9	196	173	419	1070	790	646	791	1000	320	346	133	2520
10	183	164	821	730	625	610	675	736	810	244	140	2550
11	181	181	2000	573	e520	540	594	779	1270	219	144	1590
12	167	239	1730	511	e470	523	567	694	2300	216	125	808
13	148	308	973	e440	e430	490	996	595	1850	233	133	521
14	158	336	623	e390	e390	448	1910	498	2610	228	130	393
15	348	284	544	e350	e350	429	2050	521	4050	243	123	323
16	560	246	497	e320	e320	428	1460	590	3450	227	138	305
17	416	234	843	e300	e310	486	901	533	2580	211	170	1490
18	322	224	719	e280	e300	505	722	834	2270	225	199	3020
19	245	283	577	e270	e350	711	637	1060	1610	259	754	2950
20	211	449	511	e260	750	1480	620	870	989	242	1500	1740
21	234	353	450	e250	1370	2620	567	1800	704	262	2820	818
22	271	289	423	e270	1110	2330	802	2670	550	261	1850	482
23	276	253	569	e240	767	1520	1060	2670	450	222	973	382
24	297	234	1690	e230	704	962	971	4390	405	183	525	334
25	303	255	1730	e220	665	831	715	3840	818	170	370	300
26	262	245	1280	e250	597	940	636	2350	749	177	304	279
27	330	226	867	362	522	1870	619	1380	534	243	288	251
28	405	1090	700	603	493	2200	557	916	443	222	474	235
29	384	1970	704	519	485	1560	458	687	512	193	619	237
30	342	1590	1460	407	---	1620	429	558	436	303	602	224
31	299	---	1700	318	---	2550	---	763	---	486	463	---
TOTAL	9215	11443	26237	29443	19782	32727	34423	39089	33827	8218	15980	23942
MEAN	297	381	846	950	682	1056	1147	1261	1128	265	515	798
MAX	574	1970	2000	4590	1850	2620	2850	4390	4050	486	2820	3020
MIN	148	164	416	220	300	428	429	498	320	170	123	196

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

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	209	301	447	549	707	875	746	530	409	317	239	225
MAX	1206	1628	1621	1989	1659	1827	1591	1641	1852	1812	1273	1465
(WY)	1991	1986	1991	1952	1959	1978	1994	1996	1947	1969	1958	1979
MIN	70.0	81.4	81.5	94.6	98.0	283	172	121	81.2	79.1	82.9	69.9
(WY)	1964	1945	1964	1945	1964	1969	1946	1941	1988	1954	1962	1954

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1938-2004
ANNUAL TOTAL	238904	284326	
ANNUAL MEAN	655	777	462
HIGHEST ANNUAL MEAN			777
LOWEST ANNUAL MEAN			245
HIGHEST DAILY MEAN	4150	Jul 28	4590
LOWEST DAILY MEAN	84	Feb 2	123
ANNUAL SEVEN-DAY MINIMUM	90	Jan 27	133
MAXIMUM PEAK FLOW			5240
MAXIMUM PEAK STAGE		11.78	May 24
INSTANTANEOUS LOW FLOW			45
10 PERCENT EXCEEDS	1690	1850	1080
50 PERCENT EXCEEDS	407	501	238
90 PERCENT EXCEEDS	161	219	102

e Estimated.

03117500 Sandy Creek at Waynesburg, Ohio

LOCATION.—Latitude 40°40'21", longitude 81°15'36", in sec. 21, T.17 N., R.7 W., Stark County, Hydrologic Unit 05040001, on upstream side of left pier of bridge on State Highway 183 in Waynesburg, Ohio, 300 ft downstream from Little Sandy Creek, and 0.6 mi upstream from Indian Run.

DRAINAGE AREA.—253 mi².

PERIOD OF RECORD.—October 1938 to current year. Prior to December 1938 monthly discharge only, published in WSP 1305.

REVISED RECORDS.—WSP 923: 1939-40. WSP 1555: 1940(M), 1943(M), 1947(M), 1952, 1956(M). WSP 1907: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 955.00 ft, National Geodetic Vertical Datum of 1912.

REMARKS.—Records good except for periods of estimated record, which are poor. Water-quality and sediment data formerly collected at this site. U.S. Army Corps of Engineers satellite telemeter at station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
2	357	297	545	757	e160	431	1460	695	357	204	929	482
3	316	278	408	826	e300	486	1380	892	306	224	679	414
4	317	251	339	1350	1120	489	1130	529	e280	180	523	368
5	319	236	337	3480	868	558	897	437	e250	171	495	386
6	277	235	345	3040	e1050	572	682	380	e220	160	314	335
7	245	224	328	1670	e1600	587	547	340	e210	148	217	295
8	226	198	297	e1100	e1100	548	489	372	e200	282	184	409
9	207	184	276	e820	e600	507	463	329	e190	186	161	4820
10	192	174	373	e640	e460	449	403	292	332	174	144	5370
11	172	182	796	e500	e370	398	358	317	556	221	131	2640
12	164	248	675	e360	e310	389	343	267	1090	162	121	1370
13	156	335	553	e290	e280	353	783	237	786	168	136	862
14	191	303	464	e260	e260	327	1620	217	1190	154	134	587
15	711	242	413	e240	e240	330	1340	228	3060	174	111	484
16	543	216	386	e220	e230	314	983	258	e2100	146	97	429
17	504	208	921	e210	e220	313	729	224	e1600	121	88	805
18	434	198	754	e200	e210	313	776	314	e1100	124	86	2720
19	340	294	619	e190	e260	439	628	639	e800	347	515	2210
20	291	570	512	e180	538	677	537	547	e660	202	1370	1400
21	260	466	425	e170	916	1400	480	1440	e580	148	3100	902
22	246	406	379	e190	674	1120	458	3140	508	122	2360	602
23	246	342	403	e170	498	860	833	2710	439	111	1310	471
24	227	311	843	e160	472	663	815	e1600	374	110	785	422
25	201	300	750	e150	444	543	662	e1000	380	91	498	372
26	222	270	598	e140	394	508	603	e700	337	182	371	344
27	496	243	497	e180	360	668	529	499	299	299	345	310
28	530	528	438	e310	332	534	468	437	265	187	2100	275
29	496	945	412	e250	323	446	409	386	279	137	2970	257
30	451	853	613	e210	---	424	365	339	237	136	1320	241
31	376	---	598	e180	---	719	---	427	---	545	856	---
TOTAL	10131	9857	16013	18918	14759	16693	22004	20561	19462	5822	23480	31191
MEAN	327	329	517	610	509	538	733	663	649	188	757	1040
MAX	711	945	921	3480	1600	1400	1620	3140	3060	545	3100	5370
MIN	156	174	276	140	160	313	343	217	190	91	86	241
CFSM	1.29	1.30	2.04	2.41	2.01	2.13	2.90	2.62	2.56	0.74	2.99	4.11
IN.	1.49	1.45	2.35	2.78	2.17	2.45	3.24	3.02	2.86	0.86	3.45	4.59
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939-2004, BY WATER YEAR (WY)												
MEAN	99.4	168	283	351	458	551	478	342	225	147	108	106
MAX	476	1008	1104	1111	987	1179	867	961	750	780	871	1040
(WY)	1991	1986	1991	1952	1956	1945	1957	1996	1989	2003	1980	2004
MIN	15.5	18.4	22.1	55.1	53.5	114	118	80.4	45.1	33.2	22.3	16.1
(WY)	1964	1964	1964	1954	1964	1969	1946	1941	1988	1965	1962	1963
SUMMARY STATISTICS												
				FOR 2003 CALENDAR YEAR			FOR 2004 WATER YEAR			WATER YEARS 1939-2004		
ANNUAL TOTAL				157270			208891					
ANNUAL MEAN				431			571			276		
HIGHEST ANNUAL MEAN										571		
LOWEST ANNUAL MEAN										140		
HIGHEST DAILY MEAN				4160			Jul 28			5370		
LOWEST DAILY MEAN				43			Feb 2			86		
ANNUAL SEVEN-DAY MINIMUM				46			Jan 27			110		
MAXIMUM PEAK FLOW							7970			Sep 10a		
MAXIMUM PEAK STAGE							9.00			Sep 10		
INSTANTANEOUS LOW FLOW										10.05		
ANNUAL RUNOFF (CFSM)				1.70			2.26			6.9		
ANNUAL RUNOFF (INCHES)				23.12			30.71			14.81		
10 PERCENT EXCEEDS				830			1100			640		
50 PERCENT EXCEEDS				310			380			142		
90 PERCENT EXCEEDS				103			173			35		

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

03118000 Middle Branch Nimishillen Creek at Canton, Ohio

LOCATION.—Latitude 40°50'29", longitude 81°21'14", in NE ¼ sec. 27, T.11 N., R.8 W., Stark County, Hydrologic Unit 05040001, on right bank at downstream side of bridge on Martindale Road, 2.4 mi upstream from mouth, and 0.5 mi northeast of Canton, Ohio.

DRAINAGE AREA.—43.1 mi².

PERIOD OF RECORD.—September 1941 to current year.

REVISED RECORDS.—WSP 1033: 1942(M), 1943(P), 1944(M). WSP 1305: 1946(M). WSP 1143: 1948. WSP 1907: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 1,046.60 ft, National Geodetic Vertical Datum of 1912.

REMARKS.—Records fair except for periods of estimated record, which are poor. Part of municipal water supply for city of Canton is pumped from its northeast well field; a portion of pumpage is believed to be derived from creek as recharge to aquifer supplying well field about 1 mi downstream from gage. Mean pumpage for water year 2004, 11.7 ft³/s. At times low flow regulated by small pools above station. Water-quality data formerly collected at this site.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	35	92	81	e31	48	236	38	81	60	45	34
2	50	31	63	89	e41	62	301	87	68	61	40	29
3	41	29	48	113	63	73	215	149	67	61	31	27
4	42	27	41	227	124	72	126	84	63	57	27	27
5	40	26	42	534	102	106	96	55	58	56	25	26
6	34	25	42	321	172	99	71	44	56	46	22	24
7	27	23	39	e160	307	71	58	51	51	40	20	22
8	24	22	35	e92	192	61	52	92	34	50	18	44
9	23	20	35	e70	100	59	49	67	40	46	16	468
10	22	19	69	e60	69	55	48	53	100	43	9.5	407
11	20	21	183	e54	59	48	41	53	153	39	10	167
12	18	30	127	e50	53	47	40	42	249	37	12	85
13	18	38	74	e47	49	43	90	34	142	36	17	58
14	33	34	55	e44	e44	40	195	29	261	35	17	46
15	76	30	48	e40	e40	39	130	41	451	36	15	39
16	73	27	46	e38	e37	40	74	58	342	34	16	34
17	48	25	119	e36	e35	40	54	44	264	33	16	126
18	36	23	99	e35	e34	40	73	72	329	33	19	415
19	31	34	67	e33	e36	64	64	76	208	32	94	234
20	25	79	53	e32	91	122	63	59	124	30	154	109
21	24	55	45	e31	186	241	58	254	97	28	285	71
22	25	41	40	e30	115	152	81	838	85	27	179	55
23	26	33	49	e29	74	93	114	659	76	26	73	44
24	27	31	166	e28	72	70	95	295	72	25	44	38
25	25	28	148	e27	67	65	68	183	84	26	33	34
26	30	26	88	e26	57	74	58	129	74	27	29	34
27	79	25	64	e36	50	184	49	97	68	28	27	38
28	81	111	55	e46	48	154	42	82	65	28	102	33
29	58	246	53	e42	47	95	36	71	66	26	95	31
30	50	142	125	e36	---	78	34	62	63	25	58	30
31	41	---	132	e33	---	216	---	88	---	35	42	---
TOTAL	1212	1336	2342	2520	2395	2651	2711	3986	3891	1166	1590.5	2829
MEAN	39.1	44.5	75.5	81.3	82.6	85.5	90.4	129	130	37.6	51.3	94.3
MAX	81	246	183	534	307	241	301	838	451	61	285	468
MIN	18	19	35	26	31	39	34	29	34	25	9.5	22
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942-2004, BY WATER YEAR (WY)												
MEAN	14.0	23.6	38.9	48.3	59.1	71.6	61.8	48.5	36.7	27.2	19.0	17.5
MAX	84.7	103	140	170	153	142	227	138	150	168	108	97.2
(WY)	1991	1986	1991	1952	1971	1951	1994	1996	1989	2003	1958	1990
MIN	0.74	1.09	2.78	1.40	1.88	23.7	14.9	10.5	5.17	3.16	2.32	1.25
(WY)	1992	1992	1964	1963	1963	1969	1946	1988	1988	1954	1962	1991
SUMMARY STATISTICS												
				FOR 2003 CALENDAR YEAR				FOR 2004 WATER YEAR				WATER YEARS 1942-2004
ANNUAL TOTAL				26119.6				28629.5				
ANNUAL MEAN				71.6				78.2				
HIGHEST ANNUAL MEAN								38.7				
LOWEST ANNUAL MEAN								78.2				2004
HIGHEST DAILY MEAN				1040				16.0				1954
LOWEST DAILY MEAN				8.0				1620				Jan 22 1959
ANNUAL SEVEN-DAY MINIMUM				8.6				9.5				0.30 Sep 19 1962
MAXIMUM PEAK FLOW								14				0.30 Dec 28 1962
MAXIMUM PEAK STAGE								1080				2470 Jan 22 1959
INSTANTANEOUS LOW FLOW								6.42				6.63 Jul 28 2003
10 PERCENT EXCEEDS				165								0.20 Nov 9 1944
50 PERCENT EXCEEDS				41				162				85
90 PERCENT EXCEEDS				16				50				20
								25				4.3

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

03121850 Huff Run at Mineral City, Ohio

LOCATION.—Latitude 40°35'50", longitude 81°21'33", Tuscarawas County, Hydrologic Unit 05040001, on left abutment of bridge on County Road 90, adjacent to intersection of Sandy Township Road 46, 500 ft southeast of State Route 800 at southeast edge of Mineral City, Ohio, and 1.4 mi upstream from Conotton Creek.
 DRAINAGE AREA.—12.3 mi².

Water-Discharge Records

PERIOD OF RECORD.—October 1997 to current year.

GAGE.—Water-stage recorder. Datum of gage is 886.98 ft above sea level.

REMARKS.—Records good except for periods of estimated record, which are poor. Data Collection Platform at station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	13	21	20	e7.4	13	49	16	25	9.8	22	21
2	15	12	17	36	e8.0	18	76	27	20	9.5	e14	17
3	14	12	16	31	39	e17	56	23	18	9.2	e10	16
4	15	11	14	132	32	e21	44	19	16	8.8	e11	15
5	13	11	e16	428	15	e27	32	18	15	9.4	e9.6	14
6	10	10	e18	207	187	e23	26	16	14	8.3	e8.6	12
7	9.8	9.5	e13	75	71	e21	24	19	13	8.7	e8.0	11
8	9.0	8.8	e12	e40	28	e19	22	19	11	9.9	e7.4	66
9	8.4	8.3	e13	e30	22	e18	20	16	11	7.9	e6.8	729
10	8.1	8.2	e34	e21	e18	e17	17	14	14	9.3	e6.2	70
11	7.9	9.7	e44	e18	e15	16	16	14	61	10	e6.0	36
12	7.5	12	e23	e17	e14	16	16	12	54	8.9	e5.8	26
13	7.3	13	e18	e16	e13	14	35	11	27	9.6	7.6	20
14	20	11	e14	e15	e12	14	63	10	120	8.0	6.4	17
15	38	9.7	e12	e14	e11	14	41	14	86	9.4	6.1	16
16	21	10	15	e13	e10	14	31	12	63	7.5	5.9	14
17	e16	9.6	38	e11	e9.8	e14	25	10	505	7.6	5.3	115
18	e12	9.1	23	e12	e9.6	e17	22	157	e150	7.6	7.7	147
19	e10	19	19	e11	e12	e26	20	235	e60	7.6	48	40
20	e9.6	19	15	e10	18	35	19	60	e32	7.1	197	27
21	e9.4	16	13	e9.4	25	54	18	171	e21	6.4	512	21
22	e13	15	13	e8.6	17	34	17	271	e18	6.1	58	18
23	e11	14	14	e8.0	15	25	30	66	e16	6.0	32	16
24	e10	14	31	e7.8	16	22	25	43	15	5.5	23	15
25	9.0	13	21	e7.6	15	21	22	e29	15	5.3	19	14
26	14	12	18	e7.6	14	20	23	e23	13	19	17	13
27	23	11	15	e8.8	13	21	20	e20	12	9.6	15	12
28	17	34	15	e8.4	13	18	18	e18	13	7.7	109	12
29	18	32	14	e8.0	13	17	16	17	13	6.6	56	11
30	15	25	30	e7.8	---	20	15	16	11	6.5	34	10
31	14	---	22	e7.6	---	32	---	50	---	40	25	---
TOTAL	424.0	411.9	601	1246.6	692.8	658	858	1446	1462	292.8	1299.4	1571
MEAN	13.7	13.7	19.4	40.2	23.9	21.2	28.6	46.6	48.7	9.45	41.9	52.4
MAX	38	34	44	428	187	54	76	271	505	40	512	729
MIN	7.3	8.2	12	7.6	7.4	13	15	10	11	5.3	5.3	10
CFSM	1.11	1.12	1.58	3.27	1.94	1.73	2.33	3.79	3.96	0.77	3.41	4.26
IN.	1.28	1.25	1.82	3.77	2.10	1.99	2.59	4.37	4.42	0.89	3.93	4.75

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998-2004, BY WATER YEAR (WY)

	1998	1999	2000	2001	2002	2003	2004
MEAN	5.13	5.56	9.91	20.2	16.0	17.4	25.9
MAX	13.7	13.7	19.4	40.6	23.9	23.4	41.0
(WY)	2004	2004	2004	1999	2004	1999	2000
MIN	2.29	3.47	4.49	6.28	7.95	10.2	13.6
(WY)	2003	1999	2000	2002	2003	2000	2003

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1998-2004

ANNUAL TOTAL	6629.4	10963.5		
ANNUAL MEAN	18.2	30.0	14.6	
HIGHEST ANNUAL MEAN			30.0	2004
LOWEST ANNUAL MEAN			9.30	2001
HIGHEST DAILY MEAN	323	May 16	729	Sep 9 2004
LOWEST DAILY MEAN	2.1	Feb 21	5.3	Jul 25 2002
ANNUAL SEVEN-DAY MINIMUM	2.4	Feb 15	6.2	Aug 11 2002
MAXIMUM PEAK FLOW			1860	Sep 9a 2004
MAXIMUM PEAK STAGE			5.82	Sep 9 2004
INSTANTANEOUS LOW FLOW			0.73	Aug 12 2002
ANNUAL RUNOFF (CFSM)	1.48	2.44	1.19	
ANNUAL RUNOFF (INCHES)	20.05	33.16	16.13	
10 PERCENT EXCEEDS	33	48	27	
50 PERCENT EXCEEDS	13	15	7.6	
90 PERCENT EXCEEDS	5.2	8.0	2.5	

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

03121850 Huff Run at Mineral City, Ohio—Continued
Water-Quality Records

PERIOD OF RECORD.—October 1997 to current year.

PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: October 1997 to current year.

pH: October 1997 to current year.

WATER TEMPERATURE: October 1997 to current year.

DISSOLVED OXYGEN: October 1997 to current year.

INSTRUMENTATION.— Water-quality monitor. Electronic data logger. Set for 1-hour interval. Satellite telemeter at station.

REMARKS.—Interruptions in the water-quality record are due to malfunction of the instrument. Specific conductance records are good except Oct. 1–Nov. 5, Jan. 16–Feb. 4, and Apr. 29–May 18, which are fair. pH records are good except Nov. 5–Jan. 16 and Aug. 23–Sept. 30, which are fair. Water temperature records are good except Dec. 16–30, May 21–26, June 19, 21, Aug. 21–23, 28–30, Sept. 9, 10, and 17–23, which are fair. Dissolved oxygen records are poor.

EXTREMES FOR PERIOD OF RECORD.—

SPECIFIC CONDUCTANCE: Maximum, 1,950 microsiemens, Sept. 22, 1999; minimum, 197 microsiemens, Jan. 23, 1999.

pH: Maximum, 7.8 units, Jan. 30, 2000; minimum, 3.8 units, Aug. 13 and 23, 2002.

WATER TEMPERATURE: Maximum, 28.5° C, July 23, 1998; minimum, 0.0° C, on many days during winter.

DISSOLVED OXYGEN: Maximum, 15.5 mg/L, Feb. 16 and Mar. 7, 2004; minimum, 3.4 mg/L, Sept. 11 and 12, 2000.

EXTREMES FOR CURRENT YEAR.—

SPECIFIC CONDUCTANCE: Maximum, 1,600 microsiemens, July 26; minimum, 403 microsiemens, Aug. 20.

pH: Maximum, 7.2 units, Nov. 5; minimum, 5.8 units, on several days.

WATER TEMPERATURE: Maximum, 23.0° C, July 31; minimum, 0.0° C, on many days during winter.

DISSOLVED OXYGEN: Maximum, 15.5 mg/L, Feb. 16 and Mar. 7; minimum, 6.4 mg/L, Sept. 7, 8, and 17.

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

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	697	631	668	868	810	848	658	611	632	698	663	677
2	734	684	710	889	860	872	720	658	689	736	515	618
3	764	731	741	889	874	884	775	720	747	615	586	603
4	810	764	784	937	885	917	807	775	794	633	429	536
5	807	725	756	941	907	928	812	803	808	---	---	---
6	839	794	807	947	900	927	838	817	827	---	---	---
7	854	821	831	974	947	963	857	837	846	---	---	---
8	887	813	841	1020	974	992	893	857	878	---	---	---
9	951	887	905	1040	1020	1020	---	---	---	---	---	---
10	986	933	949	1060	1040	1060	---	---	---	---	---	---
11	1020	986	1010	1070	1050	1060	---	---	---	---	---	---
12	1080	1020	1050	1050	958	1000	---	---	---	---	---	---
13	1130	1080	1100	977	860	925	---	---	---	---	---	---
14	1200	856	1070	919	868	891	---	---	---	---	---	---
15	928	428	574	962	919	944	783	760	771	---	---	---
16	753	652	705	---	---	---	806	775	794	1110	1080	1100
17	756	721	734	---	---	---	793	481	596	1150	1110	1130
18	---	---	---	979	942	969	605	560	580	1120	1100	1110
19	---	---	---	978	811	935	656	605	629	1160	1100	1120
20	---	---	---	811	638	687	711	656	684	1220	1160	1170
21	---	---	---	745	724	736	775	711	744	1290	1200	1240
22	---	---	---	769	745	758	794	775	784	1260	1220	1230
23	---	---	---	798	769	780	795	766	784	1290	1220	1270
24	971	944	957	814	780	799	787	565	658	1260	1260	1260
25	1010	971	987	846	814	832	639	606	621	1310	1260	1280
26	1020	958	1000	886	845	872	680	639	656	1290	1270	1280
27	1010	674	776	906	886	896	724	680	698	1280	1220	1250
28	757	685	725	906	519	760	752	720	732	1250	1200	1220
29	779	720	754	581	528	565	759	745	751	1310	1250	1280
30	793	723	761	611	581	594	795	584	675	1330	1290	1300
31	830	793	813	---	---	---	678	628	661	1340	1280	1310
MONTH	1200	428	840	1070	519	872	893	481	722	1340	429	1100

03121850 Huff Run at Mineral City, Ohio—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
1	---	---	---	7.0	6.9	7.0	6.7	6.6	6.7	6.2	6.1	6.1
2	---	---	---	7.0	6.9	6.9	6.7	6.5	6.6	6.7	6.1	6.4
3	---	---	---	6.9	6.9	6.9	6.5	6.1	6.5	6.7	6.3	6.4
4	---	---	---	6.9	6.8	6.9	6.7	6.2	6.6	6.5	6.2	6.3
5	---	---	---	7.2	6.4	7.0	---	---	---	6.5	5.9	6.2
6	6.9	6.8	6.9	7.1	6.7	6.9	6.7	6.3	6.4	6.0	5.9	5.9
7	7.0	6.8	6.9	7.1	6.7	6.7	6.4	6.3	6.4	6.0	5.9	5.9
8	6.9	6.8	6.9	6.7	6.7	6.7	6.3	6.1	6.1	6.0	5.9	5.9
9	6.8	6.7	6.8	6.7	6.6	6.6	---	---	---	6.0	5.9	5.9
10	6.8	6.7	6.8	6.6	6.6	6.6	---	---	---	5.9	5.9	5.9
11	6.7	6.7	6.7	7.0	6.6	6.7	---	---	---	6.0	5.9	5.9
12	6.7	6.6	6.7	6.9	6.6	6.7	---	---	---	6.2	5.9	6.0
13	6.7	6.6	6.7	6.6	6.6	6.6	---	---	---	6.1	6.0	6.0
14	6.9	6.7	6.7	6.6	6.5	6.6	---	---	---	6.2	6.0	6.0
15	7.1	6.9	7.0	6.7	6.4	6.5	6.6	6.2	6.4	6.0	5.9	5.9
16	7.0	6.9	6.9	---	---	---	6.8	6.3	6.3	6.1	5.9	6.0
17	7.0	6.9	6.9	---	---	---	6.8	6.3	6.3	6.5	5.9	6.0
18	---	---	---	6.7	6.4	6.4	6.3	6.3	6.3	6.6	6.0	6.1
19	---	---	---	6.6	6.4	6.4	6.3	6.2	6.2	6.1	6.0	6.1
20	---	---	---	6.6	6.5	6.6	6.2	6.2	6.2	6.1	5.9	6.0
21	---	---	---	6.5	6.5	6.5	6.2	6.2	6.2	6.1	6.0	6.0
22	---	---	---	6.6	6.4	6.5	6.3	6.2	6.2	6.1	6.0	6.0
23	---	---	---	6.6	6.5	6.6	6.7	6.2	6.4	6.1	6.0	6.0
24	6.9	6.8	6.8	6.8	6.5	6.6	6.6	6.2	6.3	6.1	6.1	6.1
25	6.8	6.8	6.8	6.6	6.4	6.5	6.3	6.2	6.3	6.1	6.0	6.1
26	7.0	6.8	6.8	6.5	6.5	6.5	6.3	6.1	6.2	6.5	6.0	6.0
27	7.0	6.9	7.0	6.7	6.5	6.5	6.1	6.1	6.1	6.5	6.0	6.5
28	7.1	7.0	7.0	6.9	6.6	6.7	6.1	6.1	6.1	6.1	6.1	6.1
29	7.1	6.9	7.0	6.7	6.6	6.6	6.2	6.1	6.1	6.1	6.0	6.1
30	7.0	6.9	6.9	6.6	6.6	6.6	6.2	6.1	6.2	6.1	6.0	6.1
31	6.9	6.9	6.9	---	---	---	6.2	6.1	6.1	6.1	6.0	6.1
MAX	7.1	7.0	7.0	7.2	6.9	7.0	6.8	6.6	6.7	6.7	6.3	6.5
MIN	6.7	6.6	6.7	6.5	6.4	6.4	6.1	6.1	6.1	5.9	5.9	5.9

DAY	FEBRUARY			MARCH			APRIL			MAY		
	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
1	6.1	6.0	6.1	6.7	5.8	6.0	6.8	6.3	6.6	6.4	6.3	6.4
2	6.5	6.0	6.1	6.7	5.9	5.9	6.5	6.2	6.3	6.6	6.3	6.4
3	6.8	5.9	6.4	6.4	6.0	6.3	6.5	6.1	6.2	6.7	6.4	6.5
4	6.1	5.9	6.1	6.8	6.3	6.7	6.4	6.2	6.2	6.6	6.4	6.4
5	6.6	6.1	6.1	6.7	6.3	6.4	6.4	6.1	6.3	6.5	6.4	6.4
6	6.6	5.8	6.2	6.7	6.3	6.4	6.4	6.3	6.3	6.4	6.3	6.4
7	5.8	5.8	5.8	6.7	6.3	6.3	6.5	6.3	6.3	6.4	6.3	6.3
8	5.8	5.8	5.8	6.6	6.2	6.2	6.5	6.3	6.3	6.5	6.4	6.4
9	6.0	5.8	5.9	6.4	6.2	6.2	6.3	6.3	6.3	6.4	6.4	6.4
10	6.2	6.0	6.0	6.2	6.2	6.2	6.3	6.2	6.3	6.4	6.4	6.4
11	6.1	6.1	6.1	6.5	6.1	6.2	6.3	6.2	6.2	6.5	6.4	6.4
12	6.2	6.1	6.1	6.2	6.1	6.1	6.6	6.2	6.3	6.4	6.3	6.4
13	6.2	6.2	6.2	6.1	6.1	6.1	6.7	6.4	6.6	---	---	---
14	6.2	6.2	6.2	6.5	6.1	6.1	6.7	6.4	6.5	---	---	---
15	6.3	6.2	6.2	6.2	6.1	6.2	6.5	6.4	6.5	---	---	---
16	6.2	6.1	6.2	6.5	6.1	6.2	6.5	6.4	6.5	---	---	---
17	6.2	6.1	6.2	6.3	6.0	6.3	6.5	6.4	6.5	---	---	---
18	6.3	6.2	6.2	6.7	6.3	6.4	6.5	6.4	6.5	---	---	---
19	6.4	6.2	6.3	6.7	6.4	6.5	6.6	6.4	6.4	6.6	6.6	6.6
20	6.9	6.3	6.5	6.8	6.4	6.5	6.6	6.4	6.4	6.6	6.5	6.6
21	6.8	6.3	6.3	6.5	6.2	6.4	6.6	6.4	6.4	6.6	6.0	6.3
22	6.3	6.2	6.2	6.4	6.1	6.3	6.6	6.4	6.4	6.1	5.9	6.0
23	6.3	6.2	6.3	6.3	6.1	6.3	6.7	6.3	6.5	6.0	5.9	5.9
24	6.8	6.2	6.2	6.4	6.3	6.3	6.6	6.4	6.5	5.9	5.9	5.9
25	6.2	6.1	6.2	6.5	6.2	6.3	6.5	6.3	6.4	6.0	5.9	5.9
26	6.2	5.8	6.1	6.6	6.3	6.4	6.5	6.3	6.4	6.4	5.9	6.4
27	6.3	5.8	5.8	6.6	6.4	6.5	6.4	6.3	6.3	6.4	6.4	6.4
28	6.2	5.8	5.8	6.6	6.3	6.4	6.3	6.2	6.3	6.5	6.4	6.4
29	6.2	5.8	5.8	6.4	6.3	6.4	6.5	6.2	6.3	6.4	6.3	6.4
30	---	---	---	6.7	6.4	6.5	6.5	6.4	6.4	6.3	6.3	6.3
31	---	---	---	6.7	6.4	6.5	---	---	---	6.7	6.2	6.6
MAX	6.9	6.3	6.5	6.8	6.4	6.7	6.8	6.4	6.6	6.7	6.6	6.6
MIN	5.8	5.8	5.8	6.1	5.8	5.9	6.3	6.1	6.2	5.9	5.9	5.9

03121850 Huff Run at Mineral City, Ohio—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
1	6.6	6.5	6.5	6.4	6.3	6.4	6.7	6.3	6.6	6.9	6.7	6.7
2	6.6	6.4	6.5	6.3	6.3	6.3	---	---	---	6.8	6.6	6.7
3	6.5	6.4	6.4	6.3	6.2	6.3	---	---	---	6.7	6.6	6.7
4	6.4	6.4	6.4	6.3	6.2	6.2	---	---	---	6.7	6.6	6.6
5	6.5	6.3	6.4	6.3	6.2	6.3	---	---	---	6.8	6.6	6.6
6	6.5	6.3	6.4	6.3	6.1	6.2	---	---	---	6.6	6.6	6.6
7	6.5	6.3	6.4	6.3	6.1	6.2	---	---	---	6.7	6.5	6.6
8	6.5	6.3	6.4	6.5	6.2	6.5	---	---	---	6.7	6.5	6.7
9	6.4	6.3	6.3	6.5	6.3	6.4	---	---	---	6.6	6.2	6.6
10	6.5	6.3	6.4	6.4	6.3	6.4	---	---	---	6.7	6.6	6.7
11	6.8	6.3	6.5	6.5	6.2	6.3	---	---	---	6.7	6.6	6.7
12	6.8	6.2	6.3	6.5	6.3	6.3	---	---	---	6.8	6.6	6.7
13	6.6	6.4	6.5	6.4	6.2	6.3	6.4	6.2	6.3	6.7	6.6	6.7
14	6.6	6.1	6.1	6.3	6.2	6.3	6.4	6.3	6.3	6.7	6.6	6.7
15	6.1	6.0	6.1	6.5	6.3	6.4	6.3	6.2	6.2	6.8	6.6	6.6
16	6.1	6.0	6.0	6.4	6.3	6.4	6.4	6.0	6.3	6.7	6.5	6.6
17	6.0	5.9	5.9	6.3	6.2	6.3	6.4	6.2	6.3	6.7	6.4	6.6
18	6.0	5.9	5.9	6.4	6.3	6.3	6.3	6.0	6.1	6.6	6.4	6.6
19	6.0	5.9	5.9	6.4	6.3	6.3	7.0	6.2	6.7	6.5	6.4	6.4
20	6.2	6.0	6.1	6.4	6.3	6.3	6.9	6.5	6.7	6.4	6.3	6.4
21	6.6	6.2	6.5	6.3	6.1	6.2	---	---	---	6.3	6.2	6.3
22	6.6	6.5	6.5	6.2	6.1	6.1	---	---	---	6.3	6.2	6.2
23	6.5	6.4	6.5	6.2	6.1	6.1	6.7	6.5	6.7	6.7	6.2	6.3
24	6.5	6.4	6.4	6.2	6.1	6.1	6.8	6.7	6.7	6.8	6.5	6.7
25	6.5	6.4	6.4	6.2	6.1	6.1	6.8	6.6	6.7	6.7	6.5	6.6
26	6.4	6.4	6.4	6.6	6.1	6.3	6.8	6.6	6.7	6.7	6.5	6.5
27	6.4	6.4	6.4	6.6	6.3	6.4	6.8	6.6	6.6	6.6	6.5	6.6
28	6.4	6.3	6.4	6.3	6.2	6.3	---	---	---	6.7	6.5	6.5
29	6.5	6.4	6.4	6.3	6.2	6.2	---	---	---	6.6	6.5	6.5
30	6.4	6.3	6.4	6.2	6.1	6.1	6.8	6.7	6.7	6.7	6.4	6.5
31	---	---	---	6.6	6.2	6.3	6.8	6.7	6.7	---	---	---
MAX	6.8	6.5	6.5	6.6	6.3	6.5	7.0	6.7	6.7	6.9	6.7	6.7
MIN	6.0	5.9	5.9	6.2	6.1	6.1	6.3	6.0	6.1	6.3	6.2	6.2
YEAR	MAX	MAXIMUM	7.2	MIN	MAXIMUM	7.0	MEDIAN	MAXIMUM	7.0	MINIMUM	5.8	
		MINIMUM	5.8		MINIMUM	5.8		MINIMUM	5.8			

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

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

03121850 Huff Run at Mineral City, Ohio—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	---	---	---	9.6	9.1	9.3	---	---	---	12.9	12.1	12.6
2	---	---	---	9.4	8.7	9.1	---	---	---	12.1	11.0	11.6
3	---	---	---	9.6	8.8	9.1	---	---	---	11.0	10.0	10.4
4	---	---	---	9.6	8.9	9.2	---	---	---	11.0	7.6	9.5
5	---	---	---	---	---	---	---	---	---	---	---	---
6	10.0	9.7	9.8	---	---	---	---	---	---	---	---	---
7	11.6	9.8	11.0	---	---	---	---	---	---	---	---	---
8	12.3	11.1	11.8	---	---	---	---	---	---	11.1	8.3	10.0
9	12.7	11.3	12.1	---	---	---	---	---	---	10.4	9.2	9.7
10	12.5	11.7	12.0	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	9.2	8.2	8.6	12.7	12.2	12.5	---	---	---	---	---	---
15	11.6	8.2	10.0	12.2	11.6	12.0	10.1	9.8	10.0	---	---	---
16	12.2	9.6	10.8	---	---	---	11.4	10.1	10.8	---	---	---
17	---	---	---	---	---	---	11.6	9.0	10.7	12.0	11.3	11.8
18	---	---	---	10.9	9.8	10.5	---	---	---	11.7	11.2	11.4
19	---	---	---	9.8	9.1	9.3	---	---	---	12.0	11.7	11.9
20	---	---	---	10.2	9.6	10.0	---	---	---	12.7	11.8	12.0
21	---	---	---	10.3	9.6	10.0	---	---	---	12.3	11.9	12.1
22	---	---	---	9.9	9.1	9.6	---	---	---	12.2	11.8	11.9
23	---	---	---	9.1	8.5	8.9	---	---	---	12.3	12.0	12.2
24	---	---	---	9.0	8.4	8.6	---	---	---	12.3	12.0	12.1
25	11.9	10.6	11.5	9.6	9.0	9.4	---	---	---	12.4	12.1	12.2
26	10.7	10.2	10.5	9.4	8.9	9.3	---	---	---	12.1	11.7	12.0
27	11.0	10.3	10.7	8.9	8.3	8.7	---	---	---	12.2	11.6	11.8
28	12.9	10.4	11.6	---	---	---	---	---	---	12.4	12.2	12.4
29	12.6	10.4	11.6	---	---	---	---	---	---	12.4	12.4	12.4
30	12.9	10.5	11.7	---	---	---	12.3	11.6	11.9	12.5	12.3	12.4
31	10.8	9.6	10.4	---	---	---	12.8	12.2	12.5	12.6	12.3	12.4
MONTH	12.9	8.2	10.9	12.7	8.3	9.7	12.8	9.0	11.2	12.9	7.6	11.7

DAY	FEBRUARY			MARCH			APRIL			MAY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	12.7	12.3	12.5	---	---	---	11.7	8.6	10.8	9.7	8.3	9.2
2	12.9	11.6	12.2	---	---	---	11.7	7.1	8.3	11.6	8.3	9.5
3	12.6	10.2	11.7	10.5	9.8	10.1	11.7	7.0	8.4	12.5	10.6	11.4
4	13.0	9.6	11.8	12.7	10.5	11.5	12.0	7.2	9.3	14.1	10.3	11.2
5	13.1	12.7	13.0	13.3	11.0	12.0	12.8	8.4	10.2	10.7	9.6	10.3
6	13.1	9.4	10.9	14.0	11.2	12.5	12.3	10.7	11.6	11.0	9.1	10.2
7	11.6	8.5	10.0	15.5	14.0	15.0	11.2	9.8	10.6	11.8	9.1	10.0
8	13.7	8.9	12.1	---	---	---	11.0	10.1	10.5	13.1	9.2	11.3
9	14.2	11.6	13.2	---	---	---	11.0	9.8	10.4	11.9	8.5	10.4
10	13.8	13.4	13.7	---	---	---	11.0	9.8	10.4	9.7	8.3	9.1
11	14.8	13.8	14.4	---	---	---	10.9	10.0	10.6	9.3	8.3	8.8
12	15.0	14.2	14.7	---	---	---	11.3	10.5	10.9	9.3	8.1	8.8
13	14.9	14.5	14.7	---	---	---	11.1	10.8	10.9	9.2	8.1	8.7
14	15.4	14.6	15.0	---	---	---	11.3	10.0	10.7	9.2	8.3	8.8
15	15.4	14.7	15.1	---	---	---	11.4	9.8	10.6	9.5	8.4	8.9
16	15.5	14.9	15.2	---	---	---	10.9	9.2	10.1	10.5	9.5	10.0
17	15.1	14.3	14.7	14.4	13.4	14.0	10.2	8.9	9.6	10.5	8.8	9.9
18	14.4	13.1	13.9	14.6	12.8	14.1	9.5	8.3	8.9	10.6	7.8	9.0
19	13.1	11.0	12.0	14.1	12.8	13.4	9.2	8.5	8.9	9.7	8.3	9.3
20	11.1	9.3	10.4	14.0	12.4	13.6	9.9	8.5	9.2	10.3	9.4	9.9
21	9.8	9.0	9.4	14.0	9.4	12.3	9.4	8.3	8.9	9.6	8.6	9.4
22	9.0	7.7	8.4	14.2	13.5	13.8	9.5	8.7	9.2	---	---	---
23	---	---	---	14.2	12.8	13.6	10.0	9.2	9.6	---	---	---
24	---	---	---	13.6	12.6	13.2	10.5	9.1	9.8	---	---	---
25	---	---	---	12.7	11.5	12.2	9.8	9.1	9.5	---	---	---
26	---	---	---	---	---	---	9.9	8.9	9.4	10.1	9.7	9.9
27	---	---	---	---	---	---	10.5	9.2	10.1	10.1	9.7	9.9
28	---	---	---	---	---	---	11.5	9.7	10.7	9.9	9.6	9.8
29	---	---	---	---	---	---	10.7	9.0	9.8	10.9	9.7	10.3
30	---	---	---	11.0	10.2	10.7	9.9	9.0	9.5	10.2	9.1	9.8
31	---	---	---	11.2	10.7	11.0	---	---	---	10.3	8.6	9.1
MONTH	15.5	7.7	12.7	15.5	9.4	12.7	12.8	7.0	9.9	14.1	7.8	9.7

03124500 Sugar Creek at Strasburg, Ohio

LOCATION.—Latitude 40°35'15", longitude 81°31'24", in NW ¼ sec. 1, T.9 N., R.3 W., Tuscarawas County, Hydrologic Unit 05040001, on left bank 150 ft upstream from bridge on State Highway 21, 0.8 mi upstream from Broad Run, and 0.1 mi southeast of Strasburg, Ohio.

DRAINAGE AREA.—311 mi².

PERIOD OF RECORD.—August 1931 to March 1933, January 1935 to July 1939, October 1961 to current year.

REVISED RECORDS.—WSP 1305: 1932-33(M). WSP 1907: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 896.24 ft, National Geodetic Vertical Datum of 1912. July 29, 1931-Mar. 31, 1933, and

Dec. 10, 1934-July 31, 1939, nonrecording gage; Oct. 1, 1961-May 26, 1964, water-stage recorder at datum 2.00 ft higher.

REMARKS.—Records fair except for periods of estimated record, which are poor. Flood flow regulated by Beach City Lake 5 mi upstream, since August 1937.

Part of municipal water supply for City of Canton, starting May 1962, is pumped from well field; pumpage is returned to Nimishillen Creek. Mean pumpage for water year 2004, 15.1 ft³/s. Water-quality data formerly collected at this site.

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	957	158	589	705	122	255	1860	303	1030	314	411	298
2	421	144	389	729	113	327	1800	437	657	283	377	225
3	318	137	302	1110	2100	446	1810	826	489	264	223	186
4	278	131	257	1510	1070	403	1710	699	381	231	174	164
5	275	124	246	1840	1170	516	1080	463	298	223	225	172
6	230	119	293	1930	953	544	742	375	263	211	188	154
7	196	115	290	1930	2030	438	591	334	233	189	141	130
8	173	106	257	1880	1860	371	515	402	202	242	118	166
9	157	97	233	1910	1700	341	470	355	179	223	103	1010
10	145	91	322	1920	664	306	410	290	230	191	95	1450
11	137	92	1060	1870	433	269	358	276	509	194	88	1510
12	128	111	1230	815	375	262	331	244	1510	215	82	955
13	118	167	715	e290	409	240	551	214	2030	278	84	392
14	122	203	448	e240	e290	213	1110	194	1150	215	86	291
15	275	155	380	e200	e240	211	1180	199	788	177	79	239
16	395	130	333	e180	e200	205	725	278	1570	161	72	206
17	259	121	663	e160	e180	217	533	228	2030	142	70	270
18	213	116	797	e150	e170	219	476	339	1840	157	81	1230
19	184	123	517	e140	e190	321	427	834	1800	238	321	1390
20	160	258	406	e135	498	606	375	937	1780	183	834	707
21	141	248	333	e130	797	1260	355	935	1800	145	1340	412
22	134	186	292	e125	702	1500	368	1830	1810	137	1640	318
23	127	159	301	e120	398	923	610	1720	1800	123	1410	262
24	119	146	704	e115	373	583	832	1870	1770	113	555	222
25	109	146	1130	e110	358	493	555	1870	1720	101	314	197
26	109	137	728	e105	303	464	478	835	1690	124	233	180
27	219	127	509	e130	270	690	433	442	1620	229	198	165
28	305	252	431	197	250	893	377	371	1510	169	192	155
29	226	1110	414	197	245	628	324	363	620	137	398	148
30	208	1040	602	153	---	618	286	294	392	120	602	139
31	185	---	1040	137	---	1440	---	499	---	173	474	---
TOTAL	7023	6249	16211	21163	16563	16202	21672	19256	33701	5902	11208	13343
MEAN	227	208	523	683	571	523	722	621	1123	190	362	445
MAX	957	1110	1230	1930	2030	1500	1860	1870	2030	314	1640	1510
MIN	109	91	233	105	113	205	286	194	179	101	70	130

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932-2004, BY WATER YEAR (WY)

MEAN	92.5	176	313	396	475	614	499	321	251	185	151	117
MAX	583	929	1001	2025	1174	1297	953	1089	1123	2128	1219	1048
(WY)	1991	1986	1978	1937	1981	1963	1980	1996	2004	1969	1935	1979
MIN	0.00	4.08	7.70	36.9	32.2	151	90.2	72.6	25.3	11.8	11.2	3.34
(WY)	1964	1964	1964	1977	1964	1987	1935	1986	1988	1965	1962	1966

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1932-2004

ANNUAL TOTAL	121162	188493										
ANNUAL MEAN	332	515								299		
HIGHEST ANNUAL MEAN										520		1980
LOWEST ANNUAL MEAN										160		1988
HIGHEST DAILY MEAN	1830	Sep 4				2030	Feb 7			10200	Aug 7	1935
LOWEST DAILY MEAN	21	Feb 2				70	Aug 17			0.00	Sep 29	1963
ANNUAL SEVEN-DAY MINIMUM	24	Jan 27				79	Aug 12			0.00	Sep 29	1963
MAXIMUM PEAK FLOW						2680	Jun 17			19700	Aug 7	1935
MAXIMUM PEAK STAGE						6.37	Jun 17			14.70	Aug 7	1935
INSTANTANEOUS LOW FLOW										0.00	Sep 29	1963
10 PERCENT EXCEEDS	790					1500				780		
50 PERCENT EXCEEDS	215					294				134		
90 PERCENT EXCEEDS	65					124				25		

e Estimated.

03136175 Kokosing River near Lucerne, Ohio

LOCATION.—Latitude 40°27'51", longitude 82°36'36", Knox County, Hydrologic Unit 05040003, on left bank 100 ft upstream from Vail Road bridge, 700 ft south of State Route 95, 2 mi east of Lucerne, Ohio, 3.7 mi west of Fredricktown, Ohio, and 4.2 mi east of Chesterville, Ohio.

DRAINAGE AREA.—59.5 mi².

PERIOD OF RECORD.—January 2000 to September 2004 (discontinued).

GAGE.—Water-stage recorder. Datum of gage is 1,065 ft above sea level.

REMARKS.—Records fair except for periods of estimated record, which are poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	26	162	121	e24	98	190	108	457	27	21	37
2	56	25	e110	370	e24	205	182	865	171	25	14	24
3	46	23	e84	272	141	152	151	642	122	24	11	18
4	46	22	65	727	190	148	116	195	91	31	12	15
5	43	22	77	1160	88	178	91	132	72	30	13	13
6	36	21	109	340	508	133	76	98	62	23	11	11
7	31	19	e88	162	397	96	67	120	53	21	10	10
8	27	17	e78	116	138	82	60	206	45	20	9.6	13
9	24	e16	72	94	88	69	53	109	39	19	9.3	55
10	23	e15	278	73	71	57	47	77	55	17	9.0	32
11	23	16	500	66	59	53	43	60	315	16	8.5	18
12	22	24	e178	63	56	50	45	51	481	16	8.3	14
13	21	48	e96	59	49	39	128	44	306	16	8.3	11
14	24	39	80	55	40	41	312	42	1200	15	8.2	10
15	108	30	68	51	40	41	154	50	459	14	8.1	9.8
16	77	27	73	42	31	43	97	69	257	13	8.0	9.2
17	55	25	140	40	30	45	74	52	179	14	7.7	11
18	46	23	88	43	30	48	61	260	239	15	7.4	15
19	40	71	68	39	73	109	52	466	140	14	12	11
20	35	107	58	36	215	471	49	214	107	13	34	9.3
21	31	63	49	33	436	567	55	348	86	13	286	8.5
22	29	48	51	32	124	190	113	628	73	13	78	8.0
23	26	39	166	30	100	126	191	184	59	13	35	8.5
24	24	40	340	29	126	102	119	116	50	12	23	8.0
25	23	46	161	28	89	102	96	86	57	11	16	7.7
26	24	38	103	e27	83	108	97	68	47	12	14	7.5
27	30	190	82	e26	73	408	72	59	39	13	13	7.5
28	31	685	78	e26	73	218	58	103	36	12	407	7.4
29	32	471	99	e25	75	134	48	83	35	11	393	7.2
30	33	190	502	e25	---	515	57	63	30	11	122	e7.3
31	29	---	208	e24	---	377	---	1230	---	21	64	---
TOTAL	1167	2426	4311	4234	3471	5005	2954	6828	5362	525	1681.4	423.9
MEAN	37.6	80.9	139	137	120	161	98.5	220	179	16.9	54.2	14.1
MAX	108	685	502	1160	508	567	312	1230	1200	31	407	55
MIN	21	15	49	24	24	39	43	42	30	11	7.4	7.2
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999-2004, BY WATER YEAR (WY)												
MEAN	19.1	39.6	97.7	63.9	94.0	113	155	125	81.9	15.4	16.7	34.3
MAX	37.6	80.9	139	137	120	193	270	220	179	28.5	54.2	144
(WY)	2004	2004	2004	2004	2004	2003	2002	2004	2004	2003	2004	2003
MIN	3.12	9.97	29.7	32.1	63.1	35.8	98.5	64.0	25.7	6.78	4.60	3.20
(WY)	2003	2003	2003	2002	2003	2001	2004	2000	2002	2002	2002	2002
SUMMARY STATISTICS												
ANNUAL TOTAL				FOR 2003 CALENDAR YEAR			FOR 2004 WATER YEAR			WATER YEARS 1999-004		
ANNUAL MEAN				33613.6			38388.3					
HIGHEST ANNUAL MEAN				92.1			105			73.7		
LOWEST ANNUAL MEAN										105		
HIGHEST DAILY MEAN				929			1230			1250		
LOWEST DAILY MEAN				6.2			7.2			1.5		
ANNUAL SEVEN-DAY MINIMUM				6.6			7.5			1.9		
MAXIMUM PEAK FLOW							1550			1550		
MAXIMUM PEAK STAGE							8.35			8.35		
INSTANTANEOUS LOW FLOW							7.0			1.6		
10 PERCENT EXCEEDS				211			258			168		
50 PERCENT EXCEEDS				47			51			30		
90 PERCENT EXCEEDS				10			12			4.9		

e Estimated.

03139000 Killbuck Creek at Killbuck, Ohio

LOCATION.—Latitude 40°28'53", longitude 81°59'10", Holmes County, Hydrologic Unit 05040003, on right bank at downstream side of U.S. Highway 62 bridge south of Killbuck, Ohio, and 1.2 mi downstream from Black Creek. Prior to Oct. 5, 1976, at site 0.9 mi upstream.

DRAINAGE AREA.—464 mi².

PERIOD OF RECORD.—October 1930 to current year.

REVISED RECORDS.—WSP 873: 1935. WSP 1555: 1935. WSP 1907: Drainage area. WDR-OH-70-1: 1969. WDR-OH-77-1: Drainage area. WDR-OH-87-1: 1984-86.

GAGE.—Water-stage recorder. Datum of gage is 788.05 ft above sea level. Prior to Oct. 1, 1949, nonrecording gage; Oct. 1, 1949-Oct. 5, 1976, water-stage recorder and nonrecording gage, at site 0.9 mi upstream at same datum.

REMARKS.—Records fair except for periods of estimated record, which are poor. Water-quality and sediment data formerly collected at this site. U.S. Army Corps of Engineers satellite telemeter at station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1200	254	966	991	e300	524	1810	594	1680	353	257	260
2	963	238	870	1160	e290	640	2070	915	1200	350	213	226
3	681	226	685	1260	e440	727	2230	1200	904	301	172	204
4	524	217	524	1640	1100	766	2200	1140	633	273	174	192
5	440	212	493	2680	860	841	2050	1060	506	265	179	220
6	371	207	516	2620	1330	890	1800	910	444	242	136	200
7	324	201	472	2350	1820	870	1550	777	401	236	120	176
8	292	188	426	2210	1430	789	1320	803	363	261	109	251
9	269	176	403	2010	1190	691	1140	683	337	233	103	944
10	253	170	628	1650	1010	607	961	584	613	215	97	773
11	241	174	1270	1330	816	551	809	519	840	256	92	663
12	228	201	1210	1110	688	534	692	512	1890	305	87	557
13	216	258	1150	937	655	481	853	454	1770	228	88	432
14	224	268	1080	765	556	451	1160	415	2070	196	87	344
15	357	243	940	653	529	433	1170	419	2260	196	82	293
16	410	224	744	e490	438	428	1140	431	2240	173	78	256
17	390	213	835	e460	417	445	1070	402	2630	177	75	515
18	329	200	743	e420	405	437	1170	589	3250	285	74	1010
19	297	234	642	e380	448	544	1130	793	2550	192	217	817
20	268	313	542	e360	630	864	1010	813	2010	164	472	795
21	253	310	452	e350	971	1460	861	1220	1650	157	1380	721
22	240	286	419	e340	925	1490	830	2360	1350	158	1510	552
23	233	257	445	e330	848	1480	1200	2240	1100	152	1110	407
24	226	241	972	e320	782	1390	1220	2090	870	138	744	316
25	217	233	1010	e310	712	1220	1110	2000	723	124	498	269
26	228	219	986	e330	637	1070	971	1810	583	149	390	229
27	310	222	926	e350	580	1110	823	1480	482	160	329	200
28	328	596	815	e370	538	1140	713	1180	454	151	315	188
29	323	1040	715	e350	516	1140	618	909	481	136	352	176
30	298	993	957	e330	---	1380	560	626	397	149	318	166
31	275	---	1020	e310	---	1710	---	1450	---	222	293	---
TOTAL	11208	8814	23856	29166	21861	27103	36241	31378	36681	6597	10151	12352
MEAN	362	294	770	941	754	874	1208	1012	1223	213	327	412
MAX	1200	1040	1270	2680	1820	1710	2230	2360	3250	353	1510	1010
MIN	216	170	403	310	290	428	560	402	337	124	74	166
CFSM	0.78	0.63	1.66	2.03	1.62	1.88	2.60	2.18	2.64	0.46	0.71	0.89
IN.	0.90	0.71	1.91	2.34	1.75	2.17	2.91	2.52	2.94	0.53	0.81	0.99

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931-2004, BY WATER YEAR (WY)

MEAN	138	223	384	545	661	854	755	527	413	283	200	153
MAX	1015	1286	1509	2416	1648	1685	1400	1523	2281	3960	2147	1473
(WY)	1991	1986	1991	1937	1975	1978	1957	1996	1947	1969	1935	1979
MIN	26.8	37.1	38.1	42.3	71.6	124	170	71.8	69.9	39.6	34.7	25.6
(WY)	1964	1954	1964	1945	1934	1931	1935	1934	1988	1954	1932	1954

	SUMMARY STATISTICS		FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1931-2004	
ANNUAL TOTAL			218367		255408			
ANNUAL MEAN			598		698		427	
HIGHEST ANNUAL MEAN							698	2004
LOWEST ANNUAL MEAN							128	1931
HIGHEST DAILY MEAN			2140	May 10	3250	Jun 18	37200	Jul 6 1969
LOWEST DAILY MEAN			110	Feb 20	74	Aug 18	23	Sep 10 1954
ANNUAL SEVEN-DAY MINIMUM			115	Feb 15	82	Aug 12	23	Sep 8 1954
MAXIMUM PEAK FLOW					3530	Jun 18a	47500	Jul 5 1969
MAXIMUM PEAK STAGE					17.01	Jun 18	26.40	Jul 5 1969
INSTANTANEOUS LOW FLOW							23	Sep 10 1954
ANNUAL RUNOFF (CFSM)			1.29		1.50		0.92	
ANNUAL RUNOFF (INCHES)			17.51		20.48		12.49	
10 PERCENT EXCEEDS			1310		1470		1090	
50 PERCENT EXCEEDS			420		514		210	
90 PERCENT EXCEEDS			170		188		57	

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

03140000 Mill Creek near Coshocton, Ohio

LOCATION.—Latitude 40°21'46", longitude 81°51'45", Coshocton County, Hydrologic Unit 05040003, on left bank 0.5 mi downstream from Little Mill Creek and 6 mi north of Coshocton, Ohio.

DRAINAGE AREA.—27.2 mi².

PERIOD OF RECORD.—October 1936 to current year. Monthly discharge only for October 1936, published in WSP 1305.

REVISED RECORDS.—WSP 1143: 1946, 1947-48(P). WSP 1907: Drainage area.

GAGE.—Water-stage recorder and concrete control. Datum of gage is 782.00 ft, National Geodetic Vertical Datum of 1912.

REMARKS.—Records good except for periods of estimated record, which are poor. Water-quality data formerly collected at this site.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	19	42	46	e8.6	22	126	39	73	13	136	43
2	33	18	33	143	e8.4	32	173	98	50	12	30	33
3	28	17	29	136	e100	30	109	71	44	11	22	27
4	28	16	27	691	103	40	75	50	31	10	39	28
5	23	15	42	527	66	40	56	42	27	11	27	24
6	20	14	44	133	536	41	48	34	24	9.3	18	19
7	18	13	38	e46	103	33	42	70	21	13	15	17
8	16	12	34	e26	e27	29	39	57	17	12	13	279
9	15	11	34	e19	e19	26	34	42	17	8.4	12	455
10	14	11	73	e16	e16	22	29	34	37	8.0	11	85
11	13	13	89	e14	e14	21	26	33	309	30	9.7	52
12	12	19	52	e13	e13	20	34	27	135	20	8.9	40
13	11	17	41	e12	e12	17	93	22	63	21	10	31
14	25	13	40	e11	e11	18	163	20	686	11	8.7	26
15	30	13	35	e10	e10	17	70	29	311	12	7.9	23
16	17	13	46	e9.8	e9.6	18	52	22	126	8.2	7.3	20
17	19	12	91	e9.6	e9.2	17	43	20	118	11	6.8	190
18	15	12	50	e9.4	e15	21	55	195	389	103	6.6	108
19	14	26	43	e9.2	22	42	40	199	92	21	172	50
20	13	25	36	e9.0	33	86	35	87	59	15	268	37
21	13	20	31	e8.8	57	105	33	259	45	14	448	30
22	13	18	31	e8.6	29	55	34	230	39	10	82	26
23	12	17	36	e8.4	27	44	181	88	30	9.9	47	22
24	11	18	112	e8.2	27	38	71	59	25	8.0	33	20
25	10	16	60	e8.0	24	38	56	44	24	7.2	26	18
26	17	15	48	e7.8	21	34	61	37	21	59	23	16
27	41	16	43	e10	20	39	48	32	18	22	20	15
28	27	154	40	e12	19	34	40	41	19	16	110	14
29	28	80	38	e9.6	19	31	34	28	17	13	215	13
30	23	53	96	e9.0	---	145	33	24	14	11	142	12
31	20	---	55	e8.8	---	216	---	306	---	36	61	---
TOTAL	619	716	1509	1989.2	1378.8	1371	1933	2339	2881	566.0	2035.9	1773
MEAN	20.0	23.9	48.7	64.2	47.5	44.2	64.4	75.5	96.0	18.3	65.7	59.1
MAX	41	154	112	691	536	216	181	306	686	103	448	455
MIN	10	11	27	7.8	8.4	17	26	20	14	7.2	6.6	12
CFSM	0.73	0.88	1.79	2.36	1.75	1.63	2.37	2.77	3.53	0.67	2.41	2.17
IN.	0.85	0.98	2.06	2.72	1.89	1.88	2.64	3.20	3.94	0.77	2.78	2.42

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937-2004, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
MEAN	6.77	14.5	28.9	41.0	48.2
MAX	56.4	92.1	138	206	106
(WY)	1978	1986	1991	1937	1951
MIN	0.10	0.42	0.60	1.49	2.69
(WY)	1964	1954	1964	1977	1954

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1937-2004

ANNUAL TOTAL	13873.1	19110.9	
ANNUAL MEAN	38.0	52.2	27.8
HIGHEST ANNUAL MEAN			54.5
LOWEST ANNUAL MEAN			7.66
HIGHEST DAILY MEAN	873	Aug 30	2360
LOWEST DAILY MEAN	4.2	Feb 2	0.00
ANNUAL SEVEN-DAY MINIMUM	4.5	Jan 27	0.06
MAXIMUM PEAK FLOW			8720
MAXIMUM PEAK STAGE			15.38
INSTANTANEOUS LOW FLOW			0.00
ANNUAL RUNOFF (CFSM)	1.40	1.92	1.02
ANNUAL RUNOFF (INCHES)	18.97	26.14	13.87
10 PERCENT EXCEEDS	71	109	62
50 PERCENT EXCEEDS	23	27	11
90 PERCENT EXCEEDS	6.8	10	1.0

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

03140500 Muskingum River near Coshocton, Ohio

LOCATION.—Latitude 40°14'54", longitude 81°52'23", in T.5 N., R.6 W., Coshocton County, Hydrologic Unit 05040004, on right bank at upstream side of former highway bridge, 1 mi southwest of Coshocton, Ohio, and 2 mi downstream from confluence of Tuscarawas and Walhonding Rivers.

DRAINAGE AREA.—4,859 mi².

PERIOD OF RECORD.—July 1936 to current year.

REVISED RECORDS.—WSP 1907: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 725.00 ft, National Geodetic Vertical Datum of 1912. Prior to Sept. 19, 1936, nonrecording gage and Sept. 20, 1936–Sept. 30, 1977, water-stage recorder at same site at datum 5.00 ft higher.

REMARKS.—Records excellent except for periods of estimated record, which are fair. Flow regulated by 13 flood-control reservoirs at points 19 mi to 88 mi upstream. Water-quality data formerly collected at this site. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood in Mar. 1913 reached a stage of about 28.8 ft, discharge, 202,000 ft³/s, computed by U.S. Army Corps of Engineers.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	15000	4610	13900	14100	3370	5760	18500	6730	17700	11700	7600	7690	
2	12600	4150	12500	14200	3380	6690	20900	7650	17500	8160	6720	6960	
3	10300	3900	11100	16200	5150	8130	21800	13600	16100	7510	5620	5900	
4	7830	3820	9490	25400	8530	8800	21500	15000	13100	7040	5160	5160	
5	6520	3740	8480	30600	9100	9360	19900	14400	10700	6820	5080	4150	
6	5370	3600	8300	26900	16100	10500	17800	12800	8700	6370	4210	3720	
7	4750	3550	7890	28100	19700	10100	15000	10400	7850	6070	3700	3250	
8	4410	3640	7410	25200	17400	9090	14300	10100	7720	5930	3050	4060	
9	3950	3420	7110	23200	14500	8510	13000	9460	7320	5700	2730	19000	
10	3710	3270	7390	21200	12000	8000	11200	8080	7280	4500	2510	18800	
11	3520	3180	12100	20000	10900	6840	9760	6740	8800	6020	2250	17800	
12	3320	3440	15700	19100	10100	6000	8850	6480	17300	4690	2250	15300	
13	3100	3780	15600	17400	8980	5450	10000	5880	17900	4610	2110	13000	
14	3070	4560	12200	16300	7440	5060	16000	5470	25000	4080	2060	9850	
15	4230	4630	10100	15800	6190	4850	16900	5020	23600	3580	2010	8650	
16	6350	4230	9040	15100	5480	4610	15200	5200	21200	3430	1910	8560	
17	6410	3970	10300	12300	4960	4420	13100	5300	21300	3600	1830	10100	
18	5670	3990	11600	11900	4630	4410	11700	7590	23400	4710	1780	16200	
19	5050	3980	11000	11200	4530	4930	11800	14300	20300	3780	2380	15000	
20	4490	4930	9310	10100	5150	6660	11700	15900	20900	3410	6880	13700	
21	4040	6210	7940	8240	8540	12700	11000	e16000	19700	3280	16600	12600	
22	3800	5950	6960	7520	10900	14600	10100	e23000	19600	2950	16800	11300	
23	3660	5500	e6530	5760	9650	14000	14000	e22000	18400	2780	12500	9820	
24	3530	5090	9380	4930	8480	12200	15000	e21000	17500	2570	10600	9050	
25	3360	4980	13000	4170	8560	10600	13500	19900	16500	2380	8840	8810	
26	3190	4820	12900	3810	7310	9710	11700	19300	16000	3450	7670	8570	
27	3820	4640	10900	4050	6590	9560	10300	18100	15800	3440	6970	8340	
28	5290	6520	9360	4540	7630	11400	9260	17400	13900	3530	6920	8300	
29	5590	13300	8510	4560	5830	11300	8320	15300	12200	3330	9640	7960	
30	5280	15300	9980	4220	---	12300	7240	11000	12200	2980	8920	7410	
31	4950	---	13200	3720	---	16400	---	14500	---	4230	7750	---	
TOTAL	166160	150700	319180	429820	251080	272940	409330	383600	475470	146630	185050	299010	
MEAN	5360	5023	10300	13870	8658	8805	13640	12370	15850	4730	5969	9967	
MAX	15000	15300	15700	30600	19700	16400	21800	23000	25000	11700	16800	19000	
MIN	3070	3180	6530	3720	3370	4410	7240	5020	7280	2380	1780	3250	
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936-2004, BY WATER YEAR (WY)													
MEAN	1748	2986	4835	6395	7788	9616	8968	6371	4821	3215	2207	1914	
MAX	7981	12310	14860	30880	20990	21070	16400	19350	17480	16640	12430	10320	
(WY)	1991	1986	1991	1937	1959	1945	1957	1996	1947	1969	1980	2003	
MIN	636	566	558	923	929	2520	2189	1611	921	637	645	499	
(WY)	1992	1954	1964	1977	1964	1969	1946	1941	1988	1954	1954	1954	
SUMMARY STATISTICS													
ANNUAL TOTAL				FOR 2003 CALENDAR YEAR				FOR 2004 WATER YEAR				WATER YEARS 1936-2004	
ANNUAL MEAN				2544270				3488970					
HIGHEST ANNUAL MEAN				6971				9533				5058	
LOWEST ANNUAL MEAN												9533	
HIGHEST DAILY MEAN				19800				May 12				2082	
LOWEST DAILY MEAN				1300				Feb 18				1954	
ANNUAL SEVEN-DAY MINIMUM				1410				Jan 27				77900	
MAXIMUM PEAK FLOW								33500				Jan 26	
MAXIMUM PEAK STAGE								18.04				Jan 26	
INSTANTANEOUS LOW FLOW								1750				Aug 19	
10 PERCENT EXCEEDS				14100				17700				13000	
50 PERCENT EXCEEDS				5670				8300				3000	
90 PERCENT EXCEEDS				2150				3530				871	

e Estimated.

03141870 Leatherwood Creek near Kipling, Ohio

LOCATION.—Latitude 39°59'24", longitude 81°29'45", Guernsey County, Hydrologic Unit 05040005, on left bank at Deerfield Road bridge, 0.5 mi southeast of village of Kipling, Ohio, and 0.75 mi downstream from Hawkins Run.

DRAINAGE AREA.—69.5 mi².

PERIOD OF RECORD.—February 2000 to current year.

REVISED RECORDS.—WSP 853: 1929(M). WSP 893: 1928. WSP 973: 1942.

GAGE.—Water-stage recorder. Datum of gage is 795.78 ft above sea level.

REMARKS.—Records fair except for periods of estimated record, which are poor. Satellite telemeter at gage.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	60	168	109	e33	70	491	49	55	15	137	49
2	39	57	114	371	e33	210	482	52	45	13	43	33
3	32	48	90	422	479	149	277	61	73	12	24	26
4	34	44	82	1490	446	145	196	44	41	12	29	22
5	35	59	113	2410	188	141	147	39	36	14	22	21
6	28	86	191	1030	1050	236	117	34	34	15	15	18
7	29	63	129	259	794	178	103	37	28	11	12	20
8	23	48	95	e140	224	142	99	58	22	12	10	1120
9	22	41	90	e110	e110	118	96	38	20	10	9.2	4900
10	21	38	100	e100	e100	98	81	31	24	8.9	10	2180
11	20	50	347	e90	e80	88	73	26	209	8.7	16	280
12	20	634	187	e80	e70	85	107	25	320	8.6	10	104
13	19	315	115	e72	e64	73	539	22	93	12	13	65
14	53	148	104	e64	e60	71	806	20	335	9.9	12	49
15	244	100	101	e60	e50	72	272	26	372	8.2	9.3	41
16	76	80	125	e56	e48	79	165	33	375	8.0	7.4	35
17	100	70	521	e54	e44	97	121	23	128	8.5	6.4	1270
18	86	63	242	e52	e43	98	98	179	125	25	5.7	8100
19	61	395	157	e49	e41	245	82	1230	64	13	88	2140
20	49	612	118	e46	e47	153	75	517	45	11	81	272
21	44	206	91	e44	134	174	71	293	35	9.1	475	122
22	39	131	90	e42	100	128	82	803	30	7.9	114	83
23	35	101	120	e40	83	103	250	258	26	8.4	45	67
24	31	92	411	e39	99	95	120	142	21	7.5	28	56
25	30	90	223	e38	98	90	85	96	32	5.9	20	51
26	59	75	148	e37	79	82	78	95	25	147	18	47
27	348	68	116	e50	72	93	67	80	19	99	35	42
28	208	532	104	e66	66	94	63	78	17	32	165	41
29	135	544	98	e38	64	78	51	64	26	18	240	39
30	96	231	227	e34	---	81	45	49	18	14	137	35
31	71	---	150	e34	---	317	---	65	---	175	108	---
TOTAL	2132	5081	4967	7526	4799	3883	5339	4567	2693	759.6	1945.0	21328
MEAN	68.8	169	160	243	165	125	178	147	89.8	24.5	62.7	711
MAX	348	634	521	2410	1050	317	806	1230	375	175	475	8100
MIN	19	38	82	34	33	70	45	20	17	5.9	5.7	18
CFSM	0.99	2.44	2.31	3.49	2.38	1.80	2.56	2.12	1.29	0.35	0.90	10.2
IN.	1.14	2.72	2.66	4.03	2.57	2.08	2.86	2.44	1.44	0.41	1.04	11.42

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000-2004, BY WATER YEAR (WY)

	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004		
MAX (WY)	68.8	169	160	243	175	146	194	151	121	52.8	141	711
MIN (WY)	3.82	9.67	50.5	45.2	33.8	96.7	57.4	63.9	44.3	5.50	1.42	1.52
	2002	2001	2003	2002	2002	2002	2003	2001	2000	2002	2002	2002

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 2000-2004

ANNUAL TOTAL	41667	65019.6	
ANNUAL MEAN	114	178	
HIGHEST ANNUAL MEAN			92.9
LOWEST ANNUAL MEAN			178
HIGHEST DAILY MEAN	867	Aug 16	8100
LOWEST DAILY MEAN	11	Feb 16	5.7
ANNUAL SEVEN-DAY MINIMUM	14	Jan 26	9.0
MAXIMUM PEAK FLOW			10100
MAXIMUM PEAK STAGE			17.21
INSTANTANEOUS LOW FLOW			0.00
ANNUAL RUNOFF (CFSM)	1.64	2.56	1.34
ANNUAL RUNOFF (INCHES)	22.30	34.80	18.17
10 PERCENT EXCEEDS	250	318	180
50 PERCENT EXCEEDS	70	71	38
90 PERCENT EXCEEDS	23	15	2.9

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

03142000 Wills Creek at Cambridge, Ohio

LOCATION.—Latitude 40°00'52", longitude 81°35'14", Guernsey County, Hydrologic Unit 05040005, on left bank at upstream side of bridge on Campbell Avenue in Cambridge, Ohio, 0.9 mi downstream from Leatherwood Creek.

DRAINAGE AREA.—406 mi².

PERIOD OF RECORD.—June 1926 to September 1928, May 1937 to current year.

REVISED RECORDS.—WSP 853: 1929(M). WSP 893: 1928. WSP 973: 1942.

GAGE.—Water-stage recorder. Datum of gage is 772.34 ft above sea level. Prior to Oct. 6, 1927, nonrecording gage at site 1.5 mi downstream at different datum; Oct. 6, 1927–Sept. 30, 1928, and May 22, 1937–Oct. 18, 1938, nonrecording gage at present site and datum.

REMARKS.—Records good. Flow regulated by Senecaville Lake on Seneca Fork, 22 mi upstream, beginning in 1937. Water-quality data formerly collected at this site. U.S. Army Corps of Engineers satellite telemeter at gage.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	495	296	1930	704	193	308	1940	269	1170	72	1060	788
2	405	265	1440	1050	191	674	2660	300	1050	63	316	654
3	157	250	1310	1790	647	1030	2730	366	1180	59	378	266
4	95	230	1270	3160	2040	857	1790	311	1030	57	402	87
5	101	232	1300	5110	1560	761	724	264	340	65	349	74
6	79	241	1480	5760	2070	957	1110	186	175	72	178	68
7	64	206	1380	5050	3340	1110	1210	165	154	66	87	102
8	54	166	1170	3990	3540	696	1170	232	131	59	66	2190
9	46	138	1200	3030	2680	734	1160	202	111	58	57	7020
10	42	120	1110	2140	1280	665	629	155	107	53	57	8730
11	42	194	1340	1550	1410	601	343	213	577	51	62	7180
12	45	1340	1510	1410	1460	573	356	234	2050	58	68	5670
13	38	2310	1100	1370	1040	400	1540	228	1600	88	68	4370
14	74	1980	928	1340	497	313	2900	140	1010	76	73	3160
15	887	1210	908	1300	385	315	3080	117	2270	61	70	1790
16	1080	1070	889	1200	313	239	2150	164	2410	52	64	1110
17	686	985	1710	935	284	293	1280	149	2000	69	56	1900
18	435	1010	2040	874	292	300	1150	547	1370	79	54	5690
19	290	1240	1610	1040	290	743	1050	2620	1110	77	244	7220
20	245	2150	1240	846	327	711	1020	3420	928	60	355	6180
21	220	2000	793	394	449	573	1020	3150	731	51	878	4830
22	208	1230	705	247	475	479	1070	3420	237	48	814	3630
23	190	1080	740	257	381	353	1650	3890	136	45	301	2520
24	111	989	1370	219	496	298	1310	3610	115	45	321	1480
25	72	986	1720	210	586	281	604	2810	99	41	266	1140
26	88	931	1120	203	393	261	501	1740	104	228	149	1030
27	709	887	864	222	331	264	333	1260	87	523	120	971
28	1530	1530	766	252	309	321	265	1140	77	178	257	955
29	979	2630	714	233	298	275	227	1340	88	96	787	945
30	1040	2590	747	206	---	253	221	1290	101	71	492	925
31	590	---	993	189	---	915	---	1140	---	345	631	---
TOTAL	11097	30486	37397	46281	27557	16553	37193	35072	22548	2966	9080	82675
MEAN	358	1016	1206	1493	950	534	1240	1131	752	95.7	293	2756
MAX	1530	2630	2040	5760	3540	1110	3080	3890	2410	523	1060	8730
MIN	38	120	705	189	191	239	221	117	77	41	54	68
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937-2004, BY WATER YEAR (WY)												
MEAN	102	314	501	617	775	854	773	554	388	203	163	158
MAX	835	1912	1615	1674	1789	2361	1710	1890	1602	1690	1937	2756
(WY)	1976	1986	1991	1950	1939	1945	1940	1996	1981	1998	1980	2004
MIN	3.18	4.31	7.55	48.1	25.0	109	87.7	30.5	20.6	11.6	3.77	3.59
(WY)	1954	1954	1954	1954	1954	1969	1941	1941	1988	1966	1962	1963
SUMMARY STATISTICS												
				FOR 2003 CALENDAR YEAR			FOR 2004 WATER YEAR			WATER YEARS 1937-2004		
ANNUAL TOTAL				248176			358905					
ANNUAL MEAN				680			981			446		
HIGHEST ANNUAL MEAN										981		
LOWEST ANNUAL MEAN										118		
HIGHEST DAILY MEAN				2630			8730			10800		
LOWEST DAILY MEAN				37			38			0.70		
ANNUAL SEVEN-DAY MINIMUM				40			47			1.6		
MAXIMUM PEAK FLOW							9110			11400		
MAXIMUM PEAK STAGE							24.93			26.91		
INSTANTANEOUS LOW FLOW										0.70		
10 PERCENT EXCEEDS				1490			2280			1190		
50 PERCENT EXCEEDS				519			582			186		
90 PERCENT EXCEEDS				77			70			19		

03145000 South Fork Licking River near Hebron, Ohio

LOCATION.—Latitude 39°59'19", longitude 82°28'30", in NW ¼ sec. 3, T.1 N., R.12 W., Licking County, Hydrologic Unit 05040006, on right bank at upstream side of bridge on county road, 800 ft downstream from Beaver Run, 2.3 mi north of Hebron, Ohio, and 2.5 mi upstream from Ramp Creek.

DRAINAGE AREA.—133 mi².

PERIOD OF RECORD.—October 1939 to September 1948, July 1968 to current year.

REVISED RECORDS.—WSP 923: 1940. WSP 1033: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 856.08 ft above sea level. Prior to Sept. 13, 1974, nonrecording gage at same site and datum.

REMARKS.—Records fair. Occasional regulation by Buckeye Lake, capacity, 27,300 acre-ft, on unnamed tributary 5.6 mi upstream from station. Occasional diversion from Buckeye Lake into Jonathan Creek, which bypasses station. Water-quality data formerly collected at this site. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Jan. 21, 1959, reached a stage of 12.4 ft present datum, from flood marks; discharge 5,880 ft³/s, by slope-area measurement.

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	158	44	328	233	123	118	410	90	115	27	1010	28
2	135	45	297	668	87	180	590	579	77	25	366	22
3	123	48	261	1050	481	140	358	657	57	25	205	20
4	122	45	229	2330	640	154	190	263	42	26	151	19
5	62	65	266	2620	364	178	133	194	37	27	151	18
6	50	54	495	2220	1600	171	107	160	34	24	123	18
7	38	44	302	1050	1570	144	93	140	34	25	108	18
8	35	40	236	708	577	103	85	131	31	26	100	67
9	33	36	208	657	382	83	74	122	31	21	85	261
10	31	33	319	579	365	69	63	103	82	21	26	80
11	29	36	732	524	393	64	57	47	815	20	23	40
12	28	680	331	474	343	64	73	268	1890	30	22	28
13	28	305	226	431	348	53	334	84	1610	38	21	23
14	37	164	195	380	231	52	1210	58	1560	26	21	21
15	176	232	178	333	210	57	365	57	1030	21	20	18
16	90	208	180	281	171	59	193	67	860	19	20	16
17	64	195	421	249	157	67	177	55	591	40	20	91
18	65	189	238	294	142	100	153	59	815	53	20	216
19	55	217	189	270	142	442	144	536	400	34	20	122
20	46	298	164	211	169	222	122	251	275	25	28	95
21	44	245	145	179	296	234	136	357	233	22	104	82
22	37	265	139	164	212	139	175	903	207	25	68	74
23	34	249	180	142	171	101	715	467	184	26	33	66
24	31	236	670	141	205	87	338	270	123	24	26	54
25	29	225	351	124	208	104	243	151	48	21	23	18
26	31	216	215	124	159	130	275	122	44	78	35	16
27	50	213	177	127	140	170	205	111	36	76	26	17
28	56	671	163	138	129	217	169	105	34	40	23	17
29	52	761	158	122	128	127	125	94	31	31	24	18
30	57	395	529	108	---	914	72	60	29	28	85	18
31	50	---	347	134	---	897	---	139	---	491	47	---
TOTAL	1876	6454	8869	17065	10143	5640	7384	6700	11355	1415	3034	1601
MEAN	60.5	215	286	550	350	182	246	216	378	45.6	97.9	53.4
MAX	176	761	732	2620	1600	914	1210	903	1890	491	1010	261
MIN	28	33	139	108	87	52	57	47	29	19	20	16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940-2004, BY WATER YEAR (WY)

MEAN	40.8	173	207	198	249	249	237	181	145	93.3	67.9	50.9
MAX	177	858	666	550	536	860	616	768	554	572	503	607
(WY)	1976	1986	1991	2004	1990	1945	1970	1996	1997	1992	1979	1979
MIN	4.70	3.50	7.77	12.7	32.7	27.2	25.6	4.07	8.43	4.92	3.48	4.70
(WY)	2000	1945	1944	1944	1944	1941	1941	1941	1988	1944	1942	1991

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1940-2004

ANNUAL TOTAL	65144	81536		
ANNUAL MEAN	178	223		157
HIGHEST ANNUAL MEAN				273
LOWEST ANNUAL MEAN				56.9
HIGHEST DAILY MEAN	1470	Sep 2	2620	Jan 5
LOWEST DAILY MEAN	11	Jul 30	16	Sep 16
ANNUAL SEVEN-DAY MINIMUM	12	Jul 26	20	Aug 13
MAXIMUM PEAK FLOW			2790	Jan 5
MAXIMUM PEAK STAGE			10.99	Jan 5
INSTANTANEOUS LOW FLOW			15	Sep 16
10 PERCENT EXCEEDS	421		531	
50 PERCENT EXCEEDS	82		124	
90 PERCENT EXCEEDS	25		24	

03146500 Licking River near Newark, Ohio

LOCATION.—Latitude 40°03'33", longitude 82°20'23", in T.2 N., R.11 W., Licking County, Hydrologic Unit 05040006, on right bank at downstream side of Stadden Bridge, 1 mi downstream from Shawnee Run, 1.5 mi upstream from Equality Run, and 3.5 mi east of Newark, Ohio.

DRAINAGE AREA.—537 mi².

PERIOD OF RECORD.—October 1939 to current year.

REVISED RECORDS.—WSP 973: 1940(M). WSP 1907: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 779.02 ft above sea level. Prior to May 9, 1940, nonrecording gage at same site and datum.

REMARKS.—Records fair except for periods of estimated record, which are poor. Occasional regulation by Buckeye Lake, capacity, 27,300 acre-ft, on South Fork 15.2 mi upstream. Water-quality data formerly collected at this site. U.S. Army Corps of Engineers satellite telemeter at station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	706	226	924	876	278	596	1960	509	1600	279	1890	448
2	606	215	771	3060	271	1120	2450	2050	762	264	825	322
3	526	215	664	3500	2060	1020	1840	2660	519	250	472	259
4	496	204	596	13500	2470	938	1250	1260	365	243	365	224
5	392	223	673	17000	1410	1060	911	893	297	244	344	198
6	321	208	1320	6230	7500	958	732	691	263	228	304	184
7	276	192	955	3200	5100	793	636	592	237	225	258	171
8	249	179	748	2280	1980	631	568	644	212	216	233	479
9	231	169	662	1920	1350	513	479	518	187	202	221	1890
10	214	160	957	1610	1210	420	393	417	288	195	159	797
11	204	178	2480	1420	1270	373	349	301	2860	192	138	435
12	191	1580	1200	1310	1140	360	403	670	4400	232	134	311
13	182	1070	813	1190	1240	304	1370	359	3330	229	132	250
14	254	618	688	1090	843	288	4420	276	9590	197	128	217
15	989	593	624	1000	773	293	1850	280	5810	181	129	200
16	713	520	592	862	613	310	1090	295	5430	167	125	185
17	490	467	1190	787	550	315	847	263	2550	285	120	530
18	412	439	845	882	491	377	686	373	1740	233	119	1450
19	346	531	681	834	516	1300	589	2480	1340	200	e140	654
20	294	737	597	690	787	1060	522	1500	1120	172	e175	432
21	263	599	509	577	1670	1410	525	1540	971	160	e2000	347
22	244	569	490	541	1070	928	687	4290	844	175	e800	297
23	222	523	592	445	806	681	3230	1830	726	169	e350	266
24	206	495	2190	442	885	568	1730	1110	611	157	229	240
25	192	469	1300	389	862	614	1160	744	512	146	184	190
26	203	445	863	387	699	658	1190	597	443	406	244	169
27	250	441	708	428	616	1120	874	503	381	263	194	163
28	250	1770	649	475	561	1390	686	492	350	197	994	159
29	242	2320	637	425	550	871	561	436	331	172	3360	155
30	241	1170	1640	368	---	3730	431	322	302	161	1540	153
31	223	---	1310	305	---	3470	---	1920	---	1040	742	---
TOTAL	10628	17525	28868	68023	39571	28469	34419	30815	48371	7480	17048	11775
MEAN	343	584	931	2194	1365	918	1147	994	1612	241	550	392
MAX	989	2320	2480	17000	7500	3730	4420	4290	9590	1040	3360	1890
MIN	182	160	490	305	271	288	349	263	187	146	119	153

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940-2004, BY WATER YEAR (WY)

MAX	914	2402	2867	2926	2577	3454	2404	2610	2151	2115	2017	2207
(WY)	1987	1986	1991	1950	1990	1963	1940	1996	1989	1990	1979	1979
MIN	39.5	41.1	43.1	65.0	59.5	207	166	91.5	76.3	58.5	58.3	36.7
(WY)	1954	1954	1954	1977	1964	1941	1941	1941	1988	1954	1963	1954

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1940 - 2004	
ANNUAL TOTAL	245606	342992		
ANNUAL MEAN	673	937	618	
HIGHEST ANNUAL MEAN			1138	1990
LOWEST ANNUAL MEAN			156	1954
HIGHEST DAILY MEAN	5510	Sep 3	17000	Jan 5
LOWEST DAILY MEAN	101	Aug 26	119	Aug 18
ANNUAL SEVEN-DAY MINIMUM	112	Aug 23	127	Aug 12
MAXIMUM PEAK FLOW			19800	Jan 5a
MAXIMUM PEAK STAGE			14.89	Jan 5
INSTANTANEOUS LOW FLOW			114	Aug 18
10 PERCENT EXCEEDS	1390	1900	1430	
50 PERCENT EXCEEDS	441	526	260	
90 PERCENT EXCEEDS	160	189	69	

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

03149500 Salt Creek at Chandlersville, Ohio

LOCATION.—Latitude 39°54'31", longitude 81°51'37", Muskingum County, Hydrologic Unit 05040004, on left bank downstream of State Highway 146, 1 mi upstream from Buffalo Fork, 2 mi northwest of Chandlersville and 11 mi southeast of Zanesville.

DRAINAGE AREA.—75.7 mi².

PERIOD OF RECORD.—January 1935 to September 1947. November 1, 2000 to current year.

GAGE.—Water-stage recorder and crest gage. Datum of gage is 695.14 ft, NAVD 1988. Prior to 1947 at site 300 ft upstream at different datum.

REMARKS.—Records fair except for periods of estimated record, which are poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	39	156	126	e27	74	498	68	109	24	70	24
2	60	38	113	411	e29	180	725	224	78	22	24	17
3	48	36	89	837	e600	143	423	220	87	20	16	14
4	50	33	80	3250	441	163	283	115	61	20	27	12
5	44	38	110	2500	259	169	188	90	54	20	21	11
6	36	41	164	646	1750	285	141	72	50	18	13	9.4
7	31	35	111	362	571	229	120	105	42	17	10	12
8	28	29	92	274	230	169	105	109	36	17	9.0	e3200
9	26	26	87	233	179	135	91	68	32	15	7.8	e4100
10	25	24	102	e185	165	108	73	53	48	14	8.7	461
11	23	29	220	e160	166	94	63	49	608	15	8.5	245
12	21	556	139	e140	142	86	135	43	361	15	7.1	168
13	20	209	106	e125	140	71	654	34	174	41	7.6	129
14	43	119	105	e110	104	69	702	30	522	20	7.3	105
15	121	92	101	e100	98	67	316	70	329	14	6.6	89
16	50	74	136	e82	87	70	200	73	248	11	5.9	78
17	59	63	578	e74	92	74	147	41	363	38	5.3	1530
18	56	56	247	e84	74	87	115	710	218	30	5.0	1080
19	44	144	178	e80	70	205	95	2370	141	17	143	302
20	38	129	137	e62	83	139	86	573	103	13	71	181
21	35	83	105	e50	128	172	89	1170	81	11	106	133
22	33	71	100	e45	93	126	96	1770	71	10	42	104
23	30	64	107	e35	78	102	583	475	58	11	20	85
24	27	60	356	e34	87	93	220	265	45	10	14	72
25	25	57	206	e29	85	87	154	168	39	8.6	21	65
26	33	49	157	e29	73	78	142	151	36	70	17	58
27	114	48	132	e33	68	96	112	130	31	35	20	52
28	79	817	112	e40	64	96	86	299	30	19	21	49
29	64	445	104	e36	63	78	70	208	32	14	208	45
30	52	226	210	e33	---	139	63	110	26	12	195	41
31	43	---	154	e29	---	363	---	166	---	104	42	---
TOTAL	1436	3730	4794	10234	6046	4047	6775	10029	4113	705.6	1179.8	12471.4
MEAN	46.3	124	155	330	208	131	226	324	137	22.8	38.1	416
MAX	121	817	578	3250	1750	363	725	2370	608	104	208	4100
MIN	20	24	80	29	27	67	63	30	26	8.6	5.0	9.4
CFSM	0.61	1.64	2.04	4.36	2.75	1.72	2.98	4.27	1.81	0.30	0.50	5.49
IN.	0.71	1.83	2.36	5.03	2.97	1.99	3.33	4.93	2.02	0.35	0.58	6.13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936-2004, BY WATER YEAR (WY)

MEAN	19.1	51.5	74.9	125	151	183	165	128	101	40.5	30.3	49.1
MAX	82.1	199	187	536	371	510	339	324	234	146	107	416
(WY)	1937	1937	1943	1937	1936	1945	1940	2004	1946	1937	1941	2004
MIN	2.18	4.74	8.29	13.4	35.5	43.5	20.3	10.9	2.87	3.39	1.32	1.80
(WY)	1944	1945	1940	1944	1944	1941	1941	1941	1936	1944	2002	2002

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1936-2004

ANNUAL TOTAL	41253.8	65560.8										
ANNUAL MEAN	113	179								94.8		
HIGHEST ANNUAL MEAN										179		2004
LOWEST ANNUAL MEAN										54.4		1944
HIGHEST DAILY MEAN	1090	Feb 23					4100	Sep 9		4100	Sep 9	2004
LOWEST DAILY MEAN	5.8	Aug 21					5.0	Aug 18		0.00	Jul 22	1936
ANNUAL SEVEN-DAY MINIMUM	11	Jan 26					6.4	Aug 12		0.01	Aug 9	1944
MAXIMUM PEAK FLOW							13500	Sep 8		13500	Sep 8	2004
MAXIMUM PEAK STAGE							22.26	Sep 8		22.26	Sep 8	2004
INSTANTANEOUS LOW FLOW										0.00	Jul 22	1936
ANNUAL RUNOFF (CFSM)	1.49						2.37			1.25		
ANNUAL RUNOFF (INCHES)	20.27						32.22			17.01		
10 PERCENT EXCEEDS	256						358			216		
50 PERCENT EXCEEDS	63						80			33		
90 PERCENT EXCEEDS	16						17			3.0		

e Estimated.

03150000 Muskingum River at McConnellsville, Ohio

LOCATION.—Latitude 39°38'42", longitude 81°51'00", in SE ¼ sec.11, T.10.N., R.12 W., Morgan County, Hydrologic Unit 05040004, on left bank just upstream from Dam 7 at McConnellsville, and 3.5 mi downstream from Oilspring Run.

DRAINAGE AREA.—7,422 mi².

PERIOD OF RECORD.—October 1921 to September 1992. October 2001 to current year.

REVISED RECORDS.—WSP 783: 1913(M). WSP 853: 1933(M). WSP 1173: 1922-24, 1928(M). WSP 1907: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 650.31 ft, National Geodetic Vertical Datum of 1912. Prior to July 27, 1922 nonrecording gage at site 0.5 mi upstream at same datum; July 27, 1922-Aug. 10, 1926, nonrecording gage; Aug. 11, 1926-Sept. 8, 1959, water-stage recorder at present site and datum; Sept. 9, 1959-July 18, 1960, nonrecording gage at site 0.5 mi upstream at same datum.

REMARKS.—Records excellent except for periods of estimated record, which are poor. Flow regulated by 17 flood-control reservoirs 36.6 mi to 148 mi upstream from station. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Mar. 1913 reached a stage of 33.5 ft, discharge, 270,000 ft³/s computed by U.S. Army Corps of Engineers.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18400	7210	e21000	17500	5010	8190	26000	10100	24100	12500	10800	10700
2	16100	6610	17700	19200	5160	9230	29700	10700	24000	11100	10500	9400
3	13600	6020	16600	23300	7660	10800	29600	15300	22400	8810	8450	8490
4	10900	5530	14700	40700	13100	11900	28300	19400	20600	8250	7370	7480
5	9090	5550	e12800	50200	14600	13000	27000	19300	16000	7900	6950	6420
6	7630	5450	e12200	38500	28200	14800	24700	16400	12600	7580	6510	5300
7	6680	5160	e11700	32000	30800	14900	21800	14600	10700	7070	5480	4780
8	6110	5150	e11300	31400	28900	13400	18900	12900	9310	6810	4870	15600
9	5690	5050	e10700	30700	25800	12600	17500	12100	8980	6710	4240	37100
10	5110	4710	e10500	31000	23600	11900	15900	11300	8560	6290	3920	24200
11	4870	4600	14900	29800	21900	10600	13900	9960	14600	5910	3720	22900
12	4670	9700	19800	29000	19500	9230	12800	9230	21400	6540	3300	23100
13	4420	9180	19800	28400	16700	8430	16100	8180	25100	5730	3130	21400
14	4420	8410	18100	27000	13300	7850	23500	7120	28000	5550	3040	17900
15	5680	8980	15000	26400	11300	7390	26500	6920	28100	4920	2990	15700
16	6950	8750	12900	25800	9400	7050	25000	6820	26900	4540	2910	14800
17	8690	7680	16100	24600	7860	6990	20900	7360	27400	4760	2760	23900
18	8000	6830	16700	23400	7360	6700	18600	8870	27700	5560	2600	26900
19	7330	7380	16500	22800	7210	8040	18000	24900	27100	5710	2900	21500
20	6920	8030	15200	21900	7400	9410	16500	25200	26100	4670	5220	20500
21	6130	9190	13000	20100	9300	12400	15500	25600	25600	4290	12100	21300
22	5580	10100	11300	18600	12600	16700	14400	33000	25600	4090	20200	20100
23	5090	9810	10300	15100	13500	17300	19300	24700	25400	3850	17100	18000
24	4880	8610	12500	8970	12500	16000	22900	25300	24700	3630	13400	15700
25	4710	8200	17000	7140	11500	13900	21900	26400	24400	3410	11300	15300
26	4600	7830	18100	6500	11400	12700	19100	25600	22200	4150	9640	14900
27	5130	7510	16000	6490	9140	12200	14800	24300	18800	5820	8690	14500
28	6010	12000	14100	6370	10000	12700	13400	23700	16600	5020	8300	14200
29	7530	e17000	12700	6770	8900	14300	12300	23700	14200	5100	12700	14000
30	7650	e22000	13000	6530	---	16200	11000	20200	13400	4510	15300	13600
31	7350	---	16200	5540	---	23000	---	18700	---	5990	13100	---
TOTAL	225920	248230	458400	681710	403600	369810	595800	527860	620550	186770	243490	499670
MEAN	7288	8274	14790	21990	13920	11930	19860	17030	20680	6025	7855	16660
MAX	18400	22000	21000	50200	30800	23000	29700	33000	28100	12500	20200	37100
MIN	4420	4600	10300	5540	5010	6700	11000	6820	8560	3410	2600	4780

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922-2004, BY WATER YEAR (WY)

MEAN	2505	4477	7761	10200	12050	15030	13630	9430	6850	4538	3499	2939
MAX	11780	19260	26010	51270	29380	36270	26180	23550	22650	18920	26280	16660
(WY)	1927	1986	1928	1937	1959	1945	1940	1983	1981	1969	1935	2004
MIN	643	731	833	1111	1173	2316	3337	1564	1361	711	494	590
(WY)	1931	1954	1964	1931	1934	1931	1941	1934	1930	1930	1930	1932

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1922-2004	
ANNUAL TOTAL	3637200	5061810		
ANNUAL MEAN	9965	13830	7718	
HIGHEST ANNUAL MEAN			13830	2004
LOWEST ANNUAL MEAN			2658	1931
HIGHEST DAILY MEAN	26200	50200	124000	Jan 26 1937
LOWEST DAILY MEAN	1900	2600	325	Oct 12 1930
ANNUAL SEVEN-DAY MINIMUM	2050	2900	448	Aug 20 1930
MAXIMUM PEAK FLOW		52500	126000	Jan 26 1937
MAXIMUM PEAK STAGE		12.67	21.14	Jan 26 1937
INSTANTANEOUS LOW FLOW		2570	325	Oct 12 1930
10 PERCENT EXCEEDS	20200	25600	20000	
50 PERCENT EXCEEDS	8410	12400	4440	
90 PERCENT EXCEEDS	3440	5080	1150	

e Estimated.

03157500 Hocking River at Enterprise, Ohio

LOCATION.—Latitude 39°33'54", longitude 82°28'29", in NW ¼ sec. 5, T.14 N., R.17 W., Hocking County, Hydrologic Unit 05030204, on right bank at upstream side of bridge at Enterprise, Ohio, 4.0 mi downstream from Buck Run, and 4.3 mi upstream from Scott Creek.

DRAINAGE AREA.—459 mi².

PERIOD OF RECORD.—October 1930 to current year. Prior to May 1931 monthly discharge only, published in WSP 1305.

REVISED RECORDS.—WSP 873: 1938. WDR-OH-70-1: 1969. WSP 1907: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 723.58 ft above sea level. Prior to Oct. 24, 1933, nonrecording gage at same site and datum.

REMARKS.—Records good except for periods of estimated record, which are poor. Flood flow affected by temporary retention in eight retarding basins, combined capacity, 8,710 acre-ft, constructed between 1955 and 1961 upstream from station. Water-quality data formerly collected at this site. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood in Mar. 1907 reached a stage of 22.0 ft from flood mark; discharge, 36,000 ft³/s from reports of U.S. Army Corps of Engineers.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
1	412	225	852	718	e250	435	1550	498	1140	229	1560	75			
2	347	242	638	924	e350	605	2290	774	822	209	652	71			
3	294	232	533	1130	1680	607	1920	1170	654	193	409	69			
4	281	217	481	4820	1820	609	1350	783	543	182	384	68			
5	258	223	553	10300	1200	660	1020	644	485	181	335	66			
6	228	250	1020	7940	5940	924	824	555	443	174	241	63			
7	203	229	754	3630	5540	895	724	493	389	155	194	62			
8	186	205	611	1710	2090	738	659	455	344	147	167	2040			
9	173	187	540	1330	1370	633	601	413	315	133	149	5190			
10	167	179	647	1060	1110	552	529	374	552	122	149	3120			
11	161	204	1590	864	e900	506	485	356	1950	118	145	1040			
12	152	2150	1090	e720	e780	481	559	323	4600	186	126	599			
13	144	1710	763	e620	e640	431	1910	297	2300	135	118	415			
14	190	933	659	e540	e560	417	3640	272	2250	113	111	317			
15	586	647	589	e500	e520	423	1970	306	1580	101	102	279			
16	392	523	562	e460	e470	423	1310	345	1540	95	97	234			
17	314	450	1440	e420	e440	447	970	286	1490	284	93	1230			
18	282	404	1040	e390	e430	447	789	453	4080	332	89	2430			
19	254	473	783	e360	445	642	668	5780	1590	186	86	1060			
20	230	672	644	e340	473	610	613	3730	1020	141	116	665			
21	213	495	542	e320	569	660	617	1680	754	117	120	484			
22	203	428	510	e310	524	584	651	3070	616	707	102	394			
23	189	387	518	e300	479	519	1710	1520	509	447	89	337			
24	181	375	1170	e290	523	493	1270	1040	433	231	84	300			
25	172	360	1040	e280	571	483	988	746	382	163	146	272			
26	187	331	774	e280	505	450	845	816	350	1680	136	246			
27	269	334	650	e270	469	493	711	1400	309	979	117	228			
28	308	1760	598	e260	437	511	602	3030	282	532	96	218			
29	276	2190	584	e260	426	474	532	1550	281	349	109	204			
30	255	1230	1020	e250	---	1360	493	1030	254	267	88	193			
31	228	---	935	e250	---	2270	---	1770	---	1770	81	---			
TOTAL	7735	18245	24130	41846	31511	19782	32800	35959	32257	10658	6491	21969			
MEAN	250	608	778	1350	1087	638	1093	1160	1075	344	209	732			
MAX	586	2190	1590	10300	5940	2270	3640	5780	4600	1770	1560	5190			
MIN	144	179	481	250	250	417	485	272	254	95	81	62			
CFSM	0.54	1.32	1.70	2.94	2.37	1.39	2.38	2.53	2.34	0.75	0.46	1.60			
IN.	0.63	1.48	1.96	3.39	2.55	1.60	2.66	2.91	2.61	0.86	0.53	1.78			
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932-2004, BY WATER YEAR (WY)															
MEAN	125	249	424	643	776	932	852	627	386	274	221	162			
MAX	670	1864	1844	3605	1899	2875	2228	2499	1446	1437	1686	1087			
(WY)	1976	1986	1991	1937	1979	1945	1940	1968	1981	1958	1980	1979			
MIN	33.4	41.1	40.5	100	58.0	181	184	95.3	68.1	60.4	39.9	30.4			
(WY)	1954	1954	1964	1977	1954	1941	1941	1934	1936	1999	1932	1953			
SUMMARY STATISTICS															
				FOR 2003 CALENDAR YEAR				FOR 2004 WATER YEAR				WATER YEARS 1932-2004			
ANNUAL TOTAL				178210				283383							
ANNUAL MEAN				488				774				471			
HIGHEST ANNUAL MEAN												860			
LOWEST ANNUAL MEAN												110			
HIGHEST DAILY MEAN				3170				Mar 6				10300			
LOWEST DAILY MEAN				79				Aug 26				Jan 5			
ANNUAL SEVEN-DAY MINIMUM				104				Aug 20				62			
MAXIMUM PEAK FLOW												68			
MAXIMUM PEAK STAGE												11500			
INSTANTANEOUS LOW FLOW												16.68			
ANNUAL RUNOFF (CFSM)				1.06				1.69				1.03			
ANNUAL RUNOFF (INCHES)				14.44				22.97				13.94			
10 PERCENT EXCEEDS				1020				1680				1060			
50 PERCENT EXCEEDS				357				480				214			
90 PERCENT EXCEEDS				132				145				59			

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

03158200 Monday Creek at Doanville, Ohio

LOCATION.—Latitude 39°26'07", longitude 82°11'30", Athens County, Hydrologic Unit 05030204, on right bank 75 ft upstream from Lang Street bridge in Doanville, Ohio, 1.75 mi above mouth, and 2.5 mi south of Nelsonville, Ohio.

DRAINAGE AREA.—114 mi².

Water-Discharge Records

PERIOD OF RECORD.—May 1997 to current year. Low-flow site 1961-71.

REVISED RECORDS.—WDR OH-00-1: 1999(P).

GAGE.—Water stage recorder. Elevation of gage is 650 ft above sea level (from topographic map).

REMARKS.—Records fair except for periods of estimated record which are poor. Four parameter monitor at site. Satellite transmitter at site.

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	105	85	260	192	e39	111	654	118	463	45	459	18			
2	94	83	193	247	e38	199	925	166	297	41	113	16			
3	76	80	165	269	e200	186	646	328	226	39	72	16			
4	74	73	149	926	521	184	399	177	181	39	54	15			
5	73	78	175	e2200	273	204	293	144	156	44	46	14			
6	63	83	349	e1500	e1100	410	236	125	141	43	40	13			
7	58	76	245	e720	e920	302	203	111	122	41	35	13			
8	53	69	191	380	e500	216	176	103	105	43	31	383			
9	50	60	169	264	323	176	156	96	96	38	28	e1800			
10	48	58	192	203	263	153	139	87	88	49	27	e500			
11	47	63	491	e150	259	140	128	78	337	40	25	217			
12	44	974	303	e130	225	130	160	102	966	36	25	105			
13	43	848	202	e120	222	117	807	79	559	31	26	74			
14	51	262	179	e100	186	112	e920	68	252	28	25	55			
15	98	178	167	e92	169	111	e480	76	165	27	23	45			
16	78	151	157	e84	136	113	318	104	146	24	22	39			
17	59	132	619	e76	136	125	239	81	154	31	20	1040			
18	58	118	391	e72	126	116	197	89	1150	65	19	e2000			
19	55	178	270	e68	e125	141	171	e2000	610	47	18	e400			
20	51	234	215	e64	e120	139	158	e1000	194	34	28	178			
21	48	155	178	e60	e130	155	158	e400	136	28	26	123			
22	45	126	165	e56	e130	137	184	763	113	130	31	98			
23	43	113	169	e54	e120	122	446	381	102	129	23	80			
24	41	108	467	e50	e130	117	305	211	85	50	19	65			
25	40	109	379	e48	147	116	217	155	73	36	18	58			
26	48	98	260	e46	129	108	189	250	68	203	28	50			
27	172	99	207	e44	120	115	158	600	61	210	34	46			
28	168	833	182	e43	114	123	138	e1100	56	80	28	44			
29	120	1170	171	e42	108	113	125	e580	54	54	22	41			
30	105	400	243	e41	---	331	116	332	49	42	21	38			
31	94	---	247	e40	---	690	---	637	---	409	19	---			
TOTAL	2202	7094	7750	8381	7009	5512	9441	10541	7205	2156	1405	7584			
MEAN	71.0	236	250	270	242	178	315	340	240	69.5	45.3	253			
MAX	172	1170	619	2200	1100	690	925	2000	1150	409	459	2000			
MIN	40	58	149	40	38	108	116	68	49	24	18	13			
MED	58	111	202	84	136	137	200	155	144	42	26	56			
CFSM	0.62	2.07	2.19	2.37	2.12	1.56	2.76	2.98	2.11	0.61	0.40	2.22			
IN.	0.72	2.31	2.53	2.73	2.29	1.80	3.08	3.44	2.35	0.70	0.46	2.47			
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997-2004, BY WATER YEAR (WY)															
MEAN	21.9	57.0	90.5	172	174	195	237	197	133	41.4	69.7	65.3			
MAX	71.0	236	250	342	242	255	335	340	240	86.1	347	253			
(WY)	2004	2004	2004	1998	2004	2003	2000	2004	2004	2003	1997	2004			
MIN	8.15	14.1	29.4	60.4	59.5	178	112	52.3	15.8	9.03	7.79	5.43			
(WY)	2000	1999	1999	2001	2002	2004	2003	1999	1999	1999	2002	1998			
SUMMARY STATISTICS															
ANNUAL TOTAL				FOR 2003 CALENDAR YEAR				FOR 2004 WATER YEAR				WATER YEARS 1997-2004			
ANNUAL MEAN				57766				76280							
HIGHEST ANNUAL MEAN				158				208				118			
LOWEST ANNUAL MEAN												208			
HIGHEST DAILY MEAN				1270				Feb 23				2200			
LOWEST DAILY MEAN				14				Jan 27				13			
ANNUAL SEVEN-DAY MINIMUM				16				Jan 21				15			
MAXIMUM PEAK FLOW												3200			
MAXIMUM PEAK STAGE												18.55			
INSTANTANEOUS LOW FLOW															
ANNUAL RUNOFF (CFSM)				1.39				1.83				1.03			
ANNUAL RUNOFF (INCHES)				18.85				24.89				14.02			
10 PERCENT EXCEEDS				348				471				273			
50 PERCENT EXCEEDS				99				120				48			
90 PERCENT EXCEEDS				36				33				8.4			

e Estimated.

03158200 Monday Creek at Doanville, Ohio—Continued

Water-Quality Records

PERIOD OF RECORD.—June 1997 to current year.

PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: June 1997 to current year.

pH: June 1997 to current year.

WATER TEMPERATURE: June 1997 to current year.

DISSOLVED OXYGEN: June 1997 to current year.

INSTRUMENTATION.—Water-quality monitor. Electronic data logger. Set for 1-hour interval. Satellite telemeter at station.

REMARKS.—Interruptions in the water-quality record are due to malfunction of the instrument. Specific conductance and water temperature records are good except June 2-July 2, which are fair. pH records are fair except July 3-Sept. 30, which are good, and Dec. 24-Apr. 14, which are poor. Dissolved oxygen records are fair except May 11-13, June 2, July 20-22, and Aug. 21-27, which are poor.

EXTREMES FOR PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: Maximum, 1,110 microsiemens, Sept. 20, 1998; minimum, 136 microsiemens, Sept. 17, 2004.

pH: Maximum, 7.5 units Mar. 23, 2001; minimum, 3.0 units May 30, 1998.

WATER TEMPERATURE: Maximum, 28° C, July 5, 6, 23, 24, and 31, 1999; minimum, 0.0° C, on many days during winter.

DISSOLVED OXYGEN: Maximum, 15.3 mg/L, Dec. 25, 1999; minimum, 3.5 mg/L, May 28, 2004.

EXTREMES FOR CURRENT YEAR.—

SPECIFIC CONDUCTANCE: Maximum, 810 microsiemens, Sept. 7; minimum, 136 microsiemens, Sept. 17.

pH: Maximum, 7.0 units, Aug. 1; minimum, 4.0 units, Jan. 17, 23, and 24.

WATER TEMPERATURE: Maximum, 23.5° C, July 13; minimum, 0.2° C, on many days.

DISSOLVED OXYGEN: Maximum, 14.8 mg/L, Jan. 1, 8, 10, and 11; minimum, 3.5 mg/L, May 28.

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

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	503	470	486	559	546	553	---	---	---	476	456	467
2	527	503	514	567	559	563	---	---	---	477	445	464
3	543	527	533	577	567	572	475	448	462	452	435	442
4	557	543	551	585	577	581	491	475	483	437	260	351
5	569	557	562	587	573	580	494	477	490	---	---	---
6	582	569	576	579	570	574	477	397	430	337	193	256
7	593	582	587	584	575	579	432	398	414	445	337	396
8	606	593	600	589	584	586	456	432	444	506	445	479
9	619	606	612	600	589	596	472	456	464	541	506	524
10	627	619	622	605	600	603	477	448	471	586	541	562
11	634	627	630	606	602	605	---	---	---	617	586	603
12	641	634	638	602	238	334	---	---	---	623	600	614
13	649	641	645	346	268	302	---	---	---	628	623	625
14	653	597	640	404	346	379	---	---	---	639	628	633
15	618	593	606	437	404	422	---	---	---	648	639	643
16	635	588	614	459	437	449	---	---	---	680	648	663
17	633	615	619	477	459	468	---	---	---	708	678	689
18	617	604	610	493	477	486	---	---	---	690	620	659
19	619	604	611	492	426	472	---	---	---	620	597	608
20	630	619	626	449	426	439	---	---	---	640	617	626
21	635	630	633	464	449	455	---	---	---	671	631	647
22	645	635	640	483	464	474	---	---	---	672	645	657
23	644	641	642	497	483	491	---	---	---	701	668	690
24	650	643	646	505	497	502	491	374	424	700	681	686
25	654	650	652	512	505	507	399	372	386	---	---	---
26	656	622	644	522	512	517	435	399	417	706	697	701
27	628	503	567	527	508	522	461	435	448	707	694	699
28	519	502	510	510	320	471	481	461	471	698	678	686
29	512	502	506	---	---	---	493	481	488	696	683	689
30	531	512	519	---	---	---	493	453	479	700	691	694
31	546	531	539	---	---	---	460	453	456	730	688	708
MONTH	656	470	593	606	238	503	494	372	452	730	193	592

03158200 Monday Creek at Doanville, Ohio—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
1	6.7	6.6	6.6	6.6	6.5	6.6	---	---	---	6.2	5.9	6.1
2	6.7	6.6	6.7	6.5	6.5	6.5	---	---	---	6.3	5.9	5.9
3	6.6	6.5	6.6	6.5	6.5	6.5	6.1	5.9	6.0	6.4	6.3	6.4
4	6.5	6.4	6.4	6.5	6.5	6.5	5.9	5.8	5.9	6.7	6.3	6.4
5	6.4	6.4	6.4	6.5	6.4	6.5	5.9	5.8	5.8	6.6	6.4	6.6
6	6.4	6.4	6.4	6.6	6.5	6.5	6.6	5.9	6.5	6.7	5.9	6.4
7	6.4	6.3	6.4	6.6	6.6	6.6	6.5	6.3	6.5	5.9	5.1	5.3
8	6.3	6.2	6.3	6.6	6.5	6.6	6.3	6.1	6.2	5.1	4.8	5.0
9	6.2	6.1	6.1	6.6	6.5	6.5	6.1	6.0	6.1	4.8	4.7	4.8
10	6.1	6.0	6.0	6.5	6.4	6.5	6.1	6.0	6.0	4.7	4.6	4.7
11	6.0	6.0	6.0	6.4	6.4	6.4	6.7	6.1	6.6	4.6	4.3	4.4
12	6.0	5.9	6.0	6.7	6.3	6.5	6.6	6.4	6.4	4.6	4.4	4.4
13	6.0	5.9	5.9	6.7	6.5	6.6	6.4	6.3	6.4	4.4	4.4	4.4
14	6.0	5.8	5.9	6.6	6.6	6.6	6.4	6.2	6.3	4.4	4.3	4.3
15	6.6	5.7	6.2	6.6	6.6	6.6	6.3	6.1	6.2	4.3	4.3	4.3
16	6.7	6.6	6.6	6.6	6.5	6.5	---	---	---	4.3	4.1	4.2
17	6.7	6.5	6.6	6.5	6.5	6.5	---	---	---	4.2	4.0	4.1
18	6.5	6.4	6.5	6.5	6.4	6.4	---	---	---	4.6	4.1	4.3
19	6.4	6.4	6.4	6.6	6.4	6.4	---	---	---	4.9	4.6	4.8
20	6.4	6.3	6.4	6.7	6.6	6.7	---	---	---	4.8	4.6	4.6
21	6.4	6.3	6.3	6.7	6.6	6.7	---	---	---	4.6	4.3	4.5
22	6.3	6.2	6.3	6.6	6.5	6.6	---	---	---	4.4	4.3	4.4
23	6.3	6.3	6.3	6.5	6.5	6.5	---	---	---	4.3	4.0	4.1
24	6.3	6.1	6.1	6.5	6.4	6.4	6.7	5.7	6.3	4.2	4.0	4.1
25	6.1	6.1	6.1	6.5	6.4	6.5	6.5	6.4	6.4	---	---	---
26	6.1	6.0	6.0	6.5	6.4	6.5	6.4	6.2	6.3	4.1	4.1	4.1
27	6.7	5.9	6.2	6.4	6.3	6.4	6.2	6.0	6.1	4.3	4.1	4.2
28	6.9	6.7	6.8	6.5	6.3	6.4	6.0	5.8	6.0	4.4	4.3	4.3
29	6.9	6.8	6.9	---	---	---	5.8	5.7	5.8	4.3	4.3	4.3
30	6.8	6.8	6.8	---	---	---	6.3	5.7	5.8	4.3	4.2	4.2
31	6.8	6.6	6.8	---	---	---	6.4	6.2	6.3	4.3	4.1	4.2
MAX	6.9	6.8	6.9	6.7	6.6	6.7	6.7	6.4	6.6	6.7	6.4	6.6
MIN	6.0	5.7	5.9	6.4	6.3	6.4	5.8	5.7	5.8	4.1	4.0	4.1

DAY	FEBRUARY			MARCH			APRIL			MAY		
	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
1	4.3	4.1	4.2	4.5	4.5	4.5	---	---	---	5.0	5.0	5.0
2	4.2	4.1	4.2	6.0	4.5	5.3	---	---	---	5.6	5.0	5.0
3	5.1	4.2	4.3	6.2	6.0	6.0	---	---	---	6.6	5.6	6.5
4	6.0	5.1	6.0	6.2	6.0	6.0	6.0	5.8	6.0	6.3	5.9	6.1
5	6.0	5.8	5.9	6.2	6.0	6.0	6.0	5.8	6.0	5.9	5.5	5.7
6	6.3	5.8	6.2	6.0	5.9	5.9	5.8	5.8	5.8	5.5	5.2	5.5
7	6.3	6.2	6.3	5.9	5.9	5.9	5.8	5.7	5.8	5.2	5.0	5.2
8	6.3	6.2	6.2	6.0	5.9	5.9	5.8	5.5	5.7	5.0	4.9	5.0
9	6.2	5.8	6.0	6.0	5.9	5.9	5.8	4.7	5.5	5.0	4.9	4.9
10	6.2	5.6	6.0	5.9	5.7	5.9	---	---	---	4.9	4.8	4.9
11	6.0	5.8	6.0	5.9	5.5	5.9	---	---	---	4.8	4.8	4.8
12	6.0	5.5	5.9	5.9	5.4	5.9	---	---	---	5.3	4.7	4.9
13	6.0	5.5	5.9	5.9	5.1	5.7	---	---	---	5.3	4.7	4.9
14	6.0	5.3	5.9	5.5	4.7	5.1	---	---	---	4.7	4.6	4.6
15	6.0	5.2	5.7	5.2	4.7	4.7	6.3	6.2	6.2	4.7	4.6	4.6
16	5.9	4.7	5.6	4.9	4.6	4.7	6.2	6.1	6.2	5.4	4.7	5.0
17	5.7	4.6	5.0	5.5	4.7	5.2	6.2	5.5	6.1	5.3	5.1	5.3
18	5.2	4.6	4.7	5.7	5.0	5.4	6.1	5.2	6.0	5.1	4.8	4.9
19	---	---	---	5.8	5.0	5.5	6.0	5.1	5.3	---	---	---
20	---	---	---	6.0	5.7	5.8	5.9	4.9	5.1	---	---	---
21	---	---	---	6.0	5.8	5.8	5.0	4.9	5.0	---	---	---
22	---	---	---	6.0	5.7	5.8	5.4	5.0	5.1	---	---	---
23	---	---	---	5.8	5.5	5.8	6.6	5.4	6.3	---	---	---
24	4.5	4.5	4.5	5.8	5.2	5.5	6.4	6.0	6.2	---	---	---
25	5.1	4.5	4.8	5.7	5.2	5.3	6.0	5.7	5.8	---	---	---
26	5.0	4.7	4.8	5.5	5.0	5.2	5.7	5.5	5.6	---	---	---
27	4.7	4.5	4.7	5.3	5.0	5.2	5.5	5.3	5.3	---	---	---
28	4.7	4.5	4.5	---	---	---	5.3	5.1	5.2	6.2	6.1	6.1
29	4.5	4.5	4.5	---	---	---	5.1	5.0	5.1	6.2	6.2	6.2
30	---	---	---	---	---	---	5.0	5.0	5.0	6.2	6.1	6.1
31	---	---	---	---	---	---	---	---	---	6.2	6.1	6.1
MAX	6.3	6.2	6.3	6.2	6.0	6.0	6.6	6.2	6.3	6.6	6.2	6.5
MIN	4.2	4.1	4.2	4.5	4.5	4.5	5.0	4.7	5.0	4.7	4.6	4.6

03158200 Monday Creek at Doanville, Ohio—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
1	6.4	6.1	6.2	---	---	---	7.0	6.7	6.7	5.1	4.8	5.0
2	---	---	---	---	---	---	6.7	6.7	6.7	4.8	4.8	4.8
3	---	---	---	4.6	4.5	4.6	6.7	6.5	6.6	4.8	4.7	4.7
4	---	---	---	4.5	4.5	4.5	6.5	6.3	6.4	4.7	4.6	4.6
5	---	---	---	4.5	4.4	4.5	6.3	6.2	6.2	4.6	4.6	4.6
6	---	---	---	4.6	4.5	4.5	6.2	6.1	6.2	4.6	4.6	4.6
7	---	---	---	4.5	4.3	4.5	6.1	5.7	6.0	4.6	4.6	4.6
8	---	---	---	4.6	4.2	4.4	5.7	5.5	5.6	5.6	4.5	4.6
9	---	---	---	4.6	4.5	4.5	5.5	5.2	5.4	6.4	5.6	6.3
10	---	---	---	4.9	4.5	4.6	5.2	5.1	5.2	6.4	6.1	6.4
11	---	---	---	4.9	4.6	4.7	5.1	5.1	5.1	6.2	6.1	6.2
12	---	---	---	4.6	4.6	4.6	5.1	5.0	5.0	6.2	6.1	6.2
13	---	---	---	4.6	4.6	4.6	5.0	4.9	5.0	6.1	6.1	6.1
14	---	---	---	4.6	4.5	4.5	5.1	5.0	5.1	6.1	6.0	6.1
15	---	---	---	4.5	4.5	4.5	5.0	5.0	5.0	6.0	6.0	6.0
16	---	---	---	4.5	4.4	4.4	5.0	4.9	5.0	6.0	5.9	5.9
17	---	---	---	4.4	4.3	4.3	4.9	4.9	4.9	6.3	5.8	6.0
18	---	---	---	5.5	4.2	4.9	4.9	4.8	4.9	6.4	6.3	6.3
19	---	---	---	5.6	4.8	5.2	4.8	4.8	4.8	6.3	5.8	5.9
20	---	---	---	5.6	5.0	5.5	5.0	4.7	4.8	5.8	5.7	5.7
21	---	---	---	5.0	4.7	4.8	5.0	4.9	5.0	5.7	5.5	5.6
22	---	---	---	6.2	4.7	4.8	5.4	5.0	5.3	5.5	5.3	5.4
23	---	---	---	6.6	6.1	6.6	5.4	5.2	5.3	5.3	5.2	5.3
24	---	---	---	6.5	6.1	6.3	5.2	4.9	5.1	5.2	5.0	5.1
25	---	---	---	6.1	5.2	5.6	4.9	4.8	4.9	5.0	5.0	5.0
26	---	---	---	6.7	4.9	5.1	5.3	4.8	4.9	5.0	4.9	5.0
27	---	---	---	6.8	6.7	6.7	5.7	5.2	5.3	4.9	4.9	4.9
28	---	---	---	6.7	6.5	6.6	5.8	5.6	5.6	4.9	4.9	4.9
29	---	---	---	6.7	6.2	6.3	5.6	5.2	5.4	4.9	4.8	4.9
30	---	---	---	6.2	5.9	6.1	5.2	4.8	4.9	5.0	4.9	5.0
31	---	---	---	6.8	5.5	5.9	5.2	4.9	5.1	---	---	---
MAX	6.4	6.1	6.2	6.8	6.7	6.7	7.0	6.7	6.7	6.4	6.3	6.4
MIN	6.4	6.1	6.2	4.4	4.2	4.3	4.8	4.7	4.8	4.6	4.5	4.6
YEAR	MAX	MAXIMUM 7.0 MINIMUM 4.1		MIN	MAXIMUM 6.8 MINIMUM 4.0		MEDIAN	MAXIMUM 6.9 MINIMUM 4.1				

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

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	13.2	12.4	12.8	13.2	12.3	12.7	6.4	6.0	6.2	3.8	2.8	3.3
2	13.0	11.6	12.1	15.1	13.1	14.0	6.1	4.3	5.3	5.9	3.8	4.9
3	11.6	9.8	10.6	15.1	13.3	14.3	4.3	3.6	3.8	9.2	5.9	7.5
4	11.7	10.8	11.2	14.8	13.0	14.1	4.4	3.4	3.8	9.5	7.6	8.6
5	11.7	10.6	11.2	14.6	13.8	14.2	5.7	4.4	5.1	7.6	6.1	6.9
6	12.4	11.0	11.7	14.3	12.9	13.6	5.7	5.4	5.5	6.1	3.4	4.9
7	12.5	10.8	11.7	12.9	11.0	12.0	5.4	4.5	5.0	3.4	1.9	2.4
8	13.0	11.2	12.1	11.0	8.5	9.4	4.5	3.7	4.0	2.1	1.5	1.8
9	13.5	11.9	12.7	8.5	6.7	7.3	5.3	4.1	4.6	2.5	2.1	2.3
10	14.7	13.5	14.0	6.8	5.1	6.1	6.7	5.3	5.8	2.1	1.0	1.4
11	15.3	13.9	14.7	8.2	6.6	7.1	6.7	5.9	6.4	1.6	0.7	1.1
12	15.4	14.5	15.0	11.7	8.2	10.7	5.9	4.2	5.0	2.9	1.3	2.0
13	15.0	13.4	14.2	11.6	8.7	10.3	4.2	3.0	3.3	3.3	2.9	3.1
14	14.2	13.4	13.8	8.7	7.0	7.5	3.0	2.5	2.7	3.2	2.5	2.9
15	13.8	12.8	13.3	7.3	6.9	7.1	3.6	2.9	3.1	3.2	2.1	2.9
16	12.8	11.3	12.2	8.6	7.3	8.0	3.9	2.7	3.3	2.1	1.2	1.6
17	12.6	11.9	12.3	9.8	8.6	9.1	4.2	3.7	3.9	1.6	0.9	1.3
18	11.9	11.0	11.5	10.6	8.8	9.5	3.7	3.2	3.4	2.2	1.5	1.9
19	11.9	10.2	11.2	11.6	10.6	11.1	3.3	3.1	3.2	1.5	0.6	0.9
20	12.3	10.2	11.3	10.8	9.3	9.9	3.2	2.5	2.9	0.9	0.3	0.6
21	12.8	12.0	12.4	9.3	8.1	8.8	2.5	1.6	2.0	1.0	0.3	0.5
22	12.8	11.4	12.0	9.2	7.8	8.6	3.5	2.0	2.6	1.6	0.8	1.1
23	11.4	10.2	10.8	10.0	8.4	9.2	5.4	3.5	4.4	0.8	0.2	0.3
24	10.2	8.5	9.4	9.7	7.9	9.1	5.4	4.2	4.9	0.8	0.2	0.4
25	10.8	8.5	9.6	7.9	5.8	6.5	4.2	3.3	3.7	---	---	---
26	10.9	10.7	10.8	5.8	5.1	5.5	3.3	2.7	3.0	1.1	0.2	0.7
27	11.0	10.4	10.7	6.5	5.3	5.7	2.8	2.1	2.5	1.4	0.9	1.2
28	10.4	9.4	9.8	8.1	6.5	7.5	3.0	2.1	2.5	1.1	0.3	0.7
29	10.6	9.7	10.1	7.7	5.5	6.4	4.5	2.8	3.4	0.9	0.3	0.6
30	11.0	9.2	10.1	6.5	5.9	6.3	5.0	4.3	4.7	0.5	0.2	0.3
31	12.5	10.1	11.2	---	---	---	4.3	3.3	3.7	0.2	0.2	0.2
MONTH	15.4	8.5	11.8	15.1	5.1	9.4	6.7	1.6	4.0	9.5	0.2	2.3

03158200 Monday Creek at Doanville, Ohio—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	12.0	9.7	11.0	10.1	9.8	10.0	---	---	---	14.8	14.3	14.6
2	10.2	9.7	10.0	9.8	9.3	9.6	---	---	---	14.4	13.3	13.8
3	10.7	10.1	10.5	9.7	9.4	9.5	12.5	12.1	12.4	13.3	11.9	12.6
4	10.4	10.1	10.3	9.7	9.4	9.5	12.5	12.2	12.4	12.2	11.6	12.0
5	10.4	10.1	10.3	9.7	9.5	9.6	12.2	11.7	11.9	12.2	11.1	11.8
6	10.3	10.0	10.2	9.9	9.5	9.7	11.9	11.7	11.8	13.3	12.2	12.7
7	10.4	10.0	10.2	10.7	9.9	10.3	12.3	11.9	12.1	14.7	13.3	14.3
8	10.4	9.9	10.1	11.6	10.7	11.3	12.8	12.3	12.6	14.8	14.5	14.7
9	10.2	9.6	10.0	12.0	11.6	11.9	12.7	12.3	12.5	14.5	14.2	14.4
10	9.6	9.1	9.5	12.5	12.0	12.3	12.3	11.7	12.0	14.8	14.2	14.6
11	9.4	8.8	9.2	12.1	11.6	11.9	11.8	11.6	11.7	14.8	14.3	14.6
12	9.0	8.5	8.8	11.6	9.6	10.3	12.7	11.7	12.2	14.3	13.5	13.9
13	9.0	8.5	8.8	10.6	8.6	9.6	13.6	12.7	13.3	13.5	12.9	13.2
14	9.0	8.3	8.8	12.0	10.6	11.5	13.7	13.3	13.5	12.9	12.4	12.7
15	8.8	8.3	8.6	12.0	11.9	12.0	14.4	13.3	13.7	12.4	12.0	12.2
16	9.5	8.7	9.2	11.9	11.6	11.8	13.8	13.3	13.7	---	---	---
17	9.5	9.2	9.3	11.6	11.2	11.5	13.4	12.8	13.2	---	---	---
18	9.9	9.4	9.7	11.4	11.0	11.3	14.0	12.8	13.2	---	---	---
19	10.2	9.7	9.9	11.0	10.4	10.7	13.4	13.2	13.3	---	---	---
20	10.2	9.7	10.0	10.9	10.5	10.8	14.0	13.2	13.5	---	---	---
21	9.7	9.3	9.5	11.1	10.8	11.0	14.0	13.6	13.8	---	---	---
22	9.7	9.2	9.5	11.1	10.9	11.0	13.7	12.8	13.3	13.1	12.8	12.9
23	10.2	9.7	9.9	10.9	10.6	10.8	12.8	12.2	12.5	13.3	13.0	13.2
24	10.8	10.1	10.6	10.8	10.6	10.7	12.9	12.2	12.6	13.1	12.9	13.0
25	10.9	10.4	10.7	11.2	10.6	10.9	13.6	12.9	13.2	---	---	---
26	10.4	9.9	10.1	11.3	11.1	11.2	14.1	13.6	13.9	13.2	12.8	13.0
27	10.0	9.9	10.0	11.1	10.8	11.0	14.6	14.1	14.4	12.9	12.7	12.8
28	10.6	10.0	10.4	10.8	10.3	10.6	14.6	14.4	14.5	13.1	12.9	13.0
29	10.4	10.3	10.4	---	---	---	14.4	13.7	14.2	13.2	13.1	13.1
30	10.8	10.3	10.6	---	---	---	14.4	13.5	13.6	13.2	13.1	13.1
31	10.6	10.1	10.4	---	---	---	14.4	13.8	14.2	13.3	12.8	13.1
MONTH	12.0	8.3	9.9	12.5	8.6	10.8	14.6	11.6	13.1	14.8	11.1	13.3

DAY	FEBRUARY			MARCH			APRIL			MAY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	13.1	12.8	13.0	---	---	---	---	---	---	10.2	9.7	10.0
2	13.0	12.7	12.9	---	---	---	---	---	---	10.0	9.6	9.7
3	13.1	12.5	12.8	---	---	---	---	---	---	10.6	10.0	10.4
4	13.3	13.0	13.1	---	---	---	---	---	---	10.9	10.5	10.8
5	13.8	13.1	13.3	---	---	---	---	---	---	10.6	10.1	10.4
6	13.6	13.1	13.4	---	---	---	---	---	---	10.2	9.7	10.0
7	---	---	---	---	---	---	---	---	---	9.8	9.5	9.7
8	---	---	---	---	---	---	---	---	---	9.8	9.3	9.6
9	---	---	---	---	---	---	11.4	11.1	11.2	9.5	9.0	9.4
10	---	---	---	---	---	---	11.4	10.9	11.2	9.3	8.9	9.1
11	---	---	---	---	---	---	11.2	10.9	11.1	9.0	8.8	8.9
12	---	---	---	---	---	---	11.8	11.0	11.5	8.8	8.5	8.7
13	---	---	---	---	---	---	12.6	11.5	12.0	8.6	8.1	8.5
14	---	---	---	---	---	---	11.8	9.0	10.6	8.2	8.0	8.1
15	---	---	---	---	---	---	---	---	---	8.5	8.0	8.2
16	---	---	---	---	---	---	---	---	---	9.0	8.5	8.8
17	---	---	---	---	---	---	---	---	---	9.4	8.9	9.1
18	---	---	---	---	---	---	---	---	---	8.9	8.6	8.8
19	---	---	---	---	---	---	---	---	---	8.7	5.5	7.5
20	---	---	---	---	---	---	---	---	---	9.5	5.6	6.6
21	---	---	---	---	---	---	10.0	9.8	9.9	9.2	7.5	8.3
22	---	---	---	---	---	---	10.2	9.8	10.0	8.1	6.4	7.3
23	---	---	---	---	---	---	10.4	10.1	10.3	7.2	5.5	6.0
24	---	---	---	---	---	---	10.8	10.3	10.6	7.3	6.5	6.9
25	---	---	---	---	---	---	10.4	10.0	10.3	7.5	6.6	6.9
26	---	---	---	---	---	---	10.3	10.0	10.1	7.5	6.2	6.8
27	---	---	---	---	---	---	10.5	10.1	10.3	6.2	3.9	5.1
28	---	---	---	---	---	---	11.1	10.4	10.8	5.7	3.5	4.3
29	---	---	---	---	---	---	11.0	10.1	10.7	5.3	4.2	4.7
30	---	---	---	---	---	---	10.4	10.1	10.2	6.1	5.3	5.5
31	---	---	---	---	---	---	---	---	---	6.3	5.2	5.7
MONTH	13.8	12.5	13.1	---	---	---	12.6	9.0	10.7	10.9	3.5	8.1

03159246 Sunday Creek below Millfield, Ohio

LOCATION.—Latitude 39°25'47", longitude 82°06'04", Athens County, Hydrologic Unit 05030204, on left bank at downstream side of bridge on County Road 28, 3 mi downstream of Greene's Run at Millfield, Ohio.

DRAINAGE AREA.—126 mi².

Water-Discharge Records

PERIOD OF RECORD.—October 2002 to current year.

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

REMARKS.—Records fair except for periods of estimated record, which are poor. Flow partially regulated by Burr Oak Reservoir 13 mi upstream. Water-quality monitor at site. Satellite telemeter at site.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	71	81	186	154	e43	92	860	97	706	31	234	14		
2	54	76	170	165	e42	268	1110	112	385	29	78	12		
3	45	76	168	160	311	303	715	196	160	28	141	12		
4	46	117	173	881	522	304	523	123	120	29	91	12		
5	44	94	157	2710	501	225	430	163	105	31	37	11		
6	39	101	187	1660	1650	572	273	104	97	32	32	10		
7	36	80	185	750	1440	329	153	85	86	31	28	9.5		
8	34	68	179	603	394	279	132	80	79	36	25	735		
9	33	61	171	628	340	393	118	74	74	27	24	3380		
10	33	57	164	574	590	353	104	70	75	30	24	1610		
11	33	60	170	358	654	129	96	66	403	28	23	732		
12	32	202	166	267	582	109	150	67	614	24	23	685		
13	31	173	162	126	197	96	1090	63	274	23	24	591		
14	51	187	169	108	151	92	1580	59	272	20	23	232		
15	124	180	154	103	132	90	712	68	406	18	21	51		
16	69	187	149	88	105	97	664	71	271	17	20	39		
17	53	186	183	82	98	111	330	64	191	23	19	2070		
18	52	187	179	161	93	101	286	106	1150	33	19	4090		
19	48	164	176	156	93	133	253	2590	379	32	19	1090		
20	44	168	168	e96	100	133	128	3090	228	27	30	162		
21	42	162	149	e88	126	163	139	713	236	21	27	578		
22	41	133	137	e80	113	157	188	729	174	50	23	792		
23	40	110	144	e75	152	220	516	598	71	38	20	760		
24	38	128	170	e70	217	113	378	614	59	24	20	660		
25	38	176	166	e65	131	104	291	780	58	19	20	140		
26	55	129	171	e60	106	97	256	912	54	84	25	121		
27	192	105	164	e56	98	106	144	975	49	77	35	125		
28	199	191	145	e54	91	116	117	1950	47	39	25	56		
29	198	162	152	e50	87	106	104	1080	45	30	17	36		
30	120	188	168	e46	---	298	96	892	34	26	18	34		
31	90	---	161	e44	---	854	---	837	---	404	16	---		
TOTAL	2025	3989	5143	10518	9159	6543	11936	17428	6902	1361	1181	18849.5		
MEAN	65.3	133	166	339	316	211	398	562	230	43.9	38.1	628		
MAX	199	202	187	2710	1650	854	1580	3090	1150	404	234	4090		
MIN	31	57	137	44	42	90	96	59	34	17	16	9.5		
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003-2004, BY WATER YEAR (WY)														
MEAN	41.9	87.7	146	233	278	225	255	399	194	41.7	59.0	367		
MAX	65.3	133	166	339	316	238	398	562	230	43.9	80.0	628		
(WY)	2004	2004	2004	2004	2004	2003	2004	2004	2004	2004	2003	2004		
MIN	18.5	42.4	125	127	239	211	112	236	158	39.5	38.1	106		
(WY)	2003	2003	2003	2003	2003	2004	2003	2003	2003	2003	2004	2003		
SUMMARY STATISTICS														
				FOR 2003 CALENDAR YEAR				FOR 2004 WATER YEAR				WATER YEARS 2003-2004		
ANNUAL TOTAL				51494				95034.5						
ANNUAL MEAN				141				260				193		
HIGHEST ANNUAL MEAN												260	2004	
LOWEST ANNUAL MEAN												126	2003	
HIGHEST DAILY MEAN				1650	Feb 23			4090	Sep 18			4090	Sep 18	2004
LOWEST DAILY MEAN				13	Jul 21			9.5	Sep 7			7.7	Oct 9	2002
ANNUAL SEVEN-DAY MINIMUM				18	Jul 1			12	Sep 1			9.6	Oct 4	2002
MAXIMUM PEAK FLOW								4440	Sep 18			4440	Sep 18	2004
MAXIMUM PEAK STAGE								24.48	Sep 18			24.48	Sep 18	2004
10 PERCENT EXCEEDS				307				670				448		
50 PERCENT EXCEEDS				97				114				92		
90 PERCENT EXCEEDS				28				25				21		

e Estimated.

03159246 Sunday Creek below Millfield, Ohio—Continued
 Water-Quality Records

PERIOD OF RECORD.—November 2002 to current year.

PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: November 2002 to current year.

pH: November 2002 to current year.

WATER TEMPERATURE: November 2002 to current year.

DISSOLVED OXYGEN: November 2002 to current year.

INSTRUMENTATION.—Water-quality monitor. Electronic data logger. Set for 1-hour interval. Satellite telemeter at station.

REMARKS.—Interruptions in the water-quality record are due to malfunction of the instrument. Specific conductance records are good except Oct. 1-8, which are fair. pH records are fair except Jan. 9-Feb. 5, July 8-22, and Sept. 15-29, which are poor. Water temperature records are good. Dissolved oxygen records are poor.

EXTREMES FOR PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: Maximum, 1,490 microsiemens, Sept. 8, 2004; minimum, 104 microsiemens, Sept. 17, 2004.

pH: Maximum, 7.3 units Feb. 5, 13, 17, and Sept. 24, 2004; minimum, 4.4 units Sept. 7, 2004.

WATER TEMPERATURE: Maximum, 24.0° C, July 6 and 7, 2003; minimum, 0.0° C, on many days during winter.

DISSOLVED OXYGEN: Maximum, 15.0 mg/L, Jan. 20, 2004; minimum, 4.3 mg/L, June 3, 2003.

EXTREMES FOR CURRENT YEAR.—

SPECIFIC CONDUCTANCE: Maximum, 1,490 microsiemens, Sept. 8; minimum, 104 microsiemens, Sept. 17.

pH: Maximum, 7.3 units Feb. 5, 13, 17, and Sept. 24, 2004; minimum, 4.4 units Sept. 7.

WATER TEMPERATURE: Maximum, 23.5° C, July 13; minimum, 0.1° C, Jan. 30.

DISSOLVED OXYGEN: Maximum, 15.0 mg/L, Jan. 20; minimum, 4.5 mg/L, Aug. 5 and 8.

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

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	487	373	420	518	491	504	---	---	---	407	280	357
2	584	487	538	542	518	532	---	---	---	411	349	369
3	648	584	617	555	523	540	263	253	254	369	354	361
4	651	630	642	523	396	448	331	263	305	361	166	233
5	662	628	638	444	398	418	409	288	362	166	133	145
6	691	662	674	485	402	454	371	319	344	226	151	197
7	716	691	700	518	485	502	361	322	340	227	213	220
8	723	704	712	545	518	533	408	270	367	232	225	229
9	736	723	727	573	545	557	292	270	274	---	---	---
10	752	736	745	600	573	584	413	292	366	248	238	240
11	774	752	762	604	590	599	344	259	308	300	248	286
12	807	767	780	---	---	---	289	245	273	343	295	321
13	824	807	821	---	---	---	377	254	334	496	336	422
14	830	577	791	---	---	---	401	377	386	533	496	522
15	577	473	530	---	---	---	417	399	407	529	517	522
16	571	511	536	---	---	---	438	383	427	567	526	550
17	582	564	577	---	---	---	383	255	298	601	567	582
18	605	574	581	---	---	---	258	244	253	573	464	521
19	634	605	621	---	---	---	285	247	266	509	468	491
20	666	630	640	305	261	280	382	285	350	523	474	496
21	694	666	687	402	305	354	413	382	398	604	484	535
22	702	681	688	438	402	420	453	413	423	581	516	552
23	727	702	715	481	438	454	449	367	432	651	580	603
24	725	711	715	487	437	473	367	251	288	605	586	599
25	734	725	730	458	332	344	333	250	293	701	592	650
26	741	577	692	453	342	407	366	333	346	652	610	624
27	577	305	446	453	299	385	403	366	385	665	622	644
28	311	274	301	450	163	281	424	402	412	646	621	632
29	319	277	304	191	143	164	462	260	411	652	632	640
30	457	319	378	207	191	202	310	260	291	642	633	638
31	491	457	477	---	---	---	319	272	302	725	636	667
MONTH	830	274	619	604	143	429	462	244	341	725	133	462

03159246 Sunday Creek below Millfield, Ohio—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
1	6.6	6.4	6.6	6.5	6.5	6.5	---	---	---	6.9	6.3	6.6
2	6.6	6.4	6.5	6.5	6.5	6.5	---	---	---	6.7	6.4	6.6
3	6.5	6.4	6.5	6.5	6.4	6.5	6.9	6.9	6.9	6.9	6.6	6.8
4	6.4	6.0	6.4	6.6	6.5	6.6	6.9	6.7	6.8	7.2	6.9	7.1
5	6.5	6.0	6.4	6.7	6.4	6.5	6.8	6.6	6.7	7.0	6.9	7.0
6	6.4	6.0	6.4	6.7	6.6	6.7	6.8	6.7	6.8	7.0	6.7	6.9
7	6.4	6.0	6.3	6.6	6.6	6.6	6.8	6.7	6.7	6.9	6.4	6.7
8	---	---	---	6.6	6.5	6.6	6.8	6.6	6.7	6.8	6.6	6.7
9	---	---	---	6.5	6.5	6.5	6.8	6.7	6.8	6.6	6.5	6.6
10	---	---	---	6.5	6.3	6.5	6.8	6.6	6.6	6.6	6.4	6.5
11	---	---	---	6.6	6.4	6.4	6.9	6.8	6.9	6.5	6.4	6.4
12	---	---	---	---	---	---	7.0	6.9	6.9	6.4	6.2	6.4
13	---	---	---	---	---	---	6.9	6.7	6.7	6.5	6.3	6.4
14	---	---	---	---	---	---	6.7	6.7	6.7	6.6	6.4	6.5
15	---	---	---	---	---	---	6.7	6.7	6.7	6.6	6.4	6.5
16	6.5	6.4	6.5	---	---	---	6.9	6.2	6.2	6.6	6.5	6.5
17	6.4	6.4	6.4	---	---	---	7.1	6.9	7.1	6.5	6.4	6.5
18	6.4	6.4	6.4	---	---	---	7.1	7.0	7.1	6.7	6.5	6.6
19	6.4	6.3	6.4	---	---	---	7.1	6.8	7.0	6.7	6.6	6.6
20	6.4	6.3	6.3	---	---	---	6.9	6.8	6.8	6.6	5.8	6.6
21	6.3	6.2	6.3	---	---	---	6.8	6.7	6.8	6.6	5.7	6.5
22	6.3	6.3	6.3	---	---	---	6.8	6.7	6.7	6.6	6.1	6.5
23	6.3	6.2	6.2	---	---	---	7.0	6.7	6.7	6.6	6.5	6.5
24	6.3	6.2	6.2	---	---	---	7.1	7.0	7.1	6.6	6.3	6.6
25	6.2	6.2	6.2	---	---	---	7.1	6.8	6.9	6.6	5.8	6.4
26	6.4	6.2	6.2	---	---	---	6.8	6.5	6.8	6.5	6.4	6.5
27	6.9	6.4	6.8	---	---	---	6.7	6.3	6.7	6.5	6.4	6.5
28	6.9	6.9	6.9	---	---	---	6.6	6.2	6.5	6.5	6.3	6.4
29	6.9	6.8	6.8	---	---	---	6.8	6.3	6.5	6.6	6.4	6.5
30	6.8	6.5	6.7	---	---	---	6.9	6.7	6.9	6.6	6.5	6.6
31	6.6	6.5	6.6	---	---	---	6.9	6.7	6.9	6.7	6.5	6.7
MAX	6.9	6.9	6.9	6.7	6.6	6.7	7.1	7.0	7.1	7.2	6.9	7.1
MIN	6.2	6.0	6.2	6.5	6.3	6.4	6.6	6.2	6.2	6.4	5.7	6.4

DAY	FEBRUARY			MARCH			APRIL			MAY		
	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
1	6.7	6.5	6.6	---	---	---	7.2	6.5	7.0	6.5	6.4	6.5
2	6.6	6.6	6.6	---	---	---	7.1	7.0	7.1	6.7	6.4	6.4
3	6.7	6.5	6.6	6.8	6.7	6.7	---	---	---	6.8	6.7	6.7
4	6.6	6.5	6.6	6.7	6.7	6.7	---	---	---	6.7	6.6	6.7
5	7.3	6.5	6.6	6.7	6.6	6.6	---	---	---	6.8	6.5	6.6
6	---	---	---	6.7	6.6	6.6	---	---	---	6.8	6.4	6.5
7	---	---	---	6.6	6.6	6.6	---	---	---	6.5	6.4	6.4
8	---	---	---	6.6	6.5	6.6	---	---	---	6.4	6.3	6.4
9	---	---	---	6.5	6.5	6.5	---	---	---	6.3	6.2	6.3
10	---	---	---	---	---	---	---	---	---	6.3	6.1	6.2
11	---	---	---	---	---	---	---	---	---	6.2	6.1	6.2
12	---	---	---	6.6	6.6	6.6	---	---	---	6.2	6.1	6.2
13	7.3	6.8	7.1	6.6	5.9	6.6	---	---	---	6.3	6.1	6.2
14	7.2	6.8	7.1	6.6	6.5	6.6	---	---	---	6.3	6.2	6.3
15	7.2	6.9	7.2	6.6	6.5	6.6	7.0	6.9	6.9	6.5	6.2	6.3
16	7.2	7.0	7.1	6.6	6.5	6.5	7.0	6.9	7.0	6.5	6.4	6.4
17	7.3	7.0	7.2	6.6	6.6	6.6	6.9	6.8	6.8	6.4	6.3	6.3
18	7.1	6.5	7.0	6.6	6.6	6.6	6.8	6.7	6.8	6.7	6.3	6.6
19	7.0	6.7	7.0	6.7	6.6	6.7	6.8	6.7	6.8	7.1	6.6	6.9
20	6.9	6.7	6.9	6.7	6.6	6.7	6.7	6.5	6.6	6.9	6.8	6.8
21	6.9	6.8	6.9	6.8	6.7	6.8	6.5	6.5	6.5	7.0	6.8	6.8
22	---	---	---	6.9	6.7	6.8	6.7	6.5	6.7	7.0	6.9	6.9
23	---	---	---	6.9	6.8	6.8	7.0	6.7	6.9	7.0	6.9	6.9
24	---	---	---	6.8	6.6	6.7	7.0	6.8	6.9	7.0	6.9	6.9
25	---	---	---	6.6	6.5	6.6	6.9	6.8	6.8	7.0	6.9	7.0
26	---	---	---	6.6	6.5	6.6	6.8	6.8	6.8	7.1	6.8	6.9
27	---	---	---	6.6	6.5	6.5	6.8	6.6	6.6	---	---	---
28	---	---	---	6.6	6.5	6.6	6.6	6.5	6.6	---	---	---
29	---	---	---	6.6	6.4	6.5	6.5	6.4	6.5	---	---	---
30	---	---	---	7.0	6.6	6.7	6.5	6.5	6.5	---	---	---
31	---	---	---	7.2	7.0	7.1	---	---	---	---	---	---
MAX	7.3	7.0	7.2	7.2	7.0	7.1	7.2	7.0	7.1	7.1	6.9	7.0
MIN	6.6	6.5	6.6	6.5	5.9	6.5	6.5	6.4	6.5	6.2	6.1	6.2

03159246 Sunday Creek below Millfield, Ohio—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
1	---	---	---	5.8	5.7	5.8	6.5	6.2	6.3	5.3	5.2	5.3
2	---	---	---	6.2	5.7	5.8	6.3	6.0	6.2	5.2	5.1	5.2
3	---	---	---	5.8	5.7	5.8	6.4	6.2	6.2	5.1	5.0	5.0
4	---	---	---	5.8	5.6	5.7	6.3	6.1	6.2	5.0	4.9	4.9
5	---	---	---	5.8	5.6	5.7	6.1	5.7	5.8	4.9	4.8	4.9
6	---	---	---	5.9	5.7	5.7	5.7	5.4	5.6	4.8	4.6	4.7
7	---	---	---	5.7	5.6	5.7	5.6	5.2	5.4	4.7	4.4	4.6
8	---	---	---	6.1	5.7	5.9	5.4	5.1	5.3	6.1	4.7	4.7
9	---	---	---	6.0	5.9	5.9	5.3	4.9	5.2	6.6	6.1	6.3
10	---	---	---	6.1	5.9	5.9	5.1	4.9	5.0	6.7	6.4	6.5
11	---	---	---	6.2	6.0	6.1	5.8	4.9	5.7	6.8	6.7	6.8
12	---	---	---	6.1	6.0	6.0	5.8	5.7	5.7	6.8	6.7	6.8
13	---	---	---	6.1	6.0	6.1	5.7	5.6	5.7	6.8	6.6	6.7
14	---	---	---	6.1	6.0	6.0	5.7	5.3	5.6	6.6	6.4	6.5
15	---	---	---	6.1	6.0	6.1	5.6	5.3	5.6	6.4	5.9	6.0
16	---	---	---	6.2	6.1	6.1	5.5	5.3	5.5	6.0	5.9	5.9
17	---	---	---	6.2	6.1	6.2	5.3	5.2	5.3	6.9	5.9	6.5
18	---	---	---	6.4	6.2	6.3	5.3	5.2	5.2	6.9	6.8	6.8
19	---	---	---	6.5	6.4	6.4	5.3	5.1	5.2	6.8	6.7	6.7
20	---	---	---	6.4	6.2	6.3	5.7	5.1	5.2	6.8	6.6	6.7
21	---	---	---	6.3	6.0	6.1	5.7	5.5	5.6	7.1	6.8	7.1
22	---	---	---	6.3	5.9	6.0	5.6	5.5	5.6	7.2	7.1	7.1
23	---	---	---	6.3	6.0	6.1	5.6	5.4	5.5	7.2	7.1	7.2
24	---	---	---	6.1	5.7	6.0	5.5	5.3	5.4	7.3	7.2	7.3
25	6.0	5.9	5.9	5.9	5.7	5.7	5.7	5.4	5.4	7.2	6.9	7.0
26	6.0	5.8	5.9	6.4	5.7	5.8	5.7	5.6	5.7	7.0	6.9	7.0
27	5.9	5.8	5.9	6.6	6.2	6.4	6.1	5.6	5.8	7.0	6.9	7.0
28	5.9	5.9	5.9	6.2	6.0	6.1	5.9	5.6	5.8	7.1	6.4	6.8
29	6.0	5.9	6.0	6.3	5.9	5.9	5.6	5.4	5.5	6.4	6.3	6.3
30	6.0	5.8	5.9	5.9	5.8	5.8	5.4	5.4	5.4	6.4	6.2	6.3
31	---	---	---	6.6	5.8	6.2	5.5	5.3	5.4	---	---	---
MAX	6.0	5.9	6.0	6.6	6.4	6.4	6.5	6.2	6.3	7.3	7.2	7.3
MIN	5.9	5.8	5.9	5.7	5.6	5.7	5.1	4.9	5.0	4.7	4.4	4.6
YEAR	MAX	MAXIMUM	7.3	MIN	MAXIMUM	7.2	MEDIAN	MAXIMUM	7.3	MINIMUM	4.6	
		MINIMUM	4.7		MINIMUM	4.4		MINIMUM	4.6			

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

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	15.2	14.2	14.9	13.6	12.5	13.0	---	---	---	3.7	2.7	3.3
2	14.2	12.2	13.0	15.2	13.4	14.1	---	---	---	6.1	3.7	4.9
3	12.2	10.5	11.2	15.5	13.7	14.5	6.5	6.0	6.2	8.9	6.1	7.4
4	12.0	11.3	11.6	14.6	13.5	14.1	6.3	5.1	5.6	9.3	7.7	8.5
5	12.3	11.1	11.7	14.8	13.8	14.2	6.4	5.9	6.2	9.8	6.0	7.7
6	12.9	11.4	12.1	14.5	13.0	13.7	5.9	5.3	5.6	6.0	3.3	4.8
7	13.1	11.3	12.2	13.0	11.1	12.1	5.3	4.4	4.9	3.3	2.6	2.8
8	13.5	11.6	12.6	11.1	8.7	9.8	5.3	3.6	4.0	2.9	2.7	2.8
9	14.2	12.3	13.1	8.7	7.1	7.7	6.2	5.3	5.7	3.1	2.9	3.0
10	15.1	13.8	14.4	7.6	5.9	6.8	6.6	6.1	6.3	2.9	2.2	2.5
11	15.9	14.1	15.0	8.9	7.0	7.8	6.6	5.6	6.2	2.6	1.7	2.2
12	15.9	14.7	15.4	---	---	---	5.6	4.8	5.0	3.2	2.4	2.7
13	15.7	13.6	14.6	---	---	---	4.8	2.8	3.4	3.4	3.1	3.2
14	15.0	13.6	14.3	---	---	---	3.0	2.4	2.7	3.1	2.4	2.8
15	14.1	13.1	13.7	---	---	---	3.5	3.0	3.2	2.9	1.9	2.6
16	13.2	11.8	12.6	---	---	---	3.9	2.8	3.2	1.9	0.9	1.3
17	12.9	12.2	12.5	---	---	---	4.1	3.7	3.9	1.1	0.5	0.8
18	12.2	11.5	11.8	---	---	---	3.9	3.5	3.7	1.5	1.0	1.3
19	12.4	10.5	11.4	---	---	---	3.9	3.6	3.7	1.3	0.5	0.8
20	13.0	10.6	11.7	11.0	9.7	10.1	3.6	2.5	3.1	0.7	0.2	0.4
21	13.4	12.2	12.8	9.8	8.5	9.1	2.5	1.6	2.0	0.9	0.2	0.4
22	13.2	12.2	12.5	9.4	8.3	8.9	3.4	1.9	2.5	1.2	0.2	0.7
23	12.2	10.9	11.5	10.3	8.9	9.5	5.4	3.4	4.4	0.6	0.2	0.3
24	10.9	9.0	10.0	10.0	8.2	9.4	5.4	4.0	4.7	0.9	0.2	0.5
25	11.6	8.8	10.1	8.2	7.2	7.6	4.0	3.2	3.6	0.3	0.2	0.2
26	11.6	10.8	11.3	7.3	6.0	6.6	3.2	2.7	3.0	0.9	0.2	0.6
27	11.4	11.0	11.2	8.0	7.1	7.6	2.9	2.1	2.5	1.0	0.4	0.7
28	12.0	10.5	11.0	8.2	7.2	7.7	3.0	2.0	2.5	1.1	0.2	0.5
29	12.1	11.5	11.9	7.5	5.4	6.1	4.4	2.8	3.4	0.8	0.3	0.5
30	12.0	10.8	11.4	5.4	4.8	5.1	4.6	4.0	4.4	0.8	0.1	0.4
31	13.0	10.8	11.8	---	---	---	4.0	3.0	3.5	0.4	0.2	0.2
MONTH	15.9	8.8	12.4	15.5	4.8	9.8	6.6	1.6	4.1	9.8	0.1	2.3

03159246 Sunday Creek below Millfield, Ohio—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	8.7	8.1	8.4	8.7	8.2	8.4	---	---	---	13.1	12.8	12.9
2	9.3	8.6	9.0	8.2	7.8	8.0	---	---	---	12.8	11.8	12.3
3	9.7	9.3	9.5	7.8	7.6	7.7	11.2	10.8	11.1	11.8	10.8	11.3
4	9.5	9.1	9.4	8.2	7.7	8.0	11.5	11.0	11.3	11.2	10.7	10.9
5	9.5	9.0	9.3	8.1	7.5	7.7	11.1	10.7	10.9	11.2	11.1	11.1
6	9.3	9.0	9.2	7.8	7.4	7.6	11.6	11.1	11.4	12.7	11.2	11.6
7	9.3	8.8	9.1	8.4	7.8	8.1	11.9	11.6	11.7	13.1	12.7	13.0
8	9.4	8.9	9.2	9.2	8.4	8.8	12.4	11.8	12.1	---	---	---
9	9.2	8.8	9.0	9.6	9.1	9.4	11.8	11.4	11.6	13.5	13.1	13.3
10	9.0	8.4	8.6	9.7	9.5	9.6	11.4	11.0	11.1	13.5	12.6	13.2
11	8.6	8.2	8.3	10.4	9.0	9.3	11.6	11.0	11.3	12.6	12.2	12.4
12	8.3	8.0	8.1	---	---	---	12.3	11.6	12.0	12.2	11.5	11.9
13	8.0	7.6	7.8	---	---	---	12.9	12.1	12.5	12.1	11.1	11.5
14	8.0	7.5	7.8	---	---	---	12.8	12.6	12.8	12.0	11.5	11.8
15	9.2	7.5	8.1	---	---	---	12.6	12.5	12.6	12.2	11.5	11.6
16	10.0	9.0	9.4	---	---	---	12.5	11.8	12.2	13.1	12.2	12.5
17	10.1	9.9	10.0	---	---	---	11.8	11.6	11.7	13.6	13.1	13.4
18	10.3	9.9	10.0	---	---	---	12.0	11.7	11.9	13.5	13.2	13.3
19	10.3	9.4	10.0	10.1	9.7	9.9	12.1	11.8	12.0	14.2	13.4	13.8
20	9.9	9.5	9.7	10.8	10.1	10.5	12.5	11.9	12.2	15.0	14.0	14.4
21	10.0	9.4	9.6	10.9	10.6	10.8	13.0	12.5	12.8	14.7	13.5	14.0
22	9.4	9.0	9.2	11.0	10.7	10.8	12.9	12.4	12.7	14.1	13.1	13.7
23	9.4	9.0	9.3	10.7	10.2	10.5	12.4	11.9	12.1	13.7	13.3	13.6
24	9.5	9.1	9.3	10.9	9.9	10.2	12.4	11.9	12.1	13.9	13.2	13.6
25	9.4	9.0	9.3	11.7	10.9	11.3	12.8	12.4	12.6	13.9	12.6	13.4
26	9.2	8.7	9.0	12.4	11.2	11.5	13.1	12.8	13.0	13.6	13.1	13.3
27	9.3	8.6	8.9	11.5	10.5	10.8	13.3	13.1	13.2	13.5	13.1	13.2
28	9.7	9.3	9.5	11.2	10.7	11.0	13.3	13.1	13.2	13.8	13.4	13.6
29	9.7	9.2	9.4	---	---	---	13.1	12.6	12.9	14.0	13.7	13.8
30	9.5	9.0	9.2	---	---	---	12.8	12.4	12.5	14.0	13.7	13.8
31	9.0	8.7	8.9	---	---	---	13.2	12.7	13.0	13.9	13.2	13.6
MONTH	10.3	7.5	9.1	12.4	7.4	9.5	13.3	10.7	12.2	15.0	10.7	12.9

DAY	FEBRUARY			MARCH			APRIL			MAY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	13.8	13.3	13.5	---	---	---	11.6	10.9	11.2	8.8	8.5	8.7
2	13.6	13.2	13.4	---	---	---	11.8	11.2	11.6	8.6	7.9	8.2
3	13.5	13.1	13.3	---	---	---	---	---	---	9.6	8.6	9.3
4	13.4	12.8	13.2	---	---	---	---	---	---	9.8	9.6	9.7
5	13.3	12.7	13.0	---	---	---	---	---	---	9.7	9.0	9.3
6	13.5	12.9	13.4	---	---	---	---	---	---	9.4	8.5	8.8
7	---	---	---	---	---	---	---	---	---	8.5	8.0	8.2
8	---	---	---	---	---	---	---	---	---	8.2	8.1	8.2
9	---	---	---	---	---	---	---	---	---	8.1	7.6	7.9
10	---	---	---	---	---	---	---	---	---	7.7	7.2	7.5
11	---	---	---	11.6	11.2	11.4	---	---	---	7.3	7.1	7.2
12	---	---	---	12.0	11.5	11.7	---	---	---	7.2	7.1	7.2
13	12.7	12.5	12.7	12.1	11.9	12.1	---	---	---	7.3	6.9	7.1
14	13.0	12.7	12.9	12.1	11.8	11.9	---	---	---	6.9	6.6	6.7
15	13.0	12.8	12.9	11.9	11.7	11.8	11.0	10.6	10.8	6.7	6.5	6.6
16	13.4	12.9	13.1	11.7	11.2	11.5	10.7	10.2	10.5	7.4	6.7	7.0
17	13.4	13.1	13.3	12.3	11.6	12.0	10.2	9.5	9.9	7.5	7.2	7.4
18	13.3	12.9	13.1	12.3	12.0	12.1	9.7	9.2	9.5	7.2	6.6	6.9
19	13.0	12.4	12.7	12.1	11.7	11.9	9.5	8.9	9.2	7.4	6.0	6.6
20	12.4	11.9	12.2	11.8	11.0	11.5	9.3	8.4	8.7	6.9	5.9	6.2
21	12.3	11.9	12.0	11.6	10.8	11.2	8.4	8.0	8.2	8.2	6.9	7.7
22	---	---	---	12.7	11.6	12.1	8.7	7.9	8.3	8.0	7.6	7.8
23	---	---	---	12.8	12.3	12.6	9.6	8.7	9.1	7.9	7.7	7.8
24	---	---	---	12.3	11.6	11.9	9.6	9.3	9.5	7.9	7.6	7.8
25	---	---	---	11.9	10.8	11.3	9.3	9.0	9.1	7.9	7.4	7.8
26	---	---	---	10.8	9.8	10.1	9.3	8.9	9.0	7.5	7.0	7.4
27	---	---	---	9.9	9.0	9.4	9.1	8.7	8.9	---	---	---
28	---	---	---	10.2	9.3	9.6	9.9	9.0	9.5	---	---	---
29	---	---	---	9.9	9.0	9.3	9.8	9.2	9.4	---	---	---
30	---	---	---	10.6	8.8	9.5	9.2	8.6	8.8	---	---	---
31	---	---	---	11.1	10.5	10.8	---	---	---	---	---	---
MONTH	13.8	11.9	13.0	12.8	8.8	11.2	11.8	7.9	9.5	9.8	5.9	7.7

03159500 Hocking River at Athens, Ohio

LOCATION.—Latitude 39°19'44", longitude 82°05'16", in T.9 N., R.14 W., Athens County, Hydrologic Unit 05030204, on right bank 0.8 mi east of business section of Athens, Ohio, 1.4 mi downstream from Coats Run, and 3 mi downstream from Margaret Creek.

DRAINAGE AREA.—943 mi².

PERIOD OF RECORD.—May 1915 to current year.

REVISED RECORDS.—WSP 523: 1918-19(M). WSP 743: 1922(M). WSP 873: 1920, 1922, 1924-28, 1937. WSP 1113: 1932.

WDR-OH-90-1: 1979(M), 1983(M), 1985(M), 1986(M).

GAGE.—Water-stage recorder. Datum of gage is 611.26 ft above sea level. Prior to Aug. 17, 1931, nonrecording gage; Aug. 18, 1931-June 19, 1970, at present site at datum 3.55 ft. higher; June 19, 1970-Sept. 30, 1971, and Oct. 1, 1976-Mar. 31, 1993, water-stage recorder at site 5.3 mi downstream at datum 11.26 ft lower, published as "Below Athens" (03159510).

REMARKS.—Records fair except for periods of estimated record, which are poor. Water-quality data formerly collected at this site. Some regulation by Burr Oak Reservoir, capacity 26,900 acre-ft, on East Branch Sunday Creek 29 mi upstream beginning 1952; by Hocking Lake, capacity 3,080 acre-ft, on Clear Fork 39.4 mi upstream beginning in 1949; and by temporary retention in 8 retarding basins, combined capacity, 8,710 acre-ft, constructed between 1955 and 1961 upstream from Lancaster.

EXTREMES OUTSIDE PERIOD RECORD.—Flood in Mar. 1907 reached a stage of about 27 ft from flood marks, site and datum then in use; discharge 50,000 ft³/s, estimated by U.S. Army Corps of Engineers.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	842	486	2500	1780	e630	891	5310	1040	4260	445	4280	158
2	708	456	2020	1920	704	1440	5730	1080	2360	415	1670	147
3	595	460	1710	2300	1570	1610	5380	2100	1590	390	1010	137
4	529	464	1380	6840	4310	1730	3670	1770	1240	376	745	133
5	511	569	1280	11100	3170	1770	2700	1410	1050	365	616	131
6	472	709	2110	14600	6970	3490	2000	1260	955	379	520	125
7	430	561	2050	11600	10300	2650	1650	1060	872	348	424	121
8	392	491	1600	6150	8950	1920	1440	962	766	340	363	1830
9	367	442	1580	3450	3580	1760	1320	903	673	303	324	9980
10	353	411	1410	2790	e2650	1530	1160	814	633	281	302	12500
11	337	408	3090	2040	e2050	1200	1050	811	1140	292	286	6270
12	325	5640	3160	1730	e1750	1050	1120	938	5490	254	283	2320
13	303	6980	2050	1480	e1550	971	4640	744	5600	286	267	1690
14	315	3270	1610	1320	e1350	893	8440	678	3110	245	251	1070
15	605	1960	1470	e1150	e1250	875	6710	650	3240	216	238	711
16	743	1470	1350	e1050	e1150	879	3790	748	2610	201	224	567
17	555	1240	3310	e950	e1050	933	2530	703	1980	205	209	6610
18	484	1100	3540	e890	1020	900	1940	830	4530	424	198	13900
19	447	2100	2420	e830	996	949	1650	5320	5420	441	189	9640
20	416	2490	1750	e790	1010	1160	1370	12500	2260	307	207	2330
21	387	1640	1410	e760	1070	1330	1310	9280	1560	250	250	1710
22	384	1230	1260	e730	1120	1220	1420	4820	1310	560	230	1740
23	366	1040	1250	e700	1010	1150	2550	4630	1020	1560	205	1520
24	350	961	2820	e690	1120	1000	3190	2700	845	671	181	1350
25	326	1050	3140	e670	1150	933	2140	2260	747	429	174	818
26	364	904	2070	e650	1060	891	1870	2260	656	653	257	642
27	1000	874	1650	e640	982	877	1610	3900	596	2570	283	623
28	1150	4000	1430	e630	915	958	1370	7710	544	1160	239	559
29	885	7520	1340	e620	887	922	1200	8050	517	735	196	456
30	663	4020	1870	e610	---	1520	1090	3910	490	549	195	424
31	539	---	2360	e600	---	4760	---	3600	---	1100	173	---
TOTAL	16143	54946	61990	82060	65324	44162	81350	89441	58064	16750	14989	80212
MEAN	521	1832	2000	2647	2253	1425	2712	2885	1935	540	484	2674
MAX	1150	7520	3540	14600	10300	4760	8440	12500	5600	2570	4280	13900
MIN	303	408	1250	600	630	875	1050	650	490	201	173	121
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916-2004, BY WATER YEAR (WY)												
MEAN	243	539	997	1438	1731	2103	1830	1385	797	498	411	327
MAX	1539	3194	3830	7796	3928	5975	4268	5672	3143	2957	3054	2674
(WY)	1976	1920	1924	1937	1951	1963	1940	1968	1928	1958	1980	2004
MIN	36.1	46.4	64.5	75.5	91.6	262	385	174	77.8	52.2	39.6	44.8
(WY)	1931	1954	1931	1931	1954	1931	1925	1934	1930	1930	1930	1930
SUMMARY STATISTICS												
				FOR 2003 CALENDAR YEAR			FOR 2004 WATER YEAR			WATER YEARS 1916-2004		
ANNUAL TOTAL				452341			665431					
ANNUAL MEAN				1239			1818			1021		
HIGHEST ANNUAL MEAN										1818		
LOWEST ANNUAL MEAN										233		
HIGHEST DAILY MEAN				7550			Feb 23			14600		
LOWEST DAILY MEAN				210			Sep 18			121		
ANNUAL SEVEN-DAY MINIMUM				236			Jan 28			136		
MAXIMUM PEAK FLOW										15100		
MAXIMUM PEAK STAGE							21.33			Jan 6		
INSTANTANEOUS LOW FLOW										24.18		
10 PERCENT EXCEEDS				2690			4290			2440		
50 PERCENT EXCEEDS				808			1050			434		
90 PERCENT EXCEEDS				324			290			90		

e Estimated.

Surface-Water Records—Raccoon Creek Basin

03201902 Raccoon Creek at Bowlins Mills, Ohio

LOCATION.—Latitude 39°13'50", longitude 82°17'09", in Vinton County, Hydrologic Unit 05090101, on left bank at State Highway 50 and 356 intersection at Bowlins Mills, Ohio, 12 mi downstream of Lake Hope.

DRAINAGE AREA.—205 mi².

PERIOD OF RECORD.—October 1983 to September 1985, December 2002 to current year.

GAGE.—Water stage recorder. Elevation of gage 680 ft (from topographic map).

REMARKS.—Records fair except for periods of estimated record, which are poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	142	1490	416	e110	144	1160	176	470	31	379	24
2	90	140	455	483	e100	358	1360	184	288	30	223	22
3	73	123	329	693	e180	452	1520	445	213	31	95	21
4	62	112	275	2080	e680	511	951	353	165	29	64	20
5	60	149	289	2850	e1100	715	510	243	131	35	55	20
6	58	401	583	2890	e1400	1390	374	200	114	34	50	19
7	51	295	550	2500	2360	1600	312	165	98	32	43	19
8	47	175	397	1180	2260	861	275	137	82	29	37	459
9	41	125	323	465	1320	466	246	116	70	28	34	2480
10	39	102	340	360	510	357	209	100	63	29	32	2880
11	39	94	958	286	454	293	187	339	78	33	30	2640
12	36	1210	861	291	390	261	204	625	394	33	29	654
13	37	2390	495	261	357	223	1110	193	270	38	29	122
14	44	2320	386	236	313	199	2180	128	142	42	28	76
15	96	1520	369	220	273	196	2110	119	104	35	28	57
16	100	403	314	190	227	192	1490	171	110	29	27	46
17	74	291	790	157	193	223	509	137	93	26	25	1610
18	65	235	1010	292	183	208	367	203	100	26	24	4770
19	61	423	603	551	175	195	294	660	74	42	23	4440
20	55	901	429	364	184	185	253	1110	61	39	22	2920
21	52	583	329	e270	215	327	233	582	53	33	26	482
22	51	328	300	e230	224	384	341	644	49	124	23	165
23	45	234	297	e200	187	279	654	437	45	408	28	109
24	45	209	733	e180	184	239	604	239	42	150	27	81
25	42	228	943	e170	202	222	415	164	40	65	25	66
26	58	203	591	e150	188	199	355	281	37	63	28	56
27	254	195	421	e140	179	192	288	462	36	337	35	49
28	472	1050	346	e130	168	197	239	1490	34	174	43	44
29	314	2190	313	e120	142	184	205	1920	32	88	36	41
30	222	2140	418	e120	---	404	181	1090	31	61	30	38
31	168	---	549	e110	---	1260	---	504	---	75	27	---
TOTAL	2946	18911	16486	18585	14458	12916	19136	13617	3519	2229	1605	24430
MEAN	95.0	630	532	600	499	417	638	439	117	71.9	51.8	814
MAX	472	2390	1490	2890	2360	1600	2180	1920	470	408	379	4770
MIN	36	94	275	110	100	144	181	100	31	26	22	19
CFSM	0.46	3.07	2.59	2.92	2.43	2.03	3.11	2.14	0.57	0.35	0.25	3.97
IN.	0.53	3.43	2.99	3.37	2.62	2.34	3.47	2.47	0.64	0.40	0.29	4.43
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984-2004, BY WATER YEAR (WY)												
MEAN	49.2	347	347	279	494	394	419	442	170	110	49.2	354
MAX	95.0	630	532	600	590	417	638	444	364	148	87.4	814
(WY)	2004	2004	2004	2004	1985	2004	2004	1985	2003	2003	2003	2004
MIN	3.47	63.0	235	89.5	394	380	207	439	30.3	71.9	8.37	1.12
(WY)	1985	1985	1985	1985	2003	1985	2003	2004	1985	2004	1984	1984
SUMMARY STATISTICS												
				FOR 2003 CALENDAR YEAR			FOR 2004 WATER YEAR			WATER YEARS 1984-2004		
ANNUAL TOTAL				111480			148838					
ANNUAL MEAN				305			407			407		
HIGHEST ANNUAL MEAN										407		
LOWEST ANNUAL MEAN										407		
HIGHEST DAILY MEAN				2430			Feb 24			4770		
LOWEST DAILY MEAN				20			Jan 30			19		
ANNUAL SEVEN-DAY MINIMUM				22			Jan 25			21		
MAXIMUM PEAK FLOW										5000		
MAXIMUM PEAK STAGE										17.05		
INSTANTANEOUS LOW FLOW										17		
ANNUAL RUNOFF (CFSM)				1.49			1.98			1.98		
ANNUAL RUNOFF (INCHES)				20.23			27.01			26.95		
10 PERCENT EXCEEDS				735			1100			1100		
50 PERCENT EXCEEDS				164			196			196		
90 PERCENT EXCEEDS				39			32			32		

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

03201980 Little Raccoon Creek near Ewington, Ohio

LOCATION.—Latitude 39°00'38", longitude 82°27'08", in SW ¼ sec. 12, T.8N., R.17W., Jackson County, Hydrologic Unit 05090101, on left bank downstream side of Old Keystone Road, 5 mi west of Ewington, Ohio, 3.6 mi downstream from Tarcamp Creek, 0.15 mi upstream of Kuger Run.
 DRAINAGE AREA.—99.7 mi².

Water-Discharge Records

PERIOD OF RECORD.—July 1984 to June 1985 and November 1998 to current year.

GAGE.—Water-stage recorder and crest gage. Elevation of gage is 630 ft above sea level (from topographic map).

REMARKS.—Records fair except for periods of estimated record, which are poor. Water-quality data collected at this site.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	53	377	183	e60	71	550	86	288	20	19	14
2	42	46	177	273	e58	172	592	96	192	19	16	14
3	32	43	139	366	277	176	575	164	143	20	14	13
4	29	40	118	407	561	310	382	135	107	21	13	13
5	27	49	131	1550	446	471	230	106	94	30	14	13
6	25	125	204	1450	704	837	175	88	82	24	14	12
7	23	100	186	737	955	865	152	76	69	19	14	11
8	24	73	151	289	775	557	134	67	60	18	21	e130
9	24	59	128	204	353	247	116	60	52	18	11	e640
10	19	51	140	166	230	184	98	55	48	17	10	580
11	20	52	312	140	210	157	89	51	59	41	11	128
12	21	405	258	133	183	135	100	122	182	27	10	70
13	21	1000	180	135	168	116	485	94	86	21	11	51
14	24	799	156	124	150	103	919	59	61	18	11	43
15	65	267	153	119	135	101	798	53	108	16	11	39
16	60	152	147	101	111	99	416	69	423	15	11	36
17	38	114	372	89	100	109	210	55	213	14	12	1140
18	37	97	424	185	93	99	165	59	131	24	12	5270
19	35	252	264	309	93	103	139	116	92	22	12	1700
20	32	503	192	195	94	98	125	168	66	17	13	511
21	29	261	154	e150	101	131	118	114	52	15	15	137
22	29	168	141	e120	96	116	158	163	45	28	18	88
23	28	130	142	e98	87	100	223	185	46	50	15	67
24	27	112	301	e88	87	95	218	98	41	27	13	53
25	26	109	353	e82	90	90	175	67	33	19	12	47
26	34	92	234	e76	84	85	171	63	30	17	14	43
27	144	87	177	e72	77	85	146	173	25	20	17	39
28	183	443	152	e70	72	81	116	1750	23	20	15	35
29	105	953	134	e66	69	74	97	1380	23	17	14	32
30	78	871	210	e64	---	189	87	776	22	16	13	30
31	61	---	242	e62	---	459	---	328	---	16	14	---
TOTAL	1379	7506	6449	8103	6519	6515	7959	6876	2896	666	420	10999
MEAN	44.5	250	208	261	225	210	265	222	96.5	21.5	13.5	367
MAX	183	1000	424	1550	955	865	919	1750	423	50	21	5270
MIN	19	40	118	62	58	71	87	51	22	14	10	11
CFSM	0.45	2.51	2.09	2.62	2.25	2.11	2.66	2.22	0.97	0.22	0.14	3.68
IN.	0.51	2.80	2.41	3.02	2.43	2.43	2.97	2.57	1.08	0.25	0.16	4.10

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

	1999	2000	2001	2002	2003	2004
MEAN	18.0	70.7	85.2	125	216	212
MAX	44.5	250	208	261	588	323
(WY)	2004	2004	2004	2004	2000	2002
MIN	8.22	13.0	20.4	29.4	44.0	129
(WY)	2001	2001	1999	2001	2002	2001

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1999-2004	
ANNUAL TOTAL	49452		66287			
ANNUAL MEAN	135		181		112	
HIGHEST ANNUAL MEAN					181	
LOWEST ANNUAL MEAN					82.7	
HIGHEST DAILY MEAN	1800		5270		7460	
LOWEST DAILY MEAN	11		10		2.1	
ANNUAL SEVEN-DAY MINIMUM	13		11		3.1	
MAXIMUM PEAK FLOW			6270		8450	
MAXIMUM PEAK STAGE			15.18		15.83	
INSTANTANEOUS LOW FLOW			10		2.1	
ANNUAL RUNOFF (CFSM)	1.36		1.82		1.12	
ANNUAL RUNOFF (INCHES)	18.45		24.73		15.25	
10 PERCENT EXCEEDS	313		418		243	
50 PERCENT EXCEEDS	80		93		38	
90 PERCENT EXCEEDS	25		16		7.7	

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

03201980 Little Raccoon Creek near Ewington, Ohio—Continued

Water-Quality Records

PERIOD OF RECORD.—July 1984 to June 1985, December 21, 1998 to current year.

PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: December 1998 to current year.

pH: December 1998 to current year.

WATER TEMPERATURE: December 1998 to current year.

DISSOLVED OXYGEN: December 1998 to current year.

SUSPENDED SEDIMENT DISCHARGE: August 1984 to June 1985 (discontinued).

INSTRUMENTATION.—Water-quality monitor. Electronic data logger. Set for 1-hour interval. Satellite telemeter at station.

REMARKS.—Interruptions in the water-quality record are due to malfunctions of the instrument. Specific conductance and water temperature records are good. pH records are good except Oct. 1-Feb. 5, which are fair. Dissolved oxygen records are fair except Jan. 3-9, Feb. 5-12, May 23-27, and Aug. 1-10, which are poor.

EXTREMES FOR PERIOD OF RECORD.—

SPECIFIC CONDUCTANCE: Maximum, 1,310 microsiemens, Sept. 19, 1999; minimum, 164 microsiemens, Feb. 20, 2000.

pH: Maximum, 8.1 units, July 25, 2002; minimum, 4.8 units, Nov. 2, 1999.

WATER TEMPERATURE: Maximum, 29.5° C, Aug. 3 and 5, 2002; minimum 0.0° C, on several days during winter.

DISSOLVED OXYGEN: Maximum, 14.9 mg/L, Jan. 1, 1999; minimum, 2.4 mg/L, Sept. 20, 2004.

EXTREMES FOR CURRENT YEAR.—

SPECIFIC CONDUCTANCE: Maximum, 1,260 microsiemens, Oct. 16; minimum, 204 microsiemens, Sept. 18.

pH: Maximum, 7.8 units, Sept. 2 and 8; minimum, 5.4 units, Aug. 10.

WATER TEMPERATURE: Maximum, 25.5° C, Aug. 29; minimum 0.2° C, on several days.

DISSOLVED OXYGEN: Maximum, 14.4 mg/L, Feb. 17; minimum 2.4 mg/L, Sept. 20.

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

[(00061), USGS National Water Information System parameter code; cfs, cubic feet per second; mg/L, milligrams per liter; std, standard; µS/cm, microsiemens per centimeter; deg C, degree Celsius; --, no data; M, presence of compound verified but concentration not quantified]

Date	Time	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Acidity water, unfltrd heated, mg/L as CaCO ₃ (70508)	Alkalinity, wat flt inc tit field, mg/L as CaCO ₃ (39086)
Oct. 7	1140	23	9.9	7.3	714	22.5	12.0	--	52
Dec. 11	1115	324	11.2	6.9	478	2.5	6.5	--	27
Feb. 17	1130	99	13.7	6.7	425	7.5	2.5	--	18
Apr. 26	1000	180	8.3	6.8	410	13.0	17.0	--	20
June 16	1000	450	7.1	6.1	469	24.0	21.5	--	8
Aug. 10	1130	10	6.9	5.6	800	27.0	22.0	--	.0

Date	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Sulfate water, fltrd, mg/L (00945)	Aluminum, water, fltrd, ug/L (01106)	Aluminum, water, unfltrd recoverable, ug/L (01105)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recoverable, ug/L (01045)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recoverable, ug/L (01055)
Oct. 7	63	266	16	200	102	700	1640	1460
Dec. 11	33	191	11	1750	196	4450	1350	1360
Feb. 17	22	150	16	1600	1290	3360	1390	1380
Apr. 26	24	146	17	1070	98	1970	1020	954
June 16	10	161	18	1850	142	3870	1660	1710
Aug. 10	M	376	390	770	75	370	4040	3980

03201980 Little Raccoon Creek near Ewington, Ohio—Continued

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

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	625	603	608	549	509	545	339	263	312	390	370	381
2	681	613	652	561	502	544	350	334	341	547	373	406
3	766	681	726	580	555	565	396	350	369	436	356	375
4	698	655	667	596	580	590	402	369	388	483	348	385
5	686	670	675	595	565	583	425	399	406	358	231	280
6	689	686	688	828	551	649	513	425	459	238	221	228
7	710	689	701	725	554	595	432	388	410	284	224	250
8	706	691	697	568	551	560	391	384	387	340	284	320
9	703	508	578	572	541	552	398	384	392	393	340	368
10	684	638	675	577	557	567	405	393	399	418	393	408
11	695	683	688	588	562	580	500	396	434	461	408	437
12	721	689	712	562	345	475	396	357	365	478	425	457
13	741	721	736	427	280	359	370	359	366	467	456	462
14	768	741	753	309	274	282	399	370	382	484	455	461
15	808	704	747	391	309	369	413	399	407	501	481	490
16	1260	473	955	408	376	394	422	399	409	502	487	495
17	707	332	570	411	396	404	517	397	433	496	479	487
18	745	704	726	417	397	404	397	325	341	573	472	498
19	733	702	714	436	396	408	353	332	349	568	386	456
20	780	733	763	458	353	390	364	353	359	399	381	388
21	765	731	742	369	358	365	382	362	373	424	384	399
22	741	727	731	381	367	373	416	382	403	457	385	423
23	753	687	726	400	377	391	440	401	419	442	420	433
24	754	739	747	406	395	400	598	420	460	489	419	449
25	752	725	735	458	406	434	428	357	376	505	489	498
26	746	713	732	436	424	428	366	359	362	518	476	494
27	939	561	705	444	432	440	387	366	378	530	513	522
28	831	555	643	455	316	400	425	380	400	617	530	578
29	568	524	548	363	246	308	423	400	406	613	562	581
30	540	522	532	263	240	247	555	390	422	584	579	581
31	546	530	537	---	---	---	535	374	403	580	539	559
MONTH	1260	332	691	828	240	453	598	263	391	617	221	437

DAY	FEBRUARY			MARCH			APRIL			MAY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	603	535	565	519	506	514	372	331	340	516	475	495
2	597	552	571	735	485	550	382	340	359	516	475	497
3	751	507	561	555	477	517	356	325	336	642	419	502
4	507	310	382	568	432	470	358	328	346	431	399	412
5	358	312	338	483	316	380	368	328	359	416	400	408
6	413	289	329	336	290	317	389	368	382	432	416	428
7	289	240	266	331	279	304	410	389	401	449	432	442
8	276	238	250	341	276	307	417	399	409	477	448	460
9	342	276	318	363	341	352	430	417	426	502	477	487
10	368	342	358	383	363	376	443	428	437	506	498	501
11	411	368	389	434	381	395	454	442	449	511	500	504
12	400	385	392	410	395	405	461	427	453	600	299	498
13	411	386	400	421	408	416	615	307	428	376	271	328
14	412	395	402	442	421	434	361	301	337	436	376	406
15	420	400	412	465	442	455	301	275	285	493	436	464
16	428	414	420	466	457	461	353	292	329	636	493	549
17	474	408	435	494	466	483	364	351	356	631	504	529
18	472	450	458	481	473	476	381	364	373	563	501	515
19	493	455	474	493	479	486	404	381	394	662	432	534
20	504	489	495	493	476	485	437	404	420	645	358	433
21	519	494	505	540	479	502	467	437	453	467	385	416
22	522	486	508	540	470	485	514	464	481	588	348	433
23	501	485	495	496	476	487	503	417	462	357	303	337
24	505	496	501	496	474	483	417	371	391	383	357	371
25	533	504	511	509	485	494	378	370	374	411	383	401
26	534	525	529	519	503	508	444	373	409	441	409	425
27	529	503	519	562	519	554	436	424	430	745	416	524
28	503	494	498	563	531	547	444	436	440	---	---	---
29	519	501	506	534	504	511	474	444	454	---	---	---
30	---	---	---	660	453	502	475	472	473	---	---	---
31	---	---	---	660	372	461	---	---	---	---	---	---
MONTH	751	238	441	735	276	455	615	275	400	745	271	456

03201980 Little Raccoon Creek near Ewington, Ohio—Continued

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

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	361	352	356	680	623	652	796	748	773	898	833	866
2	382	353	365	683	626	655	807	756	781	898	837	864
3	391	381	386	672	630	648	827	774	805	843	813	833
4	415	391	408	672	595	634	863	799	835	826	809	818
5	460	415	433	687	639	667	799	685	746	836	826	832
6	481	460	475	732	675	703	798	712	745	905	833	870
7	493	481	486	888	732	827	825	773	789	903	868	881
8	509	492	499	760	689	716	920	825	864	868	368	715
9	520	509	513	771	670	692	891	815	860	590	412	532
10	547	520	534	776	677	712	815	782	795	496	411	438
11	563	515	544	750	686	723	787	770	778	511	458	478
12	891	477	596	1110	735	852	786	773	779	510	490	496
13	501	462	475	1100	729	852	785	757	770	517	498	508
14	549	501	528	729	704	711	793	759	769	549	513	527
15	579	291	537	735	699	710	814	791	800	584	545	553
16	517	291	397	751	705	720	814	783	794	651	584	635
17	419	364	397	807	727	777	802	792	797	649	210	430
18	464	395	425	754	702	725	825	795	807	362	204	265
19	479	464	474	793	733	759	876	825	862	236	207	217
20	497	471	480	941	750	837	921	856	892	382	236	308
21	502	497	500	910	757	799	884	824	858	414	354	386
22	520	502	516	772	636	718	840	788	802	461	406	429
23	547	519	536	759	621	714	864	827	844	516	461	487
24	586	545	569	1080	732	913	869	828	849	575	516	544
25	579	543	567	843	691	726	865	797	824	575	562	569
26	580	531	548	712	687	696	1020	798	904	594	567	580
27	594	572	579	717	680	697	1010	808	891	634	594	612
28	631	594	617	751	655	697	810	781	795	638	631	635
29	634	617	624	887	747	798	816	792	804	677	633	646
30	656	619	636	885	790	826	807	789	796	702	677	690
31	---	---	---	839	764	804	833	786	808	---	---	---
MONTH	891	291	500	1110	595	741	1020	685	813	905	204	588
YEAR	1260	204	532									

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
1	7.3	7.3	7.3	7.0	7.0	7.0	6.9	6.5	6.6	6.6	6.5	6.5
2	7.3	7.2	7.3	7.0	7.0	7.0	6.8	6.5	6.6	6.7	6.2	6.6
3	7.3	7.2	7.3	7.1	7.0	7.0	6.9	6.6	6.8	6.7	6.5	6.7
4	7.4	7.2	7.3	7.1	7.0	7.1	6.9	6.9	6.9	6.9	6.5	6.6
5	7.4	7.3	7.3	7.1	6.9	7.0	6.9	6.8	6.9	6.7	6.6	6.7
6	7.3	7.3	7.3	7.0	6.6	6.9	6.9	6.6	6.8	6.7	6.7	6.7
7	7.4	7.2	7.3	7.1	6.9	7.0	6.9	6.8	6.9	6.7	6.6	6.7
8	7.3	7.2	7.3	7.0	7.0	7.0	6.9	6.9	6.9	6.6	6.3	6.3
9	7.3	7.1	7.2	7.1	7.0	7.1	6.9	6.9	6.9	6.3	6.3	6.3
10	7.2	7.2	7.2	7.1	7.0	7.1	6.9	6.8	6.9	6.5	6.3	6.3
11	7.2	7.1	7.2	7.0	7.0	7.0	7.0	6.6	6.8	6.5	6.3	6.5
12	7.2	7.1	7.1	7.0	6.4	6.7	7.0	6.8	6.9	6.5	6.3	6.3
13	7.1	7.1	7.1	6.7	6.5	6.7	6.9	6.8	6.9	6.3	6.3	6.3
14	7.1	7.1	7.1	6.8	6.7	6.8	7.0	6.9	7.0	6.5	6.3	6.5
15	7.1	6.9	7.1	6.8	6.4	6.4	6.9	6.9	6.9	6.6	6.5	6.5
16	7.2	6.8	7.0	6.7	6.5	6.7	6.9	6.9	6.9	6.7	6.6	6.6
17	7.2	7.0	7.1	6.8	6.7	6.7	6.9	6.6	6.9	6.7	6.7	6.7
18	7.2	7.1	7.1	6.8	6.8	6.8	6.9	6.8	6.9	6.7	6.2	6.6
19	7.1	7.0	7.1	6.8	6.5	6.7	6.8	6.6	6.8	6.7	6.2	6.7
20	7.1	7.0	7.1	6.8	6.4	6.8	6.8	6.8	6.8	6.7	6.6	6.6
21	7.1	7.1	7.1	6.8	6.5	6.5	6.9	6.8	6.9	6.7	6.5	6.7
22	7.2	7.1	7.2	6.8	6.5	6.7	6.9	6.8	6.8	6.7	6.6	6.7
23	7.2	7.2	7.2	6.8	6.8	6.8	---	---	---	6.9	6.7	6.7
24	7.2	7.2	7.2	6.9	6.8	6.9	6.6	6.2	6.6	6.9	6.7	6.7
25	7.2	7.1	7.2	6.9	6.8	6.9	6.7	6.5	6.6	6.7	6.7	6.7
26	7.2	7.1	7.2	6.9	6.9	6.9	6.5	6.5	6.5	6.7	6.6	6.7
27	7.1	6.7	7.0	7.0	6.9	6.9	6.6	6.5	6.5	6.6	6.6	6.6
28	7.0	6.8	7.0	6.9	6.5	6.6	6.6	6.5	6.6	6.9	6.6	6.6
29	7.0	7.0	7.0	6.9	6.6	6.8	6.6	6.5	6.6	6.9	6.7	6.9
30	7.0	7.0	7.0	6.9	6.8	6.9	6.5	6.0	6.5	6.9	6.9	6.9
31	7.0	7.0	7.0	---	---	---	6.6	6.5	6.6	6.9	6.7	6.7
MAX	7.4	7.3	7.3	7.1	7.0	7.1	7.0	6.9	7.0	6.9	6.9	6.9
MIN	7.0	6.7	7.0	6.7	6.4	6.4	6.5	6.0	6.5	6.3	6.2	6.3

03201980 Little Raccoon Creek near Ewington, Ohio—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	FEBRUARY			MARCH			APRIL			MAY		
	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
1	6.7	6.6	6.6	7.0	6.9	6.9	6.9	6.8	6.8	7.1	7.1	7.1
2	6.6	6.5	6.6	7.0	6.2	6.9	6.8	6.7	6.8	7.1	7.1	7.1
3	6.7	6.2	6.5	7.0	6.9	6.9	6.8	6.8	6.8	7.2	6.6	7.1
4	6.9	6.7	6.9	6.9	6.4	6.8	6.8	6.6	6.7	7.1	7.1	7.1
5	6.9	6.7	6.7	6.8	6.8	6.8	6.7	6.6	6.6	7.1	7.1	7.1
6	6.9	6.4	6.7	6.8	6.6	6.8	6.9	6.7	6.7	7.1	7.1	7.1
7	6.8	6.8	6.8	6.8	6.8	6.8	6.9	6.8	6.9	7.2	7.1	7.1
8	6.8	6.7	6.8	6.8	6.6	6.7	6.9	6.8	6.9	7.2	7.2	7.2
9	6.7	6.6	6.6	6.6	6.6	6.6	6.9	6.9	6.9	7.2	7.1	7.2
10	6.6	6.6	6.6	6.7	6.6	6.7	6.9	6.9	6.9	7.2	7.2	7.2
11	6.7	6.6	6.6	6.8	6.7	6.8	6.9	6.9	6.9	7.2	7.2	7.2
12	6.7	6.6	6.6	6.8	6.8	6.8	7.0	6.9	6.9	7.3	7.1	7.2
13	6.7	6.7	6.7	6.8	6.8	6.8	7.0	6.1	6.8	7.2	6.9	7.1
14	6.7	6.7	6.7	6.8	6.8	6.8	6.9	6.6	6.8	7.1	7.1	7.1
15	6.7	6.7	6.7	6.8	6.7	6.8	6.8	6.7	6.8	7.1	7.1	7.1
16	6.8	6.7	6.7	6.8	6.8	6.8	6.7	6.5	6.6	7.1	6.9	7.1
17	6.8	6.6	6.8	6.9	6.7	6.8	6.7	6.5	6.6	7.2	7.1	7.2
18	6.8	6.8	6.8	6.9	6.8	6.9	6.9	6.7	6.8	7.1	7.1	7.1
19	6.9	6.7	6.8	6.9	6.8	6.9	6.9	6.9	6.9	7.2	6.5	7.1
20	6.8	6.6	6.8	6.9	6.8	6.9	6.9	6.9	6.9	7.0	6.5	6.9
21	6.8	6.7	6.8	6.9	6.7	6.7	6.9	6.9	6.9	7.0	6.9	6.9
22	6.9	6.8	6.8	7.0	6.8	6.9	7.0	6.8	6.9	7.0	6.7	6.9
23	6.9	6.8	6.9	7.0	6.9	7.0	7.0	6.8	6.9	6.9	6.7	6.9
24	6.9	6.8	6.9	7.0	6.9	6.9	6.9	6.8	6.8	7.0	6.9	7.0
25	6.9	6.8	6.9	7.0	6.9	7.0	6.9	6.8	6.8	7.0	7.0	7.0
26	6.9	6.9	6.9	7.0	6.9	7.0	6.9	6.7	6.9	7.0	7.0	7.0
27	7.0	6.9	6.9	7.1	7.0	7.0	7.0	6.9	7.0	7.1	6.6	6.9
28	7.0	6.9	6.9	7.1	7.0	7.1	7.0	7.0	7.0	---	---	---
29	7.0	6.9	6.9	7.1	7.1	7.1	7.2	7.0	7.0	---	---	---
30	---	---	---	7.1	6.2	7.0	7.1	7.0	7.1	---	---	---
31	---	---	---	7.4	6.8	7.0	---	---	---	---	---	---
MAX	7.0	6.9	6.9	7.4	7.1	7.1	7.2	7.0	7.1	7.3	7.2	7.2
MIN	6.6	6.2	6.5	6.6	6.2	6.6	6.7	6.1	6.6	6.9	6.5	6.9

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
1	6.5	6.5	6.5	7.3	7.3	7.3	7.5	7.5	7.5	7.7	7.7	7.7
2	6.7	6.5	6.6	7.3	7.3	7.3	7.5	7.5	7.5	7.8	7.7	7.7
3	7.0	6.7	7.0	7.4	7.3	7.3	7.5	7.4	7.4	7.7	7.7	7.7
4	7.0	7.0	7.0	7.3	7.3	7.3	7.5	7.4	7.4	7.7	7.7	7.7
5	7.0	7.0	7.0	7.3	7.2	7.3	7.6	7.5	7.5	7.7	7.7	7.7
6	7.1	7.0	7.0	7.3	7.1	7.2	7.7	7.6	7.7	7.7	7.7	7.7
7	7.1	7.0	7.0	7.2	7.2	7.2	7.7	7.7	7.7	7.7	7.7	7.7
8	7.1	7.0	7.1	7.4	7.2	7.3	7.7	7.1	7.5	7.8	6.6	7.7
9	7.1	7.1	7.1	7.4	7.4	7.4	7.6	5.5	6.8	6.8	6.4	6.8
10	7.1	7.1	7.1	7.4	7.3	7.3	5.7	5.4	5.4	6.8	6.4	6.8
11	7.1	6.9	7.1	7.4	7.3	7.4	---	---	---	6.6	6.4	6.5
12	7.1	6.4	6.9	7.4	7.2	7.3	---	---	---	6.8	6.4	6.7
13	6.9	6.8	6.9	7.4	7.3	7.4	---	---	---	6.9	6.8	6.9
14	6.9	6.9	6.9	7.4	7.4	7.4	---	---	---	7.0	6.9	6.9
15	7.0	6.7	7.0	7.4	7.4	7.4	---	---	---	7.2	7.0	7.2
16	6.9	6.0	6.5	7.4	7.4	7.4	---	---	---	7.2	7.2	7.2
17	6.8	6.3	6.4	7.4	7.4	7.4	7.7	7.6	7.6	7.3	6.4	6.8
18	6.9	6.6	6.8	7.5	7.4	7.4	7.7	7.6	7.7	6.8	6.3	6.7
19	7.0	6.7	6.9	7.4	7.3	7.4	7.6	7.5	7.6	6.8	6.7	6.8
20	7.0	7.0	7.0	7.4	7.3	7.3	7.6	7.5	7.5	6.9	6.2	6.7
21	7.1	7.0	7.1	7.4	7.3	7.3	7.5	7.5	7.5	6.8	6.4	6.7
22	7.1	7.1	7.1	7.6	7.3	7.4	7.6	7.5	7.6	6.9	6.7	6.8
23	7.1	7.1	7.1	7.4	6.9	7.3	7.6	7.6	7.6	6.7	6.5	6.7
24	7.2	7.1	7.1	7.4	7.1	7.3	7.7	7.6	7.6	6.6	6.3	6.4
25	7.3	7.2	7.2	7.5	7.4	7.5	7.7	7.6	7.7	6.4	6.3	6.4
26	7.2	7.2	7.2	7.5	7.3	7.4	7.7	7.6	7.7	6.8	6.4	6.7
27	7.2	7.2	7.2	7.4	7.3	7.4	7.7	7.6	7.6	6.9	6.8	6.9
28	7.3	7.2	7.2	7.4	7.4	7.4	7.7	7.7	7.7	7.0	6.9	6.9
29	7.3	7.2	7.3	7.5	7.4	7.5	7.7	7.6	7.7	7.2	6.9	7.0
30	7.3	7.3	7.3	7.5	7.5	7.5	7.6	7.6	7.6	7.2	7.2	7.2
31	---	---	---	7.6	7.5	7.5	7.7	7.6	7.6	---	---	---
MAX	7.3	7.3	7.3	7.6	7.5	7.5	7.7	7.7	7.7	7.8	7.7	7.7
MIN	6.5	6.0	6.4	7.2	6.9	7.2	5.7	5.4	5.4	6.4	6.2	6.4
YEAR	MAX	MAXIMUM	7.8	MIN	MAXIMUM	7.7	MEDIAN	MAXIMUM	7.7	MINIMUM	5.4	
		MINIMUM	5.7		MINIMUM	5.4		MINIMUM	5.4			

03201980 Little Raccoon Creek near Ewington, Ohio—Continued

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

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	13.8	12.8	13.3	13.7	12.3	13.0	7.3	5.7	6.5	3.7	2.9	3.4
2	13.2	11.7	12.3	14.9	13.1	13.9	6.4	4.4	5.3	5.8	3.6	4.7
3	11.8	9.9	10.8	15.1	13.1	14.2	4.4	3.8	4.0	8.6	5.8	7.2
4	12.2	11.3	11.7	14.8	13.0	14.1	4.4	3.6	3.9	9.4	8.6	9.1
5	12.0	10.8	11.4	15.0	14.2	14.6	5.3	4.4	4.9	8.7	6.7	7.9
6	12.5	11.2	11.9	15.0	14.0	14.6	5.7	5.3	5.5	6.7	3.5	5.4
7	12.6	11.2	12.1	14.0	12.2	13.3	5.6	4.5	5.3	3.5	1.4	2.1
8	13.2	11.6	12.5	12.2	9.8	10.8	4.5	3.9	4.2	2.9	2.3	2.7
9	14.3	12.9	13.6	9.8	8.2	8.7	5.3	4.2	4.6	2.7	2.3	2.5
10	15.2	14.1	14.5	8.5	6.9	7.7	6.4	5.3	5.7	2.3	0.7	1.3
11	15.8	14.4	15.1	9.8	8.1	8.8	6.5	5.9	6.3	1.0	0.3	0.6
12	15.9	15.1	15.5	12.7	9.8	11.2	5.9	4.5	5.3	2.2	1.0	1.5
13	15.7	14.1	14.8	12.7	9.7	11.4	4.5	3.0	3.7	2.6	2.1	2.4
14	14.8	14.3	14.6	9.7	7.9	8.4	3.0	2.5	2.7	2.6	1.9	2.3
15	14.5	13.4	14.0	10.1	8.2	9.3	3.2	2.7	2.9	2.7	1.8	2.5
16	14.1	12.0	13.0	9.3	8.5	8.9	3.8	2.5	3.1	1.8	1.2	1.5
17	14.3	12.4	13.2	10.1	9.1	9.5	3.9	3.5	3.8	1.4	0.9	1.1
18	12.4	11.3	11.7	10.8	9.5	10.1	3.5	3.0	3.2	1.9	1.4	1.7
19	11.9	10.1	11.1	11.9	10.8	11.6	3.7	3.2	3.5	1.7	0.8	1.0
20	12.3	10.5	11.4	11.6	10.3	10.6	3.3	2.4	3.0	1.0	0.4	0.7
21	13.3	12.3	12.7	10.3	9.7	10	2.4	1.5	1.9	0.6	0.2	0.4
22	13.3	11.7	12.4	9.8	8.8	9.4	3.2	1.8	2.3	1.4	0.6	0.9
23	11.7	11.0	11.4	10.2	9.2	9.7	4.8	3.2	3.9	0.8	0.2	0.4
24	11.0	9.1	9.9	10.1	8.6	9.6	5.0	4.5	4.8	0.4	0.2	0.3
25	11.0	9.1	10	8.6	6.6	7.3	4.6	3.7	4.0	0.3	0.3	0.3
26	11.4	11.0	11.3	6.6	6.0	6.2	3.7	2.8	3.1	0.3	0.3	0.3
27	11.5	10.8	11.1	6.5	5.9	6.2	2.8	2.1	2.4	0.4	0.3	0.3
28	10.8	10.2	10.5	7.9	6.5	7.3	2.8	1.9	2.3	0.4	0.2	0.3
29	11.2	10.4	10.7	7.2	5.4	6.0	4.3	2.6	3.2	0.4	0.3	0.3
30	11.8	10.0	11.0	5.7	4.8	5.2	4.9	4.3	4.5	0.3	0.2	0.3
31	13.5	10.9	12.0	---	---	---	4.4	3.6	3.9	0.4	0.2	0.3
MONTH	15.9	9.1	12.3	15.1	4.8	10.1	7.3	1.5	4.0	9.4	0.2	2.1

DAY	FEBRUARY			MARCH			APRIL			MAY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	0.4	0.2	0.3	6.8	5.1	5.9	11.1	9.4	10.1	18.0	15.3	16.4
2	0.4	0.3	0.3	8.5	6.4	7.4	9.4	8.4	8.7	17.4	15.3	16.7
3	0.3	0.3	0.3	8.5	7.5	8.0	10.6	8.4	9.1	15.3	13.5	14.3
4	0.4	0.3	0.3	8.8	7.9	8.3	10.6	9.5	10	14.0	11.6	12.9
5	1.8	0.3	1.0	10.8	8.8	9.5	9.6	8.0	8.9	16.3	13.4	14.6
6	1.7	0.8	1.4	10.8	10.2	10.6	10.2	7.7	8.9	18.1	14.8	16.3
7	0.8	0.3	0.5	10.2	8.2	8.8	12.7	9.7	10.8	19.1	17.2	18.0
8	1.6	0.4	0.9	8.2	7.0	7.4	13.9	11.9	12.6	20.1	17.4	18.5
9	2.3	1.6	2.0	7.3	6.3	6.7	13.5	11.7	12.7	21.3	17.8	19.3
10	3.0	2.0	2.5	6.9	5.3	6.1	14.1	11.7	12.8	21.6	18.4	19.9
11	3.2	2.2	2.8	6.2	5.4	5.9	13.7	12.6	13.1	21.3	19.7	20.5
12	3.9	2.7	3.2	6.2	4.6	5.5	13.0	10.8	12.0	21.5	19.5	20.5
13	3.4	2.8	3.1	5.8	4.1	5.1	10.9	9.1	10.1	21.7	19.7	20.7
14	2.9	2.1	2.5	5.6	5.2	5.4	10.9	8.4	9.4	22.3	20.8	21.5
15	2.9	1.9	2.4	7.4	5.3	6.2	13.0	9.8	11.0	21.8	20.2	20.7
16	2.5	1.3	1.9	6.8	5.9	6.6	13.5	11.3	12.3	20.2	19.1	19.6
17	2.9	1.7	2.2	5.9	5.3	5.6	15.6	12.8	14.0	20.7	18.0	19.3
18	3.1	2.0	2.5	6.2	5.2	5.7	18.1	15.2	16.3	21.6	19.5	20.4
19	4.6	2.7	3.6	7.8	6.0	6.6	17.7	16.5	17.0	21.4	20.1	20.8
20	5.1	3.9	4.5	8.8	6.3	7.4	17.4	15.7	16.7	21.9	20.6	21.2
21	5.5	4.8	5.2	8.6	7.1	8.1	17.2	16.1	16.8	23.3	21.5	22.2
22	5.6	4.6	5.0	7.1	5.8	6.5	17.0	15.9	16.2	23.0	21.5	22.2
23	5.3	3.9	4.6	6.9	4.6	5.8	15.9	15.0	15.2	23.3	21.3	22.2
24	5.3	4.7	5.0	7.7	5.9	6.6	16.2	14.2	15.2	23.9	22.4	23.0
25	5.5	4.2	4.7	11.3	7.5	9.4	17.2	15.7	16.3	23.8	22.0	22.9
26	5.1	3.9	4.4	13.9	10.7	12.2	17.6	16.7	17.1	23.4	21.7	22.2
27	5.9	4.0	4.8	14.5	13.3	13.9	16.8	14.3	15.5	21.7	21.0	21.2
28	6.2	3.7	4.9	16.0	13.1	14.4	14.8	12.3	13.6	---	---	---
29	6.5	4.0	5.2	16.6	14.0	15.1	15.9	12.4	14.5	---	---	---
30	---	---	---	15.4	13.4	14.2	15.7	15.3	15.5	---	---	---
31	---	---	---	13.5	11.1	11.8	---	---	---	---	---	---
MONTH	6.5	0.2	2.8	16.6	4.1	8.3	18.1	7.7	13.1	23.9	11.6	19.6

03201980 Little Raccoon Creek near Ewington, Ohio—Continued

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

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	19.2	18.2	18.8	21.9	20.1	21.1	23.9	21.9	22.7	23.3	20.8	21.7
2	20.1	18.2	19.0	22.9	20.6	21.7	24.1	22.2	23.3	22.3	20.4	21.2
3	20.4	18.5	19.4	22.9	21.6	22.3	24.5	22.9	23.8	22.5	21.1	21.6
4	20.0	18.7	19.1	23.4	21.6	22.4	24.3	23.3	23.9	23.2	21.3	22.0
5	19.0	18.1	18.6	24.4	22.5	23.4	23.9	22.6	23.2	23.9	21.2	22.2
6	19.9	17.7	18.7	25.2	22.8	24.0	23.0	20.6	21.5	24.1	21.3	22.4
7	21.1	18.0	19.4	25.2	23.4	24.1	21.3	19.4	20.3	23.0	21.8	22.4
8	22.1	19.1	20.4	23.7	22.1	23.0	21.0	19.4	20.3	22.7	20.6	21.8
9	23.2	20.7	21.8	23.9	22.5	23.2	21.8	19.8	20.7	20.7	20.4	20.5
10	23.2	22.2	22.6	24.7	23.4	24.0	22.8	20.9	21.7	20.8	20.3	20.5
11	22.6	22.2	22.4	24.3	23.0	23.8	22.5	21.2	21.8	21.2	19.8	20.5
12	22.2	21.1	21.6	24.6	23.0	23.7	21.2	19.8	20.7	21.4	19.7	20.5
13	23.0	20.6	21.6	25.1	23.4	24.3	19.8	18.9	19.3	21.5	20.0	20.8
14	23.7	21.7	22.6	25.0	23.6	24.4	19.7	18.1	18.8	22.0	20.7	21.3
15	23.5	21.5	22.7	24.2	22.3	23.2	20.1	18.2	18.9	21.8	20.3	21.2
16	22.5	21.3	21.9	23.2	21.4	22.4	21.0	18.4	19.4	21.7	20.6	21.1
17	23.5	21.5	22.2	22.9	22.0	22.5	20.8	18.7	19.5	21.2	19.1	20.2
18	24.3	22.8	23.4	22.0	20.9	21.6	21.3	18.7	19.8	19.5	18.9	19.1
19	23.8	22.8	23.2	22.6	20.8	21.7	23.5	20.2	21.4	19.5	18.5	18.9
20	22.8	20.1	21.4	22.6	20.9	21.8	23.0	22.0	22.4	19.0	17.6	18.3
21	21.7	19.1	20.4	23.0	21.6	22.4	23.2	21.6	22.2	18.5	17.1	17.8
22	22.4	20.8	21.5	23.0	22.1	22.6	22.0	20.4	21.1	18.9	17.2	18.0
23	23.2	21.0	22.0	23.2	22.2	22.6	22.7	20.3	21.1	19.4	17.3	18.3
24	22.9	20.1	21.5	23.1	21.4	22.3	23.5	21.0	21.9	19.3	17.7	18.6
25	22.7	21.1	21.5	22.7	20.8	21.8	23.6	21.9	22.6	19.3	17.9	18.7
26	22.3	20.5	21.4	22.4	21.4	21.9	23.5	22.2	22.8	19.3	17.8	18.6
27	22.0	19.7	20.9	22.1	21.1	21.6	24.2	22.5	23.1	18.9	17.6	18.3
28	21.6	19.6	20.5	22.1	21.1	21.5	25.4	23.2	24.0	19.4	18.7	19.0
29	21.8	19.6	20.7	21.8	20.0	20.9	25.5	23.8	24.4	19.0	17.9	18.3
30	22.0	19.3	20.8	22.5	21.6	22.1	24.4	23.5	24.0	18.4	17.2	17.8
31	---	---	---	22.7	22.2	22.4	23.6	21.7	22.6	---	---	---
MONTH	24.3	17.7	21.1	25.2	20.0	22.6	25.5	18.1	21.7	24.1	17.1	20.1
YEAR	25.5	0.2	13.1									

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	9.3	8.9	9.1	9.4	9.1	9.3	10.9	8.9	9.9	13.1	12.4	12.7
2	9.6	9.2	9.4	9.3	8.8	9.1	11.9	10.0	11.0	13.1	12.0	12.5
3	10.0	9.5	9.8	9.1	8.7	8.9	12.2	11.9	12.1	12.0	9.7	10.9
4	9.7	9.5	9.6	9.2	8.7	8.9	12.3	12.0	12.2	10.3	9.6	10.0
5	9.8	9.5	9.6	9.0	8.7	8.8	12.0	11.6	11.8	10.4	8.8	9.7
6	9.9	9.5	9.7	8.8	8.7	8.8	11.7	11.3	11.6	12.2	10.4	11.2
7	10.3	10.0	10.1	9.5	8.8	9.1	11.9	11.2	11.4	13.2	12.2	12.8
8	10.3	10.0	10.1	10.4	9.5	10.0	12.1	11.9	12.0	12.5	11.0	11.7
9	10.0	9.6	9.8	11.0	10.4	10.8	12.0	11.7	11.9	12.5	12.0	12.3
10	9.6	9.1	9.3	11.5	11.0	11.3	11.7	11.2	11.5	13.6	12.4	13.2
11	9.1	8.6	8.9	11.1	10.6	10.9	11.3	11.0	11.2	13.8	13.5	13.7
12	8.6	8.1	8.4	10.6	8.1	9.6	11.1	10.7	10.9	13.6	12.9	13.3
13	8.3	7.8	8.0	8.4	7.5	7.7	12.0	11.1	11.5	12.9	12.6	12.8
14	8.3	7.9	8.0	9.6	8.3	9.0	11.9	11.8	11.9	12.8	12.5	12.7
15	8.5	7.7	8.2	9.2	6.2	7.9	11.8	11.6	11.7	12.8	12.4	12.5
16	9.0	8.3	8.8	10.5	9.2	10.2	11.6	11.3	11.5	13.2	12.8	13.0
17	9.0	7.9	8.6	10.4	10.2	10.3	11.3	11.1	11.1	13.4	13.1	13.3
18	9.4	8.9	9.1	10.3	10.0	10.2	---	---	---	13.1	12.5	12.7
19	9.9	9.3	9.6	10.0	9.6	9.8	---	---	---	13.2	12.5	12.8
20	10.0	9.4	9.7	9.8	9.0	9.6	---	---	---	13.4	12.6	12.9
21	9.5	9.0	9.2	9.5	8.4	8.9	---	---	---	13.4	13.1	13.3
22	9.4	8.7	9.0	10.7	9.5	10.1	---	---	---	13.2	12.9	13.1
23	9.6	9.1	9.3	10.6	10.4	10.5	13.1	12.4	12.6	13.4	13.0	13.3
24	10.3	9.4	9.8	10.6	10.3	10.4	12.6	12.2	12.3	13.3	13.1	13.2
25	10.2	9.9	10.0	11.4	10.6	11.1	12.5	11.8	12.2	13.4	13.2	13.3
26	9.9	9.3	9.5	11.6	11.4	11.6	12.8	11.9	12.3	13.2	12.5	12.9
27	9.7	9.1	9.5	11.7	11.6	11.6	13.8	12.7	13.2	12.6	12.4	12.4
28	9.3	8.8	9.0	11.6	10.7	11.1	13.8	13.5	13.6	13.0	12.6	12.8
29	9.6	9.3	9.5	10.8	10.5	10.7	13.5	12.6	13.1	13.1	12.9	13.1
30	9.9	9.6	9.8	11.1	10.8	11.0	12.6	12.4	12.5	13.2	13.1	13.1
31	9.8	9.3	9.6	---	---	---	12.6	12.2	12.4	13.3	12.9	13.1
MONTH	10.3	7.7	9.3	11.7	6.2	9.9	13.8	8.9	11.9	13.8	8.8	12.6

03202000 Raccoon Creek at Adamsville, Ohio

LOCATION.—Latitude 38°52'24", longitude 82°21'22", Gallia County, Hydrologic Unit 05090101, on left bank downstream side of State Highway 588 at Adamsville, Ohio.

DRAINAGE AREA.—585 mi².

PERIOD OF RECORD.—June 1915 to December 1935, October 1938 to September 1985, October 1991 to current year.

REVISED RECORDS—WSP 873: 1916-18, 1920, 1922, 1924, 1926-27, 1931, 1933, 1935(M). WSP 1908: Drainage area. WSP 2108: 1968-70(M). OH-77-1: 1992-95 (datum).

GAGE.—Water-stage recorder. Datum of gage is 570.04 ft above sea level. July 8, 1984-October 21, 1997, water-stage recorder 1.7 mi downstream at datum 2.30 ft lower.

REMARKS.—Records fair except for periods of estimated record, which are poor. Water-quality and sediment data formerly collected at this site.

**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	277	365	3810	1210	e310	350	2700	434	2150	110	151	46
2	252	311	3130	1550	e300	494	3400	423	1120	103	193	41
3	223	275	1660	1770	e290	889	3330	523	822	108	364	36
4	197	249	861	2050	e980	1470	2970	724	590	118	213	32
5	177	429	766	3500	e1700	2140	2170	700	495	117	144	29
6	161	552	994	4690	3670	4420	1290	516	404	113	94	26
7	151	661	1250	5840	4010	4270	952	420	338	101	77	24
8	144	620	1170	5760	4170	3870	796	360	288	95	68	1170
9	136	458	926	4970	4230	2580	681	312	251	91	67	3430
10	123	367	879	2630	3520	1280	593	276	219	87	70	2780
11	109	326	1490	963	1970	945	514	248	270	89	66	2690
12	98	1560	1880	770	1180	782	536	331	410	109	51	2510
13	90	3160	1660	736	1010	658	2280	979	466	94	50	2470
14	189	3510	1190	684	893	573	4080	501	515	85	45	811
15	262	3640	1000	625	783	520	4260	300	344	109	42	281
16	235	2910	930	559	667	497	4210	265	706	97	41	214
17	251	1530	1590	491	578	494	3540	296	772	98	38	3250
18	213	742	2170	803	503	500	1840	283	473	87	35	6120
19	190	1870	2080	1400	471	532	956	369	370	83	36	6600
20	174	2320	1490	1310	462	501	771	769	311	81	39	6870
21	163	2130	1060	e800	480	622	665	1240	248	73	56	6430
22	154	1450	863	e680	494	622	649	1100	214	121	47	5500
23	148	972	797	e580	490	699	884	1310	193	167	42	2420
24	139	779	1290	e520	456	586	1250	916	184	350	41	445
25	124	689	1870	e470	443	512	1200	518	169	340	39	320
26	135	621	1840	e440	439	471	972	381	161	202	36	261
27	479	557	1350	e410	419	439	847	478	149	154	37	228
28	838	1690	1000	e370	389	422	683	4280	132	202	40	205
29	879	3080	838	e350	371	411	557	4480	122	320	42	185
30	655	3530	975	e330	---	751	478	4340	117	203	47	170
31	465	---	1250	e320	---	1830	---	3950	---	175	52	---
TOTAL	7831	41353	44059	47581	35678	35130	50054	32022	13003	4282	2363	55594
MEAN	253	1378	1421	1535	1230	1133	1668	1033	433	138	76.2	1853
MAX	879	3640	3810	5840	4230	4420	4260	4480	2150	350	364	6870
MIN	90	249	766	320	290	350	478	248	117	73	35	24
CFSM	0.43	2.36	2.43	2.62	2.10	1.94	2.85	1.77	0.74	0.24	0.13	3.17
IN.	0.50	2.63	2.80	3.03	2.27	2.23	3.18	2.04	0.83	0.27	0.15	3.54

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916-2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	120	314	655	937	1185	1473	1187	906	430	237	196	150
MAX	986	1812	2562	2739	2989	4165	3231	4200	2244	1752	1548	1853
(WY)	1976	1920	1979	1950	1939	1963	1939	1968	1941	1958	1926	2004
MIN	2.63	5.49	7.92	24.0	44.7	248	224	79.6	29.3	11.3	7.16	3.35
(WY)	1931	1964	1964	1931	1954	1941	1971	1930	1930	1930	1922	1930

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1916-2004

ANNUAL TOTAL	317434	368950	
ANNUAL MEAN	870	1008	649
HIGHEST ANNUAL MEAN			1095
LOWEST ANNUAL MEAN			186
HIGHEST DAILY MEAN	5470	Feb 25	6870 Sep 20
LOWEST DAILY MEAN	79	Sep 18	24 Sep 7
ANNUAL SEVEN-DAY MINIMUM	111	Sep 12	33 Sep 1
MAXIMUM PEAK FLOW			6910 Sep 20a
MAXIMUM PEAK STAGE			20.18 Sep 20
INSTANTANEOUS LOW FLOW			23 Sep 7
ANNUAL RUNOFF (CFSM)	1.49	1.72	1.11
ANNUAL RUNOFF (INCHES)	20.19	23.46	15.08
10 PERCENT EXCEEDS	2150	3100	1730
50 PERCENT EXCEEDS	499	498	242
90 PERCENT EXCEEDS	148	86	26

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

Surface-Water Records—Symmes Creek Basin

03205470 Symmes Creek at Aid, Ohio

LOCATION.—Latitude 38°35'46", longitude 82°29'43", Lawrence County, Hydrologic Unit 05090101, on right bank, at State Route 141 at Aid, 0.1 mi west of intersection with State Route 378, 1.2 mi downstream of Sharps Creek.

DRAINAGE AREA.—302 mi².

PERIOD OF RECORD.—November 1, 2000 to current year.

GAGE.—Water-stage recorder. Datum of gage is 560.00 ft above sea level.

REMARKS.—Records fair except for periods of estimated record, which are poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	151	913	489	e140	128	1150	215	2690	24	31	37
2	48	118	927	1200	e130	194	1530	201	1950	22	49	24
3	48	97	750	1300	e300	234	1510	215	1070	276	57	19
4	46	82	427	995	e740	814	1370	212	612	339	39	15
5	38	354	327	1360	826	1090	1130	202	344	163	42	12
6	33	1030	473	1350	2450	3620	816	180	261	107	37	10
7	31	718	497	1080	2730	3300	528	159	197	78	35	9.8
8	28	500	429	1050	2220	2920	374	140	154	53	32	936
9	25	306	357	935	2000	2120	303	126	129	39	25	2830
10	24	225	376	622	1370	1310	258	115	109	117	21	2160
11	22	190	795	370	864	770	225	111	99	532	18	1670
12	21	1630	692	324	584	441	318	101	143	721	17	1470
13	21	2670	590	325	458	322	1860	87	222	248	17	696
14	32	1390	578	294	388	269	2980	93	197	105	16	213
15	171	1100	675	280	340	241	2170	123	199	51	15	124
16	148	844	642	254	293	227	2240	113	349	30	15	93
17	116	558	1050	234	264	218	1640	96	373	20	14	2440
18	78	344	951	496	244	208	940	86	243	16	12	6090
19	58	1750	829	781	232	203	470	83	212	14	14	5810
20	51	2510	792	595	224	209	347	87	166	12	12	4850
21	44	1610	653	414	223	502	306	130	133	9.1	18	3280
22	38	1310	489	e310	215	472	358	150	115	50	22	2040
23	34	774	420	e270	206	371	421	127	101	109	21	595
24	31	500	881	e240	200	309	463	126	79	58	19	216
25	29	409	857	e220	196	267	397	122	67	72	19	151
26	33	340	703	e210	189	239	490	840	55	78	15	119
27	390	285	630	e190	178	226	467	1820	45	54	13	100
28	528	860	500	e180	151	218	341	3220	40	65	11	81
29	384	1390	387	e170	133	208	268	3390	33	46	11	66
30	275	935	477	e160	---	914	226	3310	27	36	13	57
31	196	---	530	e150	---	1310	---	3240	---	31	15	---
TOTAL	3072	24980	19597	16848	18488	23874	25896	19220	10414	3575.1	695	36213.8
MEAN	99.1	833	632	543	638	770	863	620	347	115	22.4	1207
MAX	528	2670	1050	1360	2730	3620	2980	3390	2690	721	57	6090
MIN	21	82	327	150	130	128	225	83	27	9.1	11	9.8
CFSM	0.33	2.76	2.09	1.80	2.11	2.55	2.86	2.05	1.15	0.38	0.07	4.00
IN.	0.38	3.08	2.41	2.08	2.28	2.94	3.19	2.37	1.28	0.44	0.09	4.46
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001-2004, BY WATER YEAR (WY)												
MEAN	73.4	318	406	300	602	755	617	1018	447	67.1	59.4	365
MAX	120	833	632	543	1181	1050	1029	1469	903	120	200	1207
(WY)	2003	2004	2004	2004	2003	2002	2002	2001	2003	2003	2003	2004
MIN	1.28	3.07	36.7	56.2	118	368	204	620	244	14.2	6.77	8.18
(WY)	2002	2002	2002	2001	2002	2003	2001	2004	2002	2001	2001	2001
SUMMARY STATISTICS												
				FOR 2003 CALENDAR YEAR			FOR 2004 WATER YEAR			WATER YEARS 2001 - 2004		
ANNUAL TOTAL				195147			202872.9					
ANNUAL MEAN				535			554			447		
HIGHEST ANNUAL MEAN										554		
LOWEST ANNUAL MEAN										298		
HIGHEST DAILY MEAN				3210			Feb 23			6580		
LOWEST DAILY MEAN				17			Aug 27			0.43		
ANNUAL SEVEN-DAY MINIMUM				22			Aug 21			0.68		
MAXIMUM PEAK FLOW							6510			7100		
MAXIMUM PEAK STAGE							23.44			23.56		
INSTANTANEOUS LOW FLOW										1.0		
ANNUAL RUNOFF (CFSM)				1.77			1.84			1.48		
ANNUAL RUNOFF (INCHES)				24.04			24.99			20.12		
10 PERCENT EXCEEDS				1550			1480			1310		
50 PERCENT EXCEEDS				259			226			150		
90 PERCENT EXCEEDS				39			23			7.3		

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

Surface-Water Records—Scioto River Basin

03219500 Scioto River near Prospect, Ohio

LOCATION.—Latitude 40°25'10", longitude 83°11'50", Delaware County, Hydrologic Unit 05060001, on right bank at downstream side of Hoskins Bridge, 1.5 mi upstream from Ottawa Creek, 2 mi south of Prospect, Ohio, and 2.5 mi downstream from Patton Run.

DRAINAGE AREA.—567 mi².

Water-Discharge Records

PERIOD OF RECORD.—July 1925 to October 1932, October 1939 to current year. Published as "at Prospect" 1925-32. Gage-height records collected in this vicinity since 1915 are contained in reports of National Weather Service.

REVISED RECORDS.—WSP 1908: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 886.9 ft, National Geodetic Vertical Datum of 1912 (levels by U.S. Army Corps of Engineers). July 24, 1925-Oct. 31, 1932, nonrecording gage at site 2.5 mi upstream at datum 4.8 ft higher; Oct. 16-Dec. 5, 1939, nonrecording gage at present site and datum.

REMARKS.—Records fair except for periods of estimated record, which are poor. Water-quality data collected at this site (sediment data formerly collected). U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Mar. 25, 1913, reached a stage of 21.1 ft, discharge; 27,000 ft³/s, computed by Franklin County Conservancy District, at site and datum used 1925-32.

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	953	526	4680	2120	e140	e1000	2350	281	2990	155	87	305
2	583	424	3120	1710	e140	e1500	1630	1770	3670	133	163	174
3	400	373	1680	1520	e200	e2600	1120	2610	2980	118	133	115
4	314	335	896	2430	358	1460	854	2960	1410	112	98	87
5	267	302	815	4320	448	1590	644	2440	641	103	96	71
6	243	268	1120	5610	1060	2100	501	1150	449	92	125	58
7	232	235	1150	5530	1380	2020	410	671	340	86	140	50
8	205	203	976	4240	1180	1100	368	1010	280	82	102	47
9	178	176	808	2540	849	686	330	1250	233	78	72	67
10	153	157	1200	1030	566	535	289	786	201	76	56	82
11	137	147	2230	599	523	428	251	510	651	71	46	92
12	124	164	2890	e400	531	361	221	498	1990	142	41	75
13	113	213	2480	e340	492	307	263	507	2870	266	37	58
14	140	319	1270	e300	386	260	805	345	5270	188	33	46
15	911	347	711	e260	e300	237	976	429	6310	128	32	38
16	1500	264	616	e240	e250	235	687	596	6760	91	38	36
17	1540	212	1010	e220	e220	238	467	562	6290	79	35	45
18	954	195	1320	e200	e200	258	350	636	4970	86	31	129
19	628	278	1030	e190	284	450	295	2380	3250	77	56	142
20	493	742	667	e180	958	785	255	2890	1750	77	95	118
21	390	828	515	e170	1740	1150	237	3210	851	70	310	81
22	322	581	416	e165	2200	1200	241	4020	604	72	392	57
23	281	418	682	e160	1750	824	860	4430	459	142	284	44
24	248	351	1890	e160	1100	569	1400	4850	353	253	159	37
25	217	360	2870	e155	926	464	1040	3730	315	184	96	34
26	537	394	2750	e155	690	449	717	2010	288	119	68	30
27	1340	1170	1540	e150	567	971	596	869	268	88	58	28
28	1600	2910	792	e150	e520	1250	438	659	226	74	57	26
29	1190	4290	666	e145	e700	1050	333	565	195	67	844	26
30	794	5270	1450	e145	---	1810	275	430	172	61	1160	26
31	657	---	1940	e140	---	2430	---	2520	---	68	699	---
TOTAL	17644	22452	46180	35674	20658	30317	19203	51574	57036	3438	5643	2224
MEAN	569	748	1490	1151	712	978	640	1664	1901	111	182	74.1
MAX	1600	5270	4680	5610	2200	2600	2350	4850	6760	266	1160	305
MIN	113	147	416	140	140	235	221	281	172	61	31	26
CFSM	1.00	1.32	2.63	2.03	1.26	1.72	1.13	2.93	3.35	0.20	0.32	0.13
IN.	1.16	1.47	3.03	2.34	1.36	1.99	1.26	3.38	3.74	0.23	0.37	0.15
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926-2004, BY WATER YEAR (WY)												
MEAN	124	260	501	704	774	1004	889	524	430	269	124	106
MAX	1643	2023	2451	3305	2166	3008	2771	1788	1915	2049	778	1651
(WY)	1927	1973	1991	1950	1975	1978	1957	1996	1947	1992	1995	1926
MIN	10.9	13.8	14.9	15.1	30.8	135	97.0	78.3	32.5	19.4	11.7	7.98
(WY)	1945	1931	1964	1945	1964	1941	1946	1955	1988	1952	1932	1941
SUMMARY STATISTICS				FOR 2003 CALENDAR YEAR			FOR 2004 WATER YEAR			WATER YEARS 1926-2004		
ANNUAL TOTAL				335370			312043					
ANNUAL MEAN				919			853			474		
HIGHEST ANNUAL MEAN										853		
LOWEST ANNUAL MEAN										127		
HIGHEST DAILY MEAN				5270			Nov 30			6760		
LOWEST DAILY MEAN				45			Aug 26			26		
ANNUAL SEVEN-DAY MINIMUM				55			Aug 21			30		
MAXIMUM PEAK FLOW							6820			Jun 16a		
MAXIMUM PEAK STAGE							12.69			Jun 16		
INSTANTANEOUS LOW FLOW										15.00		
ANNUAL RUNOFF (CFSM)				1.62			1.50			0.84		
ANNUAL RUNOFF (INCHES)				22.00			20.47			11.36		
10 PERCENT EXCEEDS				2750			2430			1320		
50 PERCENT EXCEEDS				451			380			132		
90 PERCENT EXCEEDS				105			71			19		

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.
e Estimated.

03219500 Scioto River near Prospect, Ohio—Continued

Water-Quality Records

PERIOD OF RECORD.—June 1998 to current year.

PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: June 1998 to current year.

pH: June 1998 to current year.

WATER TEMPERATURE: June 1998 to current year.

DISSOLVED OXYGEN: June 1998 to current year.

INSTRUMENTATION.—Water-quality monitor. Electronic data logger. Set for 1-hour interval. Satellite telemeter at station.

REMARKS.—Interruptions in the water-quality record are due to malfunction of the instrument except for Dec. 23-Mar. 24, when monitor was turned off for the winter. Specific conductance records are good except Nov. 27-Dec. 2, Dec. 11-13, May 17-25, July 8-26, and Aug. 27-Sept. 29, which are fair. pH records are good except Oct. 30-Nov. 18, Mar. 24-Apr. 15, and Aug. 27-Sept. 29, which are fair. Water temperature records are good. Dissolved oxygen records are fair except Oct. 1, Oct. 30-Nov. 18, Mar. 24-Apr. 21, May 17-July 6, and Aug. 23-Sept. 29, which are poor.

EXTREMES FOR PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: Maximum, 1,830 microsiemens, Jan. 16, 1999; minimum, 227 microsiemens, June 16, 2004.

pH: Maximum, 9.4 units, Nov. 28, 1999; minimum, 6.9 units, Apr. 10, 29, May 3 and 16, 2000.

WATER TEMPERATURE: Maximum, 32.5° C, July 31, 1999; minimum, 0.0° C, on many days during winter.

DISSOLVED OXYGEN: Maximum, 19.5 mg/L, July 21, 2004; minimum, 0.9 mg/L, July 23, 1999.

EXTREMES FOR CURRENT YEAR.—

SPECIFIC CONDUCTANCE: Maximum, 873 microsiemens, Oct. 13; minimum, 227 microsiemens, June 16.

pH: Maximum, 9.0 units, Aug. 18; minimum, 7.1 units, Mar. 25 and June 16.

WATER TEMPERATURE: Maximum, 26.2° C, Aug. 28; minimum, 2.0° C, Dec. 21.

DISSOLVED OXYGEN: Maximum, 19.5 mg/L, July 21; minimum, 1.7 mg/L, May 15.

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

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	527	432	478	722	693	709	420	317	364	---	---	---
2	598	527	566	724	706	717	509	420	465	---	---	---
3	648	598	628	760	723	744	560	507	531	---	---	---
4	702	648	676	790	760	775	632	560	597	---	---	---
5	747	702	726	795	770	786	648	596	634	---	---	---
6	759	747	752	811	792	804	605	579	592	---	---	---
7	792	759	771	824	801	813	603	589	596	---	---	---
8	830	792	804	830	811	821	611	590	600	---	---	---
9	838	830	833	835	818	826	652	603	627	---	---	---
10	844	834	837	841	826	834	658	546	631	---	---	---
11	861	844	852	843	822	834	546	413	456	---	---	---
12	870	861	867	832	820	825	418	403	409	---	---	---
13	873	860	868	838	819	828	500	412	450	---	---	---
14	860	773	830	822	793	807	587	500	541	---	---	---
15	806	575	673	818	775	799	683	587	636	---	---	---
16	619	508	549	776	756	768	734	680	709	---	---	---
17	546	514	527	775	745	761	711	647	663	---	---	---
18	608	546	572	750	715	731	647	549	601	---	---	---
19	674	608	644	766	726	746	591	538	558	---	---	---
20	691	674	684	761	676	728	677	591	636	---	---	---
21	739	649	715	679	597	619	725	674	704	---	---	---
22	775	682	734	631	614	621	739	717	726	---	---	---
23	779	748	769	671	631	646	---	---	---	---	---	---
24	815	721	764	725	664	691	---	---	---	---	---	---
25	819	795	811	749	722	736	---	---	---	---	---	---
26	795	582	705	763	737	753	---	---	---	---	---	---
27	601	508	568	764	405	600	---	---	---	---	---	---
28	525	483	506	418	321	369	---	---	---	---	---	---
29	---	---	---	329	311	322	---	---	---	---	---	---
30	---	---	---	317	302	308	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	873	432	704	843	302	711	739	317	578	---	---	---

03219500 Scioto River near Prospect, Ohio—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
1	7.6	7.6	7.6	7.8	7.8	7.8	7.5	7.4	7.5	---	---	---
2	7.7	7.6	7.7	7.8	7.8	7.8	7.6	7.4	7.5	---	---	---
3	7.8	7.7	7.7	7.8	7.8	7.8	7.6	7.5	7.6	---	---	---
4	7.8	7.8	7.8	7.8	7.7	7.7	7.7	7.6	7.6	---	---	---
5	7.8	7.8	7.8	7.8	7.7	7.7	7.7	7.5	7.7	---	---	---
6	7.8	7.8	7.8	7.7	7.7	7.7	7.6	7.6	7.6	---	---	---
7	7.8	7.8	7.8	7.8	7.7	7.7	7.7	7.6	7.7	---	---	---
8	7.9	7.8	7.8	7.9	7.7	7.8	7.7	7.6	7.7	---	---	---
9	7.8	7.8	7.8	7.9	7.8	7.9	7.7	7.6	7.7	---	---	---
10	7.8	7.8	7.8	8.0	7.9	7.9	7.8	7.6	7.7	---	---	---
11	7.8	7.7	7.8	7.9	7.9	7.9	7.7	7.4	7.5	---	---	---
12	7.8	7.7	7.7	8.0	7.9	7.9	7.6	7.4	7.5	---	---	---
13	7.8	7.7	7.7	8.0	7.8	8.0	7.6	7.4	7.5	---	---	---
14	7.7	7.5	7.7	8.0	7.8	7.9	7.6	7.5	7.6	---	---	---
15	7.7	7.4	7.5	7.9	7.9	7.9	7.7	7.6	7.6	---	---	---
16	7.5	7.4	7.5	7.9	7.9	7.9	7.8	7.7	7.7	---	---	---
17	7.5	7.4	7.5	7.9	7.7	7.8	7.8	7.6	7.7	---	---	---
18	7.6	7.5	7.5	7.8	7.7	7.8	7.8	7.6	7.7	---	---	---
19	7.7	7.6	7.6	7.9	7.8	7.8	7.7	7.6	7.6	---	---	---
20	7.7	7.6	7.7	7.8	7.7	7.8	7.8	7.6	7.7	---	---	---
21	7.7	7.7	7.7	7.8	7.7	7.7	7.8	7.6	7.7	---	---	---
22	7.7	7.7	7.7	7.7	7.7	7.7	7.6	7.4	7.5	---	---	---
23	7.8	7.7	7.7	7.8	7.7	7.7	---	---	---	---	---	---
24	7.8	7.7	7.8	7.9	7.8	7.8	---	---	---	---	---	---
25	7.8	7.7	7.8	7.9	7.9	7.9	---	---	---	---	---	---
26	7.8	7.5	7.7	7.9	7.9	7.9	---	---	---	---	---	---
27	7.6	7.5	7.5	7.9	7.6	7.8	---	---	---	---	---	---
28	7.5	7.5	7.5	7.6	7.4	7.5	---	---	---	---	---	---
29	---	---	---	7.5	7.4	7.4	---	---	---	---	---	---
30	---	---	---	7.5	7.4	7.5	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MAX	7.9	7.8	7.8	8.0	7.9	8.0	7.8	7.7	7.7	---	---	---
MIN	7.5	7.4	7.5	7.5	7.4	7.4	7.5	7.4	7.5	---	---	---

DAY	FEBRUARY			MARCH			APRIL			MAY		
	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
1	---	---	---	---	---	---	7.9	7.4	7.5	8.0	7.7	7.8
2	---	---	---	---	---	---	7.6	7.5	7.6	7.8	7.3	7.6
3	---	---	---	---	---	---	8.0	7.6	7.8	7.6	7.3	7.4
4	---	---	---	---	---	---	7.9	7.5	7.9	7.6	7.4	7.5
5	---	---	---	---	---	---	7.9	7.7	7.8	7.7	7.4	7.6
6	---	---	---	---	---	---	7.9	7.7	7.8	7.8	7.5	7.7
7	---	---	---	---	---	---	8.0	7.5	7.9	7.8	7.6	7.7
8	---	---	---	---	---	---	8.1	7.7	8.0	7.8	7.6	7.7
9	---	---	---	---	---	---	8.1	7.9	8.0	7.8	7.5	7.6
10	---	---	---	---	---	---	8.2	7.9	8.0	7.7	7.5	7.6
11	---	---	---	---	---	---	8.2	7.7	8.0	7.9	7.7	7.7
12	---	---	---	---	---	---	8.2	7.8	7.9	7.9	7.7	7.8
13	---	---	---	---	---	---	7.9	7.6	7.8	8.0	7.6	7.8
14	---	---	---	---	---	---	7.8	7.5	7.6	7.7	7.6	7.6
15	---	---	---	---	---	---	7.8	7.5	7.7	7.8	7.6	7.7
16	---	---	---	---	---	---	7.9	7.6	7.8	8.0	7.7	7.7
17	---	---	---	---	---	---	8.0	7.8	7.9	8.0	7.7	7.8
18	---	---	---	---	---	---	8.2	7.9	8.1	8.0	7.7	7.8
19	---	---	---	---	---	---	8.3	8.0	8.1	7.7	7.5	7.6
20	---	---	---	---	---	---	8.4	8.1	8.2	7.6	7.4	7.5
21	---	---	---	---	---	---	8.2	8.1	8.1	7.6	7.5	7.5
22	---	---	---	---	---	---	8.1	8.0	8.1	7.6	7.5	7.5
23	---	---	---	---	---	---	8.1	7.8	8.0	7.5	7.5	7.5
24	---	---	---	---	---	---	8.0	7.7	8.0	7.6	7.4	7.5
25	---	---	---	7.9	7.1	7.8	8.0	7.8	8.0	7.6	7.4	7.5
26	---	---	---	8.0	7.3	7.6	8.1	7.9	8.0	7.4	7.4	7.4
27	---	---	---	7.8	7.2	7.4	8.1	7.9	8.0	7.5	7.4	7.5
28	---	---	---	7.9	7.2	7.8	8.0	7.8	7.8	7.6	7.5	7.6
29	---	---	---	7.8	7.4	7.8	8.0	7.7	7.9	7.7	7.6	7.6
30	---	---	---	7.9	7.4	7.5	7.9	7.7	7.8	7.7	7.6	7.7
31	---	---	---	7.7	7.4	7.6	---	---	---	7.7	7.3	7.4
MAX	---	---	---	8.0	7.4	7.8	8.4	8.1	8.2	8.0	7.7	7.8
MIN	---	---	---	7.7	7.1	7.4	7.6	7.4	7.5	7.4	7.3	7.4

03219500 Scioto River near Prospect, Ohio—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
1	7.4	7.3	7.3	7.9	7.8	7.8	8.0	7.8	7.9	7.7	7.5	7.6
2	7.3	7.3	7.3	7.9	7.8	7.9	7.9	7.8	7.8	7.7	7.7	7.7
3	7.4	7.3	7.3	7.9	7.9	7.9	8.0	7.8	7.9	7.7	7.7	7.7
4	7.4	7.3	7.4	8.0	7.9	7.9	7.8	7.8	7.8	7.8	7.6	7.7
5	7.7	7.4	7.6	8.1	7.9	8.0	7.8	7.8	7.8	7.8	7.6	7.7
6	7.7	7.7	7.7	8.1	7.9	8.0	7.8	7.8	7.8	7.9	7.6	7.7
7	7.7	7.7	7.7	8.1	7.9	8.0	7.9	7.8	7.9	7.8	7.7	7.7
8	7.7	7.7	7.7	8.2	8.0	8.1	8.0	7.9	7.9	7.7	7.7	7.7
9	7.8	7.7	7.8	8.2	8.0	8.0	7.9	7.8	7.9	7.7	7.6	7.6
10	7.8	7.8	7.8	8.2	8.0	8.0	8.0	7.8	7.9	7.8	7.5	7.6
11	7.8	7.5	7.7	8.2	7.9	8.0	8.1	7.9	8.0	7.7	7.5	7.5
12	7.6	7.4	7.5	8.1	7.9	8.0	8.2	7.9	8.0	7.8	7.6	7.7
13	7.4	7.3	7.4	8.0	7.6	7.7	8.2	7.9	8.0	7.9	7.6	7.7
14	7.3	7.2	7.3	7.7	7.6	7.7	8.5	8.0	8.3	7.9	7.7	7.7
15	7.2	7.2	7.2	7.8	7.7	7.7	8.6	8.1	8.3	8.0	7.6	7.8
16	7.2	7.1	7.2	8.0	7.8	7.8	8.7	8.2	8.4	8.3	7.7	8.0
17	7.2	7.2	7.2	8.0	7.7	7.8	8.8	8.2	8.4	7.9	7.7	7.8
18	7.4	7.2	7.4	8.2	7.8	8.0	9.0	8.3	8.4	7.8	7.6	7.7
19	7.5	7.4	7.5	8.2	7.9	8.0	---	---	---	7.7	7.5	7.5
20	7.6	7.5	7.6	8.5	8.0	8.3	---	---	---	7.7	7.4	7.5
21	7.7	7.6	7.6	8.9	8.2	8.6	---	---	---	7.7	7.4	7.5
22	7.8	7.7	7.7	8.6	8.3	8.5	---	---	---	7.9	7.5	7.7
23	7.8	7.8	7.8	8.5	8.2	8.4	---	---	---	7.9	7.5	7.7
24	7.8	7.8	7.8	8.4	7.8	8.0	7.7	7.7	7.7	8.1	7.6	7.8
25	7.8	7.7	7.8	7.9	7.8	7.8	7.7	7.7	7.7	8.2	7.7	7.8
26	7.8	7.7	7.8	7.9	7.8	7.8	7.7	7.7	7.7	8.3	7.8	7.9
27	7.8	7.8	7.8	7.9	7.8	7.8	7.8	7.6	7.7	8.5	7.8	7.9
28	7.9	7.8	7.8	7.9	7.8	7.8	7.8	7.7	7.7	8.6	7.9	8.1
29	7.9	7.8	7.9	7.9	7.8	7.8	7.7	7.4	7.5	8.1	7.8	7.9
30	7.9	7.8	7.8	8.0	7.8	7.8	7.6	7.5	7.5	8.2	7.6	7.8
31	---	---	---	8.5	7.8	7.9	7.6	7.5	7.5	---	---	---
MAX	7.9	7.8	7.9	8.9	8.3	8.6	9.0	8.3	8.4	8.6	7.9	8.1
MIN	7.2	7.1	7.2	7.7	7.6	7.7	7.6	7.4	7.5	7.7	7.4	7.5
YEAR	MAX	MAXIMUM	9.0	MIN	MAXIMUM	8.3	MEDIAN	MAXIMUM	8.6			
		MINIMUM	7.2		MINIMUM	7.1		MINIMUM	7.2			

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

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	12.9	12.3	12.6	12.9	11.9	12.5	4.3	3.9	4.1	---	---	---
2	12.7	11.4	12.1	14.6	12.7	13.7	4.2	3.9	4.0	---	---	---
3	11.9	10.9	11.4	15.4	13.8	14.6	4.1	3.7	3.9	---	---	---
4	12.2	11.3	11.7	16.1	14.4	15.2	4.7	4.0	4.3	---	---	---
5	13.0	11.0	12.0	15.9	14.7	15.3	4.9	4.6	4.7	---	---	---
6	13.4	11.2	12.3	14.7	12.8	13.9	5.0	4.7	4.8	---	---	---
7	13.6	11.3	12.5	12.8	10.8	11.9	4.7	4.1	4.4	---	---	---
8	14.7	12.2	13.4	10.8	8.5	9.7	4.5	3.9	4.2	---	---	---
9	15.3	13.1	14.4	9.0	7.2	7.9	5.5	4.4	4.9	---	---	---
10	16.6	14.9	15.7	8.1	6.4	7.2	6.5	5.4	5.8	---	---	---
11	17.6	14.9	16.1	8.8	7.4	8.2	6.5	5.3	6.1	---	---	---
12	17.9	15.8	16.5	10.2	8.7	9.3	5.3	3.6	4.4	---	---	---
13	17.8	14.5	15.8	8.7	6.9	7.7	3.6	2.6	2.9	---	---	---
14	15.4	14.1	15.0	6.9	5.9	6.4	2.9	2.5	2.7	---	---	---
15	14.1	13.0	13.5	6.5	6.1	6.3	3.3	2.9	3.1	---	---	---
16	13.0	12.1	12.4	7.1	6.5	6.8	4.1	3.1	3.6	---	---	---
17	12.1	11.6	11.8	8.2	6.9	7.5	4.1	3.5	3.9	---	---	---
18	12.0	11.1	11.6	9.7	7.5	8.5	3.5	3.0	3.2	---	---	---
19	12.4	11.2	11.8	10.4	9.7	9.9	3.0	2.8	2.9	---	---	---
20	13.7	11.9	12.8	10.0	9.2	9.6	3.0	2.5	2.7	---	---	---
21	14.0	13.1	13.5	10.1	9.4	9.7	5.7	2.0	3.7	---	---	---
22	13.5	12.7	13.1	10.1	9.2	9.7	3.9	2.4	2.8	---	---	---
23	12.8	11.4	12.3	11.3	10.1	10.7	---	---	---	---	---	---
24	12.2	10.2	11.1	10.9	8.2	9.8	---	---	---	---	---	---
25	11.8	10.6	11.3	8.2	6.6	7.3	---	---	---	---	---	---
26	11.8	10.9	11.3	6.9	6.3	6.5	---	---	---	---	---	---
27	10.9	10.3	10.7	6.6	6.1	6.3	---	---	---	---	---	---
28	10.3	9.8	10.0	6.7	5.5	6.3	---	---	---	---	---	---
29	---	---	---	5.5	4.2	4.8	---	---	---	---	---	---
30	---	---	---	4.2	3.8	4.0	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	17.9	9.8	12.8	16.1	3.8	9.2	6.5	2.0	4.0	---	---	---

03219500 Scioto River near Prospect, Ohio—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	7.9	7.3	7.6	9.7	9.2	9.4	11.9	11.3	11.5	---	---	---
2	9.3	7.9	8.6	9.8	9.2	9.6	11.9	11.4	11.6	---	---	---
3	10.1	9.0	9.4	9.3	8.9	9.1	11.7	11.6	11.7	---	---	---
4	9.5	9.2	9.3	9.3	8.6	8.9	12.3	11.7	11.9	---	---	---
5	9.8	9.0	9.4	9.3	8.7	9.1	12.2	11.7	12.1	---	---	---
6	9.8	8.9	9.3	9.4	8.9	9.2	12.1	11.6	11.8	---	---	---
7	10.2	9.3	9.7	10.0	7.7	9.5	12.8	11.9	12.3	---	---	---
8	9.9	9.2	9.5	11.4	9.6	10.6	13.0	12.4	12.6	---	---	---
9	9.3	8.2	8.9	12.3	10.7	11.5	12.8	12.2	12.5	---	---	---
10	9.1	7.8	8.1	13.2	11.4	12.2	12.5	11.2	11.9	---	---	---
11	9.2	7.7	8.3	12.5	11.6	12.0	11.5	10.5	10.8	---	---	---
12	9.3	7.5	8.1	12.6	11.2	11.8	11.9	10.9	11.4	---	---	---
13	9.7	7.4	8.2	12.8	11.6	12.0	13.0	11.9	12.4	---	---	---
14	8.1	7.2	7.5	13.2	11.5	12.2	12.6	12.5	12.5	---	---	---
15	9.1	5.4	6.6	12.6	11.8	12.1	13.4	12.6	13.0	---	---	---
16	6.2	5.5	5.7	12.5	11.7	12.0	13.6	12.9	13.2	---	---	---
17	6.4	5.7	6.1	12.6	10.8	11.7	13.2	12.2	12.7	---	---	---
18	7.1	6.2	6.6	11.4	10.5	10.9	13.3	12.8	13.1	---	---	---
19	8.7	7.1	7.8	11.2	10.5	10.8	13.6	13.2	13.3	---	---	---
20	9.4	8.6	8.8	10.7	8.8	9.4	13.9	13.3	13.6	---	---	---
21	8.9	8.5	8.7	9.2	8.7	9.0	---	---	---	---	---	---
22	9.2	8.5	8.8	10.8	9.1	9.8	---	---	---	---	---	---
23	9.2	8.5	8.8	10.8	10.4	10.6	---	---	---	---	---	---
24	9.9	9.0	9.4	11.5	10.5	11.0	---	---	---	---	---	---
25	10.2	9.1	9.4	12.7	11.5	12.0	---	---	---	---	---	---
26	9.4	7.1	8.7	13.1	11.9	12.4	---	---	---	---	---	---
27	7.1	6.3	6.8	12.7	10.9	11.8	---	---	---	---	---	---
28	7.4	6.8	7.2	10.9	10.5	10.6	---	---	---	---	---	---
29	---	---	---	11.3	10.6	10.9	---	---	---	---	---	---
30	---	---	---	12.1	11.1	11.6	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	10.2	5.4	8.3	13.2	7.7	10.8	13.9	10.5	12.3	---	---	---

DAY	FEBRUARY			MARCH			APRIL			MAY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	---	---	---	---	---	---	9.4	8.7	9.0	9.6	8.5	8.9
2	---	---	---	---	---	---	9.6	9.2	9.4	9.6	8.6	9.0
3	---	---	---	---	---	---	9.8	9.5	9.6	9.5	8.7	9.0
4	---	---	---	---	---	---	9.8	9.4	9.6	9.3	8.1	8.7
5	---	---	---	---	---	---	10.1	9.4	9.7	8.6	7.3	7.8
6	---	---	---	---	---	---	9.7	5.4	8.7	7.6	6.8	7.1
7	---	---	---	---	---	---	10.8	4.2	8.9	7.9	6.5	6.9
8	---	---	---	---	---	---	11.3	9.6	10.4	6.5	5.4	6.0
9	---	---	---	---	---	---	11.3	9.1	9.9	6.3	4.7	5.8
10	---	---	---	---	---	---	12.3	9.2	10.3	5.3	4.4	4.8
11	---	---	---	---	---	---	12.4	8.9	10.1	6.0	4.7	5.5
12	---	---	---	---	---	---	12.2	9.1	10.3	5.4	4.8	5.1
13	---	---	---	---	---	---	13.4	9.8	11.5	5.3	4.1	4.8
14	---	---	---	---	---	---	13.1	10.0	10.8	4.4	3.1	3.7
15	---	---	---	---	---	---	10.5	9.5	10.0	6.8	1.7	5.0
16	---	---	---	---	---	---	9.6	8.6	9.1	6.8	6.3	6.6
17	---	---	---	---	---	---	9.3	8.6	8.9	7.5	6.8	7.3
18	---	---	---	---	---	---	10.6	8.5	9.1	7.6	6.9	7.3
19	---	---	---	---	---	---	13.5	7.9	9.1	7.1	5.4	6.2
20	---	---	---	---	---	---	12.7	8.3	9.6	5.4	4.7	5.1
21	---	---	---	---	---	---	11.5	7.4	9.4	9.3	4.7	5.5
22	---	---	---	---	---	---	11.3	9.8	10.7	6.2	5.7	5.9
23	---	---	---	---	---	---	---	---	---	5.8	4.8	5.4
24	---	---	---	---	---	---	---	---	---	5.0	4.5	4.7
25	---	---	---	13.1	11.0	11.9	---	---	---	4.8	4.2	4.6
26	---	---	---	12.4	9.7	11.6	---	---	---	4.6	4.3	4.4
27	---	---	---	9.7	8.5	9.1	---	---	---	5.5	4.3	5.1
28	---	---	---	9.1	7.8	8.7	---	---	---	6.7	5.5	6.2
29	---	---	---	9.0	8.6	8.8	10.4	9.3	9.9	6.8	5.8	6.4
30	---	---	---	9.1	8.6	8.9	10.6	8.8	9.8	8.0	6.8	7.3
31	---	---	---	8.9	8.6	8.7	---	---	---	7.9	5.7	6.8
MONTH	---	---	---	13.1	7.8	9.7	13.5	4.2	9.7	9.6	1.7	6.2

03220000 Mill Creek near Bellepoint, Ohio

LOCATION.—Latitude 40°14'54", longitude 83°10'26", Delaware County, Hydrologic Unit 05060001, on left bank at downstream side of county road bridge, 1.2 mi west of Bellepoint, Ohio, 1.5 mi upstream from mouth, and 2.3 mi downstream from Blues Creek.

DRAINAGE AREA.—178 mi².

PERIOD OF RECORD.—October 1942 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.—WSP 1908: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 865.14 ft, National Geodetic Vertical Datum of 1912 (levels by students of The Ohio State University, City of Columbus bench mark). Prior to Jan. 1, 1948, nonrecording gage at same site and datum.

REMARKS.—Records fair except for periods of estimated record, which are poor. Water-quality data formerly collected at this site. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.—A stage of 18 ft occurred in Mar. 1913.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101	e120	267	221	e20	254	440	94	590	34	67	27
2	73	e98	171	1650	e19	845	317	1550	218	28	36	19
3	58	e80	121	1140	e43	433	297	2430	113	29	23	14
4	53	e70	93	3080	e316	320	192	489	76	27	20	12
5	48	e60	208	5040	318	549	133	214	59	44	27	12
6	42	e50	800	1900	1920	387	103	136	51	32	22	10
7	41	e40	390	310	1270	196	89	107	45	25	15	8.5
8	38	e23	202	175	376	137	79	108	42	19	13	12
9	35	e20	143	124	192	110	69	79	37	19	10	24
10	31	e17	474	e80	218	89	60	66	33	19	7.4	25
11	29	e14	1380	e70	242	81	55	58	390	23	6.2	16
12	27	e20	476	e60	226	72	56	62	2020	21	6.4	13
13	24	e46	184	e54	204	63	128	56	2040	16	5.4	9.0
14	30	e60	124	e47	132	56	952	52	2940	17	6.2	7.8
15	281	e74	101	e42	e80	53	437	84	2530	14	6.6	8.9
16	329	e50	134	e39	e72	61	173	194	1330	12	5.5	7.8
17	e240	e44	642	e36	e68	67	117	117	886	17	4.8	13
18	e180	e37	316	e33	e64	78	88	171	805	25	4.6	15
19	e150	e60	153	e31	79	375	72	459	376	17	6.9	16
20	e100	e200	112	e28	307	819	66	1140	160	13	114	9.7
21	e80	140	86	e27	611	836	65	509	106	16	882	10
22	e70	85	80	e26	337	331	71	2300	83	23	213	11
23	e60	64	172	e25	175	169	227	1620	68	38	77	8.5
24	e56	58	1200	e24	244	127	289	244	58	28	43	6.8
25	e60	70	517	e23	245	111	178	136	80	26	27	6.7
26	e170	70	195	e22	148	103	193	95	61	21	22	7.7
27	e600	1020	127	e22	126	323	151	76	52	22	26	7.0
28	e440	3470	104	e21	120	389	97	69	42	21	29	6.0
29	e300	2320	110	e21	122	201	74	59	40	16	42	5.4
30	e250	552	1040	e20	---	2000	69	49	35	13	25	42
31	e160	---	612	e20	---	1430	---	478	---	58	26	---
TOTAL	4156	9032	10734	14411	8294	11065	5337	13301	15366	733	1819.0	390.8
MEAN	134	301	346	465	286	357	178	429	512	23.6	58.7	13.0
MAX	600	3470	1380	5040	1920	2000	952	2430	2940	58	882	42
MIN	24	14	80	20	19	53	55	49	33	12	4.6	5.4
CFSM	0.75	1.69	1.95	2.61	1.61	2.01	1.00	2.41	2.88	0.13	0.33	0.07
IN.	0.87	1.89	2.24	3.01	1.73	2.31	1.12	2.78	3.21	0.15	0.38	0.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2004, BY WATER YEAR (WY)

MEAN	30.9	100	176	252	279	327	294	190	155	81.1	39.5	31.7
MAX	449	553	1130	1227	768	963	874	746	734	769	332	416
(WY)	1987	1973	1991	1950	1975	1978	1972	1996	1997	1992	1979	2003
MIN	0.90	1.99	2.17	3.82	8.09	36.1	29.6	10.5	5.19	1.33	1.75	1.00
(WY)	1954	1964	1964	1977	1964	1983	1971	1955	1988	1944	1965	1944

	SUMMARY STATISTICS		FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1944-2004	
	ANNUAL TOTAL	ANNUAL MEAN	HIGHEST ANNUAL MEAN	LOWEST ANNUAL MEAN	HIGHEST DAILY MEAN	LOWEST DAILY MEAN	ANNUAL SEVEN-DAY MINIMUM	MAXIMUM PEAK FLOW
ANNUAL TOTAL			112729		94638.8			
ANNUAL MEAN			309		259		162	
HIGHEST ANNUAL MEAN							283	2003
LOWEST ANNUAL MEAN							51.4	1954
HIGHEST DAILY MEAN			3550	Jul 9	5040	Jan 5	12600	Jan 22 1959
LOWEST DAILY MEAN			11	Aug 26	4.6	Aug 18	0.00	Sep 25 1944
ANNUAL SEVEN-DAY MINIMUM			13	Feb 16	5.6	Aug 12	0.13	Sep 21 1944
MAXIMUM PEAK FLOW					6130	Jan 5a	21800	Jun 2 1997
MAXIMUM PEAK STAGE					9.20	Jan 5	14.45	Jun 2 1997
INSTANTANEOUS LOW FLOW					3.8	Aug 18	0.00	Sep 25 1977
ANNUAL RUNOFF (CFSM)			1.74		1.45		0.91	
ANNUAL RUNOFF (INCHES)			23.56		19.78		12.39	
10 PERCENT EXCEEDS			980		603		366	
50 PERCENT EXCEEDS			84		72		30	
90 PERCENT EXCEEDS			21		14		4.2	

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

03220510 Scioto River at O'Shaughnessy Dam, Ohio

LOCATION.—Latitude 40°09'14", longitude 83°07'33", Delaware County, Hydrologic Unit 05060001, 200 ft downstream from dam.

DRAINAGE AREA.—979 mi².

Water-Quality Records

PERIOD OF RECORD.—June 1998 to current year.

PERIOD OF DAILY RECORD—

SPECIFIC CONDUCTANCE: June 1998 to current year.

pH: June 1998 to current year.

WATER TEMPERATURE: June 1998 to current year.

DISSOLVED OXYGEN: June 1998 to current year.

INSTRUMENTATION.—Water-quality monitor. Electronic data logger. Set for 1-hour interval. Satellite telemeter at station.

REMARKS.—Interruptions in the water-quality record are due to malfunction of the instrument. Specific conductance records are good except Mar. 31-May 17, which are fair. pH records are good except Oct. 10-16, Dec. 12-Jan. 21, June 22-July 6, Aug. 18-Sept. 14, and Sept. 28-30, which are fair. Water temperature records are good. Dissolved oxygen records are fair except Oct. 1-Nov. 11, Dec. 10-Jan. 21, Feb. 4-Mar. 31, Apr. 30-May 28, June 22-July 6, and Aug. 2-Sept. 28, which are poor.

EXTREMES FOR PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: Maximum, 1,400 microsiemens, Dec. 21, 1998; minimum, 144 microsiemens, May 24, 2004.

pH: Maximum, 9.1 units, Apr. 8, 2001; minimum, 5.8 units Mar. 28, 2002

WATER TEMPERATURE: Maximum, 30.5° C, July 30, 1999; minimum, 0.3° C, Jan. 9, 2004.

DISSOLVED OXYGEN: Maximum, 17.5 mg/L, May 12, 2001; minimum, 0.2 mg/L, Aug. 13,14, 1999, Aug. 25 and 26, 2000.

EXTREMES FOR CURRENT YEAR.—

SPECIFIC CONDUCTANCE: Maximum, 900 microsiemens, Feb. 5; minimum, 144 microsiemens, May 24.

pH: Maximum, 8.2 units, May 19; minimum, 76.8 units, Sept. 10.

WATER TEMPERATURE: Maximum, 28.0° C, July 13; minimum, 6.8° C, Jan. 9.

DISSOLVED OXYGEN: Maximum, 15.7 mg/L, Dec. 24 and 25; minimum, 0.6 mg/L, Sept. 15.

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

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	474	370	430	633	612	625	323	307	315	542	504	519
2	486	421	455	633	625	630	353	323	335	515	449	470
3	501	459	478	642	626	634	422	353	390	458	401	425
4	518	480	494	654	641	647	458	422	445	406	386	394
5	504	491	497	669	642	655	471	418	449	406	203	256
6	556	477	497	669	662	665	490	421	463	233	204	218
7	514	481	494	671	663	668	556	489	519	233	229	231
8	511	498	501	676	665	671	578	547	556	259	233	242
9	---	---	---	679	668	673	608	578	586	315	259	278
10	---	---	---	711	674	686	629	561	587	465	315	406
11	499	478	489	769	711	740	598	561	570	611	465	504
12	521	494	509	790	729	747	612	444	528	553	488	527
13	527	519	523	790	766	774	444	410	429	584	552	570
14	611	512	547	771	756	762	505	422	448	593	581	586
15	608	538	572	777	761	768	559	497	524	604	585	591
16	653	560	584	781	772	776	556	518	536	620	559	574
17	708	653	684	793	765	776	536	490	510	579	559	570
18	708	665	691	865	793	826	666	494	568	623	577	591
19	710	649	673	855	809	824	668	633	659	654	612	627
20	697	647	675	812	754	778	663	621	644	628	610	616
21	656	627	647	785	753	761	672	654	663	634	610	622
22	692	617	650	822	785	802	674	663	671	636	629	633
23	670	650	655	821	813	818	679	642	668	645	624	636
24	654	645	651	819	808	816	655	607	621	641	628	635
25	654	645	650	818	806	812	679	516	630	660	640	651
26	660	638	653	811	798	803	516	426	457	735	659	703
27	638	605	615	800	718	767	480	415	435	811	663	713
28	733	629	689	718	379	578	530	478	489	809	736	769
29	653	608	638	379	297	324	558	488	520	823	743	770
30	620	606	611	307	294	301	558	488	517	752	740	745
31	618	603	611	---	---	---	647	527	591	763	752	757
MONTH	733	370	581	865	294	704	679	307	527	823	203	543

03220510 Scioto River at O'Shaughnessy Dam, Ohio—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
1	7.5	7.3	7.4	7.4	7.4	7.4	7.6	7.6	7.6	7.6	7.5	7.5
2	7.4	7.3	7.3	7.5	7.4	7.4	7.8	7.6	7.7	7.5	7.5	7.5
3	7.3	7.3	7.3	7.5	7.4	7.4	7.8	7.7	7.8	7.5	7.4	7.4
4	7.4	7.3	7.3	7.6	7.4	7.5	7.8	7.7	7.8	7.6	7.4	7.5
5	7.4	7.3	7.4	7.6	7.4	7.5	7.8	7.6	7.7	7.5	7.4	7.4
6	7.5	7.3	7.4	7.6	7.5	7.5	7.8	7.8	7.8	7.5	7.3	7.4
7	7.5	7.4	7.4	7.8	7.5	7.6	7.9	7.8	7.9	7.5	7.4	7.5
8	7.5	7.4	7.4	7.9	7.5	7.6	7.9	7.9	7.9	7.5	7.4	7.4
9	---	---	---	7.9	7.5	7.6	7.9	7.8	7.8	7.4	7.3	7.4
10	---	---	---	7.9	7.5	7.6	7.8	7.5	7.7	7.3	7.0	7.1
11	7.2	7.0	7.1	7.7	7.5	7.6	7.8	7.7	7.8	7.2	7.0	7.0
12	7.3	7.1	7.2	7.6	7.4	7.5	7.9	7.7	7.8	7.2	7.1	7.1
13	7.3	7.2	7.2	7.7	7.4	7.5	7.7	7.6	7.6	7.1	7.1	7.1
14	7.3	7.2	7.2	7.7	7.5	7.5	7.6	7.3	7.5	7.2	7.1	7.2
15	7.6	7.2	7.4	7.6	7.5	7.5	7.3	7.2	7.3	7.2	7.1	7.2
16	7.6	7.4	7.5	7.7	7.5	7.5	7.4	7.3	7.4	7.2	7.1	7.2
17	7.5	7.5	7.5	7.8	7.5	7.6	7.6	7.2	7.4	7.3	7.2	7.2
18	7.5	7.3	7.4	7.8	7.5	7.7	7.7	7.5	7.6	7.3	7.2	7.3
19	7.4	7.2	7.4	7.8	7.6	7.7	7.6	7.4	7.5	7.4	7.3	7.3
20	7.4	7.2	7.3	7.9	7.6	7.8	7.6	7.4	7.5	7.3	7.3	7.3
21	7.4	7.2	7.3	7.9	7.7	7.9	7.6	7.6	7.6	7.5	7.3	7.4
22	7.6	7.3	7.5	7.7	7.6	7.7	7.7	7.6	7.6	7.5	7.4	7.5
23	7.6	7.4	7.5	7.7	7.6	7.6	7.7	7.6	7.6	7.5	7.4	7.5
24	7.6	7.5	7.5	7.7	7.6	7.7	8.1	7.7	8.0	7.5	7.4	7.5
25	7.6	7.5	7.5	7.8	7.6	7.6	8.1	8.0	8.1	7.5	7.5	7.5
26	7.6	7.5	7.5	7.8	7.6	7.6	8.0	7.9	7.9	7.7	7.5	7.6
27	7.8	7.6	7.8	8.0	7.6	7.7	7.9	7.6	7.9	7.7	7.2	7.6
28	8.0	7.8	7.9	8.0	7.7	8.0	7.8	7.5	7.6	7.7	7.6	7.6
29	7.9	7.8	7.8	7.7	7.6	7.6	7.7	7.5	7.7	7.7	7.4	7.5
30	7.8	7.6	7.7	7.6	7.6	7.6	8.0	7.5	7.7	7.5	7.5	7.5
31	7.6	7.4	7.5	---	---	---	7.7	7.6	7.6	7.6	7.5	7.5
MAX	8.0	7.8	7.9	8.0	7.7	8.0	8.1	8.0	8.1	7.7	7.6	7.6
MIN	7.2	7.0	7.1	7.4	7.4	7.4	7.3	7.2	7.3	7.1	7.0	7.0

DAY	FEBRUARY			MARCH			APRIL			MAY		
	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
1	7.6	7.5	7.5	7.3	7.2	7.3	7.6	7.5	7.5	7.2	7.1	7.1
2	7.6	7.5	7.5	7.6	7.3	7.5	7.5	7.4	7.5	7.8	7.1	7.6
3	7.6	7.5	7.5	7.6	7.5	7.5	7.4	7.2	7.3	7.8	7.4	7.7
4	7.5	7.4	7.5	7.6	7.5	7.5	7.4	7.2	7.3	7.4	7.2	7.3
5	7.4	7.3	7.4	7.7	7.5	7.5	7.3	7.3	7.3	7.3	7.2	7.3
6	7.6	7.4	7.6	7.7	7.6	7.7	7.4	7.3	7.3	7.3	7.0	7.2
7	7.6	7.4	7.5	7.6	7.6	7.6	7.5	7.3	7.3	7.1	7.0	7.1
8	7.4	7.2	7.3	7.6	7.4	7.4	7.3	7.3	7.3	7.1	7.0	7.1
9	7.2	7.1	7.2	7.4	7.3	7.3	7.4	7.3	7.4	7.2	7.0	7.1
10	7.2	7.1	7.1	7.4	7.2	7.3	7.5	7.4	7.4	7.2	7.1	7.2
11	7.2	7.1	7.1	7.5	7.3	7.4	7.5	7.4	7.5	7.3	7.1	7.2
12	7.1	7.1	7.1	7.4	7.3	7.4	7.6	7.4	7.5	7.2	7.0	7.1
13	7.2	7.1	7.1	7.4	7.3	7.3	7.4	7.2	7.3	7.3	7.0	7.1
14	7.2	7.1	7.2	7.6	7.1	7.5	7.9	7.3	7.8	7.2	7.0	7.1
15	7.2	7.2	7.2	7.6	7.3	7.4	7.9	7.6	7.8	7.2	7.1	7.2
16	7.2	7.1	7.2	7.4	7.3	7.4	7.7	7.5	7.6	7.4	7.2	7.3
17	7.2	7.1	7.1	7.3	7.3	7.3	7.5	7.3	7.4	7.4	7.1	7.2
18	7.3	7.2	7.2	7.4	7.3	7.3	7.4	7.3	7.3	7.6	7.2	7.4
19	7.4	7.1	7.2	7.5	7.2	7.4	7.5	7.3	7.4	8.2	7.5	7.7
20	7.3	7.1	7.3	7.9	7.5	7.8	7.6	7.3	7.4	7.8	7.5	7.6
21	7.5	7.3	7.4	8.0	7.9	8.0	7.5	7.3	7.4	7.6	7.4	7.5
22	7.5	7.4	7.5	7.9	7.5	7.8	7.6	7.2	7.4	7.6	7.5	7.6
23	7.4	7.3	7.3	7.5	7.5	7.5	7.6	7.2	7.5	7.5	7.4	7.4
24	7.3	7.1	7.2	7.5	7.4	7.4	7.8	7.5	7.6	7.6	7.1	7.5
25	7.2	7.1	7.2	7.4	7.3	7.3	7.6	7.4	7.5	7.5	7.3	7.3
26	7.2	7.1	7.2	7.4	7.2	7.3	7.6	7.4	7.5	7.3	7.2	7.3
27	7.3	7.2	7.2	7.7	7.3	7.4	7.5	7.4	7.5	7.3	7.1	7.2
28	7.3	7.2	7.2	7.8	7.5	7.6	7.4	7.2	7.3	7.2	7.1	7.2
29	7.3	7.2	7.2	7.6	7.5	7.5	7.3	7.3	7.3	7.1	7.1	7.1
30	---	---	---	7.9	7.4	7.8	7.3	7.1	7.2	7.2	7.1	7.1
31	---	---	---	7.9	7.6	7.7	---	---	---	7.5	7.2	7.4
MAX	7.6	7.5	7.6	8.0	7.9	8.0	7.9	7.6	7.8	8.2	7.5	7.7
MIN	7.1	7.1	7.1	7.3	7.1	7.3	7.3	7.1	7.2	7.1	7.0	7.1

03220510 Scioto River at O’Shaughnessy Dam, Ohio—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
1	7.6	7.3	7.4	7.5	7.2	7.3	---	---	---	7.5	7.0	7.2
2	7.3	7.3	7.3	7.8	7.2	7.4	---	---	---	7.3	7.0	7.2
3	7.3	7.2	7.3	7.3	7.0	7.2	7.6	7.2	7.4	7.1	6.9	7.0
4	7.2	7.1	7.2	7.1	7.0	7.0	7.4	7.2	7.3	7.6	6.9	7.2
5	7.1	7.0	7.1	7.6	7.1	7.2	7.6	7.3	7.4	7.5	7.1	7.4
6	7.0	7.0	7.0	7.4	7.2	7.3	7.4	7.3	7.4	7.1	6.9	7.0
7	7.0	7.0	7.0	---	---	---	7.5	7.2	7.3	7.2	7.0	7.1
8	7.1	7.0	7.1	7.5	7.3	7.4	7.4	7.2	7.3	7.2	7.0	7.1
9	7.1	7.1	7.1	7.5	7.4	7.4	7.4	7.2	7.3	7.0	7.0	7.0
10	---	---	---	7.8	7.3	7.5	7.4	7.2	7.2	7.0	6.8	7.0
11	---	---	---	7.6	7.2	7.4	7.5	7.2	7.2	7.0	6.9	7.0
12	---	---	---	7.7	7.2	7.4	7.8	7.2	7.3	7.0	7.0	7.0
13	---	---	---	7.9	7.4	7.6	7.5	7.3	7.4	7.0	7.0	7.0
14	---	---	---	7.7	7.3	7.6	7.9	7.3	7.5	7.2	6.9	7.0
15	---	---	---	---	---	---	7.4	7.2	7.3	7.0	7.0	7.0
16	---	---	---	---	---	---	7.3	7.2	7.2	7.2	7.0	7.1
17	---	---	---	---	---	---	7.2	7.2	7.2	7.3	7.1	7.2
18	---	---	---	---	---	---	7.4	7.2	7.3	7.4	7.2	7.3
19	---	---	---	---	---	---	7.7	7.3	7.3	7.5	7.2	7.2
20	---	---	---	---	---	---	7.4	7.2	7.3	7.3	7.1	7.2
21	---	---	---	---	---	---	7.9	7.3	7.7	7.2	7.1	7.1
22	---	---	---	---	---	---	7.5	7.3	7.3	7.6	7.1	7.3
23	7.4	7.3	7.3	---	---	---	7.3	7.2	7.2	7.8	7.1	7.2
24	7.3	7.2	7.2	---	---	---	7.5	7.2	7.2	7.4	7.1	7.3
25	7.4	7.3	7.3	---	---	---	7.2	7.1	7.1	8.0	7.3	7.5
26	7.3	7.2	7.3	---	---	---	7.2	7.1	7.1	7.8	7.5	7.6
27	7.3	7.2	7.2	---	---	---	7.2	7.2	7.2	7.8	7.4	7.5
28	7.3	7.2	7.2	---	---	---	7.3	7.0	7.2	7.8	7.4	7.6
29	7.3	7.2	7.3	---	---	---	7.4	7.1	7.1	7.6	7.4	7.5
30	7.3	7.2	7.2	---	---	---	7.5	7.4	7.4	7.5	7.3	7.4
31	---	---	---	---	---	---	7.5	7.3	7.3	---	---	---
MAX	7.6	7.3	7.4	7.9	7.4	7.6	7.9	7.4	7.7	8.0	7.5	7.6
MIN	7.0	7.0	7.0	7.1	7.0	7.0	7.2	7.0	7.1	7.0	6.8	7.0
YEAR	MAX	MAXIMUM 8.2	MINIMUM 7.0	MIN	MAXIMUM 8.0	MINIMUM 6.8	MEDIAN	MAXIMUM 8.1	MINIMUM 7.0			

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

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	14.9	14.1	14.4	12.0	11.1	11.6	4.1	3.9	4.0	3.6	3.4	3.5
2	14.3	13.7	14.0	12.1	11.7	11.9	4.0	3.7	3.8	4.0	3.6	3.8
3	14.1	13.6	13.8	12.5	11.5	12.0	3.8	3.7	3.7	5.6	4.0	4.8
4	13.9	13.5	13.7	13.2	12.2	12.5	3.8	3.7	3.7	7.1	5.6	6.4
5	13.9	13.2	13.6	13.8	12.2	13.0	3.7	3.4	3.6	7.0	4.2	5.3
6	14.4	13.1	13.7	13.2	12.6	13.0	3.4	3.3	3.3	4.2	2.3	3.3
7	13.9	13.2	13.5	12.8	11.9	12.4	3.4	3.1	3.2	2.3	0.7	1.3
8	13.6	12.9	13.2	12.1	10.9	11.5	3.8	3.3	3.6	0.7	0.4	0.5
9	---	---	---	11.7	10.5	10.9	4.0	3.8	3.9	0.5	0.3	0.4
10	---	---	---	11.5	10.4	10.8	4.2	3.8	4.0	1.2	0.5	0.8
11	14.5	13.3	13.9	11.2	10.8	11.1	4.4	3.8	3.9	2.1	1.0	1.2
12	16.0	14.1	15.0	11.6	10.8	11.3	5.4	4.4	5.1	1.5	0.9	1.2
13	15.7	14.7	15.2	10.8	9.3	10.1	5.0	4.0	4.4	1.3	1.1	1.2
14	14.7	13.0	14.1	9.9	9.3	9.6	4.1	3.5	3.7	1.3	1.1	1.2
15	14.3	13.4	13.9	9.5	9.3	9.4	4.0	3.3	3.5	1.3	1.1	1.2
16	14.2	13.8	14.0	9.7	9.3	9.5	3.7	2.8	3.3	1.5	1.2	1.3
17	14.0	13.6	13.8	9.9	9.0	9.4	2.9	2.3	2.6	1.4	1.2	1.3
18	13.6	12.9	13.2	9.7	9.0	9.2	3.1	2.2	2.5	1.5	0.6	1.4
19	13.9	12.6	13.2	9.9	9.2	9.5	2.5	2.2	2.4	1.6	1.2	1.4
20	13.4	12.6	13.1	9.5	9.1	9.3	2.2	1.9	2.1	1.7	1.5	1.5
21	13.3	12.5	12.9	9.5	9.1	9.3	2.6	2.1	2.4	1.7	1.5	1.6
22	13.1	12.3	12.8	9.8	9.3	9.6	2.7	2.4	2.5	1.7	1.5	1.6
23	12.6	11.9	12.3	10.3	9.8	10.0	2.9	2.5	2.8	1.7	1.5	1.6
24	12.9	11.6	12.1	10.1	9.0	9.6	2.5	2.1	2.2	1.7	1.5	1.6
25	12.8	11.6	12.2	9.0	8.6	8.8	3.2	2.3	2.8	1.5	1.4	1.5
26	12.6	11.9	12.3	9.0	8.6	8.8	3.2	2.7	3.0	1.6	1.2	1.4
27	12.1	11.8	12.0	8.8	8.7	8.8	2.7	2.4	2.6	2.4	1.3	1.7
28	11.8	11.2	11.4	8.7	6.6	7.6	2.9	2.5	2.7	2.2	1.1	1.5
29	11.4	10.7	11.2	6.6	4.8	5.9	2.9	2.6	2.7	1.7	1.3	1.5
30	10.8	10.6	10.7	4.8	4.0	4.3	2.9	2.3	2.5	1.7	1.5	1.6
31	11.1	10.8	11.0	---	---	---	3.7	2.4	3.3	1.7	1.5	1.5
MONTH	16.0	10.6	13.1	13.8	4.0	10.0	5.4	1.9	3.2	7.1	0.3	1.9

03220510 Scioto River at O’Shaughnessy Dam, Ohio—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	6.9	6.1	6.3	11.0	10.2	10.7	14.4	14.1	14.2	12.1	11.8	11.9
2	7.0	6.4	6.7	11.1	10.2	10.5	14.4	14.3	14.4	12.4	11.8	12.2
3	6.4	6.1	6.2	11.7	9.9	10.5	14.3	14.2	14.2	12.3	11.6	11.9
4	6.7	6.2	6.5	11.9	9.8	10.4	14.2	13.8	14.0	12.3	11.4	11.9
5	6.8	6.3	6.5	11.9	9.4	10.1	14.2	13.6	13.8	13.8	12.1	13.0
6	6.8	6.2	6.6	10.8	9.4	9.8	14.4	14.2	14.4	14.2	13.5	13.8
7	6.9	6.2	6.5	12.4	8.8	10.1	14.5	14.3	14.4	14.5	14.2	14.4
8	6.6	6.1	6.3	13.2	8.8	10.2	14.3	13.9	14.1	14.4	13.9	14.2
9	---	---	---	13.3	9.3	10.4	14.0	13.7	13.8	13.9	13.4	13.7
10	---	---	---	14.2	9.5	10.9	13.7	11.6	12.8	13.4	11.8	12.5
11	8.5	6.9	7.5	10.8	9.0	9.7	13.5	12.7	13.2	11.9	9.5	11.6
12	10.2	7.1	8.4	12.4	9.0	10.0	13.4	11.1	12.1	12.3	11.6	11.9
13	9.7	7.7	8.5	12.6	9.3	10.5	11.8	11.2	11.6	11.8	11.6	11.7
14	7.7	6.0	7.0	14.4	10.0	11.7	12.0	11.4	11.8	11.8	11.7	11.7
15	10.8	6.8	8.2	12.2	10.3	10.9	11.8	11.4	11.6	11.9	11.6	11.8
16	8.3	6.3	7.6	12.8	10.4	11.1	12.9	11.8	12.3	11.8	10.9	11.7
17	6.9	6.2	6.6	15.1	10.4	11.9	13.7	12.6	13.1	11.9	11.7	11.8
18	6.4	5.0	5.5	14.4	9.5	10.9	14.2	13.2	13.7	12.3	10.9	11.7
19	6.3	4.6	5.5	11.8	9.3	9.9	14.2	13.5	13.8	12.2	11.6	11.9
20	5.5	4.1	5.0	10.8	9.6	10.4	14.2	13.7	14.0	11.8	11.5	11.7
21	5.6	4.2	5.0	10.9	10.4	10.8	14.2	13.8	14.0	11.8	11.5	11.7
22	9.6	5.3	7.4	10.6	9.8	10.3	13.9	13.7	13.8	11.6	11.4	11.5
23	10.7	8.6	9.7	11.0	9.5	10.0	14.3	13.6	13.8	11.6	11.4	11.5
24	12.3	9.6	10.2	10.6	9.3	9.8	15.7	14.3	15.4	11.5	11.4	11.5
25	11.9	9.3	10.2	13.1	9.9	10.9	15.7	14.5	15.2	11.6	11.4	11.5
26	11.6	9.3	10.1	12.8	10.1	10.9	14.5	13.9	14.2	11.9	11.4	11.7
27	11.5	10.2	11.2	12.1	10.1	10.9	13.9	12.8	13.6	12.2	9.4	11.5
28	11.7	11.5	11.6	12.9	12.0	12.5	12.9	12.1	12.8	12.2	11.8	12.0
29	11.8	11.6	11.7	13.7	12.9	13.2	12.7	12.1	12.4	12.0	11.3	11.6
30	11.9	11.4	11.7	14.2	13.7	13.9	13.0	12.0	12.6	11.4	11.3	11.3
31	11.6	11.0	11.3	---	---	---	12.8	12.1	12.3	11.4	11.2	11.3
MONTH	12.3	4.1	8.0	15.1	8.8	10.8	15.7	11.1	13.5	14.5	9.4	12.1

DAY	FEBRUARY			MARCH			APRIL			MAY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	11.3	11.0	11.2	11.7	11.4	11.5	9.9	9.6	9.8	7.6	6.0	6.8
2	11.4	11.3	11.4	13.6	11.7	12.3	9.8	9.6	9.7	9.9	6.7	8.3
3	11.4	11.0	11.2	12.3	12.0	12.1	9.6	9.3	9.5	10.6	9.9	10.2
4	11.0	10.7	10.9	12.0	11.6	11.8	9.9	9.3	9.7	10.5	9.3	9.8
5	10.9	10.7	10.8	13.1	11.3	12.1	10.0	9.6	9.8	9.3	9.0	9.2
6	12.6	10.8	11.7	13.0	11.8	12.6	9.9	9.4	9.7	9.1	7.9	8.6
7	12.6	12.3	12.5	11.8	11.4	11.5	9.9	9.2	9.5	8.1	7.8	7.9
8	12.3	11.7	12.0	11.4	10.4	10.8	9.4	9.1	9.2	7.8	7.3	7.6
9	11.7	11.3	11.4	10.7	10.3	10.5	9.6	9.1	9.4	7.6	7.2	7.4
10	11.3	10.9	11.1	10.4	10.0	10.2	10.0	9.3	9.7	7.6	6.9	7.3
11	11.0	10.6	10.8	10.7	10.0	10.4	10.3	9.5	9.8	9.0	6.8	7.4
12	10.7	10.5	10.6	10.7	10.3	10.5	10.4	9.5	9.8	7.8	5.8	6.7
13	10.8	10.6	10.7	10.7	10.3	10.5	10.0	9.1	9.6	7.9	5.2	6.6
14	10.9	10.6	10.8	11.4	9.9	10.9	10.5	9.3	10.2	7.2	5.2	6.2
15	11.0	10.9	11.0	11.1	10.6	10.8	10.5	7.7	9.9	8.2	5.9	7.5
16	11.1	10.8	11.0	11.2	10.6	10.8	10.4	9.4	10	8.5	6.7	7.7
17	11.2	10.0	10.9	11.0	10.4	10.7	9.8	8.9	9.4	6.7	4.6	5.2
18	11.5	11.1	11.2	11.0	10.4	10.7	9.5	8.6	9.0	9.1	5.8	7.0
19	11.3	10.5	11.0	11.2	10.4	10.8	9.1	8.1	8.6	9.3	6.6	8.0
20	12.6	10.6	11.6	12.1	11.1	11.7	9.6	7.6	8.5	7.8	7.0	7.3
21	12.4	11.8	12.1	12.4	11.9	12.2	8.2	7.5	7.9	7.8	6.4	7.2
22	12.4	11.9	12.3	12.2	11.2	11.8	8.9	7.5	8.0	9.3	7.4	8.9
23	11.9	11.1	11.6	11.2	10.7	11.0	9.0	7.5	8.3	9.3	8.9	9.2
24	11.1	10.5	10.7	10.8	10.3	10.6	8.7	7.8	8.3	9.0	4.7	8.0
25	10.9	10.5	10.7	11.0	10.3	10.6	7.8	7.0	7.3	7.5	5.2	6.4
26	11.3	10.9	11.1	10.9	9.7	10.6	9.0	7.6	8.2	5.3	4.4	5.0
27	11.6	11.2	11.4	10.8	10.1	10.4	9.1	7.6	8.2	4.4	3.3	3.9
28	11.8	11.3	11.5	10.9	10.2	10.6	7.8	6.0	7.2	4.8	3.1	4.1
29	11.6	11.3	11.5	10.2	8.8	9.7	7.6	6.0	7.0	4.6	4.1	4.5
30	---	---	---	10.4	8.5	9.4	7.1	6.0	6.7	4.3	3.5	4.0
31	---	---	---	---	---	---	---	---	---	7.2	4.1	5.9
MONTH	12.6	10.0	11.3	13.6	8.5	11.0	10.5	6.0	8.9	10.6	3.1	7.1

03223425 Whetstone Creek at Mount Gilead, Ohio

LOCATION.—Latitude 40°32'56", longitude 82°49'17", Morrow County, Hydrologic Unit 05060001, on left upstream bank at State Route 95 bridge on east side of Mount Gilead, Ohio, and 0.3 mi downstream from Mount Gilead Lakes in Mount Gilead State Park.

DRAINAGE AREA.—37.9 mi².

PERIOD OF RECORD.—October 1996 to current year.

GAGE.—Water-stage recorder and crest gage. Datum of gage is 1,074.00 ft above sea level.

REMARKS.—Records fair except for periods of estimated record, which are poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
1	21	13	98	63	e12	e62	132	32	121	7.9	9.1	3.7			
2	17	12	51	229	e11	e127	135	518	57	6.9	4.9	3.2			
3	14	11	37	125	e67	e80	100	230	39	6.2	3.7	2.7			
4	15	10	27	678	e60	e86	65	84	29	28	4.5	2.6			
5	14	9.9	43	666	e42	e100	46	56	21	44	4.5	2.4			
6	12	9.4	57	132	e320	94	36	42	18	20	3.1	2.3			
7	9.5	8.5	41	59	e202	e74	31	111	13	13	2.5	2.0			
8	8.1	7.7	31	e55	e90	e58	28	143	12	9.8	2.1	6.0			
9	6.9	6.8	31	e42	e55	e45	24	60	14	6.7	2.0	20			
10	6.4	6.3	235	e39	e42	e37	20	41	22	5.4	1.8	13			
11	6.5	7.7	345	e35	e35	30	18	32	169	7.8	1.7	6.7			
12	5.5	17	103	e30	e27	27	19	25	294	23	1.6	4.4			
13	5.7	22	45	e28	e21	21	59	20	176	18	1.5	3.1			
14	12	16	34	e27	e20	21	240	20	618	10	1.5	2.9			
15	86	13	28	e25	e19	22	88	33	183	5.5	1.5	2.5			
16	38	12	36	e22	e18	26	50	45	81	4.0	1.5	2.1			
17	25	12	80	e22	e17	25	36	32	61	34	1.4	26			
18	19	12	41	e21	e16	29	30	94	86	92	1.3	24			
19	15	37	30	e20	e32	77	25	189	52	30	6.1	9.8			
20	12	45	24	e19	e103	224	23	81	35	14	26	4.8			
21	12	27	20	e18	e229	218	23	442	25	8.4	51	3.1			
22	10	20	20	e17	e59	81	37	493	20	6.8	20	2.4			
23	8.9	17	154	e17	e51	52	104	90	16	5.4	8.6	2.1			
24	7.6	18	252	e16	e67	43	59	48	12	3.9	5.3	1.9			
25	7.0	19	102	e16	e46	42	46	35	18	3.2	3.9	1.8			
26	13	17	53	e15	e43	67	46	30	16	4.2	4.7	1.7			
27	26	301	38	e15	e42	367	34	24	11	4.4	5.2	1.7			
28	19	562	38	e18	e43	123	28	26	11	3.9	5.5	1.8			
29	20	273	83	e21	e46	67	22	20	13	3.6	9.1	1.9			
30	19	112	452	e17	---	384	23	26	9.5	3.4	6.6	1.8			
31	15	---	135	e14	---	274	---	585	---	15	4.6	---			
TOTAL	506.1	1654.3	2764	2521	1835	2983	1627	3707	2252.5	448.4	206.8	164.4			
MEAN	16.3	55.1	89.2	81.3	63.3	96.2	54.2	120	75.1	14.5	6.67	5.48			
MAX	86	562	452	678	320	384	240	585	618	92	51	26			
MIN	5.5	6.3	20	14	11	21	18	20	9.5	3.2	1.3	1.7			
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997-2004, BY WATER YEAR (WY)															
MEAN	8.28	20.3	51.2	49.5	57.9	64.8	77.4	63.8	65.1	11.8	4.10	10.6			
MAX	32.2	55.1	133	89.2	90.6	96.6	131	120	214	43.1	9.53	70.7			
(WY)	2002	2004	1997	1999	2000	1997	2000	2004	1998	2003	1997	2003			
MIN	0.84	3.95	14.4	17.8	20.5	20.4	20.4	10.5	3.43	1.18	1.01	0.13			
(WY)	2003	2000	1999	2001	2003	2001	1997	1999	1999	2002	2002	1998			
SUMMARY STATISTICS															
ANNUAL TOTAL				FOR 2003 CALENDAR YEAR				FOR 2004 WATER YEAR				WATER YEARS 1997-2004			
ANNUAL MEAN				18435.8				20669.5							
				50.5				56.5				40.2			
HIGHEST ANNUAL MEAN												56.5			
LOWEST ANNUAL MEAN												28.3			
HIGHEST DAILY MEAN				854				678				2060			
LOWEST DAILY MEAN				1.5				1.3				0.07			
ANNUAL SEVEN-DAY MINIMUM				1.9				1.5				0.07			
MAXIMUM PEAK FLOW								1470				5650			
MAXIMUM PEAK STAGE								8.10				13.64			
INSTANTANEOUS LOW FLOW								1.0				0.07			
10 PERCENT EXCEEDS				141				128				93			
50 PERCENT EXCEEDS				18				22				12			
90 PERCENT EXCEEDS				3.9				3.7				1.3			

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

03225500 Olentangy River near Delaware, Ohio

LOCATION.—Latitude 40°21'18", longitude 83°04'02", in NE ¼ T.5 N., R.19 W., Delaware County, Hydrologic Unit 05060001, on left bank 500 ft upstream from main county road bridge, 1,000 ft downstream from Delaware Dam, 1300 ft upstream from Norfolk and Western Railway bridge, and 4 mi north of Delaware, Ohio.

DRAINAGE AREA.—393 mi².

PERIOD OF RECORD.—October 1923 to September 1934, April 1938 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.—Water-stage recorder and concrete control. Datum of gage is 878.00 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Oct. 1950, water-stage recorder at this site 500 ft downstream at datum 1.72 ft lower; Oct. 1, 1950-Sept. 30, 1985, at datum 78.42 ft lower.

REMARKS.—Records good. Flow completely regulated by Delaware Lake since 1951. Water-quality data formerly collected at this site. Water-temperature data collected at this site. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 14,100 ft³/s, Mar. 21, 1927, gage height, 16.9 ft, site and datum then in use; minimum daily, 0.1 ft³/s Sept. 14-29, 1934.

**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	992	503	3420	1850	154	508	2530	39	2100	86	96	62
2	31	486	3220	1870	82	1250	2310	806	3890	86	123	61
3	20	303	1470	1820	185	1310	1710	667	2240	87	67	32
4	496	152	349	224	717	871	1130	1870	981	88	41	18
5	577	353	513	124	612	1040	263	3370	369	205	41	18
6	312	303	860	1020	602	911	26	2140	204	235	41	18
7	162	166	1070	1910	758	910	26	416	125	67	41	18
8	149	166	619	3160	1300	839	230	512	125	67	41	18
9	116	166	503	4140	1290	537	209	688	125	67	41	20
10	91	165	667	3950	1130	355	114	727	125	67	38	62
11	91	166	1540	3080	617	294	114	453	155	67	35	159
12	91	227	1850	1600	379	272	512	17	192	67	38	161
13	91	336	1810	154	255	258	359	17	1890	299	40	98
14	93	408	970	242	161	185	1320	15	678	448	42	37
15	860	369	262	190	161	133	1670	556	177	272	42	27
16	1180	367	398	114	161	135	618	559	102	87	42	27
17	663	322	943	55	217	135	268	870	1110	67	42	27
18	244	304	1000	55	263	137	267	564	2460	138	42	195
19	242	311	488	291	218	159	472	1010	3180	544	43	171
20	237	309	406	265	490	172	383	2480	3970	235	55	58
21	239	410	270	103	591	989	179	2050	4210	92	507	26
22	239	453	159	104	596	1860	179	30	4080	57	356	25
23	235	309	192	103	1230	1410	375	762	2170	62	142	24
24	105	263	921	103	1250	655	603	2420	397	68	79	23
25	20	258	1140	103	830	799	602	3210	181	60	44	23
26	21	177	1130	103	412	749	501	3190	179	54	44	23
27	493	235	1110	105	230	374	183	1900	179	54	44	23
28	721	1300	1090	105	330	650	29	887	175	54	44	23
29	222	2620	847	103	332	1960	486	457	123	47	126	23
30	360	3070	1440	170	---	1990	522	297	86	40	224	17
31	278	---	1860	202	---	2020	---	204	---	44	137	---
TOTAL	9671	14977	32517	27418	15553	23867	18190	33183	35978	3911	2738	1517
MEAN	312	499	1049	884	536	770	606	1070	1199	126	88.3	50.6
MAX	1180	3070	3420	4140	1300	2020	2530	3370	4210	544	507	195
MIN	20	152	159	55	82	133	26	15	86	40	35	17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951-2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	81.6	274	447	484	641	746	568	425	325	244	113	75.6
MAX	560	1442	1683	1790	2073	2087	1537	1618	1247	1723	1259	729
(WY)	1987	1973	1991	1952	1959	1963	1964	1996	1981	1987	1995	2003
MIN	10.8	6.53	7.81	20.5	18.4	117	16.3	33.1	8.19	12.6	18.2	13.9
(WY)	1965	1992	1992	1954	1964	1983	1971	1962	1962	1988	1988	1967

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1951-2004	
ANNUAL TOTAL	212671.4	219520		
ANNUAL MEAN	583	600	367	
HIGHEST ANNUAL MEAN			609	1973
LOWEST ANNUAL MEAN			137	1954
HIGHEST DAILY MEAN	4090	May 15	5940	Feb 1 1959
LOWEST DAILY MEAN	7.4	Apr 25	1.0	Apr 15 1986
ANNUAL SEVEN-DAY MINIMUM	35	Aug 23	3.4	Apr 15 1986
MAXIMUM PEAK FLOW			6000	Jan 31 1959
MAXIMUM PEAK STAGE			8.63	Jun 1 1952
INSTANTANEOUS LOW FLOW			1.0	Apr 15 1986
10 PERCENT EXCEEDS	1840	1850	1040	
50 PERCENT EXCEEDS	242	250	95	
90 PERCENT EXCEEDS	40	40	19	

03226800 Olentangy River near Worthington, Ohio

LOCATION.—Latitude 40°06'37", longitude 83°01'55", Franklin County, Hydrologic Unit 05060001, on left bank 350 ft downstream from Interstate Highway 270 bridge, 1.5 mi northwest of Worthington, Ohio, and 2.8 mi upstream from Rush Run.

DRAINAGE AREA.—497 mi².

PERIOD OF RECORD.—October 1955 to September 1984, October 1996 to current year.

REVISED RECORDS.—WSP 1625: 1952(M). WSP 1908. Drainage area. WDR Ohio 1972: 1971(M). WDR-OH-80-1: 1976(M), 1978(M).

GAGE.—Water-stage recorder. Datum of gage is 743.20 ft above sea level.

REMARKS.—Records excellent except for periods of estimated record, which are fair. Flow regulated by Delaware Lake 21 mi upstream. Water-quality and sediment data formerly collected at this site.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood in Jan. 1952, reached a stage of 15.3 ft, discharge 15,000 ft³/s, from information by U.S. Army Corps of Engineers.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2170	487	4140	2240	275	550	2810	259	1330	106	155	129
2	141	505	3850	3340	166	1310	3140	1750	4810	101	143	77
3	89	459	2500	2820	721	1700	2060	1760	3320	88	139	71
4	401	182	424	4190	1770	1150	1620	1220	1250	101	126	52
5	547	256	743	2710	2600	1270	686	4050	545	97	96	33
6	476	446	1230	1040	3000	1070	120	3400	281	328	58	28
7	219	198	1360	2370	849	1030	91	487	163	111	48	26
8	187	185	1070	3130	1590	1020	110	611	141	67	45	95
9	160	182	515	4890	1530	615	347	687	138	63	44	132
10	130	181	1030	4700	1450	433	153	796	164	61	42	63
11	112	199	1910	3930	981	313	145	754	942	62	47	95
12	111	331	2270	2530	397	302	494	145	1210	76	35	202
13	112	350	2150	411	461	264	671	60	1590	113	43	154
14	187	445	1680	170	204	254	1670	63	4560	448	47	88
15	730	415	309	325	208	154	2130	561	1630	404	52	47
16	1610	403	485	203	188	171	1170	635	1320	133	49	37
17	1300	379	1090	118	194	182	336	746	1030	164	42	99
18	292	339	1340	123	278	212	316	1110	2900	108	41	78
19	276	488	712	101	287	469	421	982	3430	476	48	252
20	267	431	481	553	408	532	554	2720	4460	342	183	132
21	265	417	434	e170	749	889	257	3750	4890	137	771	66
22	262	508	223	e160	666	2200	328	1350	4770	297	686	35
23	259	429	262	e155	1070	1910	795	563	3380	113	179	32
24	243	313	1030	e150	1710	919	761	2300	719	79	162	31
25	87	300	1460	e180	971	915	765	3700	283	75	84	30
26	70	265	1370	e220	595	844	715	3670	223	96	83	28
27	224	647	1320	260	319	853	402	2760	209	100	70	28
28	902	2040	1290	188	336	599	125	1110	204	80	257	28
29	673	3470	1190	156	379	2110	433	619	193	70	430	29
30	173	3490	2080	146	---	3180	616	360	120	67	315	28
31	480	---	2350	256	---	2670	---	1410	---	414	229	---
TOTAL	13155	18740	42298	41935	24352	30090	24241	44388	50205	4977	4749	2225
MEAN	424	625	1364	1353	840	971	808	1432	1674	161	153	74.2
MAX	2170	3490	4140	4890	3000	3180	3140	4050	4890	476	771	252
MIN	70	181	223	101	166	154	91	60	120	61	35	26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956-2004, BY WATER YEAR (WY)

MEAN	95.3	311	570	621	754	978	770	562	429	258	146	116
MAX	576	1797	1772	2352	2368	2517	2033	1432	1674	1672	801	1118
(WY)	1973	1973	1978	1992	1959	1963	1964	2004	2004	1992	1980	2003
MIN	11.9	25.7	12.1	17.7	27.2	139	40.0	62.7	15.6	26.9	31.9	17.6
(WY)	1965	1964	1964	1977	1964	1983	1971	1962	1962	2001	2001	1964

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1956 - 2004	
	ANNUAL TOTAL	ANNUAL MEAN	ANNUAL TOTAL	ANNUAL MEAN	HIGHEST ANNUAL MEAN	LOWEST ANNUAL MEAN
ANNUAL TOTAL	296967	814	301355	823	464	823
ANNUAL MEAN					823	2004
HIGHEST ANNUAL MEAN					269	1977
LOWEST ANNUAL MEAN					10800	Jan 21 1959
HIGHEST DAILY MEAN	4940	May 15	4890	Jan 9	6.5	Dec 28 1991
LOWEST DAILY MEAN	30	Jun 29	26	Sep 7	8.0	Jan 7 1992
ANNUAL SEVEN-DAY MINIMUM	49	Aug 20	29	Sep 24	16500	Jan 21 1959
MAXIMUM PEAK FLOW			9830	Jun 14	15.68	Jan 21 1959
MAXIMUM PEAK STAGE			11.53	Jun 14	5.2	Jul 12 2001
INSTANTANEOUS LOW FLOW			24	Sep 7		
10 PERCENT EXCEEDS	2380		2410		1350	
50 PERCENT EXCEEDS	350		355		143	
90 PERCENT EXCEEDS	80		67		25	

e Estimated.

03227500 Scioto River at Columbus, Ohio

LOCATION.—Latitude 39°54'34", longitude 83°00'33", Franklin County, Hydrologic Unit 05060001, on right bank at Jackson Pike Wastewater Treatment Plant, Columbus, Ohio, 0.4 mi downstream from bridge on Frank Road, 2.8 mi upstream from Scioto Big Run, and 5 mi downstream from Olentangy River.

DRAINAGE AREA.—1,629 mi².

PERIOD OF RECORD.—October 1920 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.—WSP 743: 1927(M). WSP 803: 1922-24, 1926-30, 1932-33. WSP 1908: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 680.00 ft above sea level. Prior to Oct. 1, 1924, nonrecording gage at site 200 ft upstream at same datum.

REMARKS.—Records fair Oct. 1 to June 8, good thereafter except for periods of estimated record, which are poor. Flow regulated by Griggs Reservoir (see station 03221500), O'Shaughnessy Reservoir (see station 03220500), and Delaware Lake upstream from station. Records include sewage return flow from Jackson Pike Wastewater Treatment Plant. Shadeville Treatment Plant flow enters downstream. For statement on diversions from Big Walnut Creek, see REMARKS for station 03229500. Water-quality data formerly collected at this site. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Mar. 25, 1913, reached a stage of 25.9 ft; discharge, 138,000 ft³/s, estimated by Franklin County Conservancy District.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4040	e1190	e10000	e5100	e606	e1400	e6610	e696	e6060	533	1080	1050
2	1520	e1100	e8090	e7930	e401	e3690	e5880	e5180	e9300	544	511	636
3	930	e988	e5010	e6930	e1220	e4220	e4040	e9200	e7260	533	575	357
4	796	e671	e1750	13700	e2590	e3460	e3070	e6120	e3550	533	843	363
5	1020	e732	e1920	21700	e3440	e3820	e1760	e7580	e1560	533	597	314
6	1130	e870	e3760	11700	e6060	e4180	e991	e5460	e1010	591	363	271
7	812	e581	e3500	9190	e4600	e3810	e782	e1610	e707	692	323	203
8	583	e549	e2660	7610	e3870	e2830	e675	e1580	e618	281	314	778
9	579	e493	e1720	8020	e2990	e1720	e891	e2170	755	270	312	832
10	538	e471	e2820	6100	e2570	e1200	e695	e2040	726	279	209	408
11	497	e483	e6540	4660	e1950	e1030	e678	e1620	4110	554	196	273
12	476	e696	e6600	3400	e1370	e923	e1020	e747	5990	439	211	313
13	449	e710	e5560	1750	e1410	e827	e1060	e887	8130	307	176	332
14	379	e853	e3780	1080	e931	e508	e3600	e775	17400	599	206	287
15	1010	e924	e1420	1140	e880	e755	e4160	e991	11400	983	209	217
16	e3710	e859	e1390	906	e846	e712	e2440	e1660	13300	449	216	257
17	e3130	e761	e2970	668	e644	e595	e1160	e1660	8620	1070	217	1100
18	e1630	e689	e3480	830	e808	e618	e914	e1890	9200	932	225	529
19	e986	e990	e2360	583	e517	e1320	e1100	e3900	7620	687	346	315
20	e909	e1470	e1520	906	e1510	e2550	e959	e7260	6630	653	397	316
21	e848	e1600	e1220	688	e3490	e3600	e791	e8210	5880	411	2470	390
22	e550	e1330	e929	592	e3710	e4320	e743	e8710	5260	2220	1950	276
23	e607	e1060	e995	523	e3570	e3340	e1700	e8730	4560	944	1130	186
24	e598	e861	e4650	441	e3520	e1840	e2740	e8260	1830	435	720	172
25	e421	e834	e5780	424	e2500	e1580	e2440	e8380	996	397	799	242
26	e456	e825	e5110	565	e1700	e1590	e1960	e6630	972	993	523	184
27	e2120	e2770	e3740	936	e1150	e2300	e1400	e4170	684	559	423	165
28	e2930	e11000	e2560	456	e1120	e2670	e802	e2040	747	431	579	166
29	e2300	e12600	e2140	e479	e1140	e3820	e1080	e1280	855	370	1730	195
30	e1280	e10700	e5000	e531	---	e7730	e1260	e901	545	368	1520	164
31	e1340	---	e5950	e636	---	e8590	---	e4720	---	2900	1640	---
TOTAL	38574	59660	114924	120174	61113	81548	57401	125057	146275	21490	21010	11291
MEAN	1244	1989	3707	3877	2107	2631	1913	4034	4876	693	678	376
MAX	4040	12600	10000	21700	6060	8590	6610	9200	17400	2900	2470	1100
MIN	379	471	929	424	401	508	675	696	545	270	176	164

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921-2004, BY WATER YEAR (WY)

MEAN	387	837	1520	2154	2351	2945	2520	1639	1330	831	485	367
MAX	4633	5490	7274	10510	5993	8373	6865	6175	5866	5804	3287	3883
(WY)	1927	1973	1991	1937	1975	1963	1964	1996	1947	1992	1995	1926
MIN	60.5	71.7	71.1	96.1	110	493	322	132	97.6	85.5	82.0	66.4
(WY)	1922	1923	1935	1945	1934	1941	1946	1934	1925	1921	1930	1924

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1921-2004	
ANNUAL TOTAL	925770		858517			
ANNUAL MEAN	2536		2346		1438	
HIGHEST ANNUAL MEAN					2514	
LOWEST ANNUAL MEAN					305	
HIGHEST DAILY MEAN	12600	Nov 29	21700	Jan 5	48200	Jan 22 1959
LOWEST DAILY MEAN	174	Jun 30	164	Sep 30	47	Sep 6 1930
ANNUAL SEVEN-DAY MINIMUM	276	Aug 20	184	Sep 24	53	Sep 5 1930
MAXIMUM PEAK FLOW			29800	Jan 5	68200	Jan 22 1959
MAXIMUM PEAK STAGE			22.58	Jan 5	27.22	Jan 22 1959
INSTANTANEOUS LOW FLOW					47	Sep 6 1930
10 PERCENT EXCEEDS	7240		6560		3990	
50 PERCENT EXCEEDS	1200		1040		475	
90 PERCENT EXCEEDS	373		342		122	

e Estimated.

03228300 Big Walnut Creek at Sunbury, Ohio

LOCATION.—Latitude 40°14'10", longitude 82°51'05", Delaware County, Hydrologic Unit 05060001, on left bank 200 ft downstream from bridge on State Highway 37, 0.1 mi downstream from Rattlesnake Creek, 0.6 mi east of Sunbury, Ohio, and 0.9 mi upstream from Prairie Run.

DRAINAGE AREA.—101 mi².

Water-Discharge Records

PERIOD OF RECORD.—October 1988 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 945 ft above sea level (from topographic map).

REMARKS.—Records fair except for periods of estimated record and flows below 0.5 ft³/s, which are poor. Water-quality data collected at this site.

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	92	32	203	165	e13	147	240	153	378	16	185	62	
2	62	28	132	1280	e13	401	309	2160	117	13	41	38	
3	47	27	99	670	e130	231	210	792	64	11	17	26	
4	40	27	81	2640	e62	233	132	250	37	10	12	20	
5	49	25	145	1040	83	256	92	118	25	9.7	20	19	
6	37	23	324	70	e760	179	71	69	20	8.0	13	17	
7	29	21	174	39	e600	119	62	76	18	6.6	9.1	15	
8	24	19	110	e32	e300	91	55	154	11	5.8	6.2	24	
9	21	19	114	e27	e160	76	48	55	6.1	5.6	4.6	138	
10	e20	19	581	e25	103	63	37	36	7.5	5.1	3.5	70	
11	e19	20	899	e23	92	57	33	25	387	4.0	2.9	28	
12	e18	92	246	e22	104	54	37	e20	566	e3.9	2.3	25	
13	e18	82	57	e21	e120	40	271	e15	602	e3.8	1.9	17	
14	e26	63	92	e20	69	42	766	e13	3140	e3.8	1.2	11	
15	e105	48	81	e19	63	41	229	19	1340	e3.7	0.83	11	
16	e90	42	88	e18	43	44	119	38	849	e3.5	0.92	13	
17	e72	39	74	e18	46	46	85	25	461	e4.1	1.6	68	
18	e56	38	47	e17	47	60	66	93	324	e4.5	2.5	105	
19	e48	141	47	e16	75	245	55	604	168	e3.7	2.7	36	
20	e42	205	32	e16	194	511	49	200	105	e3.4	33	22	
21	35	99	44	e15	500	636	53	931	75	e3.4	886	14	
22	33	72	68	e15	161	208	149	1450	59	e3.3	153	11	
23	29	60	283	e15	122	123	792	187	45	3.3	60	8.7	
24	27	60	184	e15	168	96	201	76	35	3.1	31	7.8	
25	24	75	60	e14	120	95	117	42	47	2.8	20	9.7	
26	25	65	55	e14	95	112	114	27	35	4.1	15	6.8	
27	33	247	71	e14	81	875	81	21	29	4.5	13	6.1	
28	36	1360	95	e14	78	351	59	36	26	4.6	1480	5.1	
29	43	727	155	e14	83	165	45	56	25	3.6	1490	3.7	
30	43	277	582	e13	---	1070	57	23	20	4.2	273	3.2	
31	36	---	207	e13	---	532	---	1670	---	293	117	---	
TOTAL	1279	4052	5430	6334	4485	7199	4634	9434	9021.6	459.1	4899.25	841.1	
MEAN	41.3	135	175	204	155	232	154	304	301	14.8	158	28.0	
MAX	105	1360	899	2640	760	1070	792	2160	3140	293	1490	138	
MIN	18	19	32	13	13	40	33	13	6.1	2.8	0.83	3.2	
CFSM	0.41	1.34	1.73	2.02	1.53	2.30	1.53	3.01	2.98	0.15	1.56	0.28	
IN.	0.47	1.49	2.00	2.33	1.65	2.65	1.71	3.47	3.32	0.17	1.80	0.31	
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989-2004, BY WATER YEAR (WY)													
MEAN	14.8	63.7	129	168	158	169	197	168	153	75.0	35.7	28.2	
MAX	81.2	256	585	426	424	354	334	398	338	348	167	323	
(WY)	1991	1993	1991	1996	1990	1993	1996	1996	1989	1992	1995	2003	
MIN	0.00	0.05	0.72	16.4	12.4	46.0	36.7	17.0	1.29	0.15	0.01	0.01	
(WY)	1992	1992	1992	1992	2003	1990	1997	1999	1999	1991	1991	1991	
SUMMARY STATISTICS													
				FOR 2003 CALENDAR YEAR				FOR 2004 WATER YEAR				WATER YEARS 1989-2004	
ANNUAL TOTAL				48054.72				58068.05					
ANNUAL MEAN				132				159				113	
HIGHEST ANNUAL MEAN												159	1996
LOWEST ANNUAL MEAN												67.4	1992
HIGHEST DAILY MEAN				3210				3140				4790	Jun 1 1997
LOWEST DAILY MEAN				0.34				0.83				0.00	Jul 24 1991
ANNUAL SEVEN-DAY MINIMUM				1.2				1.6				0.00	Jul 24 1991
MAXIMUM PEAK FLOW								6300				6700	Jun 1 1997
MAXIMUM PEAK STAGE								11.23				11.86	Dec 20 1990
INSTANTANEOUS LOW FLOW												0.00	Jul 24 1991
ANNUAL RUNOFF (CFSM)				1.30				1.57				1.12	
ANNUAL RUNOFF (INCHES)				17.70				21.39				15.20	
10 PERCENT EXCEEDS				293				381				260	
50 PERCENT EXCEEDS				40				47				28	
90 PERCENT EXCEEDS				3.4				5.7				0.25	

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

03228300 Big Walnut Creek at Sunbury, Ohio—Continued
Water-Quality Records

PERIOD OF RECORD.—April 2000 to current year.

PERIOD OF DAILY RECORD—

SPECIFIC CONDUCTANCE: April 2000 to current year.

pH: April 2000 to current year.

WATER TEMPERATURE: April 2000 to current year.

DISSOLVED OXYGEN: April 2000 to current year.

INSTRUMENTATION.—Water-quality monitor. Electronic data logger. Set for 1-hour interval. Satellite telemeter at station.

REMARKS.—Interruptions in the water-quality record are due to malfunction of the instrument. Specific conductance records are good except Oct. 1-Dec. 15, which are fair. pH records are good except for Oct. 1-Dec. 15, June 24-July 12, and Aug. 1-Sept. 20, which are fair. Water temperature records are good except Oct. 17-Nov. 25, May 2, and 3, which are fair, Oct. 1-16 and Nov. 26-Dec. 15, which are poor. Dissolved oxygen records are fair except Oct. 1-Dec. 15, Mar. 30-Apr. 12, May 24-June 24, and July 12-Aug. 17, which are poor.

EXTREMES FOR PERIOD OF RECORD.—

SPECIFIC CONDUCTANCE: Maximum, 999 microsiemens, Dec. 4, 2002; minimum, 126 microsiemens, June 14, 2004.

pH: Maximum, 8.9 units, Apr. 19, 2002; minimum, 6.5 units, Apr. 18, 2001.

WATER TEMPERATURE: Maximum, 33° C, July 24 and Aug. 16, 2000; minimum, 0.2° C, Dec. 13, 2003.

DISSOLVED OXYGEN: Maximum, 20 mg/L, Sept. 1 and 29, 2000, and Aug. 20, 2001; minimum, 0.3 mg/L, June 16, 2004.

EXTREMES FOR CURRENT YEAR.—

SPECIFIC CONDUCTANCE: Maximum, 674 microsiemens, Nov. 10; minimum, 126 microsiemens, June 14.

pH: Maximum, 8.8 units, Apr. 28 and 29; minimum, 6.7 units, June 14.

WATER TEMPERATURE: Maximum, 27.1° C, July 13; minimum, 0.2° C, Dec. 13.

DISSOLVED OXYGEN: Maximum, 15.9 mg/L, Dec. 13 and 14; minimum, 0.3 mg/L, June 16.

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

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	492	454	474	627	618	623	471	384	429	---	---	---
2	524	492	510	629	613	622	---	---	---	---	---	---
3	546	524	535	639	617	628	---	---	---	---	---	---
4	570	546	555	645	623	637	---	---	---	---	---	---
5	589	570	580	652	630	644	---	---	---	---	---	---
6	594	589	591	660	650	654	---	---	---	---	---	---
7	602	594	598	667	645	659	---	---	---	---	---	---
8	611	602	608	670	647	661	---	---	---	---	---	---
9	617	609	614	671	653	663	---	---	---	---	---	---
10	625	613	620	674	653	665	---	---	---	---	---	---
11	634	622	629	673	661	669	---	---	---	---	---	---
12	644	632	637	661	445	560	428	351	392	---	---	---
13	650	637	642	495	439	467	488	428	457	---	---	---
14	655	534	629	551	494	522	527	488	508	---	---	---
15	616	378	443	589	551	570	---	---	---	---	---	---
16	488	413	455	611	589	601	---	---	---	---	---	---
17	536	488	512	626	611	621	---	---	---	---	---	---
18	567	536	552	647	625	638	---	---	---	---	---	---
19	583	567	576	654	547	604	---	---	---	---	---	---
20	597	581	589	579	516	546	---	---	---	---	---	---
21	607	597	602	537	517	524	---	---	---	---	---	---
22	618	607	613	---	---	---	---	---	---	---	---	---
23	625	615	621	---	---	---	---	---	---	---	---	---
24	636	621	629	---	---	---	---	---	---	---	---	---
25	638	619	629	---	---	---	---	---	---	---	---	---
26	637	610	624	---	---	---	---	---	---	---	---	---
27	642	624	630	603	443	568	---	---	---	---	---	---
28	646	630	640	443	329	381	---	---	---	---	---	---
29	640	624	633	332	303	311	---	---	---	---	---	---
30	640	620	632	384	322	352	---	---	---	---	---	---
31	633	621	628	---	---	---	---	---	---	---	---	---
MONTH	655	378	588	674	303	576	527	351	446	---	---	---

03228300 Big Walnut Creek at Sunbury, Ohio—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
1	7.9	7.5	7.8	7.9	7.7	7.8	---	---	---	---	---	---
2	8.0	7.7	7.9	7.9	7.5	7.7	---	---	---	---	---	---
3	8.1	7.8	7.9	8.3	7.5	7.8	---	---	---	---	---	---
4	8.0	7.8	7.9	8.4	7.7	7.9	---	---	---	---	---	---
5	8.1	7.7	7.9	8.2	7.9	7.9	---	---	---	---	---	---
6	8.0	7.6	7.9	8.0	7.8	7.9	---	---	---	---	---	---
7	8.1	7.6	7.9	8.4	7.9	8.0	---	---	---	---	---	---
8	8.0	7.7	7.9	8.4	8.0	8.0	---	---	---	---	---	---
9	8.0	7.6	7.8	8.4	8.0	8.1	---	---	---	---	---	---
10	7.9	7.7	7.8	8.4	8.0	8.1	---	---	---	---	---	---
11	8.0	7.6	7.8	8.2	8.0	8.1	---	---	---	---	---	---
12	7.9	7.6	7.7	8.0	7.6	7.8	8.0	7.7	7.9	---	---	---
13	7.9	7.5	7.7	7.8	7.5	7.7	8.1	7.9	8.0	---	---	---
14	7.8	7.5	7.7	8.2	7.8	8.0	8.2	8.0	8.1	---	---	---
15	7.6	7.1	7.2	8.0	7.8	7.9	---	---	---	---	---	---
16	7.8	7.1	7.5	7.8	7.7	7.7	---	---	---	---	---	---
17	7.8	7.7	7.8	7.8	7.6	7.7	---	---	---	---	---	---
18	7.9	7.7	7.8	7.8	7.4	7.7	---	---	---	---	---	---
19	7.9	7.7	7.8	8.2	7.5	7.8	---	---	---	---	---	---
20	8.0	7.6	7.8	7.9	7.7	7.8	---	---	---	---	---	---
21	8.0	7.7	7.8	7.9	7.6	7.7	---	---	---	---	---	---
22	8.1	7.8	7.9	7.7	7.5	7.6	---	---	---	---	---	---
23	8.2	7.9	8.0	---	---	---	---	---	---	---	---	---
24	8.1	7.9	7.9	---	---	---	---	---	---	---	---	---
25	8.2	7.8	7.9	---	---	---	---	---	---	---	---	---
26	8.1	7.8	7.9	---	---	---	---	---	---	---	---	---
27	8.2	7.9	8.0	---	---	---	---	---	---	---	---	---
28	8.2	7.9	8.0	---	---	---	---	---	---	---	---	---
29	8.2	7.8	7.9	---	---	---	---	---	---	---	---	---
30	8.2	7.9	8.0	---	---	---	---	---	---	---	---	---
31	8.1	7.8	7.9	---	---	---	---	---	---	---	---	---
MAX	8.2	7.9	8.0	8.4	8.0	8.1	8.2	8.0	8.1	---	---	---
MIN	7.6	7.1	7.2	7.7	7.4	7.6	8.0	7.7	7.9	---	---	---

DAY	FEBRUARY			MARCH			APRIL			MAY		
	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
1	---	---	---	---	---	---	8.0	7.8	7.9	8.1	7.6	7.9
2	---	---	---	---	---	---	8.0	7.8	7.9	---	---	---
3	---	---	---	---	---	---	8.3	7.6	7.9	---	---	---
4	---	---	---	---	---	---	8.4	7.8	8.0	7.9	7.7	7.8
5	---	---	---	---	---	---	8.5	7.9	8.1	7.8	7.4	7.6
6	---	---	---	---	---	---	8.6	7.5	8.0	8.6	7.5	8.1
7	---	---	---	---	---	---	8.6	7.6	8.0	8.3	7.7	7.9
8	---	---	---	---	---	---	8.6	7.4	8.0	8.2	7.5	7.8
9	---	---	---	---	---	---	8.7	7.4	8.2	8.0	7.5	7.7
10	---	---	---	---	---	---	8.8	7.6	8.2	8.3	7.6	7.7
11	---	---	---	---	---	---	8.7	7.5	8.0	8.0	7.7	7.8
12	---	---	---	---	---	---	8.4	7.6	8.0	---	---	---
13	---	---	---	---	---	---	8.1	7.6	8.0	---	---	---
14	---	---	---	---	---	---	7.8	7.6	7.7	---	---	---
15	---	---	---	---	---	---	8.0	7.6	7.7	8.0	7.6	7.9
16	---	---	---	---	---	---	8.4	7.6	7.7	8.0	7.5	7.9
17	---	---	---	---	---	---	8.6	7.8	8.1	8.2	7.6	7.9
18	---	---	---	---	---	---	8.3	7.7	7.9	8.0	7.6	7.8
19	---	---	---	---	---	---	8.4	7.6	7.9	7.8	7.2	7.5
20	---	---	---	---	---	---	8.2	7.5	7.9	7.6	7.3	7.4
21	---	---	---	---	---	---	8.1	7.5	7.8	---	---	---
22	---	---	---	---	---	---	8.1	7.3	7.8	---	---	---
23	---	---	---	---	---	---	7.8	7.1	7.2	---	---	---
24	---	---	---	---	---	---	7.2	7.1	7.1	---	---	---
25	---	---	---	---	---	---	7.7	7.1	7.2	8.0	7.6	7.6
26	---	---	---	---	---	---	8.2	7.6	7.8	7.8	7.6	7.7
27	---	---	---	---	---	---	7.9	7.4	7.5	7.9	7.6	7.7
28	---	---	---	---	---	---	8.8	7.4	7.5	8.0	7.7	7.8
29	---	---	---	---	---	---	8.8	7.7	8.0	8.0	7.6	7.9
30	---	---	---	---	---	---	8.2	7.6	7.7	8.1	7.4	7.6
31	---	---	---	7.8	7.5	7.7	---	---	---	7.6	7.1	7.2
MAX	---	---	---	7.8	7.5	7.7	8.8	7.9	8.2	8.6	7.7	8.1
MIN	---	---	---	7.8	7.5	7.7	7.2	7.1	7.1	7.6	7.1	7.2

03228300 Big Walnut Creek at Sunbury, Ohio—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
1	7.6	7.2	7.3	8.0	7.6	7.9	7.5	7.4	7.4	8.1	7.6	7.9
2	7.8	7.5	7.6	8.0	7.6	7.8	7.8	7.5	7.7	8.0	7.5	7.7
3	8.0	7.6	7.8	8.1	7.6	7.8	7.9	7.6	7.7	7.9	7.6	7.7
4	8.1	7.6	7.9	8.0	7.6	7.7	7.9	7.6	7.7	7.8	7.5	7.6
5	8.1	7.6	7.8	8.0	7.6	7.7	8.0	7.6	7.8	8.0	7.6	7.7
6	8.1	7.6	7.8	8.1	7.6	7.8	8.2	7.6	7.9	7.9	7.6	7.7
7	8.0	7.6	7.7	8.0	7.6	7.7	8.2	7.6	7.9	8.0	7.6	7.7
8	8.0	7.5	7.6	8.2	7.6	7.8	8.1	7.6	7.8	7.9	7.4	7.7
9	7.8	7.5	7.6	8.3	7.6	7.8	8.3	7.6	7.9	8.0	7.3	7.6
10	7.7	7.6	7.6	8.1	7.6	7.8	8.2	7.6	7.8	8.0	7.4	7.8
11	7.8	7.1	7.5	8.1	7.6	7.7	8.2	7.6	7.7	8.0	7.4	7.5
12	7.3	7.1	7.2	8.1	7.5	7.6	8.1	7.5	7.6	8.0	7.5	7.7
13	7.5	7.2	7.3	8.0	7.5	7.6	8.1	7.5	7.8	7.9	7.5	7.7
14	7.4	6.7	6.8	8.0	7.5	7.7	8.2	7.4	7.7	8.0	7.5	7.9
15	7.2	6.8	6.9	8.1	7.5	7.8	8.2	7.5	7.7	8.1	7.5	7.7
16	7.2	6.8	7.2	8.2	7.6	7.9	8.3	7.6	8.0	8.2	7.5	7.7
17	7.5	7.1	7.3	8.0	7.6	7.7	8.2	7.7	8.0	7.9	7.4	7.7
18	7.7	7.2	7.6	8.3	7.6	7.9	8.0	7.6	7.9	7.7	7.2	7.3
19	7.8	7.5	7.6	8.2	7.5	7.8	8.1	7.6	7.8	7.9	7.5	7.8
20	7.8	7.4	7.6	8.3	7.6	7.8	7.9	7.5	7.6	7.9	7.3	7.4
21	8.0	7.6	7.8	8.1	7.6	7.7	7.9	7.4	7.5	8.1	7.3	7.5
22	7.9	7.6	7.8	8.0	7.5	7.7	8.0	7.4	7.6	7.9	7.4	7.5
23	8.0	7.6	7.6	8.0	7.6	7.8	8.0	7.6	7.8	8.1	7.4	7.7
24	8.0	7.6	7.7	8.2	7.6	7.8	8.1	7.6	8.0	8.1	7.4	7.6
25	8.0	7.6	7.7	8.3	7.6	7.7	8.1	7.6	7.7	8.0	7.4	7.7
26	8.0	7.6	7.8	8.2	7.6	7.9	8.0	7.6	7.7	7.9	7.3	7.4
27	8.0	7.5	7.6	8.2	7.6	7.9	8.1	7.7	7.8	8.2	7.4	7.7
28	8.0	7.5	7.8	8.4	7.7	8.0	7.8	7.3	7.5	8.0	7.4	7.6
29	8.2	7.5	7.8	8.4	7.5	7.8	7.6	7.2	7.4	8.0	7.3	7.6
30	8.2	7.5	7.9	8.2	7.7	7.8	7.8	7.4	7.6	8.1	7.3	7.4
31	---	---	---	7.8	7.4	7.6	8.0	7.5	7.6	---	---	---
MAX	8.2	7.6	7.9	8.4	7.7	8.0	8.3	7.7	8.0	8.2	7.6	7.9
MIN	7.2	6.7	6.8	7.8	7.4	7.6	7.5	7.2	7.4	7.7	7.2	7.3
YEAR	MAX	MAXIMUM 8.8	MINIMUM 7.2	MIN	MAXIMUM 8.0	MINIMUM 6.7	MEDIAN	MAXIMUM 8.2	MINIMUM 6.8			

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

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	12.5	11.1	11.9	15.5	15.1	15.3	6.2	4.7	5.8	---	---	---
2	11.9	9.7	10.6	15.7	14.9	15.4	---	---	---	---	---	---
3	10.2	8.3	9.4	16.2	14.2	15.1	---	---	---	---	---	---
4	11.3	10.1	10.6	16.2	13.7	14.9	---	---	---	---	---	---
5	11.6	9.4	10.5	16.7	15.0	15.7	---	---	---	---	---	---
6	11.8	9.6	10.7	15.0	12.8	13.8	---	---	---	---	---	---
7	12.2	9.9	11.1	12.8	10.6	11.6	---	---	---	---	---	---
8	13.6	11.0	12.2	10.6	8.0	8.9	---	---	---	---	---	---
9	14.3	12.5	13.4	8.7	6.7	7.5	---	---	---	---	---	---
10	15.3	13.5	14.3	8.9	6.4	7.4	---	---	---	---	---	---
11	16.4	13.8	14.9	10.4	8.1	9.3	---	---	---	---	---	---
12	16.4	14.9	15.5	13.0	10.4	11.8	2.8	1.6	2.1	---	---	---
13	15.1	13.0	13.9	12.7	7.2	10.5	1.6	0.2	0.8	---	---	---
14	13.7	12.5	13.0	7.6	6.2	6.9	1.2	0.4	0.8	---	---	---
15	13.3	11.9	12.7	9.4	7.6	8.5	---	---	---	---	---	---
16	12.7	11.4	12.3	10.9	9.4	10.0	---	---	---	---	---	---
17	13.9	12.6	13.0	11.3	10.7	10.9	---	---	---	---	---	---
18	13.6	11.6	12.6	11.0	10.4	10.7	---	---	---	---	---	---
19	14.4	12.5	13.4	12.2	11.0	11.5	---	---	---	---	---	---
20	14.8	12.3	13.4	12.1	10.7	11.4	---	---	---	---	---	---
21	15.2	14.5	14.7	12.4	11.1	11.7	---	---	---	---	---	---
22	14.6	12.8	13.6	12.1	11.2	11.5	---	---	---	---	---	---
23	12.8	11.4	12.2	11.9	10.9	11.3	---	---	---	---	---	---
24	12.1	10.0	11.0	---	---	---	---	---	---	---	---	---
25	13.4	11.1	12.1	---	---	---	---	---	---	---	---	---
26	13.1	12.5	12.8	---	---	---	---	---	---	---	---	---
27	12.5	11.4	11.9	7.6	5.3	6.0	---	---	---	---	---	---
28	12.1	10.9	11.3	9.4	7.4	8.7	---	---	---	---	---	---
29	12.0	10.7	11.6	7.4	4.3	5.9	---	---	---	---	---	---
30	13.3	10.0	11.4	5.9	3.8	4.4	---	---	---	---	---	---
31	15.1	12.5	13.7	---	---	---	---	---	---	---	---	---
MONTH	16.4	8.3	12.4	16.7	3.8	10.6	6.2	0.2	2.4	---	---	---

03228300 Big Walnut Creek at Sunbury, Ohio—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	10.4	10.0	10.2	---	---	---	---	---	---	---	---	---
2	11.0	10.1	10.6	---	---	---	---	---	---	---	---	---
3	11.6	10.5	11.1	---	---	---	---	---	---	---	---	---
4	11.0	10.3	10.6	12.2	8.0	9.4	---	---	---	---	---	---
5	11.2	10.2	10.7	11.9	7.8	9.0	---	---	---	---	---	---
6	11.2	10.1	10.7	10.2	8.0	9.0	---	---	---	---	---	---
7	11.1	10.0	10.6	13.7	9.1	10.9	---	---	---	---	---	---
8	10.7	9.2	10.1	14.8	10.2	12.3	---	---	---	---	---	---
9	10.6	8.8	9.6	15.2	11.7	13.1	---	---	---	---	---	---
10	10.8	8.5	9.5	15.7	11.7	13.4	---	---	---	---	---	---
11	10.2	7.6	8.9	12.3	10.0	11.2	---	---	---	---	---	---
12	9.6	7.4	8.2	10.1	8.2	9.3	14.6	13.4	14.1	---	---	---
13	10.3	7.4	8.7	12.2	8.2	9.6	15.9	14.6	15.4	---	---	---
14	9.9	7.8	8.7	13.6	12.0	12.7	15.9	15.0	15.3	---	---	---
15	---	---	---	12.1	9.2	11.2	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	9.5	8.9	9.3	---	---	---	---	---	---	---	---	---
18	10.0	8.5	9.4	---	---	---	---	---	---	---	---	---
19	9.7	7.8	8.8	---	---	---	---	---	---	---	---	---
20	10.4	8.1	9.4	9.9	6.8	8.9	---	---	---	---	---	---
21	10.1	7.8	8.6	9.3	6.8	8.2	---	---	---	---	---	---
22	11.0	8.4	9.6	---	---	---	---	---	---	---	---	---
23	12.0	9.4	10.5	---	---	---	---	---	---	---	---	---
24	12.6	10.2	11.3	---	---	---	---	---	---	---	---	---
25	12.9	9.6	10.9	---	---	---	---	---	---	---	---	---
26	12.2	9.5	10.2	---	---	---	---	---	---	---	---	---
27	13.1	9.8	11.1	13.1	11.2	11.9	---	---	---	---	---	---
28	12.8	10.4	11.4	---	---	---	---	---	---	---	---	---
29	13.7	9.4	10.9	---	---	---	---	---	---	---	---	---
30	13.6	9.8	11.7	---	---	---	---	---	---	---	---	---
31	12.0	7.9	10.0	---	---	---	---	---	---	---	---	---
MONTH	13.7	7.4	10.0	15.7	6.8	10.7	15.9	13.4	14.9	---	---	---

DAY	FEBRUARY			MARCH			APRIL			MAY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	---	---	---	---	---	---	12.0	11.1	11.6	9.9	7.1	8.7
2	---	---	---	---	---	---	12.3	11.5	11.8	---	---	---
3	---	---	---	---	---	---	12.2	10.4	11.4	---	---	---
4	---	---	---	---	---	---	12.6	10.7	11.6	10.4	8.0	9.6
5	---	---	---	---	---	---	13.3	10.7	11.9	8.0	2.5	5.6
6	---	---	---	---	---	---	13.3	9.8	11.7	10.8	2.5	8.2
7	---	---	---	---	---	---	12.6	8.6	10.6	10.3	7.7	8.8
8	---	---	---	---	---	---	12.6	8.7	10.2	10.3	7.3	9.0
9	---	---	---	---	---	---	12.9	8.4	10.3	8.3	5.2	7.0
10	---	---	---	---	---	---	12.8	8.2	10.3	9.8	5.3	6.7
11	---	---	---	---	---	---	13.4	8.3	9.7	9.9	7.4	8.2
12	---	---	---	---	---	---	12.6	8.5	10.2	---	---	---
13	---	---	---	---	---	---	12.0	10.5	11.3	---	---	---
14	---	---	---	---	---	---	11.9	10.3	11.3	---	---	---
15	---	---	---	---	---	---	11.1	8.3	10.3	9.5	7.3	8.4
16	---	---	---	---	---	---	9.1	3.6	7.3	10.0	8.9	9.4
17	---	---	---	---	---	---	11.0	6.3	8.4	9.9	7.9	9.1
18	---	---	---	---	---	---	9.8	6.2	7.8	9.3	7.7	8.3
19	---	---	---	---	---	---	11.0	6.4	8.7	8.3	6.6	7.6
20	---	---	---	---	---	---	11.8	7.4	9.1	7.4	6.1	6.7
21	---	---	---	---	---	---	10.1	7.4	8.4	8.1	6.2	6.8
22	---	---	---	---	---	---	9.8	7.9	8.7	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	8.9	7.8	8.4
26	---	---	---	---	---	---	---	---	---	8.6	7.8	8.2
27	---	---	---	---	---	---	---	---	---	9.1	7.9	8.5
28	---	---	---	---	---	---	---	---	---	9.1	7.9	8.6
29	---	---	---	---	---	---	12.7	8.0	10.2	9.7	8.7	9.2
30	---	---	---	---	---	---	10.0	8.0	8.8	9.8	8.1	9.1
31	---	---	---	11.1	10.7	10.9	---	---	---	8.5	6.4	7.5
MONTH	---	---	---	11.1	10.7	10.9	13.4	3.6	10.1	10.8	2.5	8.2

03228500 Big Walnut Creek at Central College, Ohio

LOCATION.—Latitude 40°06'13", longitude 82°53'03", T.2 N., R.17 W., Franklin County, Hydrologic Unit 05060001, on right bank at upstream side of county road bridge, 0.2 mi east of Central College, 0.4 mi downstream from Hoover Dam, and 3 mi southeast of Westerville, Ohio.

DRAINAGE AREA.—190 mi².

PERIOD OF RECORD.—July 1938 to current year.

REVISED RECORDS.—WSP 873: 1938. WSP 1435: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 815.16 ft above sea level.

REMARKS.—Records fair except for periods of estimated record, which are poor. Flow completely regulated by Hoover Reservoir since Sept. 1954. (See station 03228400). Water-quality data collected at this site 1965-1977. U.S. Army Corps of Engineers satellite telemeter at station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	299	148	122	496	e143	213	677	234	1400	168	137	151
2	235	148	131	1380	e143	240	520	1780	649	162	135	135
3	197	152	130	1420	e144	317	468	2290	398	165	149	148
4	190	170	130	3350	e145	324	394	883	293	154	143	136
5	177	166	150	4870	e165	337	294	504	224	162	137	134
6	173	153	283	2930	736	352	254	337	199	169	123	141
7	140	144	332	832	1490	304	244	295	191	166	147	147
8	153	144	269	404	658	268	199	310	208	165	133	152
9	180	122	230	308	375	233	176	296	213	170	154	131
10	130	128	301	226	289	204	164	276	219	171	144	126
11	127	138	1200	199	245	178	170	265	266	173	156	117
12	152	141	763	191	223	171	188	225	857	155	137	130
13	168	133	418	189	e210	167	275	219	1020	153	142	143
14	181	132	294	174	e200	166	579	197	4050	163	141	135
15	180	118	240	173	e190	165	538	191	3310	171	133	133
16	179	115	185	159	e185	171	372	194	2670	179	145	132
17	179	115	235	159	e175	165	288	198	974	168	151	145
18	179	123	253	159	e165	165	254	218	550	141	146	121
19	178	135	222	159	e165	170	241	334	377	143	150	117
20	178	120	197	179	168	231	190	536	232	158	132	145
21	178	116	166	171	180	572	184	615	166	161	126	139
22	178	122	161	e165	208	506	189	3100	171	171	126	135
23	176	119	203	e160	207	358	803	1160	179	150	140	139
24	155	110	613	e155	260	287	675	542	e157	143	148	142
25	144	109	608	e155	259	257	407	339	168	145	149	141
26	131	109	380	e150	241	248	327	273	153	140	132	137
27	131	110	277	e148	227	520	289	248	143	134	142	137
28	149	116	232	e147	219	722	250	241	164	139	137	142
29	129	108	218	e145	213	487	234	174	143	135	132	138
30	126	105	917	e145	---	988	226	176	163	142	132	138
31	155	---	917	e144	---	1200	---	1130	---	143	134	---
TOTAL	5227	3869	10777	19642	8228	10686	10069	17780	19907	4859	4333	4107
MEAN	169	129	348	634	284	345	336	574	664	157	140	137
MAX	299	170	1200	4870	1490	1200	803	3100	4050	179	156	152
MIN	126	105	122	144	143	165	164	174	143	134	123	117

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955-2004, BY WATER YEAR (WY)

MEAN	112	124	157	199	238	335	332	275	234	163	145	129
MAX	289	650	926	871	781	957	783	786	720	503	655	626
(WY)	1980	1973	1991	1959	1975	1963	1961	1996	1997	1987	1980	1979
MIN	0.15	1.69	0.77	1.02	6.24	89.1	46.2	21.5	0.30	0.55	4.86	3.43
(WY)	1956	1956	1956	1956	1956	1972	1955	1955	1955	1955	1955	1955

	SUMMARY STATISTICS		FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1955-2004	
ANNUAL TOTAL			93946		119484			
ANNUAL MEAN			257		326		203	
HIGHEST ANNUAL MEAN							337	1973
LOWEST ANNUAL MEAN							111	1966
HIGHEST DAILY MEAN			2820	Sep 28	4870	Jan 5	10600	Jan 22 1959
LOWEST DAILY MEAN			105	Nov 30	105	Nov 30	0.00	May 20 1955
ANNUAL SEVEN-DAY MINIMUM			110	Nov 24	110	Nov 24	0.00	May 31 1955
MAXIMUM PEAK FLOW					5920	Jan 5	23800	Jan 21 1959
MAXIMUM PEAK STAGE					12.33	Jan 5	19.75	Jan 21 1959
INSTANTANEOUS LOW FLOW							0.00	May 20 1955
10 PERCENT EXCEEDS			442		588		307	
50 PERCENT EXCEEDS			160		172		124	
90 PERCENT EXCEEDS			130		132		66	

e Estimated.

03228560 Rocky Fork at Gahanna, Ohio

LOCATION.—Latitude 40°01'18", longitude 82°51'57", Franklin County, Hydrologic Unit 05060001, on right bank at upstream side of Hamilton Road bridge at Gahanna, Ohio.

DRAINAGE AREA.—28.2 mi².

PERIOD OF RECORD.—July 2003 to September 2004.

GAGE.—Water-stage recorder. Elevation of gage is 780 ft above sea level (from topographic map).

REMARKS.—Records good except for periods of estimated record, which are poor.

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	5.0	4.5	476
2	---	---	---	---	---	---	---	---	---	5.0	28	707
3	---	---	---	---	---	---	---	---	---	4.8	75	447
4	---	---	---	---	---	---	---	---	---	6.4	51	81
5	---	---	---	---	---	---	---	---	---	21	33	42
6	---	---	---	---	---	---	---	---	---	48	15	28
7	---	---	---	---	---	---	---	---	---	29	45	20
8	---	---	---	---	---	---	---	---	---	109	28	15
9	---	---	---	---	---	---	---	---	---	118	10	13
10	---	---	---	---	---	---	---	---	---	66	12	11
11	---	---	---	---	---	---	---	---	---	64	8.0	9.0
12	---	---	---	---	---	---	---	---	---	30	11	7.3
13	---	---	---	---	---	---	---	---	---	21	8.9	6.8
14	---	---	---	---	---	---	---	---	---	12	5.7	6.4
15	---	---	---	---	---	---	---	---	---	11	140	6.2
16	---	---	---	---	---	---	---	---	---	21	60	5.9
17	---	---	---	---	---	---	---	---	---	9.1	46	5.2
18	---	---	---	---	---	---	---	---	---	7.1	15	4.7
19	---	---	---	---	---	---	---	---	---	6.7	8.6	15
20	---	---	---	---	---	---	---	---	---	5.5	6.7	9.5
21	---	---	---	---	---	---	---	---	---	5.9	5.9	5.8
22	---	---	---	---	---	---	---	---	---	9.0	5.2	267
23	---	---	---	---	---	---	---	---	---	8.4	4.6	155
24	---	---	---	---	---	---	---	---	---	14	4.0	37
25	---	---	---	---	---	---	---	---	---	8.5	3.7	22
26	---	---	---	---	---	---	---	---	---	5.6	3.4	42
27	---	---	---	---	---	---	---	---	---	5.2	44	677
28	---	---	---	---	---	---	---	---	---	6.6	25	109
29	---	---	---	---	---	---	---	---	---	5.3	20	43
30	---	---	---	---	---	---	---	---	---	4.3	1020	28
31	---	---	---	---	---	---	---	---	---	3.9	106	---
TOTAL	---	---	---	---	---	---	---	---	---	676.3	1853.2	3301.8
MEAN	---	---	---	---	---	---	---	---	---	21.8	59.8	110
MAX	---	---	---	---	---	---	---	---	---	118	1020	707
MIN	---	---	---	---	---	---	---	---	---	3.9	3.4	4.7
CFSM	---	---	---	---	---	---	---	---	---	0.77	2.12	3.90
IN.	---	---	---	---	---	---	---	---	---	0.89	2.44	4.36
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003-2003, BY WATER YEAR (WY)												
MEAN	---	---	---	---	---	---	---	---	---	21.8	59.8	110
MAX	---	---	---	---	---	---	---	---	---	21.8	59.8	110
(WY)	---	---	---	---	---	---	---	---	---	2003	2003	2003
MIN	---	---	---	---	---	---	---	---	---	21.8	59.8	110
(WY)	---	---	---	---	---	---	---	---	---	2003	2003	2003

03228560 Rocky Fork at Gahanna, Ohio—Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	8.5	32	34	e8.0	31	67	45	41	5.2	72	e33
2	14	8.0	23	298	e11	67	122	496	29	4.9	25	e15
3	12	5.9	17	513	e250	40	67	122	16	5.4	13	e10
4	14	5.2	14	1540	e50	45	41	46	11	12	28	e8.2
5	11	4.9	61	865	e60	43	29	32	8.4	8.3	21	e7.0
6	8.6	4.7	103	103	695	35	23	24	7.5	17	9.9	e6.2
7	8.2	4.6	40	e40	108	26	21	21	7.3	7.4	7.0	e6.0
8	6.2	3.9	27	e25	40	21	19	20	6.4	5.5	5.9	e60
9	5.7	3.5	22	e18	29	17	17	15	15	4.7	5.3	e80
10	5.3	3.3	168	e14	e25	13	14	11	56	4.2	5.3	e15
11	5.3	9.1	169	e12	e25	13	13	18	762	7.4	4.3	e11
12	5.1	255	47	e11	27	12	28	16	420	9.8	3.9	e9.6
13	4.9	51	28	e9.4	28	9.7	168	13	125	4.9	3.7	e8.6
14	52	21	23	e8.4	17	9.5	317	8.9	479	3.8	3.7	e8.0
15	72	13	21	e7.6	14	9.8	60	26	479	3.5	3.5	e7.4
16	24	10	30	e7.0	11	14	37	23	565	3.2	3.4	e7.0
17	21	8.3	71	e8.8	10	17	27	13	72	36	3.8	e76
18	13	7.7	33	e22	9.6	32	23	50	45	26	3.5	e30
19	9.7	29	25	e18	9.5	89	16	170	30	8.6	12	e16
20	7.9	31	19	e10	18	55	17	45	21	5.6	36	e13
21	6.9	13	e14	e9.0	45	83	26	163	17	4.7	135	e11
22	6.3	9.1	e13	e8.0	28	37	66	263	14	43	29	e9.8
23	5.7	7.4	37	e7.0	20	26	309	44	11	19	14	e8.6
24	5.2	9.4	130	e6.4	31	24	62	26	9.8	7.3	10	e7.8
25	4.7	8.8	53	e6.0	26	29	43	17	19	5.0	8.0	e7.0
26	12	6.4	30	e7.0	19	25	40	12	11	49	29	e6.4
27	12	17	24	e12	16	115	28	11	7.8	25	14	e6.2
28	8.0	300	22	e32	15	62	20	29	6.8	12	10	e6.0
29	20	124	25	e16	16	38	16	15	6.5	7.8	e84	e6.8
30	11	46	250	e12	---	347	36	8.9	5.5	6.1	e66	e7.4
31	6.7	---	59	e9.2	---	150	---	168	---	291	e50	---
TOTAL	418.4	1028.7	1630	3688.8	1661.1	1535.0	1772	1971.8	3304.0	653.3	719.2	504.0
MEAN	13.5	34.3	52.6	119	57.3	49.5	59.1	63.6	110	21.1	23.2	16.8
MAX	72	300	250	1540	695	347	317	496	762	291	135	80
MIN	4.7	3.3	13	6.0	8.0	9.5	13	8.9	5.5	3.2	3.4	6.0
CFSM	0.48	1.22	1.86	4.22	2.03	1.76	2.09	2.26	3.91	0.75	0.82	0.60
IN.	0.55	1.36	2.15	4.87	2.19	2.02	2.34	2.60	4.36	0.86	0.95	0.66
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003-2004, BY WATER YEAR (WY)												
MEAN	13.5	34.3	52.6	119	57.3	49.5	59.1	63.6	110	21.4	41.5	63.4
MAX	13.5	34.3	52.6	119	57.3	49.5	59.1	63.6	110	21.8	59.8	110
(WY)	2004	2004	2004	2004	2004	2004	2004	2004	2004	2003	2003	2003
MIN	13.5	34.3	52.6	119	57.3	49.5	59.1	63.6	110	21.1	23.2	16.8
(WY)	2004	2004	2004	2004	2004	2004	2004	2004	2004	2004	2004	2004
SUMMARY STATISTICS												
ANNUAL TOTAL	18886.3											
ANNUAL MEAN	51.6											
HIGHEST ANNUAL MEAN	51.6											
LOWEST ANNUAL MEAN	51.6											
HIGHEST DAILY MEAN	1540 Jan 4											
LOWEST DAILY MEAN	3.2 Jul 16											
ANNUAL SEVEN-DAY MINIMUM	3.6 Aug 12											
MAXIMUM PEAK FLOW	1930 Jan 4											
MAXIMUM PEAK STAGE	8.18 Jan 4											
INSTANTANEOUS LOW FLOW	3.0 Jul 16											
ANNUAL RUNOFF (CFSM)	1.83											
ANNUAL RUNOFF (INCHES)	24.91											
10 PERCENT EXCEEDS	103											
50 PERCENT EXCEEDS	17											
90 PERCENT EXCEEDS	5.6											
FOR 2004 WATER YEAR												
WATER YEARS 2003 - 2004												

e Estimated.

03228750 Alum Creek near Kilbourne, Ohio

LOCATION.—Latitude 40°21'24", longitude 82°55'18", Delaware County, Hydrologic Unit 05060001, on left bank of upstream side of bridge on County Road 34, 100 ft downstream from West Branch Alum Creek, and 2.6 mi northeast of Kilbourne.

DRAINAGE AREA.—64.9 mi².

PERIOD OF RECORD.—November 1973 to September 1981, October 2000 to current year.

GAGE.—Water-stage recorder. Datum of gage is 900.99 ft above sea level.

REMARKS.—Records poor.

REVISIONS.—Revised figures of discharge for water years 2002 and 2003, superseding those published in the reports for 2002 and 2003 are given below.

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e0.60	e8.4	e400	e6.2	771	29	94	52	23	11	1.2	0.31
2	e0.66	e11	e100	e6.0	168	29	105	59	20	9.2	1.1	0.31
3	e0.74	e18	e90	e6.0	72	224	841	45	18	7.4	1.1	0.30
4	e0.90	e16	e50	e5.8	44	65	189	38	17	6.3	1.1	0.16
5	e1.3	e11	e40	e5.2	40	47	95	34	27	5.7	1.1	0.16
6	e7.0	e10	e30	e5.0	41	29	66	33	184	5.0	1.9	0.16
7	e3.0	e6.0	e23	e6.0	17	26	51	44	79	4.5	1.2	0.17
8	e1.6	e5.2	e19	e7.0	14	23	51	50	39	4.1	0.93	0.31
9	e1.2	e5.8	e16	e8.0	11	59	144	53	27	4.3	0.93	0.31
10	e1.1	e5.2	e14	e10	18	95	100	41	23	9.3	0.92	0.31
11	e1.0	e5.2	e13	e15	99	40	62	32	20	7.7	0.78	0.47
12	e2.0	e4.4	e17	e20	65	34	63	298	18	5.1	0.78	0.47
13	e3.2	e3.9	e23	e24	39	31	573	956	17	4.2	0.78	0.47
14	e20	e3.8	30	e30	27	28	1610	408	17	4.1	0.85	0.47
15	e30	e3.7	52	e32	21	28	613	104	16	4.0	3.4	3.3
16	e40	e3.7	17	e22	19	189	166	61	15	3.5	2.3	3.3
17	e100	e3.6	1000	e15	16	79	89	52	13	2.8	1.4	1.2
18	e40	e3.5	786	e10	14	50	66	76	13	2.0	0.95	0.76
19	e20	e3.5	192	e8.0	11	38	78	51	12	1.8	2.8	0.62
20	e10	e5.6	90	e6.0	25	52	308	41	11	2.5	3.6	2.1
21	e6.4	e7.6	52	e5.0	72	75	140	35	10	2.2	1.5	6.7
22	e5.4	e6.0	37	e6.0	40	51	142	31	9.6	1.7	1.0	3.8
23	e120	e5.4	55	e8.0	27	39	73	29	9.1	1.5	6.4	1.8
24	e580	e8.0	54	e10	22	33	55	27	8.4	1.4	15	1.2
25	e200	e18	e30	29	20	37	47	26	7.8	1.2	4.5	0.98
26	e80	e20	e20	14	26	302	40	26	7.3	1.9	2.1	1.0
27	e31	e30	e15	9.6	30	529	39	23	37	4.6	1.3	45
28	e24	e100	e12	8.0	24	346	370	26	80	3.8	0.89	22
29	e17	e400	e10	8.7	---	222	111	27	23	2.8	0.53	8.0
30	e13	e800	e9.0	94	---	374	64	31	14	2.3	0.33	5.0
31	e10	---	e7.0	256	---	124	---	31	---	1.7	0.31	---
TOTAL	1371.10	1532.5	3303.0	695.5	1793	3327	6445	2840	815.2	129.6	62.98	111.14
MEAN	44.2	51.1	107	22.4	64.0	107	215	91.6	27.2	4.18	2.03	3.70
MAX	580	800	1000	256	771	529	1610	956	184	11	15	45
MIN	0.60	3.5	7.0	5.0	11	23	39	23	7.3	1.2	0.31	0.16
CFSM	0.68	0.79	1.64	0.35	0.99	1.65	3.31	1.41	0.42	0.06	0.03	0.06
IN.	0.79	0.88	1.89	0.40	1.03	1.91	3.69	1.63	0.47	0.07	0.04	0.06

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974-2002, BY WATER YEAR (WY)

	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	15.4	43.8	88.6	104	171	125	116	52.3	45.3	13.2	33.2	17.3																	
MAX	44.2	176	192	220	355	364	215	121	139	51.1	244	125																	
(WY)	2002	1980	1978	1974	1981	1978	2002	1981	1980	1980	1980	1979																	
MIN	2.96	5.63	11.0	8.04	16.2	28.9	21.4	12.0	4.60	1.56	1.93	1.86																	
(WY)	1975	1979	1977	1977	1978	2001	1976	1976	1977	2001	1975	1977																	

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1974 - 2002	
ANNUAL TOTAL	21562.94		22426.02			
ANNUAL MEAN	59.1		61.4		68.3	
HIGHEST ANNUAL MEAN					101 1980	
LOWEST ANNUAL MEAN					46.0 1976	
HIGHEST DAILY MEAN	1000	Dec 17	1610	Apr 14	2650	Feb 24 1975
LOWEST DAILY MEAN	0.57	Jul 16	0.16	Sep 4	0.16	Sep 4 2002
ANNUAL SEVEN-DAY MINIMUM	0.68	Sep 27	0.22	Sep 1	0.22	Sep 1 2002
MAXIMUM PEAK FLOW			2850	Apr 14	4850	Feb 24 1975
MAXIMUM PEAK STAGE			9.69	Apr 14	12.05	Feb 24 1975
INSTANTANEOUS LOW FLOW			0.00	Sep 3	0.00	Sep 3 2002
ANNUAL RUNOFF (CFSM)	0.91		0.95		1.05	
ANNUAL RUNOFF (INCHES)	12.36		12.85		14.30	
10 PERCENT EXCEEDS	142		107		144	
50 PERCENT EXCEEDS	17		17		18	
90 PERCENT EXCEEDS	1.2		1.1		2.0	

e Estimated.

03228750 Alum Creek near Kilbourne, Ohio

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e3.4	e5.3	e8.0	420	e7.4	e40	51	23	79	9.2	78	978
2	e2.5	e5.0	e7.6	174	e7.2	e80	45	50	30	8.1	58	973
3	e2.1	e5.0	e6.8	75	e7.0	e200	38	43	241	7.9	55	268
4	e2.5	e5.1	e6.4	47	e230	e400	37	30	133	8.3	172	84
5	e4.2	e5.6	e6.0	37	e120	e1100	530	317	51	37	91	41
6	e3.8	e6.9	e5.6	e31	e40	886	143	147	30	17	46	29
7	e3.0	e7.3	e5.2	e28	e31	367	296	81	24	65	38	23
8	e2.3	e6.5	e4.8	e26	e26	509	234	78	42	92	42	19
9	e2.1	e6.4	e4.6	e23	e30	670	103	1430	118	131	134	17
10	e2.1	e26	e5.0	e21	e17	187	72	701	37	84	162	14
11	e2.1	e125	e6.0	e20	e16	85	58	433	811	53	32	13
12	e2.1	e30	e7.6	e19	e14	64	48	143	572	24	29	11
13	e2.1	e19	11	e17	e13	619	41	88	394	16	17	10
14	e2.1	e10	15	e16	e12	332	36	50	204	12	12	9.6
15	e2.1	e7.5	18	e15	e11	172	34	294	110	10	11	10
16	e2.3	e7.3	16	e14	e11	174	32	668	51	13	12	9.3
17	e2.5	e7.1	14	e13	e10	140	32	110	37	10	19	8.3
18	e2.8	e6.4	14	e13	e9.8	96	34	56	32	8.0	13	7.3
19	e3.8	e6.3	87	e12	e9.4	68	31	37	26	7.2	10	41
20	e4.3	e6.3	319	e11	e9.0	69	31	340	21	6.6	9.0	26
21	e4.3	8.0	79	e11	e8.8	66	59	354	18	8.4	7.9	15
22	e3.9	14	45	e10	e8.4	62	41	79	16	18	9.9	212
23	e3.5	e27	34	e9.8	e800	46	34	40	14	14	8.1	219
24	e3.4	e31	27	e9.4	e300	39	30	30	12	11	6.8	46
25	e4.6	e26	e24	e9.0	e100	35	29	25	11	8.6	6.1	27
26	e15	16	e21	e8.6	e70	76	28	20	10	7.2	6.4	20
27	e6.2	13	e19	e8.4	e60	56	26	17	10	7.2	45	1780
28	e4.7	e13	e18	e8.0	e50	43	24	17	10	11	28	419
29	e4.7	e11	e16	e7.8	---	182	25	20	10	11	14	98
30	e6.9	11	148	e7.7	---	e126	24	16	11	7.7	547	53
31	e6.3	---	559	e7.6	---	61	---	167	---	9.6	64	---
TOTAL	117.7	474.0	1557.6	1129.3	2028.0	7050	2246	5904	3165	733.0	1783.2	5480.5
MEAN	3.80	15.8	50.2	36.4	72.4	227	74.9	190	106	23.6	57.5	183
MAX	15	125	559	420	800	1100	530	1430	811	131	547	1780
MIN	2.1	5.0	4.6	7.6	7.0	35	24	16	10	6.6	6.1	7.3
CFSM	0.06	0.24	0.77	0.56	1.12	3.50	1.15	2.93	1.63	0.36	0.89	2.81
IN.	0.07	0.27	0.89	0.65	1.16	4.04	1.29	3.38	1.81	0.42	1.02	3.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974-2003, BY WATER YEAR (WY)

MEAN	14.3	41.3	85.1	97.4	162	134	112	64.9	50.8	14.2	35.4	32.3
MAX	44.2	176	192	220	355	364	215	190	139	51.1	244	183
(WY)	2002	1980	1978	1974	1981	1978	2002	2003	1980	1980	1980	2003
MIN	2.96	5.63	11.0	8.04	16.2	28.9	21.4	12.0	4.60	1.56	1.93	1.86
(WY)	1975	1979	1977	1977	1978	2001	1976	1976	1977	2001	1975	1977

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1974-2003

ANNUAL TOTAL	18368.72	31668.3								70.1		
ANNUAL MEAN	50.3	86.8										
HIGHEST ANNUAL MEAN										101		1980
LOWEST ANNUAL MEAN										46.0		1976
HIGHEST DAILY MEAN	1610	Apr 14				1780	Sep 27			2650	Feb 24	1975
LOWEST DAILY MEAN	0.16	Sep 4				2.1	Oct 3			0.16	Sep 4	2002
ANNUAL SEVEN-DAY MINIMUM	0.22	Sep 1				2.1	Oct 9			0.22	Sep 1	2002
MAXIMUM PEAK FLOW						3110	May 9			4850	Feb 24	1975
MAXIMUM PEAK STAGE						10.08	May 9			12.05	Feb 24	1975
INSTANTANEOUS LOW FLOW										0.00	Sep 3	2002
ANNUAL RUNOFF (CFSM)	0.78					1.34				1.08		
ANNUAL RUNOFF (INCHES)	10.53					18.15				14.68		
10 PERCENT EXCEEDS	95					215				150		
50 PERCENT EXCEEDS	13					21				18		
90 PERCENT EXCEEDS	1.2					5.6				2.1		

e Estimated.

03228805 Alum Creek at Africa, Ohio

LOCATION.—Latitude 40°10'56", longitude 82°57'42", in SE ¼ sec. 1, T.3 N., R.18 W., Delaware County, Hydrologic Unit 05060001, on right bank 400 ft upstream of bridge on Lewis Center Road, 1,200 ft downstream from outlet of Alum Creek Dam, 0.3 mi west of Africa, Ohio, 2.8 mi upstream from Westerville Reservoir outlet, and 4.2 mi northwest of Westerville, Ohio.

DRAINAGE AREA.—122 mi².

PERIOD OF RECORD.—Water year 1962 (occasional low-flow measurements), June 1963 to current year.

GAGE.—Water-stage recorder. Datum of gage is 822.00 ft above sea level (levels by U.S. Army Corps of Engineers). July 9, 1974–Sept. 30, 1985, at datum 22.00 ft lower; Oct. 17, 1973–July 9, 1974, nonrecording gage at bridge 400 ft downstream at datum 22.00 ft lower; prior to Oct. 17, 1973, water-stage recorder 600 ft downstream at datum 4.63 ft lower.

REMARKS.—Records fair except for periods of estimated record, which are poor. Flow regulated by Alum Creek Lake since Aug. 1973. Water-quality and sediment data formerly collected at this site. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREME FOR PERIOD OF RECORD.—Maximum discharge, 6,160 ft³/s Mar. 10, 1964, gage height 13.95 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Mar. 5, 1963, reached a stage of 14.2 ft, from floodmarks; discharge, 6,460 ft³/s.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1710	36	278	13	e13	134	375	48	608	19	13	137
2	1270	36	638	72	e13	372	32	55	1180	20	13	18
3	513	86	628	112	111	496	27	604	706	22	13	9.5
4	421	114	346	82	394	500	27	942	238	23	13	9.9
5	420	65	11	22	332	217	27	672	14	22	13	10
6	259	31	10	394	227	65	18	339	14	19	13	10
7	68	18	10	925	285	64	12	156	14	18	12	10
8	68	14	9.9	1340	538	65	12	114	14	16	12	11
9	332	14	10	1320	533	65	12	115	14	14	12	11
10	551	14	12	916	528	65	12	114	15	14	12	10
11	544	12	11	901	202	65	11	113	18	14	12	10
12	546	10	11	790	17	71	14	112	227	14	12	9.8
13	545	10	11	509	17	80	22	61	429	14	12	9.6
14	547	10	11	166	15	80	21	35	64	14	12	9.7
15	545	11	11	e19	16	81	19	60	15	13	12	9.8
16	545	12	11	e18	16	82	19	75	16	14	12	9.7
17	543	13	12	e17	16	80	19	73	781	14	12	11
18	536	13	12	e16	17	77	18	207	1710	14	12	9.7
19	538	13	12	e15	16	73	18	396	1670	14	12	9.7
20	535	13	12	e15	17	73	18	655	1230	14	13	10
21	533	11	12	e15	17	74	19	562	985	14	239	12
22	529	11	12	e14	17	333	21	10	650	14	407	13
23	526	12	12	e14	106	507	22	209	67	13	157	13
24	525	12	13	e14	189	503	19	966	18	13	35	13
25	522	12	12	e14	188	368	19	1230	18	13	36	13
26	520	12	12	e13	188	125	19	462	18	14	34	13
27	517	12	12	e13	137	66	19	83	19	13	33	13
28	516	14	12	e13	71	65	27	9.0	20	13	212	13
29	508	12	12	e13	71	408	21	12	19	13	457	13
30	506	12	14	e13	---	763	31	12	19	13	467	13
31	313	---	13	e13	---	880	---	26	---	15	382	---
TOTAL	16551	665	2202.9	7811	4307	6897	950	8527.0	10810	474	2706	464.4
MEAN	534	22.2	71.1	252	149	222	31.7	275	360	15.3	87.3	15.5
MAX	1710	114	638	1340	538	880	375	1230	1710	23	467	137
MIN	68	10	9.9	13	13	64	11	9.0	14	13	12	9.5

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

	2004	1980	1991	1993	1994	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	65.0	102	127	120	159	157	103	130	106	68.2	40.9	61.1	
MAX	534	375	460	437	464	514	358	651	360	364	570	618	
(WY)	2004	1980	1991	1993	1994	1997	1979	1996	2004	1987	1980	1980	
MIN	3.85	5.39	6.15	1.50	5.48	5.02	3.46	3.32	3.61	3.05	3.31	3.53	
(WY)	1974	1989	1976	1976	1981	1987	1981	1976	1976	1976	1981	1981	

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1974 - 2004

ANNUAL TOTAL	53091.9	62365.3		
ANNUAL MEAN	145	170	103	
HIGHEST ANNUAL MEAN			243	1980
LOWEST ANNUAL MEAN			8.54	1992
HIGHEST DAILY MEAN	1720	Sep 5	1710	Oct 1
LOWEST DAILY MEAN	5.9	Jan 28	9.0	May 28
ANNUAL SEVEN-DAY MINIMUM	7.1	Jan 22	9.8	Sep 10
MAXIMUM PEAK FLOW			1790	Oct 1
MAXIMUM PEAK STAGE			5.26	Oct 1
INSTANTANEOUS LOW FLOW				0.00
10 PERCENT EXCEEDS	527	540	296	
50 PERCENT EXCEEDS	16	19	18	
90 PERCENT EXCEEDS	9.7	11	6.2	

e Estimated.

03229500 Big Walnut Creek at Rees, Ohio

LOCATION.—Latitude 39°51'24", longitude 82°57'26", in NE ¼ sec. 26, T.4 N., R.22 W., Franklin County, Hydrologic Unit 05060001, on right bank at downstream side of bridge on Reese Road, 0.5 mi southwest of Reese, Ohio, 4.2 mi downstream from Alum Creek, and 10.5 mi upstream from mouth.

DRAINAGE AREA.—544 mi².

PERIOD OF RECORD.—August 1921 to December 1935, October 1938 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.—WSP 1053: 1929, 1933(M), 1945. WSP 1305: 1923(M), 1925-26(M).

GAGE.—Water-stage recorder. Datum of gage is 698.20 ft above sea level. Aug. 18, 1921-Oct. 23, 1927, nonrecording gage at site 0.3 mi upstream at datum 2.00 ft higher prior to Oct. 1, 1924, at present datum thereafter.

REMARKS.—Records fair except for periods of estimated record, which are poor. Flow regulated by Hoover Reservoir 26 mi upstream and Alum Creek Lake, 30 mi upstream since Aug. 1973. Water-quality data formerly collected at this site. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 59,800 ft³/s Jan. 22, 1959, gage height, 22.03 ft (from highwater mark in well), from rating curve extended above 13,000 ft³/s on basis of contracted-opening measurement of peak flow; minimum, 5 ft³/s Sept. 4, 5, 10-12, 1925; minimum daily since 1956, 9.4 ft³/s Sept. 13, 1964.

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	1890	336	290	875	e160	388	1990	579	2000	141	1550	433
2	1810	227	773	1940	187	687	1280	2840	2150	152	404	202
3	1060	190	867	3290	1490	982	971	3640	1550	144	253	125
4	752	262	837	8710	1040	1120	716	2320	803	235	325	99
5	708	279	508	12300	1120	1020	504	1520	371	179	375	101
6	663	204	813	5430	3860	615	393	1030	224	185	193	94
7	294	176	608	2730	2630	527	344	607	181	160	164	91
8	222	149	478	1930	1790	462	323	527	171	152	140	764
9	207	138	379	2080	1310	391	231	455	157	132	139	890
10	710	118	820	1560	1130	323	196	406	302	124	132	267
11	721	136	1860	1400	972	292	184	487	3400	252	135	170
12	705	1280	1320	1350	431	269	268	592	2890	376	127	135
13	705	488	736	1060	e350	254	981	378	2350	169	116	117
14	1050	264	514	759	e315	253	2320	238	4550	131	109	111
15	1270	203	436	341	e285	254	1160	433	4120	115	113	113
16	870	186	375	278	262	300	684	405	4870	113	146	105
17	860	171	541	256	236	356	474	281	1870	502	112	813
18	797	163	462	494	215	382	381	353	2320	648	104	632
19	776	321	384	344	208	776	321	1410	2040	187	227	220
20	764	358	339	255	221	524	320	1190	1830	136	331	156
21	750	214	276	e210	364	915	313	1680	1240	111	1390	127
22	741	178	237	e185	349	902	475	3790	1310	976	745	127
23	731	159	247	e175	307	1070	2200	1980	440	357	524	121
24	731	186	1010	e170	529	942	1360	1240	238	179	204	110
25	704	197	1020	e170	606	966	797	1750	300	137	163	102
26	801	159	673	e200	539	603	645	1180	232	761	386	103
27	777	191	484	e300	502	902	458	519	191	335	222	97
28	694	1340	376	e240	380	1250	370	551	174	198	188	91
29	801	976	363	e195	340	919	301	349	161	151	950	96
30	693	416	1560	e175	---	2640	425	207	150	135	711	123
31	666	---	1560	e165	---	3010	---	1540	---	2710	640	---
TOTAL	24923	9665	21146	49567	22128	24294	21385	34477	42585	10283	11318	6735
MEAN	804	322	682	1599	763	784	713	1112	1420	332	365	224
MAX	1890	1340	1860	12300	3860	3010	2320	3790	4870	2710	1550	890
MIN	207	118	237	165	160	253	184	207	150	111	104	91
(+)	118	106	102	108	116	103	103	112	123	142	124	118

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

	2003	2004	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
MEAN	224	367	501	548	667	742	701	609	548	361	286	258		
MAX	951	1398	2110	1599	1747	1688	1467	2057	1657	1313	1566	1814		
(WY)	1987	1986	1991	2004	1990	1984	1979	1996	1997	1990	1980	1979		
MIN	57.4	47.8	111	115	110	121	130	63.3	64.0	84.7	52.8	57.3		
(WY)	1995	1992	1988	1977	1992	1983	1976	1976	1988	1991	1993	1985		

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1974-2004	
ANNUAL TOTAL	239546	278506		
ANNUAL MEAN	656 (+119)	761 (+115)	480#	
HIGHEST ANNUAL MEAN			761	2004
LOWEST ANNUAL MEAN			221	1992
HIGHEST DAILY MEAN	6420	12300	14000	Sep 15 1979
LOWEST DAILY MEAN	90	91	22	Jul 10 1988
ANNUAL SEVEN-DAY MINIMUM	94	103	25	Jul 4 1988
MAXIMUM PEAK FLOW		14100		Sep 15 1979
MAXIMUM PEAK STAGE		16.05	17.75	Sep 15 1979
INSTANTANEOUS LOW FLOW		88	22	Jul 10 1988
10 PERCENT EXCEEDS	1460	1800	1210	
50 PERCENT EXCEEDS	381	387	192	
90 PERCENT EXCEEDS	119	136	60	

(+) Average diversion by City of Columbus Municipal Water Supply.

Adjusted for diversion

e Estimated.

03230310 Little Darby Creek at West Jefferson, Ohio

LOCATION.—Latitude 39°57'04", longitude 83°16'10", Madison County, Hydrologic Unit 05060001, at bridge on Middle Pike, 0.4 mi north of West Jefferson, Ohio, and 7.2 mi upstream from Big Darby Creek.

DRAINAGE AREA.—162 mi².

PERIOD OF RECORD.—October 1992 to current year.

GAGE.—Water-stage recorder. Datum of gage is 785 ft above sea level. Prior to 1992, low-flow partial-record site.

REMARKS.—Records fair except for periods of estimated record, which are poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	230	75	407	e300	e62	156	620	162	1160	78	75	22	
2	170	72	290	e370	e66	319	419	574	548	73	53	19	
3	134	70	232	e700	e160	281	351	1020	416	69	34	17	
4	120	68	199	e1800	e350	229	279	531	327	65	31	16	
5	101	66	209	e4000	e290	242	220	328	262	63	32	15	
6	86	61	420	2750	1190	221	187	243	e200	60	31	14	
7	77	59	356	1040	1670	176	170	200	e170	55	25	13	
8	69	54	263	564	849	152	159	174	e140	51	21	22	
9	63	49	221	392	456	132	142	156	e120	47	19	26	
10	59	47	249	289	350	118	124	141	e130	45	18	20	
11	55	50	533	240	363	108	114	129	1050	44	17	18	
12	53	195	375	214	300	105	116	119	1580	41	16	16	
13	51	298	253	191	296	94	193	111	908	38	15	14	
14	66	164	217	174	203	90	653	107	1190	34	15	13	
15	278	121	190	e140	169	92	519	123	1430	31	14	12	
16	278	101	179	e130	134	93	299	170	754	30	14	11	
17	173	89	366	e115	118	97	225	170	648	38	14	19	
18	135	83	310	e100	109	103	186	148	802	39	13	19	
19	117	147	229	e94	123	188	161	543	737	38	16	13	
20	98	258	188	e86	214	496	146	589	533	32	20	13	
21	90	170	159	e78	314	533	141	445	e340	27	70	12	
22	85	130	150	e74	259	332	150	1610	e280	30	127	11	
23	75	108	154	e70	192	233	383	925	e220	28	57	9.7	
24	68	103	312	e68	202	195	316	416	e180	27	36	9.2	
25	61	96	322	e66	213	172	248	276	e145	23	27	8.7	
26	67	89	225	e78	170	154	294	214	e150	27	37	8.4	
27	81	103	184	e92	150	177	234	182	e130	34	28	8.3	
28	93	812	168	e86	136	227	187	208	e105	29	23	7.8	
29	89	1150	e160	e80	136	204	155	182	91	27	29	8.8	
30	86	648	e300	e70	---	699	149	194	84	24	29	11	
31	79	---	e500	e64	---	1120	---	1350	---	59	28	---	
TOTAL	3287	5536	8320	14515	9244	7538	7540	11740	14830	1306	984	426.9	
MEAN	106	185	268	468	319	243	251	379	494	42.1	31.7	14.2	
MAX	278	1150	533	4000	1670	1120	653	1610	1580	78	127	26	
MIN	51	47	150	64	62	90	114	107	84	23	13	7.8	
CFSM	0.65	1.14	1.66	2.89	1.97	1.50	1.55	2.34	3.05	0.26	0.20	0.09	
IN.	0.75	1.27	1.91	3.33	2.12	1.73	1.73	2.70	3.41	0.30	0.23	0.10	
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993-2004, BY WATER YEAR (WY)													
MEAN	36.7	103	154	241	207	259	282	312	248	131	59.8	43.6	
MAX	106	312	368	485	319	506	493	845	673	701	335	377	
(WY)	2004	1994	2002	1996	2004	2003	1996	1996	1997	1993	1995	2003	
MIN	1.74	6.81	10.5	56.6	91.7	74.9	70.2	55.5	18.5	16.8	3.50	0.11	
(WY)	2000	2000	2000	2001	1995	2001	1997	1999	1999	1999	1999	1999	
SUMMARY STATISTICS													
				FOR 2003 CALENDAR YEAR				FOR 2004 WATER YEAR				WATER YEARS 1993-2004	
ANNUAL TOTAL				89259				85266.9					
ANNUAL MEAN				245				233				173	
HIGHEST ANNUAL MEAN												256	1996
LOWEST ANNUAL MEAN												91.1	1999
HIGHEST DAILY MEAN				1870	Sep 3			e4000	Jan 5			4910	Jun 3 1997
LOWEST DAILY MEAN				13	Aug 26			7.8	Sep 28			0.00	Sep 6 1999
ANNUAL SEVEN-DAY MINIMUM				17	Aug 21			8.7	Sep 23			0.00	Sep 12 1999
MAXIMUM PEAK FLOW								5530	Jan 5a			6240	Jun 3 1997
MAXIMUM PEAK STAGE								14.90	Jan 5			15.53	Jun 3 1997
INSTANTANEOUS LOW FLOW								7.8	Sep 28			0.00	Sep 4 1999
ANNUAL RUNOFF (CFSM)				1.51				1.44				1.07	
ANNUAL RUNOFF (INCHES)				20.50				19.58				14.51	
10 PERCENT EXCEEDS				593				533				426	
50 PERCENT EXCEEDS				137				134				70	
90 PERCENT EXCEEDS				46				19				9.0	

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

03230450 Hellbranch Run near Harrisburg, Ohio

LOCATION.—Latitude 39°50'52", longitude 83°09'26", Franklin County, Hydrologic Unit 05060001, on right downstream side of State Route 665 bridge, 2.5 mi upstream from mouth, 2.7 mi north-northwest of Harrisburg, Ohio and 1.5 mi east of Darbydale, Ohio.
 DRAINAGE AREA.—35.8 mi².

Water-Discharge Records

PERIOD OF RECORD.—October 1992 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 813 ft above sea level (from topographic map). Prior to Sept. 2001 at site 1.5 mi downstream at elevation 28 ft lower.

REMARKS.—Records fair except for periods of estimated record, which are poor. Water-quality data collected at this site.

**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	45	10	50	42	e11	36	92	43	113	7.5	94	7.0
2	31	13	36	80	e11	54	81	432	76	7.1	43	5.6
3	23	12	27	377	e170	43	70	224	54	6.8	24	4.9
4	20	11	23	1200	e150	49	55	105	41	6.6	18	4.3
5	16	9.7	48	1430	e130	51	45	71	33	6.4	19	4.0
6	12	8.9	85	584	691	43	39	52	26	5.8	11	3.6
7	10	7.7	53	220	223	36	37	42	22	5.6	8.2	3.3
8	8.9	6.7	39	135	109	32	34	38	19	5.5	6.6	9.6
9	7.9	6.0	31	95	84	28	30	31	16	5.0	5.9	24
10	7.4	5.7	71	71	89	25	26	26	17	4.7	5.3	12
11	7.3	6.4	105	60	79	24	24	26	361	4.5	4.9	7.6
12	9.2	78	57	53	69	23	26	24	359	4.8	4.4	5.8
13	8.6	48	40	e45	62	21	94	22	119	5.9	4.0	4.9
14	14	27	33	e41	48	20	313	20	403	4.1	3.7	4.5
15	56	20	26	e34	42	20	121	26	126	3.4	3.6	3.8
16	27	16	29	e31	33	22	78	38	80	3.2	3.3	3.2
17	19	14	65	e28	29	25	57	29	61	12	3.1	26
18	16	13	43	e25	27	41	45	27	48	27	2.7	32
19	13	29	32	e22	30	103	37	165	37	10	3.0	12
20	11	33	24	e20	39	76	32	75	28	7.2	8.2	7.2
21	9.9	22	20	e18	52	71	34	219	23	5.4	39	4.9
22	9.4	18	19	e16	43	50	49	836	19	9.5	21	3.6
23	8.5	15	24	e15	38	42	221	183	15	12	12	2.8
24	8.2	16	66	e13	49	38	99	91	13	6.9	7.8	2.4
25	6.9	15	47	e12	45	37	70	62	15	5.8	6.2	2.4
26	7.9	13	31	e12	38	35	60	47	15	9.8	6.3	2.3
27	14	20	25	e13	34	68	47	41	12	12	8.6	2.2
28	12	176	21	e15	31	69	38	59	10	10	13	2.3
29	14	131	20	e14	31	51	32	42	8.9	7.4	33	3.9
30	12	73	109	e13	---	193	32	47	7.9	6.5	13	3.5
31	9.8	---	63	e12	---	158	---	253	---	152	9.2	---
TOTAL	474.9	874.1	1362	4746	2487	1584	2018	3396	2177.8	380.4	445.0	215.6
MEAN	15.3	29.1	43.9	153	85.8	51.1	67.3	110	72.6	12.3	14.4	7.19
MAX	56	176	109	1430	691	193	313	836	403	152	94	32
MIN	6.9	5.7	19	12	11	20	24	20	7.9	3.2	2.7	2.2
CFSM	0.41	0.79	1.19	4.14	2.32	1.38	1.82	2.96	1.96	0.33	0.39	0.19
IN.	0.48	0.88	1.37	4.77	2.50	1.59	2.03	3.41	2.19	0.38	0.45	0.22

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

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	5.20	16.2	35.7	70.4	51.5	58.6	72.4	67.5	49.8	20.3	14.8	10.4
MAX	16.0	46.2	82.0	153	85.8	109	157	187	142	82.1	65.4	97.3
(WY)	1996	1993	1997	2004	2004	1993	1996	1997	1997	1993	1995	2003
MIN	0.00	0.01	1.95	10.9	23.6	13.8	12.7	5.40	0.36	0.30	0.00	0.00
(WY)	1995	2000	2000	2001	1995	2001	1997	1999	1999	1999	1999	1999

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1993-2004	
ANNUAL TOTAL	16075.2		20160.8			
ANNUAL MEAN	44.0		55.1		39.3	
HIGHEST ANNUAL MEAN					66.8 1996	
LOWEST ANNUAL MEAN					22.9 2000	
HIGHEST DAILY MEAN	773	Sep 2	1430	Jan 5	2000	Jun 29 1998
LOWEST DAILY MEAN	1.8	Jul 31	2.2	Sep 27	0.00	Aug 30 1993
ANNUAL SEVEN-DAY MINIMUM	2.6	Jul 26	2.6	Sep 22	0.00	Sep 13 1993
MAXIMUM PEAK FLOW			1620	Jan 5a	3180	Jun 29 1998
MAXIMUM PEAK STAGE			9.62	Jan 5	14.19	Jun 29 1998
INSTANTANEOUS LOW FLOW			2.2	Sep 27	0.00	Sep 23 1993
ANNUAL RUNOFF (CFSM)	1.19		1.49		1.06	
ANNUAL RUNOFF (INCHES)	16.16		20.27		14.45	
10 PERCENT EXCEEDS	103		104		89	
50 PERCENT EXCEEDS	21		26		12	
90 PERCENT EXCEEDS	4.9		5.4		0.15	

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.
 e Estimated.

03230450 Hellbranch Run near Harrisburg, Ohio—Continued

Water-Quality Records

PERIOD OF RECORD.—May 1992 to current year.

PERIOD OF DAILY RECORD.—

SUSPENDED-SEDIMENT DISCHARGE: October 1992 to current year.

INSTRUMENTATION.—Refrigerated water-quality pumping sampler since Oct. 1992.

REMARKS.—Water-quality samples were collected by equal-width-increment (EWI) sampling method, approximately once per month. Suspended-sediment samples and seasonal-event water-quality samples were collected by pumping sampler. Pumped samples were collected for every 0.5-ft rise and 1 ft drop in stage. Sediment samples were also collected at a single vertical, approximately once per week. Suspended-sediment loads were calculated using the mean-interval method (Porterfield, George, 1972, Computation of Fluvial-Sediment Discharge: U.S. Geological Survey, Techniques of Water-Resources Investigations, book 3, chap. C3, 66 p.). For days with unsteady concentration, discharge, or both, the day was subdivided into quarter-hour intervals and the daily load was calculated by summing the loads for these quarter-hour intervals. This required interpolation between measured and estimated concentrations.

EXTREMES FOR PERIOD OF DAILY RECORD.—

SEDIMENT CONCENTRATIONS: Maximum daily mean, 819 mg/L, June 29, 1998; minimum daily mean, 0.0 mg/L, on several days during 2004.

SEDIMENT LOADS: Maximum daily, 4,420 tons, June 29, 1998; minimum daily, 0.00 ton, on many days during 1993-1995, 1998, 1999, 2002, and on several days during 1996, 1997, 2000, and 2004.

EXTREMES FOR CURRENT YEAR.—

SEDIMENT CONCENTRATIONS: Maximum daily mean, 498 mg/L, May 22; minimum daily mean, 0.0 mg/L, on several days during the year.

SEDIMENT LOADS: Maximum daily, 1,500 tons, Jan. 4; minimum daily, 0.00 ton, on several days during the year.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

[---, no data; e, estimated]

Day	Mean discharge (cfs)	Mean concentration (mg/l)	Sediment discharge (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Sediment discharge (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Sediment discharge (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Sediment discharge (tons/day)
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	45	12	1.4	10	4	0.11	50	20	2.8	42	18	2.1
2	31	6	0.50	13	4	0.14	36	14	1.4	80	67	16
3	23	5	0.31	12	4	0.13	27	9	0.63	377	333	603
4	20	5	0.27	11	4	0.11	23	4	0.28	1200	476	1500
5	16	5	0.21	9.7	4	0.10	48	39	7.5	1430	258	1010
6	12	5	0.16	8.9	4	0.10	85	66	16	584	148	244
7	10	5	0.13	7.7	4	0.08	53	25	3.7	220	96	58
8	8.9	5	0.11	6.7	4	0.07	39	15	1.6	135	72	26
9	7.9	4	0.10	6.0	4	0.06	31	9	0.73	95	58	15
10	7.4	4	0.09	5.7	4	0.06	71	60	19	71	46	8.9
11	7.3	4	0.08	6.4	4	0.07	105	66	21	60	37	6.1
12	9.2	4	0.10	78	51	12	57	20	3.2	53	35	5.0
13	8.6	4	0.09	48	20	2.8	40	15	1.6	e45	33	4.0
14	14	6	0.33	27	7	0.55	33	11	1.0	e41	30	3.4
15	56	21	3.6	20	6	0.30	26	8	0.56	e34	28	2.6
16	27	4	0.32	16	5	0.22	29	12	1.3	e31	26	2.2
17	19	2	0.11	14	5	0.17	65	45	8.2	e28	24	1.8
18	16	2	0.10	13	5	0.18	43	14	1.7	e25	21	1.4
19	13	3	0.10	29	21	1.8	32	11	0.99	e22	19	1.1
20	11	3	0.09	33	18	1.7	24	10	0.69	e20	17	0.90
21	9.9	3	0.08	22	6	0.38	20	10	0.54	e18	14	0.70
22	9.4	3	0.08	18	5	0.24	19	11	0.60	e16	12	0.53
23	8.5	3	0.07	15	5	0.19	24	10	0.67	e15	12	0.47
24	8.2	3	0.07	16	5	0.20	66	25	4.4	e13	11	0.39
25	6.9	3	0.06	15	4	0.17	47	15	1.9	e12	10	0.34
26	7.9	3	0.06	13	4	0.14	31	11	0.94	e12	10	0.32
27	14	3	0.11	20	17	1.6	25	9	0.62	e13	9	0.33
28	12	3	0.10	176	128	68	21	8	0.48	e15	9	0.36
29	14	3	0.11	131	78	29	20	9	0.51	e14	8	0.31
30	12	3	0.12	73	34	6.7	109	116	37	e13	8	0.27
31	9.8	4	0.10	---	---	---	63	34	5.8	e12	7	0.23
TOTAL	474.9	---	9.16	874.1	---	127.37	1362	---	147.34	4746	---	3515.75

03230450 Hellbranch Run near Harrisburg, Ohio—Continued

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

[(00061), USGS National Water Information System parameter code; cfs, cubic feet per second; Sampling code*, 10 means stream cross-section sample collected by equal-width-increments (EWI), 50 means point sample collected from refrigerated automatic sampler; mg/L, milligrams per liter; std, standard; μ S/cm, microsiemens per centimeter; deg C, degrees Celsius; --, no data]

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code* (82398)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf μ S/cm 25 deg C (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Chloride, water, fltrd, mg/L (00940)	Silica, water, fltrd, mg/L (00955)
Oct. 20	1050	11	10	10.3	8.1	774	15.0	10.5	58.8	7.56
Dec. 4	1050	23	10	13.2	7.7	767	4.0	4.0	54.2	8.98
Jan. 3	1130	175	50	--	--	--	--	--	48.3	7.28
Jan. 3	1315	329	50	--	--	--	--	--	36.8	6.34
Jan. 3	1730	591	50	--	--	--	--	--	24.4	6.15
Jan. 3	1845	868	50	--	--	--	--	--	20.2	5.71
Jan. 4	1100	1240	50	--	--	--	--	--	14.0	6.07
Jan. 4	2045	1450	50	--	--	--	--	--	11.4	5.43
Jan. 5	1115	1520	10	--	--	195	1.0	4.5	--	--
Jan. 5	2245	1140	50	--	--	--	--	--	12.0	5.24
Jan. 6	0700	721	50	--	--	--	--	--	16.2	5.08
Jan. 7	0415	261	50	--	--	--	--	--	20.6	6.27
Feb. 25	1215	44	10	14.9	8.5	748	5.0	3.5	75.7	5.22
Mar. 19	1150	98	10	--	--	747	9.0	5.5	--	--
Mar. 24	1230	38	10	15.8	8.2	788	14.0	6.5	79.3	4.84
Apr. 13	1715	112	50	--	--	--	--	--	61.8	5.75
Apr. 13	2245	248	50	--	--	--	--	--	45.9	5.52
Apr. 14	0245	441	50	--	--	--	--	--	35.3	5.61
Apr. 14	1235	298	10	--	--	411	11.5	7.0	--	--
Apr. 15	0315	147	50	--	--	--	--	--	37.6	5.94
Apr. 26	1225	60	10	10.5	8.2	668	16.0	14.5	57.9	7.70
May 18	1235	26	10	9.2	8.4	728	28.0	18.5	63.6	4.06
June 11	1015	178	50	--	--	--	--	--	31.5	4.98
June 11	1200	334	50	--	--	--	--	--	25.4	5.21
June 11	1415	566	50	--	--	--	--	--	21.6	5.58
June 12	1915	213	50	--	--	--	--	--	22.2	7.14
June 14	0200	477	50	--	--	--	--	--	21.1	6.32
June 14	0215	803	50	--	--	--	--	--	15.4	5.56
June 14	0245	1100	50	--	--	--	--	--	11.8	4.94
June 14	0615	648	50	--	--	--	--	--	15.5	6.26
June 14	1930	219	50	--	--	--	--	--	18.4	7.14
June 16	1100	80	10	7.2	7.9	468	22.0	21.5	29.2	8.04
Aug. 19	1145	2.8	10	6.4	7.9	879	29.0	19.5	98.8	5.30
Sept. 28	1100	2.2	10	7.0	8.1	849	19.5	16.5	101	6.58

03230450 Hellbranch Run near Harrisburg, Ohio—Continued

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

[(00945), USGS National Water Information System parameter code; mg/L, milligrams per liter; deg C, degrees Celsius; mm, millimeter; --, no data; <, concentration or value reported is less than that indicated]

Date	Sulfate water, fltrd, mg/L (00945)	Residue total at 105 deg. C, sus- pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite water, fltrd, mg/L as N (00613)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, unfltrd mg/L (00665)	Suspd. sedi- ment, sieve diametr percent <.063mm (70331)	Sus- pended sedi- ment concen- tration mg/L (80154)
Oct. 20	43.8	2	.48	<.03	1.73	<.02	.052	.069	--	3
Dec. 4	46.7	3	.32	<.03	2.43	.05	<.010	.053	--	4
Jan. 3	32.6	194	1.9	.20	2.19	<.02	.067	.422	--	224
Jan. 3	26.4	415	3.2	.07	1.85	<.02	.076	.706	--	466
Jan. 3	19.0	503	3.0	.07	1.79	<.02	.098	.843	--	621
Jan. 3	16.2	628	3.1	.07	1.57	<.02	.107	.922	--	701
Jan. 4	12.9	359	2.6	.05	1.18	<.02	.102	.683	--	424
Jan. 4	11.5	445	2.0	.05	.94	<.02	.102	.640	--	414
Jan. 5	--	--	--	--	--	--	--	--	93	241
Jan. 5	14.1	139	1.0	.05	1.05	<.02	.105	.436	--	182
Jan. 6	17.9	102	.99	.04	1.27	<.02	.100	.375	--	162
Jan. 7	22.7	76	1.6	.03	1.54	<.02	.099	.307	--	103
Feb. 25	43.8	5	.43	.09	3.27	<.02	.012	.038	--	5
Mar. 19	--	--	--	--	--	--	--	--	--	30
Mar. 24	49.4	2	.36	.04	2.19	<.02	<.010	.021	--	28
Apr. 13	35.3	107	1.8	.39	2.14	.03	.043	.193	--	118
Apr. 13	28.7	243	1.9	.19	2.22	.03	.051	.340	--	276
Apr. 14	22.3	347	2.3	.14	2.86	.03	.050	.420	--	366
Apr. 14	--	--	--	--	--	--	--	--	92	136
Apr. 15	30.0	82	1.2	.20	3.44	.03	.088	.186	--	84
Apr. 26	40.6	11	.65	.06	2.64	.07	.042	.081	--	12
May 18	39.4	2	.49	<.03	2.63	.04	.050	.063	--	1
June 11	21.4	1320	3.6	.04	3.20	<.02	.038	1.09	--	1450
June 11	16.0	555	6.1	.03	7.79	.14	.163	.731	--	576
June 11	15.8	461	3.0	.09	5.26	.14	.140	.647	--	479
June 12	19.6	260	1.6	.03	5.18	.08	.117	.429	--	113
June 14	16.8	1160	4.4	<.03	3.37	.05	.093	1.02	--	1680
June 14	12.5	1540	5.4	.07	2.99	.07	.079	1.39	--	1820
June 14	9.2	1180	4.0	.04	3.11	.11	.130	1.14	--	1100
June 14	13.2	317	1.7	.05	3.13	.04	.133	.516	--	262
June 14	15.2	96	1.1	.03	2.80	.04	.129	.293	--	84
June 16	22.0	28	1.0	.04	2.84	.04	.132	.203	--	34
Aug. 19	50.7	2	.67	<.03	.55	<.02	.057	.070	--	3
Sept. 28	59.1	<2	.42	.08	.61	<.02	.095	.121	--	0.0

03230500 Big Darby Creek at Darbyville, Ohio

LOCATION.—Latitude 39°42'02," longitude 83°06'37", Pickaway County, Hydrologic Unit 05060001, on right bank at upstream side of State Highway 316, 0.4 mi northeast of Darbyville, 0.4 mi upstream from Lizzard Run, and 3.0 mi downstream from Greenbrier Creek.

DRAINAGE AREA.—534 mi².

PERIOD OF RECORD.—October 1921 to December 1935, January 1938 to current year. Prior to October 1959, published as Darby Creek at Darbyville.

REVISED RECORDS.—WSP 1083: 1922(M), 1924(M), 1927(M), 1933(M), 1938(M). WSP 1305: 1928-31(M), 1934(M), 1945(M). WSP 1505: 1932(M). WSP 1908: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 713.69 ft above sea level. Prior to Mar. 17, 1940, nonrecording gage at same site and datum.

REMARKS.—Records fair except for periods of estimated record, which are poor. U.S. Army Corps of Engineers satellite telemeter at station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	737	270	1160	899	e190	501	1880	436	3190	179	433	101
2	550	260	836	1120	e210	993	1300	1850	1460	168	276	76
3	430	245	655	3390	e600	1150	1120	3840	1050	160	170	66
4	372	242	543	6610	e1100	869	922	1990	781	148	133	61
5	329	231	556	12500	e1000	880	724	1100	599	138	124	57
6	282	225	1130	13000	3540	892	585	805	472	139	101	55
7	256	213	1200	4030	4360	706	515	630	389	133	96	52
8	228	203	825	1820	2160	565	462	527	329	120	84	60
9	212	193	655	1370	1180	473	409	454	282	113	71	83
10	195	177	666	1050	1060	415	344	385	259	107	64	95
11	185	182	1600	876	1160	366	300	338	1720	105	63	79
12	184	473	1370	794	1020	345	296	316	4460	100	58	67
13	173	789	804	725	965	297	563	297	3090	104	56	58
14	182	583	629	661	788	265	2130	266	3780	94	55	52
15	376	417	546	616	600	255	1940	267	4190	83	53	52
16	900	344	476	553	514	268	1070	379	2300	76	52	50
17	577	302	790	491	418	281	767	501	1880	97	50	56
18	419	280	1020	e410	375	301	601	436	1710	146	51	106
19	352	310	688	e360	365	649	488	1810	1450	114	52	74
20	308	708	538	e310	550	1280	425	1720	882	101	54	61
21	277	644	443	e280	1000	1520	392	1460	662	90	80	53
22	259	461	401	e260	1050	1150	435	4760	538	97	492	52
23	241	379	403	e240	708	771	1470	3340	440	99	256	51
24	227	346	836	e220	701	619	1240	1350	359	97	147	45
25	205	332	1180	e220	817	531	843	885	320	98	105	43
26	202	314	741	e270	671	466	842	684	327	107	86	41
27	291	305	553	e280	563	533	758	555	294	95	88	40
28	458	2070	472	e260	489	899	576	722	242	97	82	38
29	347	4470	438	e240	467	762	446	558	219	88	116	38
30	304	2170	925	e230	---	1560	388	468	198	82	191	42
31	295	---	1540	e200	---	3730	---	2330	---	501	125	---
TOTAL	10353	18138	24619	54285	28621	24292	24231	35459	37872	3876	3864	1804
MEAN	334	605	794	1751	987	784	808	1144	1262	125	125	60.1
MAX	900	4470	1600	13000	4360	3730	2130	4760	4460	501	492	106
MIN	173	177	401	200	190	255	296	266	198	76	50	38
CFSM	0.63	1.13	1.49	3.28	1.85	1.47	1.51	2.14	2.36	0.23	0.23	0.11
IN.	0.72	1.26	1.72	3.78	1.99	1.69	1.69	2.47	2.64	0.27	0.27	0.13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922-2004, BY WATER YEAR (WY)

MEAN	110	261	478	711	778	927	837	607	466	253	156	104
MAX	1223	1745	2287	2808	2146	2758	2190	2766	2228	1868	1216	1652
(WY)	1927	1986	1991	1959	1975	1963	1957	1996	1997	1993	1980	1979
MIN	3.91	13.6	18.5	23.4	37.2	84.0	133	42.6	14.9	9.08	9.82	6.43
(WY)	1964	1954	1964	1945	1934	1931	1925	1934	1934	1934	1930	1964

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1922-2004

ANNUAL TOTAL	253649	267414		
ANNUAL MEAN	695	731	472	1996
HIGHEST ANNUAL MEAN			840	1934
LOWEST ANNUAL MEAN			79.1	1934
HIGHEST DAILY MEAN	5440	Sep 3	13000	Jan 6
LOWEST DAILY MEAN	74	Aug 26	38	Sep 28
ANNUAL SEVEN-DAY MINIMUM	87	Aug 22	41	Sep 24
MAXIMUM PEAK FLOW			15500	Jan 6a
MAXIMUM PEAK STAGE			14.01	Jan 6
INSTANTANEOUS LOW FLOW			38	Sep 28
ANNUAL RUNOFF (CFSM)	1.30	1.37	0.88	
ANNUAL RUNOFF (INCHES)	17.67	18.63	12.02	
10 PERCENT EXCEEDS	1660	1530	1140	
50 PERCENT EXCEEDS	398	406	162	
90 PERCENT EXCEEDS	134	75	26	

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

03230800 Deer Creek at Mt. Sterling, Ohio

LOCATION.—Latitude 39°42'54", longitude 83°15'26", Madison County, Hydrologic Unit 05060002, on left bank at downstream side of bridge on State Highway 56, 0.2 mi downstream from unnamed right bank tributary, 0.6 mi southeast of Mount Sterling, and 4.9 mi upstream from Duffs Fork.

DRAINAGE AREA.—228 mi².

PERIOD OF RECORD.—October 1966 to September 1981; October 1995 to current year.

REVISED RECORDS.—WDR OH-75-1: 1968(M).

GAGE.—Water-stage recorder. Datum of gage is 836.25 ft above sea level.

REMARKS.—Records fair except for periods of estimated record, which are poor. Water-quality and sediment data formerly collected at this site.

**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	251	102	305	262	e200	224	684	248	1550	169	331	26
2	189	147	235	321	e200	310	485	1320	675	166	209	26
3	153	136	198	1030	529	279	434	1730	490	159	156	25
4	142	132	181	6160	825	260	349	743	399	151	139	24
5	127	149	215	10200	612	301	278	525	351	148	150	24
6	108	139	384	3070	3200	269	232	422	322	145	125	23
7	98	130	288	919	1750	213	216	368	301	135	104	23
8	91	121	229	663	597	190	197	330	279	128	96	31
9	86	113	200	547	472	169	180	312	261	122	99	36
10	87	107	253	474	586	150	160	293	256	116	101	34
11	87	109	579	438	671	129	151	274	1490	117	100	27
12	83	401	322	e400	531	125	154	264	3090	115	96	25
13	82	428	235	e380	522	114	319	256	947	111	83	21
14	86	251	209	e370	389	109	1530	246	2330	104	76	21
15	251	197	186	e345	e320	111	778	262	1080	97	69	21
16	258	173	171	e320	e280	113	442	295	737	92	60	21
17	177	152	379	e300	e270	121	328	273	530	102	61	26
18	142	143	277	e290	269	120	263	275	522	122	53	20
19	126	182	214	e280	269	271	224	2070	409	107	47	10
20	113	251	180	e270	313	364	204	1180	346	95	45	5.6
21	103	190	156	e260	380	384	195	750	315	89	51	4.9
22	104	164	152	e250	321	280	214	2480	292	101	45	9.0
23	94	147	157	e240	288	209	1070	1080	263	104	28	13
24	86	148	291	e240	304	181	639	563	240	95	21	14
25	79	141	265	e230	304	168	421	432	231	86	21	14
26	85	132	197	e220	264	160	431	377	228	110	27	14
27	111	146	171	e220	240	178	336	353	206	134	38	13
28	118	792	162	e210	223	245	258	969	198	140	35	14
29	117	844	159	e210	215	221	213	604	190	117	34	17
30	113	405	453	e200	---	887	197	466	176	108	38	21
31	101	---	374	e200	---	1350	---	1440	---	465	32	---
TOTAL	3848	6672	7777	29519	15344	8205	11582	21200	18704	4050	2570	603.5
MEAN	124	222	251	952	529	265	386	684	623	131	82.9	20.1
MAX	258	844	579	10200	3200	1350	1530	2480	3090	465	331	36
MIN	79	102	152	200	200	109	151	246	176	86	21	4.9
CFSM	0.54	0.98	1.10	4.18	2.32	1.16	1.69	3.00	2.73	0.57	0.36	0.09
IN.	0.63	1.09	1.27	4.82	2.50	1.34	1.89	3.46	3.05	0.66	0.42	0.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967-2004, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1967	55.7	180	1980	6.29	2000
1968	149	743	1973	9.67	1999
1969	276	641	1978	15.7	1977
1970	323	952	2004	10.0	1977
1971	358	910	1975	111	1978
1972	416	1239	1978	107	2001
1973	393	786	1996	58.5	1976
1974	376	1210	1996	29.2	1976
1975	289	764	1997	17.0	1999
1976	117	480	1973	12.9	1977
1977	103	531	1979	13.7	1999
1978	81.9	779	1979	3.73	1998

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1967-2004
ANNUAL TOTAL	105226	130074.5	
ANNUAL MEAN	288	355	244
HIGHEST ANNUAL MEAN			394 1996
LOWEST ANNUAL MEAN			82.7 1977
HIGHEST DAILY MEAN	2770 Sep 2	10200 Jan 5	10200 Jan 5 2004
LOWEST DAILY MEAN	34 Feb 20	4.9 Sep 21	0.89 Oct 8 2002
ANNUAL SEVEN-DAY MINIMUM	39 Jan 27	10 Sep 19	1.2 Oct 4 2002
MAXIMUM PEAK FLOW		11700 Jan 5a	11700 Jan 5 2004
MAXIMUM PEAK STAGE		12.76 Jan 5	12.76 Jan 5 2004
INSTANTANEOUS LOW FLOW			0.91 Sep 19 1999
ANNUAL RUNOFF (CFSM)	1.26	1.56	1.07
ANNUAL RUNOFF (INCHES)	17.17	21.22	14.54
10 PERCENT EXCEEDS	661	646	551
50 PERCENT EXCEEDS	170	205	100
90 PERCENT EXCEEDS	66	36	17

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

03231500 Scioto River at Chillicothe, Ohio

LOCATION.—Latitude 39°20'29", longitude 82°58'16", Ross County, Hydrologic Unit 05060002, on right bank at north end of Chillicothe, Ohio, 1,400 ft downstream from Bridge Street bridge, 7.4 mi upstream from Paint Creek, and 15.4 mi downstream from Deer Creek.

DRAINAGE AREA.—3,849 mi².

PERIOD OF RECORD.—December 1913 to September 1914 (gage heights and discharge measurements only). October 1920 to current year. Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected in this vicinity since 1907 are contained in reports of the National Weather Service.

REVISED RECORDS.—WSP 803: 1929(M). WSP 1908: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 594.05 ft above sea level. Prior to Sept. 30, 1914, nonrecording gage at site 1,300 ft upstream at different datum; Apr. 1, 1921-Aug. 6, 1930, nonrecording gage, at site 1,400 ft upstream at present datum; Aug. 7, 1930-Sept. 30, 1969, water-stage recorder 900 ft upstream at same datum.

REMARKS.—Records fair except for periods of estimated record, which are poor. Flow regulated by 6 reservoirs 36 mi to 91 mi upstream from station. Water-quality data formerly collected at this site. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Mar. 26, 1913, reached a stage of 39.8 ft; discharge, 260,000 ft³/s (estimated by Franklin County Conservancy District).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12700	2970	16100	10400	e1700	3420	19500	4040	14300	1920	13100	2940
2	8710	2430	12900	9370	e1900	3980	14500	5690	13700	1790	6360	2140
3	5080	2200	10700	14500	4090	6770	12000	15700	15200	1740	3100	1480
4	3460	1990	7740	22600	9010	7580	8570	18400	12300	1610	2380	1060
5	2900	1770	4680	38900	7410	7160	6750	15100	7470	1650	2700	961
6	2860	1640	5620	44200	17200	7310	4950	13000	4730	1490	2270	883
7	2610	1770	7690	48400	22100	7240	3830	10100	3570	1510	1670	824
8	1910	1570	6980	32000	20200	6600	3330	5560	3080	1720	1420	1100
9	1560	1380	5530	18500	12200	5500	2940	4600	2620	1340	1270	3660
10	1570	1290	4270	17800	9520	4180	2830	4490	2500	1230	1190	3120
11	1900	1250	8320	14600	7970	3420	2540	4330	4280	1190	1070	1630
12	1900	3910	12900	12200	6880	3030	2480	4090	19100	2020	998	1190
13	1820	6330	10400	10500	5520	2810	4630	3470	20100	2180	958	1060
14	1730	4090	8270	7910	5050	2550	11200	2940	19200	1510	911	1040
15	3010	3180	6380	e6200	4140	2370	12500	2750	22100	1480	885	953
16	3830	2910	3950	e5200	3470	2230	9020	3470	26000	1800	870	850
17	5830	2620	4340	e4400	3060	2500	6190	3770	24600	1420	887	1060
18	5380	1990	6340	e3900	2820	2540	5420	3910	22900	3040	846	3720
19	3980	1940	6330	e3500	2670	3250	4820	9930	19200	2570	820	2540
20	3050	2890	4880	e3000	2810	4930	4090	13300	16300	1760	1040	1460
21	2670	3520	3720	e2700	3570	6580	4010	13500	13500	1580	1710	1230
22	2480	3290	3130	e2500	6290	7560	3540	18500	11500	1680	4650	1180
23	2340	2830	2590	e2200	6290	7670	7700	22000	9590	4840	3670	1020
24	2000	2380	4060	e2000	6150	6700	10300	19300	7270	2400	2440	891
25	2000	2240	8870	e1900	6720	5120	8220	14700	4040	1540	1670	805
26	1880	2090	9140	e1800	5550	4490	7250	14000	3160	2960	1600	834
27	2090	2030	7630	e1800	4590	4120	6000	12200	2880	4150	1570	800
28	3310	5990	6110	e1700	3820	5720	4840	14400	2440	2490	1290	744
29	4830	17500	4840	e1700	3400	6290	3720	7020	2350	1810	1780	720
30	4440	20100	5620	e1600	---	8680	3170	6040	2290	1490	3270	744
31	3140	---	10900	e1600	---	17200	---	5950	---	4890	3130	---
TOTAL	106970	112090	220930	349580	196100	169500	200840	296250	332270	64800	71525	42639
MEAN	3451	3736	7127	11280	6762	5468	6695	9556	11080	2090	2307	1421
MAX	12700	20100	16100	48400	22100	17200	19500	22000	26000	4890	13100	3720
MIN	1560	1250	2590	1600	1700	2230	2480	2750	2290	1190	820	720
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921-2004, BY WATER YEAR (WY)												
MEAN	1013	2031	3577	5251	5749	7048	6092	4345	3408	2161	1457	1061
MAX	8068	12130	14120	30110	13700	19450	14640	18590	11080	9507	8263	10180
(WY)	1927	1973	1991	1937	1951	1963	1957	1996	2004	1992	1980	1979
MIN	192	210	222	312	386	1041	1136	440	378	303	214	207
(WY)	1954	1935	1935	1931	1934	1931	1941	1934	1925	1930	1930	1953
SUMMARY STATISTICS												
ANNUAL TOTAL				FOR 2003 CALENDAR YEAR			FOR 2004 WATER YEAR			WATER YEARS 1921 - 2004		
ANNUAL MEAN				2088227			2163494					
HIGHEST ANNUAL MEAN				5721			5911			3588		
LOWEST ANNUAL MEAN										6217		
HIGHEST DAILY MEAN				24200			48400			127000		
LOWEST DAILY MEAN				796			720			166		
ANNUAL SEVEN-DAY MINIMUM				1030			791			174		
MAXIMUM PEAK FLOW							51600			144000		
MAXIMUM PEAK STAGE							17.73			32.50		
10 PERCENT EXCEEDS				13700			14300			9280		
50 PERCENT EXCEEDS				3880			3620			1520		
90 PERCENT EXCEEDS				1330			1280			384		

e Estimated.

03232000 Paint Creek near Greenfield, Ohio

LOCATION.—Latitude 39°22'45", longitude 83°22'32", Fayette County, Hydrologic Unit 05060003, on right bank at upstream side of bridge on State Highway 753, 0.6 mi upstream from Stone Run, 2 mi north of Greenfield, Ohio, and 3.0 mi downstream from Indian Creek.

DRAINAGE AREA.—249 mi².

PERIOD OF RECORD.—August 1926 to November 1935, October 1939 to September 1956; water years 1962-66 (occasional low-flow measurements), water years 1963-66 (annual maximums); October 1966 to September 1981; water years 1993-1995 (stage only); October 1995 to current year.

REVISED RECORDS.—WSP 743: 1926(M). WSP 758: 1926-33. WSP 1908: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 844.27 ft above sea level. Prior to Feb. 14, 1940, nonrecording gage; Feb. 14, 1940-June 3, 1955, water-stage recorder; June 4, 1955-Sept. 30, 1956, nonrecording gage, at same site at datum 1.00 ft higher.

REMARKS.—Records good except for periods of estimated record, which are fair. Sediment data formerly collected at this site.

**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	300	77	503	397	e50	157	1110	248	1010	81	980	13
2	224	74	362	521	e70	194	741	1750	609	81	386	11
3	175	83	280	534	599	221	602	2080	410	78	211	10
4	157	106	240	3380	904	214	459	1240	311	70	137	9.9
5	137	97	267	7900	862	230	346	661	252	68	114	9.0
6	119	90	379	5750	3040	252	274	431	215	55	89	7.8
7	102	80	370	1760	2940	215	240	327	185	51	68	7.8
8	91	69	307	773	1280	183	218	261	159	46	56	61
9	81	62	264	492	567	161	189	223	140	41	46	125
10	73	57	286	368	552	141	164	194	129	37	43	55
11	70	60	506	e280	708	131	147	170	588	32	40	31
12	67	1050	431	e220	e540	126	168	153	2660	29	32	24
13	63	912	311	e190	e400	113	579	141	2370	28	28	19
14	122	573	266	e170	e260	107	1520	135	1620	24	27	16
15	248	365	234	e160	e200	105	1100	152	1640	20	24	13
16	180	276	228	e130	e180	111	647	164	1960	17	21	12
17	174	225	390	e120	e170	117	423	144	1150	450	21	20
18	135	192	405	e110	163	123	318	144	590	162	18	58
19	113	225	308	e100	159	212	258	917	478	68	16	40
20	97	265	237	e90	194	304	226	1020	342	51	18	27
21	90	246	195	e86	294	424	216	795	260	36	20	18
22	84	204	182	e80	283	352	297	744	216	119	15	14
23	79	177	193	e76	228	262	1590	488	180	84	14	11
24	73	170	395	e70	222	218	1230	324	153	47	19	11
25	66	163	404	e66	238	190	724	249	134	35	15	9.5
26	69	153	298	e64	208	172	575	308	125	225	17	9.2
27	93	180	234	e60	181	162	451	1080	117	105	22	8.1
28	94	1040	208	e58	160	153	337	5520	104	84	23	8.2
29	103	1240	204	e56	151	158	266	2750	100	60	26	7.2
30	96	790	431	e52	---	840	233	1080	90	47	27	7.2
31	84	---	543	e50	---	1550	---	980	---	1770	19	---
TOTAL	3659	9301	9861	24163	15803	7898	15648	24873	18297	4101	2592	672.9
MEAN	118	310	318	779	545	255	522	802	610	132	83.6	22.4
MAX	300	1240	543	7900	3040	1550	1590	5520	2660	1770	980	125
MIN	63	57	182	50	50	105	147	135	90	17	14	7.2
MED	96	179	298	130	238	183	341	327	256	55	26	13
CFSM	0.47	1.25	1.28	3.13	2.19	1.02	2.09	3.22	2.45	0.53	0.34	0.09
IN.	0.55	1.39	1.47	3.61	2.36	1.18	2.34	3.72	2.73	0.61	0.39	0.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927-2004, BY WATER YEAR (WY)

MEAN	48.5	113	254	375	421	485	405	363	242	104	73.2	61.8
MAX	606	827	784	1510	1078	1712	1190	1731	791	519	633	830
(WY)	1927	1973	1951	1949	1951	1945	1940	1968	1981	1973	1980	1979
MIN	0.59	1.11	2.08	2.97	8.06	28.9	57.3	20.6	2.48	0.82	0.47	0.16
(WY)	1931	1954	1995	1995	1954	1931	1941	1941	1993	1930	1930	1953

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1927 - 2004	
ANNUAL TOTAL	136137		136868.9			
ANNUAL MEAN	373		374			
HIGHEST ANNUAL MEAN					442	1996
LOWEST ANNUAL MEAN					56.1	1954
HIGHEST DAILY MEAN	3200	Sep 4	7900	Jan 5	14400	May 24 1968
LOWEST DAILY MEAN	27	Aug 26	7.2	Sep 29	0.00	Sep 10 1953
ANNUAL SEVEN-DAY MINIMUM	39	Aug 21	8.6	Sep 24	0.04	Sep 26 1953
MAXIMUM PEAK FLOW			8500	Jan 5	21700	May 24 1968
MAXIMUM PEAK STAGE			11.45	Jan 5	14.28	May 24 1968
INSTANTANEOUS LOW FLOW			6.6	Sep 28	0.00	Sep 10 1953
ANNUAL RUNOFF (CFSM)	1.50		1.50		0.99	
ANNUAL RUNOFF (INCHES)	20.34		20.45		13.48	
10 PERCENT EXCEEDS	926		906		613	
50 PERCENT EXCEEDS	220		170		84	
90 PERCENT EXCEEDS	65		22		4.5	

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

03232500 Rocky Fork near Barretts Mills, Ohio

LOCATION.—Latitude 39°13'06", longitude 83°23'08", Highland County, Hydrologic Unit 05060003, on left bank at downstream side of highway bridge, 1.1 mi north of Barretts Mills, Ohio, 2 mi east of Rainsboro, Ohio, 2.8 mi upstream from mouth, and 6 mi downstream from Rocky Fork Lake.

DRAINAGE AREA.—140 mi².

PERIOD OF RECORD.—October 1939 to current year.

REVISED RECORDS.—WSP 1908: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 770.8 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Feb. 15, 1940, nonrecording gage at same site and datum.

REMARKS.—Records fair except for periods of estimated record, which are poor. Flow regulated by Rocky Fork Lake 6 mi upstream, since 1952, capacity, 34,100 acre-ft. Water-quality data formerly collected at this site. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.—Maximum gage height, 15.56 ft, Mar. 6, 1945.

REVISIONS.—Maximum discharge for water year 1995 has been revised to 3,700 ft³/s, May 18, 1995, gage height 9.01 ft.

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	59	38	190	237	e60	97	822	124	315	9.0	607	e25
2	47	37	157	407	e64	125	392	993	252	9.8	167	e21
3	38	36	133	440	284	117	232	1360	187	11	129	e20
4	34	34	120	2780	298	282	224	341	144	9.8	112	e19
5	27	36	139	3540	654	328	195	272	116	13	110	e18
6	25	36	157	1500	2110	496	174	219	92	16	75	e17
7	22	34	142	486	975	400	159	179	73	16	56	e20
8	20	30	127	159	205	308	151	149	61	14	49	e30
9	19	26	117	169	194	245	135	131	54	10	38	e40
10	19	24	133	161	212	203	121	116	54	9.4	33	e68
11	19	27	162	154	236	179	111	117	68	36	28	e98
12	19	1090	127	149	215	157	175	103	86	20	24	e48
13	17	353	106	147	197	135	627	88	74	17	20	e35
14	20	228	108	146	175	128	994	84	73	13	18	e30
15	40	174	100	141	157	120	506	126	94	10	16	e26
16	35	141	125	123	135	121	270	151	105	7.2	14	e26
17	33	115	211	118	123	121	280	130	94	9.4	13	e40
18	32	102	183	184	113	119	230	119	71	13	11	e80
19	30	136	167	200	109	124	121	310	58	11	9.7	e62
20	28	147	144	170	115	136	123	373	47	8.9	10	e43
21	28	132	124	144	179	200	135	269	37	7.7	13	e33
22	24	118	116	e120	117	180	190	201	33	13	15	e26
23	21	106	131	e110	118	159	313	153	28	17	13	e22
24	20	106	260	e95	120	144	283	123	22	13	12	e20
25	19	89	228	e86	114	126	258	99	18	9.9	14	19
26	25	82	187	e80	107	117	238	104	16	24	23	17
27	38	109	159	e72	102	115	196	162	13	44	38	15
28	38	744	143	e68	95	109	157	1450	11	39	36	14
29	43	922	134	e64	90	108	134	355	10	31	43	11
30	42	244	334	e62	---	469	122	261	9.8	27	42	9.9
31	40	---	296	e60	---	946	---	349	---	813	e34	---
TOTAL	921	5496	4960	12372	7673	6614	8068	9011	2315.8	1302.1	1822.7	952.9
MEAN	29.7	183	160	399	265	213	269	291	77.2	42.0	58.8	31.8
MAX	59	1090	334	3540	2110	946	994	1450	315	813	607	98
MIN	17	24	100	60	60	97	111	84	9.8	7.2	9.7	9.9

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952-2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	51.7	101	164	185	241	287	257	214	111	72.0	55.1	57.5
MAX	263	514	631	535	663	1024	627	810	365	379	307	542
(WY)	1991	1973	1991	1952	1956	1963	1970	1968	1957	1954	1958	1965
MIN	1.95	3.97	6.16	13.4	11.3	17.2	24.2	26.2	6.22	3.69	4.95	1.88
(WY)	1965	1964	1954	1977	1954	1983	1971	1999	1988	1964	1986	1964

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1952-2004

ANNUAL TOTAL	58012.2	61508.5		
ANNUAL MEAN	159	168	149	
HIGHEST ANNUAL MEAN			259	1979
LOWEST ANNUAL MEAN			56.5	1953
HIGHEST DAILY MEAN	2100	May 11	3540	Jan 5
LOWEST DAILY MEAN	8.0	Jan 28	7.2	Jul 16
ANNUAL SEVEN-DAY MINIMUM	8.0	Jan 28	9.6	Jul 15
MAXIMUM PEAK FLOW			4530	Jan 5
MAXIMUM PEAK STAGE			10.10	Jan 5
INSTANTANEOUS LOW FLOW				0.40
10 PERCENT EXCEEDS	329	309	342	
50 PERCENT EXCEEDS	102	109	59	
90 PERCENT EXCEEDS	16	15	8.3	

e Estimated.

03234300 Paint Creek at Chillicothe, Ohio

LOCATION.—Latitude 39°19'13", longitude 82°58'42", Ross County, Hydrologic Unit 05060003, on left bank at downstream side of bridge on State Highway 772, 4.3 mi downstream from North Fork Paint Creek and 3.8 mi upstream from mouth.

DRAINAGE AREA.—1,136 mi².

PERIOD OF RECORD.—October 1985 to current year.

REVISED RECORDS.—WDR-OH-88-1: 1986(M), 1987(M).

GAGE.—Water-stage recorder. Elevation of gage is 600 ft above sea level (from topographic map).

REMARKS.—Records fair except for periods of estimated record, which are poor. Flow regulated by Paint Creek Lake, 35 mi upstream, capacity 145,000 acre-ft, and Rocky Fork Lake 41 mi upstream, capacity 34,100 acre-ft. Water-quality data formerly collected at this site.

**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	2360	e370	2990	2110	e700	784	3210	1210	5680	305	6090	257
2	1080	e380	2060	2900	e700	1120	3900	3890	5910	288	3710	243
3	1080	e430	1250	3450	1970	1130	2600	7080	5830	275	1200	235
4	577	e480	1190	11400	3000	1810	2130	2360	3300	269	930	211
5	487	e440	1070	22700	3670	1840	1840	4850	1550	257	828	141
6	456	e400	1370	e4000	14000	2660	1500	4420	1200	254	486	142
7	434	e370	1240	e2100	6350	1990	1390	2530	1030	266	384	190
8	418	e340	1210	e1700	3510	1650	1230	1520	935	262	347	441
9	348	e310	1570	1420	3780	1450	1170	1320	864	254	321	812
10	235	e300	1350	6130	6160	1330	1110	1210	785	260	307	403
11	171	417	1910	7190	6070	1250	1070	1160	978	262	254	317
12	660	3360	1900	7170	4810	994	1100	1110	3130	273	222	281
13	840	4850	1520	6890	3310	827	3170	972	2410	265	210	260
14	659	3320	1190	5700	2510	790	5020	936	4810	246	199	256
15	672	1450	1100	5490	2340	773	2520	916	1350	214	195	227
16	791	1230	1140	5130	1700	766	1390	927	2150	196	188	190
17	752	1170	2040	2750	1230	772	1230	887	1190	527	184	315
18	699	1090	2170	2880	1140	864	3960	794	4960	752	173	491
19	676	912	1550	2840	1220	951	4270	2030	4880	742	167	319
20	658	1060	1400	2580	1220	1060	4000	4150	4060	456	162	269
21	493	949	1100	2460	1280	1550	2540	2670	1480	293	161	225
22	335	878	951	2360	1220	1480	1470	3180	1260	287	154	203
23	299	836	954	2080	1130	1390	3610	2220	760	348	151	189
24	287	882	1950	1120	1410	1340	5360	1420	678	274	147	177
25	281	1150	2240	e940	1430	1110	4940	1010	428	232	142	170
26	290	1100	1920	e860	1350	938	2530	824	475	568	174	164
27	319	786	1460	e820	1000	909	1660	1330	455	755	241	156
28	466	3510	1150	e780	827	891	1430	9890	394	661	247	147
29	e480	5100	1140	e760	782	880	1350	3460	380	550	343	120
30	e430	4710	2340	e720	---	2540	1590	5230	341	442	337	116
31	e390	---	2730	e700	---	5550	---	4610	---	2940	281	---
TOTAL	18123	42580	49155	120130	79819	43389	74290	80116	63653	13973	18935	7667
MEAN	585	1419	1586	3875	2752	1400	2476	2584	2122	451	611	256
MAX	2360	5100	2990	22700	14000	5550	5360	9890	5910	2940	6090	812
MIN	171	300	951	700	700	766	1070	794	341	196	142	116

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986-2004, BY WATER YEAR (WY)

MEAN	342	725	1280	1765	2211	2287	2121	2411	1526	611	348	206
MAX (WY)	2106	3368	5202	3875	3949	5148	4375	6366	4266	1687	1156	1378
MIN (WY)	1991	1986	1991	2004	2000	1997	1994	1996	1996	1990	1990	2003
MAX (WY)	48.2	46.0	62.8	298	310	458	376	239	94.4	66.1	61.5	50.9
MIN (WY)	1988	2000	1988	1988	1987	1987	1986	1988	1988	1999	1986	2002

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1986 - 2004	
	Value	Date	Value	Date	Value	Date
ANNUAL TOTAL	592616		611830			
ANNUAL MEAN	1624		1672		1315	
HIGHEST ANNUAL MEAN					2178	1996
LOWEST ANNUAL MEAN					483	1988
HIGHEST DAILY MEAN	9330	Mar 6	22700	Jan 5	25300	May 29 1990
LOWEST DAILY MEAN	171	Oct 11	116	Sep 30	33	Aug 5 1999
ANNUAL SEVEN-DAY MINIMUM	218	Sep 14	150	Sep 24	38	Sep 30 1998
MAXIMUM PEAK FLOW			26400	Jan 5	30100	May 29 1990
MAXIMUM PEAK STAGE			23.38	Jan 5	24.67	May 29 1990
10 PERCENT EXCEEDS	3550		4090		3720	
50 PERCENT EXCEEDS	1100		1060		586	
90 PERCENT EXCEEDS	300		235		74	

e Estimated.

03234500 Scioto River at Higby, Ohio

LOCATION.—Latitude 39°12'44", longitude 82°51'50", in sec. 6, T.7 N., R.20 W., Ross County, Hydrologic Unit 05060002, on left bank at upstream side of highway bridge, 0.8 mi downstream from Walnut Creek, 1.2 mi north of Higby, Ohio, 3 mi northwest of Richmondale, Ohio, and 5.0 mi upstream from Salt Creek.

DRAINAGE AREA.—5,131 mi².

PERIOD OF RECORD.—October 1930 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.—WSP 893: 1937(M). WSP 1908: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 567.28 ft above sea level. Prior to Nov. 7, 1930, nonrecording gage at same site and datum.

REMARKS.—Records excellent except for periods of estimated record, which are fair. U.S. Army Corps of Engineers satellite telemeter at station.

Water-quality data formerly collected at this site.

EXTREMES OUTSIDE PERIOD OF RECORD.—Maximum gage height, 31.6 ft, Mar. 26, 1913.

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	14600	3730	19700	12500	e2800	4320	23200	5020	18100	2620	18200	3250
2	9930	3330	15100	11500	e2900	5010	19900	7780	19300	2420	10800	2640
3	6480	3100	12100	16300	5320	7230	15500	20900	20200	2350	4820	2030
4	4600	2890	9520	29700	11700	9490	11000	20400	16300	2240	3520	1620
5	3800	2730	6300	50500	11000	9080	8790	19700	9390	2210	3530	1420
6	3740	2570	6720	51000	28000	10200	6690	17200	6230	2130	3130	1340
7	3500	2680	8710	50300	31400	9260	5390	13000	4760	2030	2400	1370
8	2930	2560	8230	41700	25400	8320	4730	7600	4170	2290	2100	1840
9	2460	2320	7410	22400	16800	7120	4220	5980	3630	2000	1910	3990
10	2330	2220	6060	23200	15300	5730	3960	5630	3400	1820	1820	3950
11	2470	2150	8980	22200	13500	4910	3690	5500	3770	1800	1690	2350
12	2880	6390	14000	19400	11500	4210	3690	5150	19700	2150	1560	1820
13	3040	11100	12000	17400	9090	3830	7480	4650	21700	2810	1510	1610
14	2860	7770	9580	13700	7730	3480	15100	3950	23300	2140	1450	1580
15	3560	5130	7900	e11000	6700	3310	15600	3790	22100	1870	1400	1490
16	4660	4640	5750	e9200	5540	3100	10800	4200	27100	2210	1380	1390
17	6200	4340	6710	e7800	4630	3320	7590	4590	25800	2080	1380	2170
18	6080	3700	8170	e6400	4240	3470	8490	4670	27300	3440	1350	3850
19	4980	3480	8130	e5600	4050	3800	8650	9740	24300	3730	1320	3380
20	4130	4260	6750	e5200	4280	5660	7820	16900	20900	2570	1400	2030
21	3580	4790	5380	e4300	4600	7590	6550	15700	15400	2230	1650	1710
22	3260	4640	4600	e4000	7140	8670	4910	19900	12900	2030	4380	1590
23	3100	4180	4080	e3700	7420	8900	9220	23500	10600	4810	3890	1470
24	2770	3760	6000	e3400	7340	8090	15000	21300	8420	3140	2840	1350
25	2730	3840	10200	e3200	8080	6400	12600	15700	5080	2130	2180	1250
26	2680	3750	11000	e3100	7050	5440	9560	14600	3930	3180	2010	1230
27	2770	3440	9230	e3000	5840	4960	7570	13700	3710	4800	1920	1240
28	3720	8400	7540	e2900	4880	6150	6240	25100	3200	3560	1800	1170
29	5240	21200	6280	e2900	4340	7000	5110	11900	3040	2720	1730	1120
30	5120	24200	7420	e2800	---	10200	4770	10800	2980	2310	3530	1110
31	4030	---	12300	e2800	---	21200	---	9640	---	5250	3220	---
TOTAL	134230	163290	271850	463100	278570	209450	273820	368190	390710	83070	95820	58360
MEAN	4330	5443	8769	14940	9606	6756	9127	11880	13020	2680	3091	1945
MAX	14600	24200	19700	51000	31400	21200	23200	25100	27300	5250	18200	3990
MIN	2330	2150	4080	2800	2800	3100	3690	3790	2980	1800	1320	1110
CFSM	0.84	1.06	1.71	2.91	1.87	1.32	1.78	2.31	2.54	0.52	0.60	0.38
IN.	0.97	1.18	1.97	3.36	2.02	1.52	1.99	2.67	2.83	0.60	0.69	0.42

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931-2004, BY WATER YEAR (WY)

MEAN	1263	2424	4412	6733	7748	9516	8392	6258	4446	2862	1990	1437
MAX	6524	15460	17190	39500	18620	28220	19600	25070	13580	11430	10070	13230
(WY)	1991	1973	1991	1937	1951	1963	1957	1996	1997	1992	1980	1979
MIN	263	304	349	433	518	1375	1485	809	718	518	457	301
(WY)	1931	1935	1935	1931	1954	1941	1941	1941	1934	1944	1936	1953

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1931 - 2004
ANNUAL TOTAL	2596950	2790460	
ANNUAL MEAN	7115	7624	4775
HIGHEST ANNUAL MEAN			8178
LOWEST ANNUAL MEAN			1364
HIGHEST DAILY MEAN	31500	May 11	51000
LOWEST DAILY MEAN	1100	Feb 23	1110
ANNUAL SEVEN-DAY MINIMUM	1380	Jan 28	1210
MAXIMUM PEAK FLOW			56800
MAXIMUM PEAK STAGE			20.60
INSTANTANEOUS LOW FLOW			1100
ANNUAL RUNOFF (CFSM)	1.39	1.49	0.93
ANNUAL RUNOFF (INCHES)	18.83	20.23	12.64
10 PERCENT EXCEEDS	16200	18500	12300
50 PERCENT EXCEEDS	4860	4780	2140
90 PERCENT EXCEEDS	1900	1860	550

e Estimated.

03237020 Scioto River at Piketon, Ohio

LOCATION.—Latitude 39°04'12", longitude 83°01'11", Pike County, Hydrologic Unit 05060002, on left bank ¼ mi downstream from U.S. Highway 23 bridge.

DRAINAGE AREA.—5,836 mi².

PERIOD OF RECORD.—December 2001 to current year.

GAGE.—Water-stage recorder. Datum of gage is 531.43 ft above sea level.

REMARKS.—Records good except for periods of estimated record, which are poor. Satellite telemeter at station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15700	3940	23200	14700	e3200	4640	26100	5420	17700	3210	17600	3340
2	11600	3720	17400	13400	e3400	5430	25100	6940	21000	2930	13800	2930
3	7470	3390	13900	17800	5440	7170	20900	19500	20800	2820	6320	2320
4	5320	3180	11200	33200	14100	10900	14700	22300	19100	2740	4100	1880
5	4200	3080	7720	50400	13200	11600	11100	21200	12000	2610	3740	1550
6	4040	2980	7320	59000	27500	15100	8420	18800	7910	2590	3660	1420
7	3800	3030	9380	53500	41200	13200	6690	15400	5830	2440	2890	1340
8	3430	3000	9300	50600	31200	10700	5790	9830	4980	2570	2480	1660
9	2930	2720	8350	33200	21400	8730	5120	6930	4380	2470	2270	7880
10	2710	2580	7110	24100	17800	7090	4660	6230	4060	2180	2140	5480
11	2670	2520	9740	24700	16500	5900	4410	6060	4190	2130	2020	3180
12	3040	9850	15100	21700	14100	5120	4290	5810	17700	2110	1840	2290
13	3170	16900	14300	19400	11300	4570	9530	5380	22800	3020	1690	1910
14	3110	10500	11300	16000	9180	4190	e18000	4460	23600	2580	1610	1790
15	3200	6600	9360	e13000	7920	4010	e19000	4260	22900	2170	1530	1700
16	4640	5360	7230	e11000	6560	3780	e11000	4310	27300	2330	1490	1580
17	5640	4890	9890	e8600	5520	3880	e8400	4860	28000	2310	1460	3170
18	6230	4320	10300	e7600	4940	4020	e9000	5090	27600	2850	1460	11300
19	5320	4270	10100	e6800	4600	4030	e9200	8880	26500	4060	1410	7390
20	4390	5470	8370	e6200	4780	5640	e7400	18800	22900	3040	1360	3840
21	3850	5650	6730	e5400	4900	7370	e6400	17100	17500	2520	1640	2520
22	3530	5310	5630	e4900	6990	9060	6230	19900	14200	2290	3370	2180
23	3320	4740	5140	e4500	7940	9420	9030	24300	12000	4130	3990	2010
24	3090	4400	7640	e4000	7630	8780	16500	23400	9800	3970	3190	1820
25	2970	4310	11600	e3900	8370	7310	14700	17900	6540	2650	2510	1650
26	2960	4160	13200	e3700	7780	6020	11900	15800	4620	2740	2140	1550
27	3000	3860	11200	e3500	6610	5460	9220	16300	4340	5050	2100	1550
28	3660	10400	9070	e3400	5460	6030	7440	29300	3850	4310	2090	1480
29	5140	25600	7560	e3300	4790	7300	6170	23700	3550	3190	1800	1380
30	5380	26500	8370	e3200	---	10700	5460	13400	3430	2710	3030	1230
31	4490	---	13300	e3100	---	22500	---	11600	---	3190	3150	---
TOTAL	144000	197230	320010	527800	324310	239650	321860	413160	421080	89910	103880	85320
MEAN	4645	6574	10320	17030	11180	7731	10730	13330	14040	2900	3351	2844
MAX	15700	26500	23200	59000	41200	22500	26100	29300	28000	5050	17600	11300
MIN	2670	2520	5140	3100	3200	3780	4290	4260	3430	2110	1360	1230
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002-2004, BY WATER YEAR (WY)												
MEAN	3187	5208	8692	9181	7696	10430	10240	13440	10070	3883	3133	4528
MAX	4645	6574	10320	17030	11180	14680	12960	13600	14040	5935	4796	9717
(WY)	2004	2004	2004	2004	2004	2003	2002	2002	2004	2003	2003	2003
MIN	1728	3841	5857	3898	5420	7731	7034	13330	7597	2815	1251	1024
(WY)	2003	2003	2003	2002	2003	2004	2003	2004	2002	2002	2002	2002
SUMMARY STATISTICS												
				FOR 2003 CALENDAR YEAR			FOR 2004 WATER YEAR			WATER YEARS 2002 - 2004		
ANNUAL TOTAL				2980760			3188210					
ANNUAL MEAN				8166			8711			8014		
HIGHEST ANNUAL MEAN										8711		
LOWEST ANNUAL MEAN										7315		
HIGHEST DAILY MEAN				33400			May 11			59000		
LOWEST DAILY MEAN				1490			Feb 3			1230		
ANNUAL SEVEN-DAY MINIMUM				1580			Jan 28			1470		
MAXIMUM PEAK FLOW										60300		
MAXIMUM PEAK STAGE										25.80		
INSTANTANEOUS LOW FLOW										282		
10 PERCENT EXCEEDS				18700			20200			19000		
50 PERCENT EXCEEDS				5540			5460			5120		
90 PERCENT EXCEEDS				2310			2180			1920		

e Estimated.

Reservoirs in Scioto River Basin

03220500 O'Shaughnessy Reservoir near Dublin, Ohio

LOCATION.—Latitude 40°09'14", longitude 83°07'33", Delaware County, Hydrologic Unit 0506001, in gate house of dam on Scioto River, 4.0 mi north of Dublin, Ohio.

DRAINAGE AREA.—979 mi².

PERIOD OF RECORD.—October 1924 to current year.

GAGE.—Water-stage recorder. Monthend contents only for some periods published in WSP 1305. Datum of gage is sea level (levels by City of Columbus). Prior to Dec. 2, 1940, nonrecording gage at same site and datum.

REMARKS.—Reservoir is formed by concrete dam; dam completed and storage begun in 1924. Usable capacity, 14,500 acre-ft, between elevations 789.5 ft (sill of outlet gate) and 845 ft (crest of spillway), based on survey made in 1942. Flashboards installed May 8, 1945, additional capacity, 2,480 acre-ft, between elevations 845 ft (crest of spillway) and 847.9 ft (crest of flashboards). Dead storage below elevation 789.5 ft, 55 acre-ft. Figures given herein represent usable contents. Water used for municipal supply of City of Columbus and recreational purposes. Reservoir also used for power generation since July 1987. Capacity table computed from data furnished by City of Columbus.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 24,240 acre-ft Jan. 22, 1959, elevation, 854.40 ft; minimum contents, 43 acre-ft Feb. 11, 1945, elevation, 791.97 ft.

03221500 Griggs Reservoir near Columbus, Ohio

LOCATION.—Latitude 40°00'54", longitude 83°05'38", Franklin County, Hydrologic Unit 0506001, on left abutment of dam on Scioto River, 6.2 mi northwest of State Capitol building in Columbus, Ohio, and 6.5 mi upstream from Olentangy River.

DRAINAGE AREA.—1,044 mi².

PERIOD OF RECORD.—January 1921 to current year.

GAGE.—Water-stage recorder. Monthend contents only for some periods, published in WSP 1305. Daily readings have been obtained by City of Columbus, Division of Water, since 1908. Datum of gage is 680.38 ft above sea level (levels by City of Columbus). Prior to Oct. 4, 1940, nonrecording gage at same site and datum.

REMARKS.—Reservoir formed by concrete dam; dam completed and storage begun in 1905. Usable capacity, 3,700 acre-ft between elevations 735.4 ft (lowest outlets) and 753.4 ft (crest of spillway), based on survey made in 1935. Flashboards installed July 28, 1945, additional capacity, 750 acre-ft, between elevations 753.4 ft (crest of spillway) and 755.6 ft (crest of flashboards). Dead storage below elevation 735.4 ft, 239 acre-ft. Figures given herein represent usable contents. Water is used for municipal supply of City of Columbus and recreational purposes. Capacity table computed from data furnished by City of Columbus.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 7,490 acre-ft Jan. 22, 1959, elevation, 763.91 ft; minimum, 38 acre-ft Jan. 24, 1945, elevation, 735.78 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 6,240 acre-ft Jan. 5, elevation 760.55 ft; minimum contents, 4,460 acre-ft Aug. 15, elevation 755.65.

03228400 Hoover Reservoir at Central College

LOCATION.—Latitude 40°06'30", longitude 82°52'59", in T.2 N., R.17 W., Franklin County, Hydrologic Unit 0506001, in gate house of dam on Big Walnut Creek, 0.5 mi northeast of Central College, and 12 mi northeast of Columbus, Ohio.

DRAINAGE AREA.—190 mi².

PERIOD OF RECORD.—March 1955 to current year.

REVISED RECORDS.—WRD OH-78-1: 1975 (M).

GAGE.—Water-stage recorder. Datum of gage is sea level. Prior to Sept. 10, 1956, nonrecording gage at same site and datum.

REMARKS.—Reservoir formed by earthfill dam with concrete spillway; dam completed in 1954 and storage begun in March 1955. Usable capacity, 60,130 acre-ft between elevations 830.0 ft (lowest outlet) and 890.0 ft (crest of spillway). Additional flood-control storage above elevation 890.0 ft by bascule gates installed in May 1970, 25,750 acre-ft. Dead storage below elevation 830.0 ft, 214 acre-ft. Figures given herein represent usable contents. Reservoir is used for municipal supply of City of Columbus and for recreational purposes. Outflow is controlled mostly by operation of valves in tunnel through dam, but above spillway level bascule gates can be used. Capacity table computed from data furnished by City of Columbus.

EXTREMES FOR PERIOD OF RECORD.—Maximum contents, 87,480 acre-ft, June 2, 1997, elevation, 898.45 ft; minimum, 19,010 acre-ft Mar. 1, 1964, elevation, 868.58 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 83,970 acre-ft Jan. 5, elevation, 897.46 ft; minimum contents, 58,350 acre-ft Aug. 20, elevation 889.34 ft.

Reservoirs in Scioto River Basin—Continued

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	O'Shaughnessy Reservoir			Griggs Reservoir			Hoover Reservoir		
	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre-feet)	Change In contents (acre-feet)	Elevation (feet)	Contents (acre-feet)	Change In contents (acre-feet)
Sept. 30	848.93	17,990	---	757.34	5,060	---	894.68	74,200	---
Oct. 31	848.80	17,860	-130	756.85	4,880	-180	892.65	67,610	-6,590
Nov. 30	850.14	19,250	1,390	758.48	5,480	600	894.17	72,460	4,850
Dec. 31	849.52	18,600	-650	757.64	5,170	-310	894.79	74,570	2,110
CALENDAR YEAR 2003:			450			-310			23,390
Jan. 31	848.23	17,290	-1,310	756.57	4,780	-390	893.37	69,850	-4,720
Feb. 29	848.53	17,590	300	756.79	4,860	80	894.31	72,940	3,090
Mar. 31	848.67	17,730	140	758.19	5,350	490	894.97	75,180	2,240
Apr. 30	849.98	19,070	1,340	756.76	4,850	-500	894.34	73,040	-2,140
May 31	849.41	18,480	-590	758.12	5,340	490	895.44	76,830	3,790
June 30	848.23	17,290	-1,190	756.50	4,750	-590	893.64	70,720	-6,110
July 31	848.03	17,090	-200	756.54	4,770	20	891.30	63,700	-7,020
Aug. 31	848.21	17,270	180	756.86	4,880	110	892.40	66,860	3,160
Sept. 30	847.70	16,790	-480	756.10	4,620	-260	890.12	60,460	-6,400
WATER YEAR 2004:			-1,200			-440			-13,740

Surface-Water Records—Upper Twin Creek Basin

03237280 Upper Twin Creek at McGaw, Ohio

Hydrologic Benchmark Station

LOCATION.—Latitude 38°38'37", longitude 83°12'57", Scioto County, Hydrologic Unit 05090201, on left bank, 0.2 mi downstream from Brown Run, 0.4 mi upstream from Tucker Run, 0.8 mi upstream from bridge on U.S. Highway 52 at McGaw, Ohio, 2.7 mi northeast of Buena Vista, Ohio, and 3.3 mi upstream from mouth.

DRAINAGE AREA.—12.2 mi².

PERIOD OF RECORD.—June 1963 to current year.

GAGE.—Water-stage recorder. Datum of gage is 542.41 ft above sea level (revised). Ohio Department of Highways benchmark. Prior to July 21, 1972 at site 0.8 mi downstream at datum 22.41 ft lower; July 21, 1972-Sept. 30, 1984, at site 0.1 mi downstream at datum 1.00 ft higher; Oct. 1, 1984-May 31, 2002, at site 0.1 mi downstream at datum 4.00 ft lower.

REMARKS.—Records fair except for periods of estimated record, which are poor. Periods of no flow occur most years.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of July 3, 1960, reached a stage of 11.62 ft; discharge, 7,230 ft³/s, on basis of contracted-opening and flow-over-road measurement of peak flow.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	5.4	27	26	e14	7.1	46	16	16	0.97	1.7	0.15
2	2.4	4.5	22	106	16	12	40	25	17	0.89	1.2	0.13
3	2.1	3.9	21	56	73	11	40	27	11	0.89	0.70	0.12
4	2.0	3.7	20	37	48	68	34	23	7.4	1.1	0.52	0.11
5	1.8	27	21	100	66	181	28	20	5.8	1.5	2.9	0.11
6	1.6	42	22	51	210	331	25	17	4.3	1.7	2.4	0.10
7	1.4	28	22	e34	70	56	23	14	3.3	12	1.3	0.09
8	1.1	20	21	e28	34	28	21	12	2.6	4.0	0.75	1.6
9	0.95	15	19	e24	27	19	18	11	2.1	2.4	0.49	3.1
10	0.82	13	21	e21	24	13	17	8.9	2.3	1.6	0.42	1.7
11	0.67	12	25	e18	21	12	16	7.5	2.4	2.0	0.32	0.91
12	0.64	394	23	e16	19	9.7	26	6.5	3.0	6.7	0.29	0.56
13	0.62	66	21	e14	17	7.6	134	5.6	2.5	3.3	0.21	0.40
14	0.84	31	21	e13	16	7.1	78	5.4	2.7	2.2	0.19	0.32
15	2.2	24	19	e13	15	6.9	46	5.5	11	1.4	0.16	0.24
16	1.7	20	36	e12	13	7.1	34	5.5	17	0.92	0.14	0.20
17	1.5	17	125	e12	12	6.4	28	4.7	9.2	0.73	0.13	338
18	1.5	17	43	e15	12	6.0	24	6.5	5.3	0.62	0.12	25
19	1.3	86	29	e19	11	5.8	22	11	5.2	0.50	0.12	10
20	1.2	56	22	e28	11	5.9	20	9.7	4.1	0.40	0.11	4.5
21	1.2	33	22	91	11	9.0	19	6.7	3.1	0.32	0.12	2.6
22	1.1	27	23	67	9.3	8.6	55	5.3	3.8	0.67	0.12	1.7
23	1.2	23	27	21	8.5	8.3	74	4.5	8.2	0.85	0.12	1.1
24	1.1	22	59	21	8.6	8.3	50	4.0	4.5	0.55	0.13	0.81
25	0.87	20	41	17	8.0	7.8	37	3.9	3.4	0.38	0.14	0.62
26	1.6	19	30	20	7.5	7.2	32	16	3.3	0.36	0.14	0.48
27	14	22	26	24	7.2	7.4	27	51	2.4	0.34	0.13	0.39
28	12	333	23	23	6.7	7.1	22	234	1.8	0.30	0.21	0.30
29	9.4	78	22	21	6.5	7.4	19	20	1.5	0.27	0.26	0.28
30	7.4	39	28	18	---	101	17	12	1.2	0.34	0.20	0.24
31	6.1	---	29	16	---	87	---	25	---	1.3	0.18	---
TOTAL	84.81	1501.5	910	982	802.3	1059.7	1072	624.2	167.4	51.50	15.92	395.86
MEAN	2.74	50.0	29.4	31.7	27.7	34.2	35.7	20.1	5.58	1.66	0.51	13.2
MAX	14	394	125	106	210	331	134	234	17	12	2.9	338
MIN	0.62	3.7	19	12	6.5	5.8	16	3.9	1.2	0.27	0.11	0.09
CFSM	0.22	4.10	2.41	2.60	2.27	2.80	2.93	1.65	0.46	0.14	0.04	1.08
IN.	0.26	4.58	2.77	2.99	2.45	3.23	3.27	1.90	0.51	0.16	0.05	1.21
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963-2004, BY WATER YEAR (WY)												
MEAN	2.40	7.32	16.3	18.2	24.5	30.2	28.0	21.9	8.46	3.89	3.04	4.08
MAX	16.8	50.1	81.6	46.3	82.2	90.7	66.7	93.1	47.9	30.8	38.0	33.3
(WY)	1990	2004	1979	1996	2003	1964	1965	1996	2003	1986	1979	2000
MIN	0.00	0.00	0.00	0.44	4.42	4.39	4.41	1.63	0.04	0.03	0.00	0.00
(WY)	1964	1964	1964	1981	1978	1969	1971	1991	1988	2002	1999	1999
SUMMARY STATISTICS				FOR 2003 CALENDAR YEAR			FOR 2004 WATER YEAR			WATER YEARS 1963-2004		
ANNUAL TOTAL				11785.71			7667.19					
ANNUAL MEAN				32.3			20.9			14.0		
HIGHEST ANNUAL MEAN										31.9		
LOWEST ANNUAL MEAN										5.15		
HIGHEST DAILY MEAN				795			394			850		
LOWEST DAILY MEAN				0.62			0.09			0.00		
ANNUAL SEVEN-DAY MINIMUM				0.81			0.12			0.00		
MAXIMUM PEAK FLOW							1360			4650		
MAXIMUM PEAK STAGE							6.96			10.52		
INSTANTANEOUS LOW FLOW							0.09			0.00		
ANNUAL RUNOFF (CFSM)				2.65			1.72			1.15		
ANNUAL RUNOFF (INCHES)				35.94			23.38			15.58		
10 PERCENT EXCEEDS				77			42			32		
50 PERCENT EXCEEDS				13			9.1			3.2		
90 PERCENT EXCEEDS				2.0			0.32			0.06		

e Estimated.

Surface-Water Records—Ohio Brush Creek Basin

03237500 Ohio Brush Creek near West Union, Ohio

LOCATION.—Latitude 38°48'13", longitude 83°25'16", Adams County, Hydrologic Unit 05090201, on right bank at downstream side of bridge on State Highway 348, 0.3 mi downstream from Cedar Run, 7 mi east of West Union, Ohio, and 7.1 mi upstream from Beasley Fork.

DRAINAGE AREA.—387 mi².

PERIOD OF RECORD.—August 1926 to November 1935, September 1940 to current year.

REVISED RECORDS.—WSP 1908: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 510.6 ft National Geodetic Vertical Datum of 1912. Prior to Nov. 22, 1940, nonrecording gage at same site and datum.

REMARKS.—Records fair except for periods of estimated record, which are poor. Water-quality and sediment data formerly collected at this site.

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	156	100	545	592	e120	194	1210	202	773	24	1100	e24
2	143	81	389	3290	e150	781	854	1270	426	66	275	e21
3	112	70	318	1440	2600	470	919	1200	287	113	144	e19
4	87	62	281	13300	1630	2570	613	459	215	57	125	e18
5	73	60	325	7850	1340	1860	432	322	180	40	762	e17
6	65	66	919	1980	9680	4960	347	260	154	31	247	e17
7	58	70	526	896	2510	1440	311	214	126	31	121	e16
8	51	64	374	604	951	802	286	181	103	31	73	e100
9	45	55	315	e410	665	558	256	159	86	26	51	e260
10	40	50	432	e330	567	430	219	139	75	23	40	e150
11	37	48	1120	e290	801	358	200	116	76	270	33	e88
12	33	4510	566	e250	552	320	663	102	151	197	29	e44
13	31	1960	382	e230	597	273	3250	94	176	141	25	e32
14	35	615	339	e220	411	249	2190	94	124	67	22	e27
15	90	388	328	e210	353	248	873	216	190	45	e19	22
16	114	333	1280	e200	288	243	538	594	1270	30	17	18
17	79	282	2930	e200	253	284	399	240	404	26	14	1180
18	62	241	936	925	234	257	326	183	245	24	14	596
19	51	1010	629	894	227	293	277	2850	228	37	28	235
20	45	954	475	e300	263	328	247	1430	207	33	42	133
21	41	433	368	e260	488	701	245	452	130	24	36	83
22	38	319	362	e220	383	400	495	278	89	22	33	58
23	35	263	551	e200	299	296	830	205	70	21	20	44
24	33	262	2430	e180	278	259	528	162	57	20	15	35
25	30	305	1090	e170	271	239	553	126	58	22	315	30
26	94	249	612	e170	235	215	678	564	50	26	271	27
27	219	424	460	274	214	206	386	2320	43	119	160	23
28	211	5060	393	275	198	201	285	3270	35	72	e90	20
29	216	1990	360	e180	186	201	234	918	30	47	e58	18
30	183	846	2350	e160	---	2720	208	431	27	32	e33	16
31	138	---	1010	e130	---	2340	---	1820	---	727	e28	---
TOTAL	2645	21170	23395	36630	26744	24696	18852	20871	6085	2444	4240	3371
MEAN	85.3	706	755	1182	922	797	628	673	203	78.8	137	112
MAX	219	5060	2930	13300	9680	4960	3250	3270	1270	727	1100	1180
MIN	30	48	281	130	120	194	200	94	27	20	14	16
CFSM	0.22	1.82	1.95	3.05	2.38	2.06	1.62	1.74	0.52	0.20	0.35	0.29
IN.	0.25	2.03	2.25	3.52	2.57	2.37	1.81	2.01	0.58	0.23	0.41	0.32

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927-2004, BY WATER YEAR (WY)

MEAN	89.1	258	535	742	840	1009	744	563	273	184	154	134
MAX	651	1447	2252	2637	2242	3909	2030	2230	1424	1222	1000	2053
(WY)	1976	1986	1991	1950	2000	1964	1948	1996	1998	1932	1935	1979
MIN	0.13	0.28	2.28	12.1	24.9	96.5	106	27.5	3.18	1.46	1.04	0.43
(WY)	1954	1954	1954	1977	1954	1941	1971	1930	1988	1988	1988	1953

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1927 - 2004
ANNUAL TOTAL	248771	191143	
ANNUAL MEAN	682	522	458
HIGHEST ANNUAL MEAN			951 1979
LOWEST ANNUAL MEAN			158 1954
HIGHEST DAILY MEAN	11000 Sep 2	13300 Jan 4	49400 Mar 2 1997
LOWEST DAILY MEAN	29 Sep 21	14 Aug 17	0.00 Sep 13 1955
ANNUAL SEVEN-DAY MINIMUM	39 Sep 16	19 Sep 1	0.00 Sep 13 1955
MAXIMUM PEAK FLOW		24100 Jan 4a	77700 Mar 2 1997
MAXIMUM PEAK STAGE		19.78 Jan 4	31.15 Mar 2 1997
INSTANTANEOUS LOW FLOW		13 Aug 17	0.00 Sep 13 1955
ANNUAL RUNOFF (CFSM)	1.76	1.35	1.18
ANNUAL RUNOFF (INCHES)	23.91	18.37	16.10
10 PERCENT EXCEEDS	1660	1140	1000
50 PERCENT EXCEEDS	303	220	110
90 PERCENT EXCEEDS	52	28	5.3

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

Surface-Water Records—White Oak Creek Basin

03238500 White Oak Creek near Georgetown, Ohio

LOCATION.—Latitude 38°51'29", longitude 83°55'43", Brown County, Hydrologic Unit 05090201, on left bank 150 ft upstream from diversion dam for Georgetown water treatment plant, 0.7 mi upstream from Town Run, 1.4 mi southwest of Georgetown, Ohio, and 7.2 mi upstream from mouth.

DRAINAGE AREA.—218 mi².

PERIOD OF RECORD.—October 1923 to November 1935, October 1939 to current year.

REVISED RECORDS.—WSP 728: 1924-31. WSP 758: 1933. WSP 1908: Drainage area. WRD OH-74-1: 1973(P)

GAGE.—Water-stage recorder and crest gage. Datum of gage is 604.20 ft above sea level. Prior to Oct. 12, 1972, nonrecording gage at a site 1 mi downstream at datum 35.24 ft lower. See WSP 2108 for history of changes prior to Dec. 8, 1940.

REMARKS.—Records fair except for periods of estimated record and below 10 ft³/s, which are poor. Water-quality and sediment data formerly collected at this site. Satellite telemeter at this 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	56	37	186	216	e54	54	721	112	370	12	4620	15
2	44	27	133	2380	e49	122	289	4950	144	77	273	13
3	36	23	105	747	2540	159	315	1750	99	61	117	12
4	27	22	88	9040	849	1760	191	390	68	22	297	11
5	22	24	128	7260	662	919	126	213	51	15	690	9.6
6	20	22	429	658	7820	1770	102	146	42	14	154	8.9
7	19	22	235	241	1260	494	87	115	37	18	67	8.2
8	18	21	143	e120	289	239	81	84	36	17	39	255
9	18	20	112	e90	200	156	79	68	28	15	30	267
10	18	19	148	e80	185	119	72	58	62	22	26	116
11	17	19	500	e74	236	101	61	48	53	56	23	44
12	18	4130	251	e68	201	90	107	43	274	18	21	25
13	18	1700	138	e62	e130	76	1790	37	116	18	20	19
14	24	238	109	e60	e84	66	2510	37	235	18	19	16
15	44	141	101	e56	e70	65	462	157	272	14	19	15
16	92	123	153	e54	e66	70	213	236	260	11	18	13
17	44	107	874	e50	e62	106	144	106	96	9.4	18	66
18	27	88	277	299	e60	120	114	67	72	9.3	18	160
19	21	265	172	357	e80	129	90	1550	263	8.1	17	91
20	19	445	142	e110	122	132	79	430	200	6.6	15	39
21	20	169	113	e64	276	296	162	147	67	6.1	15	24
22	17	112	135	e46	222	182	382	88	36	30	12	19
23	16	85	402	e37	178	111	826	56	27	52	11	14
24	17	89	1620	e35	194	88	319	38	22	34	11	12
25	18	166	397	e34	180	71	232	32	20	19	12	12
26	23	115	196	e40	118	61	278	153	18	39	14	11
27	51	227	136	e50	92	55	175	1710	16	197	19	10
28	113	3960	119	e80	72	53	120	2650	15	55	27	10
29	101	1150	115	102	54	52	88	377	14	28	18	9.3
30	80	287	1610	e70	---	2340	85	160	13	126	16	10
31	58	---	435	e60	---	2090	---	1330	---	4460	18	---
TOTAL	1116	13853	9702	22640	16405	12146	10300	17338	3026	5487.5	6674	1335.0
MEAN	36.0	462	313	730	566	392	343	559	101	177	215	44.5
MAX	113	4130	1620	9040	7820	2340	2510	4950	370	4460	4620	267
MIN	16	19	88	34	49	52	61	32	13	6.1	11	8.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925-2004, BY WATER YEAR (WY)

MEAN	64.6	163	297	435	493	549	431	305	167	107	89.7	86.8
MAX	580	1103	1427	1487	1281	1822	1134	1646	996	740	531	1220
(WY)	1984	1986	1991	1950	1955	1963	1973	1996	1998	2001	1926	1979
MIN	0.07	0.00	1.64	1.67	12.2	41.5	31.6	10.9	0.47	0.00	1.28	0.17
(WY)	1941	2000	1964	1977	1934	1941	1971	1934	1999	1999	1993	1985

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1925-2004
ANNUAL TOTAL	136985.4	120022.5	
ANNUAL MEAN	375	328	265
HIGHEST ANNUAL MEAN			583
LOWEST ANNUAL MEAN			82.4
HIGHEST DAILY MEAN	8590	9040	19400
LOWEST DAILY MEAN	7.4	6.1	0.00
ANNUAL SEVEN-DAY MINIMUM	9.8	9.2	0.00
MAXIMUM PEAK FLOW		10600	22400
MAXIMUM PEAK STAGE		8.25	20.87
INSTANTANEOUS LOW FLOW		5.5	0.00
10 PERCENT EXCEEDS	872	496	537
50 PERCENT EXCEEDS	113	80	43
90 PERCENT EXCEEDS	18	15	2.5

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

Surface-Water Records—Little Miami River Basin

03240000 Little Miami River near Oldtown, Ohio

LOCATION.—Latitude 39°44'54", longitude 83°55'53", in sec. 34, R.7, T.4, Greene County, Hydrologic Unit 05090202, on right bank at downstream side of bridge on U.S. Highway 68, 0.8 mi downstream from Conner Branch, 0.9 mi upstream from Massies Creek, 1.3 mi northeast of Oldtown, Ohio, and at mile 82.25.

DRAINAGE AREA.—129 mi².

PERIOD OF RECORD.—July 1952 to current year.

REVISED RECORDS.—WDR-OH-98-1; 1991(M), 1993(M), and 1994(M).

GAGE.—Water-stage recorder. Datum of gage is 816.56 ft above sea level.

REMARKS.—Records good except for periods of estimated record, which are fair. Water-quality and sediment data formerly collected at this site.

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	184	114	236	219	e130	131	362	158	409	89	91	35
2	155	145	187	281	127	171	288	620	306	85	62	32
3	139	128	162	1030	480	161	259	818	235	82	52	31
4	134	115	148	3830	355	156	218	344	199	80	57	31
5	123	107	166	4830	298	171	184	252	178	77	64	30
6	113	100	225	1280	1490	160	163	204	163	74	50	28
7	105	94	191	522	714	142	154	174	153	73	44	27
8	100	88	165	390	269	130	146	152	141	68	41	30
9	95	83	150	331	216	122	136	141	139	65	39	31
10	93	82	164	279	243	114	132	132	137	63	38	30
11	91	85	249	254	253	111	124	124	851	62	37	27
12	89	291	193	242	209	107	125	117	998	62	36	26
13	87	268	157	228	e170	101	153	111	392	59	35	26
14	137	172	148	215	e150	101	406	120	309	55	34	25
15	316	141	136	208	e140	100	303	128	249	51	33	25
16	211	126	141	189	133	107	218	138	211	49	32	24
17	159	114	228	186	129	104	183	125	198	57	31	25
18	135	110	187	256	125	105	160	121	189	55	31	26
19	124	154	159	211	129	145	146	776	167	50	29	24
20	113	184	138	177	148	247	137	518	149	47	31	23
21	109	146	126	165	181	280	137	280	140	45	39	23
22	102	127	123	161	156	205	143	224	132	56	33	22
23	97	116	136	157	142	166	329	196	124	50	30	22
24	91	124	244	149	145	152	268	163	118	44	27	22
25	88	125	205	182	141	144	261	143	127	42	27	21
26	99	115	161	183	131	136	302	137	117	46	27	21
27	109	148	141	156	125	154	216	227	106	56	27	21
28	105	512	135	156	120	180	174	1470	103	50	114	21
29	108	527	136	139	119	163	149	514	99	45	130	22
30	102	316	366	e130	---	545	145	285	92	44	53	21
31	95	---	307	e130	---	564	---	494	---	114	39	---
TOTAL	3808	4957	5610	16866	7168	5375	6121	9406	6931	1895	1413	772
MEAN	123	165	181	544	247	173	204	303	231	61.1	45.6	25.7
MAX	316	527	366	4830	1490	564	406	1470	998	114	130	35
MIN	87	82	123	130	119	100	124	111	92	42	27	21
CFSM	0.95	1.28	1.40	4.22	1.92	1.34	1.58	2.35	1.79	0.47	0.35	0.20
IN.	1.10	1.43	1.62	4.86	2.07	1.55	1.77	2.71	2.00	0.55	0.41	0.22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952-2004, BY WATER YEAR (WY)

MEAN	38.0	72.0	114	146	179	210	204	180	136	88.9	64.5	42.8
MAX	163	315	513	544	485	655	446	637	469	406	413	378
(WY)	1991	1986	1991	2004	1975	1963	1996	1996	1981	1990	1980	1979
MIN	9.40	11.0	11.3	10.4	20.9	35.1	54.9	35.2	22.1	10.6	11.3	6.94
(WY)	2000	1954	1954	1977	1954	1954	1971	1954	1988	1954	1999	1999

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1952-2004
ANNUAL TOTAL	74709	70322	
ANNUAL MEAN	205	192	123
HIGHEST ANNUAL MEAN			228 1980
LOWEST ANNUAL MEAN			28.6 1954
HIGHEST DAILY MEAN	1970	Sep 2	4830 Jan 5 6140 Jan 21 1959
LOWEST DAILY MEAN	48	Feb 20	21 Sep 25 3.5 Sep 2 1988
ANNUAL SEVEN-DAY MINIMUM	51	Feb 15	21 Sep 24 5.5 Sep 13 1999
MAXIMUM PEAK FLOW			5810 Jan 5a 14800 Jan 21 1959
MAXIMUM PEAK STAGE			10.51 Jan 5 12.20 Jan 21 1959
INSTANTANEOUS LOW FLOW			2.8 Sep 2 1988
ANNUAL RUNOFF (CFSM)	1.59	1.49	0.95
ANNUAL RUNOFF (INCHES)	21.54	20.28	12.92
10 PERCENT EXCEEDS	376	304	259
50 PERCENT EXCEEDS	144	136	65
90 PERCENT EXCEEDS	78	31	17

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

03241500 Massies Creek at Wilberforce, Ohio

LOCATION.—Latitude 39°43'22", longitude 83°52'58", Greene County, Hydrologic Unit 05090202, on left bank at bridge on Wilberforce-Clifton Road, 0.5 mi northwest of Wilberforce, Ohio, 0.6 mi downstream from unnamed right bank tributary, and 1.7 mi upstream from Clark Run.

DRAINAGE AREA.—63.2 mi².

PERIOD OF RECORD.—September 1952 to current year. Prior to October 1962, published as Massie Creek at Wilberforce.

REVISED RECORDS.—WSP 1908: Drainage area.

GAGE.—Water-stage recorder and crest gage. Datum of gage is 865.15 ft above sea level. Aug. 4, 1972-Sept. 30, 1979, at site 150 ft downstream at same datum.

REMARKS.—Records fair except for periods of estimated record, which are poor. Water-quality and sediment data formerly collected at this site. Satellite telemeter at station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e106	49	121	115	e42	57	191	85	238	34	42	13
2	e96	74	88	142	e41	87	151	595	195	32	24	12
3	e82	64	75	651	283	74	126	576	130	31	19	11
4	e70	55	69	1790	176	73	94	236	94	31	19	12
5	e56	50	82	2050	198	79	74	162	78	30	22	11
6	e46	44	108	711	850	70	65	119	70	28	17	9.8
7	38	40	85	214	399	58	61	91	61	27	14	9.7
8	36	37	75	134	134	51	56	76	54	26	13	11
9	34	34	69	96	102	46	48	68	50	25	12	12
10	33	34	87	76	132	41	43	60	72	24	12	12
11	33	37	137	89	137	40	41	53	660	22	11	11
12	32	243	88	83	e100	38	44	50	861	21	11	9.5
13	32	183	72	77	e78	35	70	47	268	19	11	9.0
14	72	99	70	73	e64	36	264	52	253	17	10	8.9
15	182	77	62	71	e54	35	159	58	178	16	9.8	8.4
16	99	67	74	60	51	39	101	61	153	15	9.4	8.8
17	74	57	152	65	47	37	77	54	143	17	8.9	10
18	63	57	96	122	45	38	65	66	175	16	8.8	11
19	56	99	77	78	49	70	58	475	110	15	8.8	9.4
20	48	93	65	60	67	140	53	332	82	13	11	8.9
21	47	74	57	57	88	144	55	166	71	14	13	8.1
22	43	64	56	e51	66	91	68	120	64	19	9.8	8.1
23	39	57	69	e48	59	72	291	89	54	14	8.9	8.1
24	36	64	147	e47	65	66	177	75	49	12	8.4	8.2
25	35	62	101	59	62	59	189	64	60	11	8.4	8.4
26	42	55	76	63	54	55	181	69	52	14	8.9	8.7
27	54	83	68	59	49	60	115	240	44	15	8.8	8.7
28	51	359	67	51	46	65	81	1020	44	14	17	8.7
29	48	309	70	e47	46	65	69	411	41	13	41	10
30	41	176	249	e44	---	371	72	181	37	13	23	10
31	38	---	167	e43	---	308	---	401	---	79	17	---
TOTAL	1762	2796	2879	7326	3584	2500	3139	6152	4441	677	457.9	295.4
MEAN	56.8	93.2	92.9	236	124	80.6	105	198	148	21.8	14.8	9.85
MAX	182	359	249	2050	850	371	291	1020	861	79	42	13
MIN	32	34	56	43	41	35	41	47	37	11	8.4	8.1
CFSM	0.90	1.47	1.47	3.74	1.96	1.28	1.66	3.14	2.34	0.35	0.23	0.16
IN.	1.04	1.65	1.69	4.31	2.11	1.47	1.85	3.62	2.61	0.40	0.27	0.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952-2004, BY WATER YEAR (WY)

MEAN	16.5	41.9	66.6	80.1	101	118	111	97.8	68.1	41.8	28.0	16.3
MAX	99.7	248	290	273	236	372	254	335	253	199	196	186
(WY)	1991	1986	1991	1959	1975	1963	1996	1968	1981	1990	1958	1979
MIN	1.55	1.95	2.35	4.59	6.41	13.1	19.8	12.8	6.90	1.75	1.49	1.05
(WY)	1954	1954	1954	1977	1954	1954	1971	1954	1988	1954	1953	1953

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1952-2004
ANNUAL TOTAL	40608.9	36009.3	
ANNUAL MEAN	111	98.4	65.4
HIGHEST ANNUAL MEAN			113 1973
LOWEST ANNUAL MEAN			8.68 1954
HIGHEST DAILY MEAN	1420	Jul 9	3620 Jan 21 1959
LOWEST DAILY MEAN	8.9	Sep 30	0.30 Sep 3 1954
ANNUAL SEVEN-DAY MINIMUM	21	Feb 14	0.33 Sep 1 1954
MAXIMUM PEAK FLOW		2590	Jan 4a Jan 21 1959
MAXIMUM PEAK STAGE		9.82	Jan 4 Jan 21 1959
INSTANTANEOUS LOW FLOW			0.30 Sep 3 1954
ANNUAL RUNOFF (CFSM)	1.76	1.56	1.04
ANNUAL RUNOFF (INCHES)	23.90	21.20	14.06
10 PERCENT EXCEEDS	249	181	149
50 PERCENT EXCEEDS	69	58	29
90 PERCENT EXCEEDS	29	11	4.8

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

03244936 O'Bannon Creek near Loveland, Ohio

LOCATION.—Latitude 39°15'53", longitude 84°13'58", Clermont County, Hydrologic Unit 05090202, on left bank at downstream side of bridge on O'Bannonville Road, 1.1 mi east of Loveland, Ohio, 1.9 mi upstream from mouth.

DRAINAGE AREA.—54.5 mi².

PERIOD OF RECORD.—October 2003 to September 2004.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 599.61 ft, above sea level.

REMARKS.—Records fair except for periods of estimated record, which are poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	9.8	42	52	e9.0	28	162	125	30	3.4	80	3.8
2	8.9	9.3	29	568	11	56	102	1210	16	3.2	21	3.4
3	7.3	8.5	23	158	390	35	75	174	11	3.0	12	3.6
4	6.4	8.0	21	3200	157	193	45	62	8.9	3.0	19	3.5
5	6.1	7.4	112	1300	224	117	29	39	7.5	3.9	25	3.3
6	5.6	7.4	107	136	1240	125	24	26	6.7	3.4	9.4	3.3
7	5.2	7.7	49	54	226	65	23	20	6.3	2.9	5.9	3.0
8	4.9	6.8	33	36	90	39	21	15	5.6	3.0	4.8	4.8
9	4.8	6.3	27	30	75	27	17	12	11	2.8	4.3	4.8
10	4.7	6.1	129	22	117	22	15	10	10	4.9	3.7	3.8
11	4.8	8.4	147	21	108	19	13	9.5	10	5.7	3.3	3.6
12	4.8	1030	56	e20	95	18	41	8.0	12	3.4	3.0	3.9
13	4.8	101	32	e22	83	15	585	7.4	12	2.6	2.8	3.7
14	278	40	28	e20	44	15	538	12	16	2.3	2.8	3.4
15	82	30	28	e18	39	14	91	44	22	2.1	2.8	3.6
16	25	27	88	e17	26	23	48	32	21	2.1	2.6	3.7
17	16	21	142	17	21	31	32	16	13	2.2	2.4	17
18	12	80	53	147	19	75	24	14	11	2.2	2.4	10
19	9.1	214	43	67	22	88	20	467	46	2.0	2.5	6.0
20	7.9	71	33	28	66	171	19	96	13	1.9	2.7	4.9
21	7.1	37	29	20	164	198	27	33	8.5	1.9	5.1	4.4
22	6.7	26	44	16	67	62	337	18	7.0	111	3.3	2.7
23	6.5	21	255	e10	50	38	491	13	5.6	16	2.8	2.5
24	6.2	78	357	e9.2	49	30	107	9.7	4.8	7.0	4.6	2.6
25	6.6	50	93	e8.6	37	26	123	7.9	4.3	4.5	4.0	2.7
26	19	29	46	e9.9	27	23	91	64	4.1	40	3.7	2.9
27	17	385	33	e19	22	22	42	145	3.8	11	3.4	3.1
28	13	717	29	e16	19	21	26	407	3.8	6.1	4.8	2.8
29	14	171	40	e12	18	49	20	58	5.5	4.3	17	3.1
30	13	70	524	e11	---	946	63	26	3.9	28	19	3.2
31	10	---	98	e9.5	---	679	---	75	---	978	5.1	---
TOTAL	630.4	3283.7	2770	6074.2	3515.0	3270	3251	3255.5	340.3	1267.8	285.2	127.1
MEAN	20.3	109	89.4	196	121	105	108	105	11.3	40.9	9.20	4.24
MAX	278	1030	524	3200	1240	946	585	1210	46	978	80	17
MIN	4.7	6.1	21	8.6	9.0	14	13	7.4	3.8	1.9	2.4	2.5
CFSM	0.37	2.01	1.64	3.60	2.22	1.94	1.99	1.93	0.21	0.75	0.17	0.08
IN.	0.43	2.24	1.89	4.15	2.40	2.23	2.22	2.22	0.23	0.87	0.19	0.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003-2004, BY WATER YEAR (WY)

MEAN	20.3	109	89.4	196	121	105	108	105	11.3	40.9	9.20	68.4
MAX	20.3	109	89.4	196	121	105	108	105	11.3	40.9	9.20	133
(WY)	2004	2004	2004	2004	2004	2004	2004	2004	2004	2004	2004	2003
MIN	20.3	109	89.4	196	121	105	108	105	11.3	40.9	9.20	4.24
(WY)	2004	2004	2004	2004	2004	2004	2004	2004	2004	2004	2004	2004

SUMMARY STATISTICS

	FOR 2004 WATER YEAR		WATER YEARS 2003-2004	
ANNUAL TOTAL	28070.2			
ANNUAL MEAN	76.7		76.7	
HIGHEST ANNUAL MEAN			76.7	
LOWEST ANNUAL MEAN			76.7	
HIGHEST DAILY MEAN	3200	Jan 4	3200	Jan 4 2004
LOWEST DAILY MEAN	1.9	Jul 20	1.9	Aug 27 2003
ANNUAL SEVEN-DAY MINIMUM	2.1	Jul 15	2.1	Jul 15 2004
MAXIMUM PEAK FLOW	8480	Jan 4	8480	Jan 4 2004
MAXIMUM PEAK STAGE	9.32	Jan 4	9.32	Jan 4 2004
INSTANTANEOUS LOW FLOW	1.1	Jul 20	1.1	Jul 20 2004
ANNUAL RUNOFF (CFSM)	1.41		1.41	
ANNUAL RUNOFF (INCHES)	19.16		19.12	
10 PERCENT EXCEEDS	146		146	
50 PERCENT EXCEEDS	19		19	
90 PERCENT EXCEEDS	3.3		3.3	

e Estimated.

03245500 Little Miami River at Milford, Ohio

LOCATION.—Latitude 39°10'17", longitude 84°17'53", Clermont County, Hydrologic Unit 05090202, on right bank 500 ft downstream from Wooster Pike bridge on U.S. Highway 50 in Milford, Ohio, 1.2 mi upstream from East Fork, 6.4 mi downstream from North Branch Creek, and at mile 12.9.

DRAINAGE AREA.—1,203 mi².

PERIOD OF RECORD.—July 1915 to September 1917, October 1917 to May 1920 (gage heights only), March 1925 to September 1936, October 1938 to current year. Monthly discharge only for some periods, published in WSP 1305, published as "at Miamiville" 1915-20.

REVISED RECORDS.—WSP 728: 1931. WSP 743: 1932. WSP 873: 1925-36. WSP 1908: Drainage area.

GAGE.—Water-stage recorder and crest-stage gage. Datum of gage is 494.35 ft, National Geodetic Vertical Datum of 1912. June 22, 1915-May 14, 1920, nonrecording gage at site 4 mi upstream at different datum; Mar. 11, 1925-Aug. 16, 1928, nonrecording gage at bridge 500 ft upstream at datum 5.72 ft higher; Aug. 17, 1928-Sept. 30, 1977, water-stage recorder at same site at datum 5.00 ft higher.

REMARKS.—Records fair except for periods of estimated record, which are poor. Some regulation since 1948 by Cowan Lake, capacity 12,000 acre-ft, 45 mi upstream on Cowan Creek, tributary to Todd Fork, and Caesar Creek Lake capacity 242,200 acre-ft 41.3 mi upstream on Caesar Creek. U.S. Army Corps of Engineers satellite telemeter at station. Sediment data formerly collected at this site.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood in Mar. 1913, reached a stage of 30.5 ft, present datum, from information by U.S. Army Corps of Engineers.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1220	737	2540	2860	737	1060	4360	2670	5100	419	3030	297
2	1030	803	1900	4490	756	1390	3570	9810	4360	416	1260	263
3	901	859	1610	3510	4070	1290	2380	7010	2910	403	642	251
4	829	689	1150	17100	4300	1590	1920	5240	1500	386	560	242
5	767	661	1440	29000	4080	1650	1590	3380	948	625	800	239
6	717	674	2340	13700	10600	1510	1430	2220	828	426	555	226
7	560	675	1830	7260	6480	1340	1220	1510	762	404	400	221
8	504	628	1350	3140	3650	1000	1190	1270	717	347	326	236
9	487	592	1230	2300	2230	784	1020	1140	856	328	292	256
10	506	533	1610	1910	3940	773	930	919	863	340	278	267
11	523	517	2640	1740	4250	771	870	844	901	458	262	239
12	518	6290	2140	3110	3790	787	998	772	4140	470	251	222
13	500	3830	1670	4240	2710	672	2620	706	4420	361	244	215
14	1290	3100	1260	4170	2010	635	6680	686	3990	305	241	210
15	1980	2660	1220	4130	1810	639	3320	1010	3900	280	235	220
16	1490	1770	1270	3990	1200	739	2250	1120	3710	266	234	218
17	1180	1130	2300	3950	1120	826	1490	932	2820	273	231	308
18	985	892	2060	5150	1070	927	1190	809	2400	272	228	279
19	827	1610	1690	4680	1070	1340	1050	3540	1980	274	227	352
20	686	1560	1360	3860	1070	1500	1030	4520	1210	259	244	315
21	660	1160	1120	2010	1700	2260	1120	3910	964	251	289	223
22	578	1110	1110	1470	1560	1800	1840	1770	785	1580	301	205
23	540	1530	1390	1270	1350	1420	7450	1340	690	654	261	199
24	562	1280	3790	1010	1310	1080	4470	991	609	425	245	193
25	545	1380	2360	916	1290	960	4290	822	571	308	248	190
26	702	1370	1810	943	1080	870	3910	983	635	358	224	186
27	807	2230	1520	1220	1050	862	3210	1880	530	348	229	183
28	768	6630	1410	1250	1010	1000	2090	5870	487	350	253	181
29	720	5770	1280	e850	984	944	1320	5990	470	312	544	178
30	761	3870	4310	e790	---	5350	1590	5070	444	375	778	175
31	771	---	3040	e840	---	6830	---	5420	---	6290	400	---
TOTAL	24914	56540	57750	136859	72277	44599	72398	84154	54500	18563	14312	6989
MEAN	804	1885	1863	4415	2492	1439	2413	2715	1817	599	462	233
MAX	1980	6630	4310	29000	10600	6830	7450	9810	5100	6290	3030	352
MIN	487	517	1110	790	737	635	870	686	444	251	224	175
CFSM	0.67	1.57	1.55	3.67	2.07	1.20	2.01	2.26	1.51	0.50	0.38	0.19
IN.	0.77	1.75	1.79	4.23	2.23	1.38	2.24	2.60	1.69	0.57	0.44	0.22
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916-2004, BY WATER YEAR (WY)												
MAX	2775	4189	5494	7131	4951	8212	5396	7594	4686	3542	3014	3711
(WY)	1927	1986	1991	1949	1950	1945	1940	1996	1973	1958	1926	1979
MIN	47.0	60.2	73.4	88.6	145	218	369	138	117	78.0	77.6	43.0
(WY)	1954	1954	1935	1977	1954	1941	1941	1934	1925	1930	1930	1953
SUMMARY STATISTICS				FOR 2003 CALENDAR YEAR			FOR 2004 WATER YEAR			WATER YEARS 1916-2004		
ANNUAL TOTAL				704756			643855					
ANNUAL MEAN				1931			1759			1289		
HIGHEST ANNUAL MEAN										2364		
LOWEST ANNUAL MEAN										301		
HIGHEST DAILY MEAN				14100			Sep 2			29000		
LOWEST DAILY MEAN				295			Aug 27			175		
ANNUAL SEVEN-DAY MINIMUM				342			Aug 22			184		
MAXIMUM PEAK FLOW							39700			Jan 5a		
MAXIMUM PEAK STAGE							21.17			Jan 5		
INSTANTANEOUS LOW FLOW										27.30		
ANNUAL RUNOFF (CFSM)				1.61			1.46			1.07		
ANNUAL RUNOFF (INCHES)				21.79			19.91			14.56		
10 PERCENT EXCEEDS				4520			4150			3080		
50 PERCENT EXCEEDS				1200			1020			512		
90 PERCENT EXCEEDS				539			252			116		

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

03247500 East Fork Little Miami River at Perintown, Ohio

LOCATION.—Latitude 39°08'13", longitude 84°14'17", Clermont County, Hydrologic Unit 05090202, on right bank at upstream wingwall of highway bridge at Perintown, Ohio, 0.2 mi downstream from Sugarcamp Run, 5 mi upstream from mouth, and at mile 6.4.

DRAINAGE AREA.—476 mi².

PERIOD OF RECORD.—May 1915 to September 1917, October 1917 to May 1920 (gage heights only), January 1925 to current year.

GAGE.—Water-stage recorder and crest gage. Datum of gage is 507.03 ft above sea level. Prior to Feb. 6, 1940, nonrecording gage at same site and datum.

REMARKS.—Records good except for periods of estimated record, which are poor. Occasional regulation by Stonelick Lake 14 mi upstream. Surface area at spillway level, 171 acres. Flow regulated by William H. Harsha Reservoir, formerly East Fork Lake, since 1977. Water-quality data formerly collected at this site. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 42,400 ft³/s Mar. 10, 1964, gage height, 23.84 ft; minimum daily, 0.4 ft³/s July 24, 1930, Sept. 11, 12, 23, 1939; minimum gage height, -0.18 ft Oct. 3-7, 1917.

**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	236	117	1150	1410	e100	175	3290	518	1360	56	1860	51
2	214	114	543	2250	e100	223	2530	3960	533	65	3860	49
3	151	116	341	2050	1000	258	1280	2000	284	53	3570	56
4	103	115	306	5810	565	1400	1190	2990	253	50	3010	55
5	73	71	321	4120	929	1750	1140	2910	165	48	1960	50
6	71	56	586	577	3490	2350	962	2860	155	51	863	48
7	69	53	640	325	3150	1680	482	2270	117	58	342	50
8	68	51	536	263	2750	886	307	895	79	50	127	89
9	63	49	341	243	2670	334	131	475	70	61	73	78
10	61	52	487	222	2620	255	114	265	74	134	67	54
11	58	55	823	1020	1930	235	106	251	178	170	62	50
12	82	2430	1030	3040	1020	178	132	160	126	77	61	78
13	113	2320	354	3820	669	162	866	90	180	60	59	66
14	90	3590	434	4020	685	161	2110	81	174	52	59	58
15	106	1990	418	3990	589	161	1990	177	174	48	57	58
16	143	500	255	3920	387	176	947	275	100	49	57	58
17	141	351	489	3870	366	192	487	235	148	48	55	158
18	187	203	637	4120	162	260	261	215	143	47	53	292
19	212	558	562	3540	157	289	252	1950	197	51	55	280
20	168	721	391	2550	187	381	246	1500	248	53	56	271
21	159	619	228	1510	362	887	254	1370	216	46	60	136
22	115	399	318	471	367	681	481	1190	67	980	55	132
23	59	263	675	203	334	307	1660	583	55	118	53	131
24	44	346	1650	e150	326	242	481	265	52	68	53	126
25	44	423	1430	e120	316	220	1470	157	50	54	53	80
26	72	409	1180	e125	302	126	1360	806	51	239	57	77
27	77	1030	785	e140	293	123	786	1430	49	110	58	79
28	137	2620	520	e130	286	147	499	2260	50	72	53	57
29	190	3020	368	e120	257	261	246	3310	55	59	61	44
30	125	3080	1300	e110	---	1880	202	2640	54	62	55	44
31	121	---	1250	e105	---	2640	---	2120	---	5120	54	---
TOTAL	3552	25721	20348	54344	26369	19020	26262	40208	5457	8209	16918	2855
MEAN	115	857	656	1753	909	614	875	1297	182	265	546	95.2
MAX	236	3590	1650	5810	3490	2640	3290	3960	1360	5120	3860	292
MIN	44	49	228	105	100	123	106	81	49	46	53	44

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977-2004, BY WATER YEAR (WY)

	2003	2004	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002		
MEAN	261	391	730	796	1011	1069	896	975	531	277	215	234	277	215	234	277	215	234	277	215	234	277	215	234	277	215	234	277	215	234
MAX	980	1446	2108	1753	2162	2432	1789	3657	2165	1110	1220	1869	1110	1220	1869	1110	1220	1869	1110	1220	1869	1110	1220	1869	1110	1220	1869	1110	1220	1869
(WY)	1984	1986	1991	2004	1990	1997	1998	1996	1997	2001	1979	1979	2001	1979	1979	2001	1979	1979	2001	1979	1979	2001	1979	1979	2001	1979	1979	2001	1979	1979
MIN	18.5	48.0	54.1	15.3	168	138	73.5	48.4	35.6	32.4	38.6	30.1	32.4	38.6	30.1	32.4	38.6	30.1	32.4	38.6	30.1	32.4	38.6	30.1	32.4	38.6	30.1	32.4	38.6	30.1
(WY)	1983	2000	1977	1977	1987	1983	1986	1988	1988	1984	1987	1983	1984	1987	1983	1984	1987	1983	1984	1987	1983	1984	1987	1983	1984	1987	1983	1984	1987	1983

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1977-2004	
ANNUAL TOTAL	270668	249263		
ANNUAL MEAN	742	681	614	
HIGHEST ANNUAL MEAN			1058	1996
LOWEST ANNUAL MEAN			266	1977
HIGHEST DAILY MEAN	8910	May 10	5810	Jan 4
LOWEST DAILY MEAN	44	Oct 24	44	Oct 24
ANNUAL SEVEN-DAY MINIMUM	48	Sep 15	49	Jul 15
MAXIMUM PEAK FLOW			11400	Jul 31
MAXIMUM PEAK STAGE			13.72	Jul 31
INSTANTANEOUS LOW FLOW				14
10 PERCENT EXCEEDS	2350		2280	2100
50 PERCENT EXCEEDS	325		222	156
90 PERCENT EXCEEDS	60		53	39

e Estimated.

Surface-Water Records—Great Miami River Basin

03260706 Bokengehalas Creek at De Graff, Ohio

LOCATION.—Latitude 40°18'40", longitude 84°54'45", sec. 6, R. 13, T. 3, Logan County, Hydrologic Unit 05080001, at DeGraff on right bank 100 ft downstream from bridge on County Road 11, and 1.1 mi upstream from mouth.

DRAINAGE AREA.— 40.4 mi².

PERIOD OF RECORD.—June 1992 to September 1996, October 1997 to September 2002 recording crest-stage gage; October 2002 to current year. October 1957 to May 1992, at site 2.9 mi upstream published as "near DeGraff" (station 03260700), are not equivalent because of difference in drainage areas.

GAGE.—Water-stage recorder. Datum of gage is 977.38 ft above sea level.

REMARKS.—Records fair except for periods of estimated record, which are poor. Diurnal fluctuation caused by municipal plants in Bellefontaine, 12.7 mi upstream and DeGraff, 0.25 mi upstream. Since storage capacity is small, daily flows are not affected appreciably.

COOPERATION.—Base data furnished by Miami Conservancy District.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
1	e32	32	110	76	e30	56	52	36	53	38	24	17			
2	e29	30	86	129	e28	78	51	131	44	35	22	16			
3	e26	29	74	107	114	65	48	99	38	33	21	15			
4	34	28	68	327	e62	70	42	68	33	32	32	15			
5	30	27	93	565	e50	98	39	58	31	30	30	14			
6	27	26	111	223	219	75	38	50	29	29	23	13			
7	26	25	86	135	101	63	37	45	28	27	21	13			
8	25	24	75	110	70	56	36	43	26	26	19	14			
9	24	23	71	94	e62	51	34	37	25	25	19	17			
10	24	23	96	e76	e58	46	32	34	24	24	18	15			
11	23	25	117	e70	e53	44	31	32	215	23	17	13			
12	22	35	81	e65	e48	40	31	31	269	26	17	13			
13	22	37	68	e62	e43	36	41	29	183	23	16	13			
14	48	30	63	e58	e38	37	52	48	641	21	15	13			
15	87	27	58	e55	e35	37	42	45	471	20	15	13			
16	53	26	68	e52	e32	38	37	46	385	22	15	13			
17	43	25	96	e50	e30	38	34	40	231	89	15	17			
18	37	26	71	e47	e28	39	32	74	238	43	15	14			
19	33	62	62	e44	e36	50	31	132	137	31	15	13			
20	30	50	56	e41	e54	59	32	108	108	27	37	13			
21	29	39	51	e38	82	71	33	100	90	24	50	12			
22	27	34	52	e35	54	54	40	119	82	76	25	12			
23	26	31	133	e32	53	48	66	74	67	44	21	12			
24	25	41	179	e30	56	46	50	60	59	33	19	12			
25	24	41	102	e28	48	44	47	50	75	28	18	11			
26	75	35	78	e36	46	42	47	43	56	27	17	11			
27	61	233	70	e44	44	52	39	39	49	28	16	12			
28	47	435	65	e54	42	48	35	38	47	27	20	12			
29	47	277	67	e43	43	45	32	34	45	24	30	18			
30	40	146	139	e37	---	67	33	32	40	24	21	14			
31	35	---	91	e31	---	58	---	75	---	31	18	---			
TOTAL	1111	1922	2637	2794	1659	1651	1194	1850	3819	990	661	410			
MEAN	35.8	64.1	85.1	90.1	57.2	53.3	39.8	59.7	127	31.9	21.3	13.7			
MAX	87	435	179	565	219	98	66	132	641	89	50	18			
MIN	22	23	51	28	28	36	31	29	24	20	15	11			
MED	30	31	75	54	48	50	37	46	58	27	19	13			
CFSM	0.89	1.59	2.11	2.23	1.42	1.32	0.99	1.48	3.15	0.79	0.53	0.34			
IN.	1.02	1.77	2.43	2.57	1.53	1.52	1.10	1.70	3.52	0.91	0.61	0.38			
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993-2004, BY WATER YEAR (WY)															
MEAN	16.1	38.7	40.2	57.2	48.1	61.6	72.9	68.8	59.2	48.8	30.1	24.3			
MAX	35.8	85.5	85.1	103	82.3	118	170	140	127	139	64.5	88.5			
(WY)	2004	1993	2002	1996	1997	1997	2002	1996	2004	2003	2003	2003			
MIN	5.94	7.60	9.40	17.2	17.9	31.7	39.8	21.7	13.3	9.62	9.10	6.37			
(WY)	1995	1995	1995	1995	1995	2001	2004	1999	1999	1994	1994	1994			
SUMMARY STATISTICS															
ANNUAL TOTAL				FOR 2003 CALENDAR YEAR				FOR 2004 WATER YEAR				WATER YEARS 1993-2004			
ANNUAL TOTAL				25679				20698							
ANNUAL MEAN				70.4				56.6				50.1			
HIGHEST ANNUAL MEAN												60.1			
LOWEST ANNUAL MEAN												35.2			
HIGHEST DAILY MEAN				800				Jul 9				641			
LOWEST DAILY MEAN				16				Jan 29				11			
ANNUAL SEVEN-DAY MINIMUM				16				Jan 27				12			
MAXIMUM PEAK FLOW												749			
MAXIMUM PEAK STAGE												5.99			
INSTANTANEOUS LOW FLOW												10			
ANNUAL RUNOFF (CFSM)				1.74				1.40				1.24			
ANNUAL RUNOFF (INCHES)				23.65				19.06				16.84			
10 PERCENT EXCEEDS				130				99				106			
50 PERCENT EXCEEDS				45				38				32			
90 PERCENT EXCEEDS				22				17				10			

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

03261500 Great Miami River at Sidney, Ohio

LOCATION.—Latitude 40°17'13", longitude 84°09'00", Shelby County, Hydrologic Unit 05080001, on right bank 50 ft upstream from North Street bridge in Sidney, Ohio, and 0.5 mi downstream from Tawawa Creek.

DRAINAGE AREA.—541 mi².

PERIOD OF RECORD.—February 1914 to current year. Prior to October 1962, published as Miami River at Sidney.

REVISED RECORDS.—WSP 1305: 1914(M), 1922(M). WSP 1908: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 924.70 ft, National Geodetic Vertical Datum of 1912. Prior to Sept. 18, 1919, nonrecording gage at site 50 ft downstream at datum 1.76 ft higher; Sept. 18, 1919-Aug. 1925, nonrecording gage at site 50 ft downstream at present datum.

REMARKS.—Records good except for periods of estimated record, which are poor. Pumpage for City of Sidney averaged 5.85 ft³/s in 2004 and is returned as sewage 1.2 mi downstream from the station. Some regulation by Indian Lake, 28 mi upstream, capacity, 45,900 acre-ft; water diverted into Miami and Erie Canal at Port Jefferson, 2.8 mi upstream, prior to 1926; amount of diversion not published. Sediment data formerly collected at this site.

COOPERATION.—Base data furnished by Miami Conservancy District.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Mar. 25, 1913, reached a stage of 19.6 ft, present datum; discharge, 44,000 ft³/s, computed by Miami Conservancy District.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	324	409	2580	1220	e200	570	779	261	1550	e253	e199	e110
2	274	388	1850	1750	e190	1280	688	1330	1170	e237	e223	e94
3	237	348	1320	1720	e470	1160	553	1940	823	e219	e171	e88
4	213	310	963	3810	e640	1080	520	1260	553	e218	e178	e82
5	275	272	984	6690	e400	1770	490	780	385	e206	e185	e78
6	243	282	1680	5310	e1000	1590	325	553	315	e188	e213	e74
7	211	271	1330	3470	e1400	1170	268	436	262	e182	e165	e70
8	190	221	1000	2300	e700	911	262	454	220	e160	e134	e66
9	175	222	802	1620	e560	687	277	381	e208	e153	e112	e76
10	168	182	923	1130	e490	496	238	315	e201	e152	e101	e90
11	164	180	1690	827	e440	404	220	272	e1220	e159	e88	e82
12	165	287	1450	629	e380	403	213	242	e3380	e159	e83	e72
13	175	649	1050	547	e350	337	325	221	e2750	e144	e77	e66
14	376	595	836	492	e330	283	417	255	e4860	e128	e73	e62
15	1700	341	677	464	e300	282	321	347	e5940	e114	e68	e58
16	1540	267	686	407	e280	308	237	449	e6270	e115	e66	e56
17	1050	255	1430	380	e270	398	214	377	e5150	e199	e65	e65
18	772	247	1120	e330	e260	295	203	944	e4530	e317	e62	e61
19	536	586	836	e290	e250	488	193	1090	e2410	e215	e67	e84
20	393	960	665	e260	e700	853	193	1920	e1480	e162	e151	e74
21	310	632	547	e230	1520	1120	210	2430	e1060	e126	e299	e59
22	318	471	501	e200	1150	940	229	3310	e831	e188	e259	e65
23	292	383	1480	e190	876	607	497	2650	e640	e442	e153	e46
24	230	435	2920	e200	819	457	533	1870	e519	e324	e111	e49
25	198	632	2280	e220	668	415	419	1200	e568	e222	e104	e47
26	811	474	1530	e240	515	444	419	779	e548	e189	e94	e47
27	1390	2410	1090	e260	448	752	365	510	e418	e186	e83	e48
28	978	4900	852	e280	416	985	368	403	e356	e180	e78	e52
29	758	4760	734	e260	412	752	238	378	e305	e169	e99	e69
30	660	3660	1960	e240	---	732	222	306	e287	e147	e170	e105
31	500	---	1750	e220	---	864	---	895	---	e182	e130	---
TOTAL	15626	26029	39516	36186	16434	22833	10436	28558	49209	6035	4061	2095
MEAN	504	868	1275	1167	567	737	348	921	1640	195	131	69.8
MAX	1700	4900	2920	6690	1520	1770	779	3310	6270	442	299	110
MIN	164	180	501	190	190	282	193	221	201	114	62	46

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926-2004, BY WATER YEAR (WY)

MEAN	166	316	513	725	764	951	876	565	456	327	184	143
MAX	1717	1876	2373	3846	2186	2507	2500	2010	2073	2376	1173	2365
(WY)	1927	1973	1991	1930	1950	1927	1957	1996	1958	2003	1973	1926
MIN	21.9	36.3	41.3	42.1	49.5	106	164	70.6	36.1	24.6	28.5	21.2
(WY)	1964	1935	1935	1977	1964	1941	1946	1934	1988	1934	1963	1963

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1926-2004	
	366589	1004	257018	702	497	
ANNUAL TOTAL						
ANNUAL MEAN						
HIGHEST ANNUAL MEAN					963	1927
LOWEST ANNUAL MEAN					141	1931
HIGHEST DAILY MEAN		11000	Jul 9	6690	Jan 5	17400 Mar 21 1927
LOWEST DAILY MEAN		100	Feb 19	46	Sep 23	8.0 Sep 23 1935
ANNUAL SEVEN-DAY MINIMUM		109	Feb 15	51	Sep 22	15 Sep 19 1935
MAXIMUM PEAK FLOW				7260	Jan 5a	20700 Mar 20 1927
MAXIMUM PEAK STAGE				10.63	Jan 5	15.91 Jan 21 1959
INSTANTANEOUS LOW FLOW						1.5 Aug 13 1963
10 PERCENT EXCEEDS		2380		1600		1280
50 PERCENT EXCEEDS		515		349		185
90 PERCENT EXCEEDS		160		88		46

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

03261950 Loramie Creek near Newport, Ohio

LOCATION.—Latitude 40°18'25", longitude 84°23'02", in SE ¼ sec, 24, T.11 N., R.4 E., Shelby County, Hydrologic Unit 05080001, right bank at downstream side of bridge on Cardo Roman Road, 1.1 mi northwest of Newport, Ohio, 3 mi south of Fort Loramie, Ohio, 3 mi downstream from Mile Creek, and at mile 16.5.

DRAINAGE AREA.—152 mi².

PERIOD OF RECORD.—October 1964 to current year.

REVISED RECORDS.—WRD Ohio 1971: 1966(M). WDR Ohio 1985-1: 1984(M).

GAGE.—Water-stage recorder. Datum of gage is 926.57 ft above sea level. October 1, 1964-September 30, 1980, water-stage recorder at same site at datum 0.43 ft higher.

REMARKS.—Records good except for periods of estimated record, which are poor. Some regulation by Lake Loramie 5 mi upstream, capacity, 13,000 acre-ft. Sediment data formerly collected at this site.

COOPERATION.—Base data furnished by Miami Conservancy District.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Mar. 25, 1913, reached a stage of 17.0 ft and flood of Jan. 21, 1959, a stage of 14.2 ft, from flood profile furnished by Miami Conservancy District.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	77	394	202	e10	162	110	34	105	16	42	7.6
2	42	66	227	240	e10	387	89	383	72	13	12	4.9
3	30	60	152	260	27	270	72	404	50	12	6.1	4.7
4	37	53	114	1310	40	295	60	179	34	12	20	5.7
5	37	49	155	3560	42	869	45	105	23	11	59	3.5
6	32	41	393	2300	109	447	38	66	16	9.5	22	2.6
7	26	32	269	748	242	207	38	55	13	8.8	9.6	3.3
8	23	27	184	300	108	132	36	42	10	8.7	5.7	4.2
9	20	22	139	161	63	95	31	33	8.9	7.1	3.9	3.8
10	23	19	213	116	e50	64	27	27	8.3	5.8	3.4	3.2
11	28	14	500	76	e44	49	27	26	309	5.0	3.2	3.0
12	27	155	303	e50	e40	39	27	28	1010	4.8	3.1	2.9
13	23	213	175	e40	e37	36	32	19	834	4.8	3.0	3.0
14	331	136	130	e35	e35	32	30	19	1870	4.3	2.8	2.8
15	932	94	94	e26	e32	32	25	31	2220	3.5	3.2	3.1
16	393	75	127	e22	e31	41	25	32	2020	3.2	4.3	3.6
17	208	58	343	e20	e30	37	25	25	1280	7.3	4.7	5.3
18	125	85	215	e19	35	39	25	25	1020	10	4.5	6.7
19	84	782	137	e17	190	122	25	30	463	4.6	5.5	5.0
20	67	445	96	e16	530	267	26	26	208	3.5	20	5.0
21	45	210	75	e16	564	416	11	57	128	3.1	78	5.0
22	39	131	70	e15	250	198	22	552	97	17	44	5.0
23	42	93	659	e14	174	119	80	288	67	17	20	5.3
24	37	155	1240	e14	165	89	56	139	54	10	11	5.1
25	33	178	542	e13	112	90	45	92	88	4.8	6.8	4.9
26	220	121	244	e12	81	153	40	75	59	4.0	4.7	4.8
27	274	844	148	e12	65	628	34	55	40	7.7	3.7	5.0
28	165	2320	110	e12	60	340	23	35	32	9.4	3.9	6.3
29	136	2090	110	e11	66	199	17	24	27	5.6	65	14
30	107	873	555	e11	---	147	23	15	19	4.7	42	8.8
31	82	---	341	e11	---	140	---	76	---	38	15	---
TOTAL	3722	9518	8454	9659	3242	6141	1164	2997	12185.2	276.2	532.1	148.1
MEAN	120	317	273	312	112	198	38.8	96.7	406	8.91	17.2	4.94
MAX	932	2320	1240	3560	564	869	110	552	2220	38	78	14
MIN	20	14	70	11	10	32	11	15	8.3	3.1	2.8	2.6

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965-2004, BY WATER YEAR (WY)

MEAN	41.8	106	179	169	211	270	233	140	124	124	46.9	29.9
MAX	360	656	802	560	613	826	700	437	561	1025	322	302
(WY)	1987	1973	1991	1996	1975	1978	1972	1996	1981	2003	1995	2003
MIN	0.75	1.32	1.63	0.63	14.1	37.6	23.1	7.14	1.47	0.51	0.22	0.53
(WY)	1965	1981	1977	1977	1978	2001	1971	1988	1988	1965	1965	1966

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1965-2004	
	102643.2	281	58038.6	159	139	249
ANNUAL TOTAL						
ANNUAL MEAN						
HIGHEST ANNUAL MEAN						1973
LOWEST ANNUAL MEAN						1988
HIGHEST DAILY MEAN	6170	Jul 9	3560	Jan 5	6170	Jul 9 2003
LOWEST DAILY MEAN	5.8	Aug 25	2.6	Sep 6	0.10	Aug 15 1965
ANNUAL SEVEN-DAY MINIMUM	6.6	Aug 23	3.1	Sep 10	0.13	Sep 9 1966
MAXIMUM PEAK FLOW			3780	Jan 5a	6500	Dec 31 1990
MAXIMUM PEAK STAGE			13.03	Jan 5	15.51	Jul 9 2003
INSTANTANEOUS LOW FLOW					0.10	Aug 15 1965
10 PERCENT EXCEEDS	658		384		354	
50 PERCENT EXCEEDS	81		39		23	
90 PERCENT EXCEEDS	9.2		4.8		1.8	

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

03262000 Loramie Creek at Lockington, Ohio

LOCATION.—Latitude 40°12'35", longitude 84°14'32", in NE ¼ sec. 30, T.7 N., R.6 E., Shelby County, Hydrologic Unit 05080001, on left bank at downstream side of county road bridge, 1,300 ft downstream from Lockington Dam, 0.5 mi northwest of Lockington, Ohio, and at mile 1.9.

DRAINAGE AREA.—257 mi².

PERIOD OF RECORD.—October 1915 to current year.

REVISED RECORDS.—WSP 923: 1916. WSP 1908: Drainage area.

GAGE.—Water-stage recorder and concrete control. Datum of gage is 800.03 ft, National Geodetic Vertical Datum of 1912. Prior to July 3, 1924, nonrecording gage at same site at datum 75.96 ft higher; July 3, 1924-Aug. 17, 1926, nonrecording gage and Aug. 18-Sept. 30, 1926, water-stage recorder at same site at datum 74.96 ft higher.

REMARKS.—Records excellent except for periods of estimated record, which are poor. Slight regulation by Lake Loramie 18 mi upstream, capacity, 13,000 acre-ft. Flood flow regulated by Lockington retarding basin beginning in 1921.

COOPERATION.—Base data furnished by Miami Conservancy District.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 10,400 ft³/s May 7, 1916, gage height, 86.4 ft, present datum, from rating curve extended above 5,400 ft³/s.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Mar. 25, 1913, reached a stage of 91.6 ft, present datum; discharge, 25,600 ft³/s, at site upstream from Turtle Creek, drainage area, 211 mi², computed by Miami Conservancy District.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	e70	107	665	322	e40	218	315	78	204	44	47	18	
2	e56	98	376	562	e40	700	227	628	148	39	42	14	
3	e43	89	259	568	e90	502	190	812	106	35	28	14	
4	e50	80	201	2110	137	448	155	372	77	33	24	12	
5	e52	72	296	3830	107	1320	126	214	60	31	39	12	
6	e47	63	724	3570	286	845	107	152	48	31	51	11	
7	36	55	446	1580	430	422	97	145	41	27	30	9.0	
8	34	47	304	537	237	261	93	140	36	24	21	8.1	
9	38	42	235	306	e130	192	84	110	32	24	16	8.3	
10	35	38	415	e200	e110	148	75	97	30	23	14	8.7	
11	34	38	878	e160	e96	119	70	87	673	22	12	11	
12	35	159	525	141	e90	102	68	87	1540	23	12	12	
13	32	282	312	124	e84	86	73	80	1230	21	11	10	
14	348	179	242	e100	e78	80	80	75	1940	19	10	8.4	
15	1340	112	194	e90	e70	79	71	96	2280	17	10	7.7	
16	590	91	269	e82	e68	82	63	118	2690	17	10	7.3	
17	276	75	666	e74	e66	94	62	106	2360	18	10	7.2	
18	178	75	356	e68	72	89	59	92	1950	22	10	6.8	
19	129	1010	235	e62	251	193	57	91	803	26	11	7.0	
20	102	751	174	e58	883	409	57	91	363	21	32	7.0	
21	78	324	136	e54	999	802	56	187	218	19	99	8.5	
22	65	201	133	e50	481	412	48	1410	164	24	69	7.4	
23	59	145	1060	e47	309	245	82	606	127	30	37	7.4	
24	58	227	1860	e46	295	183	128	263	97	31	24	6.9	
25	52	293	852	e43	226	156	102	158	107	23	18	6.8	
26	504	198	388	e42	161	169	91	124	110	19	14	8.5	
27	483	1960	244	e41	133	769	81	100	80	23	11	9.8	
28	258	3340	189	e41	121	642	71	97	65	23	9.8	7.1	
29	208	3000	179	e41	124	377	57	75	58	25	23	15	
30	163	1380	1040	e40	---	279	55	54	51	23	56	16	
31	125	---	565	e40	---	437	---	215	---	29	30	---	
TOTAL	5578	14531	14418	15029	6214	10860	2900	6960	17688	786	830.8	292.9	
MEAN	180	484	465	485	214	350	96.7	225	590	25.4	26.8	9.76	
MAX	1340	3340	1860	3830	999	1320	315	1410	2690	44	99	18	
MIN	32	38	133	40	40	79	48	54	30	17	9.8	6.8	
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921-2004, BY WATER YEAR (WY)													
MEAN	53.8	126	229	329	344	449	386	215	189	140	67.7	52.1	
MAX	540	1025	1203	1728	1119	1235	1301	1017	1754	1450	682	1092	
(WY)	1987	1973	1991	1937	1950	1978	1922	1933	1958	2003	1995	1926	
MIN	2.92	4.64	4.59	4.35	9.19	21.4	43.0	11.9	9.23	5.35	3.37	2.46	
(WY)	1964	1964	1964	1977	1964	1941	1971	1941	1988	1936	1936	1983	
SUMMARY STATISTICS													
ANNUAL TOTAL				FOR 2003 CALENDAR YEAR				FOR 2004 WATER YEAR			WATER YEARS 1921-2004		
ANNUAL MEAN				159471				96087.7					
HIGHEST ANNUAL MEAN				437				263			214		
LOWEST ANNUAL MEAN											413		
HIGHEST DAILY MEAN				6570				Jul 10			3830		
LOWEST DAILY MEAN				14				Feb 1			6.8		
ANNUAL SEVEN-DAY MINIMUM				15				Jan 28			7.3		
MAXIMUM PEAK FLOW								4370			Jan 5		
MAXIMUM PEAK STAGE								83.27			Jan 5		
INSTANTANEOUS LOW FLOW											85.00		
10 PERCENT EXCEEDS				1070				665			544		
50 PERCENT EXCEEDS				130				87			44		
90 PERCENT EXCEEDS				33				13			7.3		

e Estimated.

03262700 Great Miami River at Troy, Ohio

LOCATION.—Latitude 40°02'25", longitude 84°11'52", Miami County, Hydrologic Unit 05080001, 400 ft downstream from B & O Railroad bridge, 1,300 ft downstream from bridge on State Highway 55 at Troy, Ohio, 1.2 mi upstream from small left bank tributary, 2.3 mi downstream from Spring Creek, and at mile 105.

DRAINAGE AREA.—926 mi².

PERIOD OF RECORD.—Water years 1961, 1962 (occasional low-flow measurements, published as Miami River at Troy). October 1962 to current year.

GAGE.—Water-stage recorder. Datum of gage is 810.67 ft above sea level.

REMARKS.—Records fair except for periods of estimated record, which are poor. Flood flow regulated by retarding basin on Loramie Creek, 18 mi upstream.

Low and medium flow slightly regulated by Indian Lake; capacity, 45,900 acre-ft, 54 mi upstream. Water supply for City of Troy averaged 8.07 ft³/s in 2004 and is returned as sewage 1 mi downstream from the station. Water-quality and sediment data formerly collected at this site.

COOPERATION.—Base data furnished by Miami Conservancy District.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of June 11, 1958, reached a stage of 16.4 ft; discharge, 21,000 ft³/s.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
1	552	658	3470	1680	e280	801	1210	e425	1630	406	331	e190			
2	453	601	2350	2460	e280	1770	1030	e1850	1380	383	423	e148			
3	423	539	1700	2620	e400	1760	905	e3390	1020	353	313	e133			
4	378	477	1330	5350	e760	1480	752	e2050	779	355	292	e126			
5	374	450	1230	11900	e640	2730	779	e1310	548	341	283	e121			
6	407	392	2330	9730	e960	2500	613	e921	475	306	383	e113			
7	368	386	1920	5950	e1700	1710	486	e729	460	304	294	e120			
8	310	339	1450	3070	e980	1290	478	e694	400	262	236	e112			
9	300	329	1190	2080	e860	1070	461	e631	367	253	190	e111			
10	291	341	1210	1480	e800	833	451	e526	333	250	171	e143			
11	273	334	2370	1180	e760	671	394	e462	1710	270	146	e134			
12	273	557	2070	972	e700	599	e353	e419	5070	266	138	e104			
13	268	969	1470	864	e660	575	e478	e392	4370	240	127	e96			
14	507	1010	1180	797	e600	470	e742	e426	6320	216	120	e90			
15	2920	702	992	734	e560	438	e589	e526	7850	188	112	81			
16	2410	476	901	676	e540	490	e436	e671	9050	200	107	92			
17	1550	412	2000	621	511	581	e380	e602	8430	233	107	105			
18	1160	402	1630	e540	474	537	e353	e1060	7680	490	99	92			
19	888	1200	1190	e500	609	666	e332	e2230	4070	352	106	151			
20	685	1770	978	e450	1630	1200	e343	e2160	2460	266	224	133			
21	533	1130	807	e380	2410	1690	e373	e2700	1750	212	446	96			
22	452	830	730	e340	1780	1450	e414	4620	1350	216	470	119			
23	453	724	1640	e320	1320	1040	e708	3490	1030	728	271	74			
24	384	771	4840	e300	1220	806	e877	2500	838	578	184	82			
25	338	1060	3350	e310	1110	699	e721	1360	868	384	177	78			
26	1030	864	2070	e330	885	688	e687	971	906	319	159	77			
27	2060	3150	1440	e360	771	1160	e603	713	687	308	140	79			
28	1460	8940	1150	e400	695	1570	e564	593	581	297	124	87			
29	1120	8540	1020	e370	682	1210	e452	509	479	288	130	103			
30	978	5610	2720	e340	---	1020	e391	412	465	243	317	180			
31	810	---	2490	e310	---	1320	---	865	---	287	e262	---			
TOTAL	24408	43963	55218	57414	25577	34824	17355	40207	73356	9794	6882	3370			
MEAN	787	1465	1781	1852	882	1123	578	1297	2445	316	222	112			
MAX	2920	8940	4840	11900	2410	2730	1210	4620	9050	728	470	190			
MIN	268	329	730	300	280	438	332	392	333	188	99	74			
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963-2004, BY WATER YEAR (WY)															
MEAN	295	625	1016	934	1208	1610	1517	1021	828	694	358	219			
MAX	2268	3824	3949	3069	3403	4005	4032	3294	2858	4440	2246	1694			
(WY)	1987	1973	1991	1974	1975	1963	1964	1996	1981	2003	1995	2003			
MIN	24.9	49.4	49.2	34.6	58.7	308	270	140	65.9	65.2	41.0	24.1			
(WY)	1964	1964	1977	1977	1964	1981	1971	1988	1988	1965	1965	1963			
SUMMARY STATISTICS															
ANNUAL TOTAL				FOR 2003 CALENDAR YEAR				FOR 2004 WATER YEAR				WATER YEARS 1963-2004			
ANNUAL MEAN				600979				392368							
HIGHEST ANNUAL MEAN				1647				1072				858			
LOWEST ANNUAL MEAN												1662			
HIGHEST DAILY MEAN				18800				Jul 9				11900			
LOWEST DAILY MEAN				120				Feb 21				74			
ANNUAL SEVEN-DAY MINIMUM				142				Feb 15				83			
MAXIMUM PEAK FLOW												12700			
MAXIMUM PEAK STAGE												12.91			
INSTANTANEOUS LOW FLOW												56			
10 PERCENT EXCEEDS				3860								2360			
50 PERCENT EXCEEDS				810								580			
90 PERCENT EXCEEDS				275								142			

e Estimated.

03263000 Great Miami River at Taylorsville, Ohio

LOCATION.—Latitude 39°52'27", longitude 84°09'45", in SW ¼ sec. 36, R.8, T.2, Montgomery County, Hydrologic Unit 05080001, on right upstream face of Taylorsville Dam, 0.8 mi north of Taylorsville, Ohio, 2.1 mi east of Vandalia, Ohio, 9.5 mi upstream from Stillwater River, and at mile 90.9.

DRAINAGE AREA.—1,149 mi².

PERIOD OF RECORD.—January 1914 to September 1917 (published as Miami River at Tadmor), October 1921 to current year. Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected at site at Tadmor, January 1914 to July 1920, are contained in reports of the National Weather Service.

REVISED RECORDS.—WSP 743: 1924(M). WSP 853: 1930, 1937. WSP 923: 1922-24. WSP 1385: 1916. WSP 1908: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 760.11 ft, National Geodetic Vertical Datum of 1912 (levels by Miami Conservancy District). Prior to October 1921, nonrecording gage at site 1.7 mi upstream at different datum; Jan. 1, 1922-Nov. 11, 1925, nonrecording gage at site 50 ft downstream at outlet works of Taylorsville Dam at datum 60.03 ft lower; Oct. 1921-Sept. 1978 at site 650 ft downstream at datum 60.03 ft lower.

REMARKS.—Records good except for periods of estimated record, which are poor. Flood flow regulated by retarding basins on Great Miami River just downstream from station and on Loramie Creek 28 mi upstream from station beginning in 1921. Low and medium flow slightly regulated by Indian Lake, 64 mi upstream from station, and by Lake Loramie 47 mi upstream from station on Loramie Creek; combined capacity, 58,900 acre-ft.

COOPERATION.—Base data furnished by Miami Conservancy District.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood in Mar. 1913, reached a stage of 25.4 ft at site at Tadmor; discharge, 127,000 ft³/s computed by Miami Conservancy District.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	883	932	5140	2560	e490	967	1720	610	2340	555	325	278
2	735	849	3550	4000	e450	2050	1420	2020	2050	510	427	213
3	659	796	2580	4430	e680	2310	1240	4080	1500	474	354	191
4	631	748	1980	7440	e1300	1930	1020	2630	1120	475	376	180
5	569	695	1780	17200	e1100	3020	999	1740	849	436	347	175
6	602	627	3150	e15000	e2500	3270	851	1250	700	410	403	159
7	543	609	2840	e12000	3480	2250	682	1020	620	388	366	172
8	488	564	2130	e8800	1920	1670	651	903	539	339	284	161
9	451	512	1690	e6200	1330	1360	614	849	474	321	224	150
10	434	492	1610	e3000	e1100	1070	599	730	453	327	198	202
11	418	472	3110	e2300	e1100	891	536	654	2370	346	182	199
12	412	1440	2990	e1900	e980	798	514	604	6480	365	167	e150
13	406	1420	2140	e1600	e880	761	603	582	5740	312	165	e140
14	670	1370	1680	e1400	e800	663	993	616	6490	280	157	e130
15	3420	1040	1400	e1200	e760	589	864	700	8230	242	152	e125
16	e3800	812	1270	e1100	e720	658	667	831	9910	231	149	119
17	e2600	713	2620	961	e660	726	575	842	10900	318	148	144
18	e1700	706	2430	1110	e600	753	524	1010	9370	567	149	126
19	e1100	1430	1740	1000	e680	856	486	3030	6140	460	143	145
20	911	2480	1400	852	1750	1560	509	2390	3420	344	369	166
21	779	1640	1160	e700	2920	2120	549	2400	2390	267	833	137
22	679	1170	1040	e640	2360	1970	636	5220	1840	299	732	118
23	651	968	1720	e600	1700	1420	884	4180	1390	707	466	131
24	593	998	6140	e560	1560	1070	1120	3000	1070	830	294	104
25	522	1360	4870	e540	1470	941	999	2010	1110	492	233	107
26	1460	1200	3100	e500	1140	888	938	1440	1110	357	201	103
27	2800	e3840	2120	e600	979	1290	842	1210	906	331	184	105
28	2020	e10600	1650	e740	882	2030	725	1650	765	298	227	109
29	1510	11700	1440	e660	848	1630	670	970	690	291	223	153
30	1290	8370	3680	e600	---	1410	593	784	617	249	372	154
31	1080	---	3780	e540	---	1810	---	2550	---	458	384	---
TOTAL	34816	60553	77930	100733	37139	44731	24023	52505	91583	12279	9234	4546
MEAN	1123	2018	2514	3249	1281	1443	801	1694	3053	396	298	152
MAX	3800	11700	6140	17200	3480	3270	1720	5220	10900	830	833	278
MIN	406	472	1040	500	450	589	486	582	453	231	143	103
CFSM	0.98	1.76	2.19	2.83	1.11	1.26	0.70	1.47	2.66	0.34	0.26	0.13
IN.	1.13	1.96	2.52	3.26	1.20	1.45	0.78	1.70	2.97	0.40	0.30	0.15
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922-2004, BY WATER YEAR (WY)												
MEAN	330	619	1046	1515	1567	1947	1827	1191	1009	686	388	285
MAX	3089	4228	4587	8024	4473	5158	5525	4603	5567	4951	2786	3608
(WY)	1927	1973	1991	1937	1950	1963	1922	1996	1958	2003	1995	1926
MIN	45.8	63.9	65.3	46.8	94.4	205	361	137	91.2	70.8	68.3	46.5
(WY)	1964	1935	1977	1977	1964	1941	1971	1941	1988	1936	1965	1963
SUMMARY STATISTICS				FOR 2003 CALENDAR YEAR			FOR 2004 WATER YEAR			WATER YEARS 1922-2004		
ANNUAL TOTAL				752076			550072					
ANNUAL MEAN				2060			1503			1031		
HIGHEST ANNUAL MEAN										2005		
LOWEST ANNUAL MEAN										292		
HIGHEST DAILY MEAN				22200			Jul 10			30200		
LOWEST DAILY MEAN				220			Feb 21			25		
ANNUAL SEVEN-DAY MINIMUM				253			Feb 15			31		
MAXIMUM PEAK FLOW							19000			31400		
MAXIMUM PEAK STAGE							22.25			75.44		
INSTANTANEOUS LOW FLOW							93			25		
ANNUAL RUNOFF (CFSM)				1.79			1.31			0.90		
ANNUAL RUNOFF (INCHES)				24.35			17.81			12.19		
10 PERCENT EXCEEDS				4650			3100			2500		
50 PERCENT EXCEEDS				1040			838			404		
90 PERCENT EXCEEDS				383			196			96		

e Estimated.

03264000 Greenville Creek near Bradford, Ohio

LOCATION.—Latitude 40°06'08", longitude 84°25'48", in NW ¼ sec. 34, T.9N., R.4E., Miami County, Hydrologic Unit 05080001, on left bank at downstream side of bridge on State Highway 721, 0.8 mi downstream from small left bank tributary, 1.8 mi south of Bradford, Ohio, and 6 mi upstream from mouth.

DRAINAGE AREA.—193 mi².

PERIOD OF RECORD.—October 1930 to September 2000, October 2000 to September 2002, recording crest-stage gage; October 2002 to September 2003.

REVISED RECORDS.—WSP 803: 1933(M). WSP 1235: 1936, 1937(M). WSP 1908: Drainage area. WRD-OH_82-1: 1980.

GAGE.—Water-stage recorder. Datum of gage 948.9 ft above sea level. Prior to Oct. 1, 1942, nonrecording gage at same site and datum. Apr. 6, 1962 to Nov. 13, 1963, water-stage recorder at site 200 ft downstream at same datum.

REMARKS.—Records good except for periods of estimated record, which are poor. Some diurnal fluctuation caused by mill 8 mi upstream from station; daily flows are not affected appreciably. Sediment data formerly collected at this site.

COOPERATION.—Base data furnished by Miami Conservancy District.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood in March 1913 reached a stage of 12.1 ft; discharge, 18,200 ft³/s, at site with drainage area of 213 mi², computed by Miami Conservancy District.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP							
1	e185	160	573	306	e110	190	223	107	922	117	103	52							
2	e165	158	419	788	e110	312	192	359	424	112	77	47							
3	e150	153	343	806	e140	269	171	407	297	107	71	43							
4	e135	144	300	1740	e170	237	151	248	235	120	107	40							
5	e125	136	308	3490	e155	340	133	186	197	116	107	37							
6	e115	125	420	2750	491	321	125	153	174	103	78	36							
7	110	117	354	857	496	232	121	137	156	95	63	35							
8	107	111	302	498	213	190	119	125	134	90	59	33							
9	105	104	272	384	164	167	112	115	123	86	54	32							
10	107	103	288	311	187	146	103	109	115	98	52	31							
11	108	105	350	274	200	138	101	101	1010	122	48	32							
12	107	450	289	261	220	130	99	97	2060	96	45	32							
13	108	406	243	242	207	121	105	95	1120	85	42	31							
14	246	233	232	224	154	122	111	97	568	78	42	31							
15	1120	183	213	213	197	120	99	129	535	72	42	31							
16	654	160	239	191	147	123	96	135	1430	70	41	31							
17	378	140	436	e175	123	122	92	121	1930	73	41	30							
18	263	144	318	e155	128	119	91	112	943	66	39	31							
19	206	843	258	e140	253	169	89	308	469	63	40	30							
20	171	695	219	e135	510	270	88	346	341	59	76	29							
21	156	366	194	e125	550	274	99	224	277	59	224	28							
22	138	259	192	e120	293	206	107	258	310	93	118	28							
23	127	209	372	e120	244	171	121	209	285	105	77	28							
24	120	248	852	e118	248	155	127	165	218	77	64	28							
25	117	269	453	e118	209	144	118	136	193	67	62	26							
26	379	208	311	e115	177	135	115	123	175	63	57	26							
27	445	1120	260	e115	161	182	103	123	157	79	51	26							
28	275	2430	235	e115	154	202	94	1280	146	78	47	26							
29	228	1940	239	e113	154	176	89	1710	138	75	58	28							
30	203	867	544	e112	---	161	95	594	125	71	75	28							
31	173	---	405	e112	---	224	---	1060	---	105	58	---							
TOTAL	7026	12586	10433	15223	6565	5868	3489	9369	15207	2700	2118	966							
MEAN	227	420	337	491	226	189	116	302	507	87.1	68.3	32.2							
MAX	1120	2430	852	3490	550	340	223	1710	2060	122	224	52							
MIN	105	103	192	112	110	119	88	95	115	59	39	26							
CFSM	1.17	2.17	1.74	2.54	1.17	0.98	0.60	1.57	2.63	0.45	0.35	0.17							
IN.	1.35	2.43	2.01	2.93	1.27	1.13	0.67	1.81	2.93	0.52	0.41	0.19							
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931-2004, BY WATER YEAR (WY)																			
MEAN	56.9	112	174	251	271	326	314	219	193	117	71.8	56.4							
MAX	496	724	772	1430	844	826	783	935	1142	610	723	690							
(WY)	1987	1994	1991	1937	1950	1963	1964	1933	1958	2003	1979	2003							
MIN	10.7	14.9	13.5	14.9	15.9	48.2	58.7	27.7	21.6	13.9	8.93	9.47							
(WY)	1964	1935	1964	1945	1935	1941	1935	1941	1934	1934	1988	1999							
SUMMARY STATISTICS																			
ANNUAL TOTAL				FOR 2003 CALENDAR YEAR				FOR 2004 WATER YEAR				WATER YEARS 1931-2004							
119855				328				250											
ANNUAL MEAN								180											
HIGHEST ANNUAL MEAN								302											
LOWEST ANNUAL MEAN								52.8				1941							
HIGHEST DAILY MEAN				4520		Sep 2		3490		Jan 5		7920		May 14		1933			
LOWEST DAILY MEAN				39		Feb 21		26		Sep 25		5.3		Sep 17		1963			
ANNUAL SEVEN-DAY MINIMUM				45		Feb 15		27		Sep 22		6.4		Aug 25		1988			
MAXIMUM PEAK FLOW								3630				Jan 5a		9320		May 14		1933	
MAXIMUM PEAK STAGE								7.75				Jan 5		10.31		Mar 5		1963	
INSTANTANEOUS LOW FLOW												4.8		Sep 17		1963			
ANNUAL RUNOFF (CFSM)				1.70				1.30				0.93							
ANNUAL RUNOFF (INCHES)				23.10				17.65				12.64							
10 PERCENT EXCEEDS				778				458				396							
50 PERCENT EXCEEDS				163				138				75							
90 PERCENT EXCEEDS				64				46				22							

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

03265000 Stillwater River at Pleasant Hill, Ohio

LOCATION.—Latitude 40°03'28", longitude 84°21'22", in SW ¼ sec. 18, T.7 N., R.5 E., Miami County, Hydrologic Unit 05080001, on left bank at downstream side of bridge on Laurer Road, 0.8 mi northwest of Pleasant Hill, Ohio, 2 mi downstream from Painter Creek, 2 mi upstream from Canyon Run, and at mile 28.35.

DRAINAGE AREA.—503 mi².

Water-Discharge Records

PERIOD OF RECORD.—October 1916 to September 1928, October 1934 to current year. Monthly discharge only for some periods, published in WSP 1305.

Gage-height records collected at same site March 1922 to December 1963 are contained in reports of the National Weather Service.

REVISED RECORDS.—WSP 523: 1917. WSP 1305: 1920(M). WSP 1908: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 846.73 ft, National Geodetic Vertical Datum of 1912. Prior to Dec. 23, 1934, nonrecording gage at same site and datum.

REMARKS.—Records good except for periods of estimated record, which are poor. Sediment data formerly collected at this site.

COOPERATION.—Base data furnished by Miami Conservancy District.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Mar. 25, 1913, reached a stage of 17.5 ft. Discharge at site about 3 mi upstream, 51,400 ft³/s, computed by Miami Conservancy District. This stage is not comparable with present gage heights because of failure of levee in 1913. Water-quality data collected at this site.

**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	414	332	1340	611	e150	400	841	204	1660	175	132	88
2	335	329	852	1920	e180	884	536	1260	698	165	117	67
3	290	323	644	2090	e280	647	426	1330	460	158	90	55
4	284	303	544	5620	498	533	358	586	354	165	103	47
5	265	286	560	11500	364	1620	295	410	299	170	164	43
6	241	259	1040	6530	973	924	261	324	267	150	122	45
7	219	235	756	2070	1550	534	249	277	240	136	89	44
8	204	217	586	1010	471	411	239	246	211	125	70	39
9	193	202	505	711	338	341	222	220	187	116	62	37
10	188	195	579	548	356	293	197	203	173	120	57	35
11	183	209	1000	471	422	267	191	188	2500	220	50	32
12	180	1090	648	443	423	252	188	176	4870	163	45	34
13	175	1080	481	406	420	222	197	168	2700	139	42	34
14	578	522	444	374	301	215	211	167	1860	118	41	33
15	3770	397	397	359	377	215	193	194	1700	101	41	32
16	1710	345	460	e310	297	218	178	224	4200	90	41	33
17	804	304	1200	e290	235	223	171	203	4810	91	40	33
18	554	286	676	e300	226	219	165	194	2140	93	37	31
19	436	2550	498	e250	546	337	159	658	921	82	38	32
20	361	1940	408	e230	1640	718	155	636	583	79	91	30
21	321	807	354	e215	1750	925	160	394	452	72	316	28
22	296	553	345	e205	680	516	184	433	467	105	205	27
23	265	445	1200	e195	514	377	197	364	449	136	123	26
24	240	538	3040	e190	542	330	216	281	337	107	91	25
25	228	666	1170	e185	448	299	212	230	307	84	75	25
26	986	468	634	e185	355	274	221	203	275	77	68	23
27	1180	3900	490	e200	316	688	195	194	241	87	59	24
28	615	8070	434	e185	299	580	173	1980	221	98	52	25
29	495	5490	433	e170	306	420	160	2550	205	93	73	26
30	438	2310	1650	e160	---	361	163	901	188	84	272	33
31	368	---	945	e150	---	1130	---	1830	---	119	136	---
TOTAL	16816	34651	24313	38083	15257	15373	7313	17228	33975	3718	2942	1086
MEAN	542	1155	784	1228	526	496	244	556	1132	120	94.9	36.2
MAX	3770	8070	3040	11500	1750	1620	841	2550	4870	220	316	88
MIN	175	195	345	150	150	215	155	167	173	72	37	23
CFSM	1.08	2.30	1.56	2.44	1.05	0.99	0.48	1.10	2.25	0.24	0.19	0.07
IN.	1.24	2.56	1.80	2.82	1.13	1.14	0.54	1.27	2.51	0.27	0.22	0.08
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1917-2004, BY WATER YEAR (WY)												
MEAN	149	294	449	615	706	907	832	490	473	282	149	131
MAX	1338	1909	2437	3961	2177	2433	2513	1700	3334	1629	1823	2127
(WY)	2002	1994	1991	1937	1950	1963	1922	1996	1958	2003	1979	1926
MIN	11.7	19.3	16.0	21.5	44.0	79.8	131	44.6	33.7	22.2	14.1	14.9
(WY)	1964	1964	1964	1977	1964	1941	1971	1941	1988	1977	1988	1954
SUMMARY STATISTICS			FOR 2003 CALENDAR YEAR				FOR 2004 WATER YEAR			WATER YEARS 1917-2004		
ANNUAL TOTAL				275276			210755					
ANNUAL MEAN				754			576			455		
HIGHEST ANNUAL MEAN							775			1973		
LOWEST ANNUAL MEAN							99.3			1941		
HIGHEST DAILY MEAN				10800		Sep 2	11500		Jan 5	17400		Jan 15 1937
LOWEST DAILY MEAN				60		Feb 21	23		Sep 26	4.0		Oct 17 1920
ANNUAL SEVEN-DAY MINIMUM				73		Feb 15	25		Sep 23	8.1		Oct 11 1920
MAXIMUM PEAK FLOW							12200		Jan 5a	26400		Jan 14 1937
MAXIMUM PEAK STAGE							13.79		Jan 5	18.46		Jun 29 1980
INSTANTANEOUS LOW FLOW							22		Sep 26	4.0		Oct 17 1920
ANNUAL RUNOFF (CFSM)				1.50			1.14			0.90		
ANNUAL RUNOFF (INCHES)				20.36			15.59			12.28		
10 PERCENT EXCEEDS				1650			1200			1020		
50 PERCENT EXCEEDS				318			273			148		
90 PERCENT EXCEEDS				114			51			33		

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

03265000 Stillwater River at Pleasant Hill, Ohio—Continued

Water-Quality Records

PERIOD OF RECORD.—June 2002 to current year (discontinued).

PERIOD OF DAILY RECORD—

SPECIFIC CONDUCTANCE: June 2002 to current year.

pH: June 2002 to current year.

WATER TEMPERATURE: June 2002 to current year.

DISSOLVED OXYGEN: June 2002 to current year.

TURBIDITY: June 2002 to current year.

INSTRUMENTATION.—Water-quality monitor. Electronic data logger. Set for 1-hour interval. Satellite telemeter at station.

REMARKS.—Interruptions in water-quality record are due to malfunction of the instrument. Specific conductance records are good except Nov. 4-21, Dec. 18-Jan. 7, Jan. 26-Feb. 4, Feb. 17-Mar. 27, and June 24-July 9, which are fair and Aug. 5-20, which are poor. pH records are good except Nov. 21-Mar. 26 and June 24-July 9, which are fair. Water temperature records are good. Dissolved oxygen records are fair except Oct. 7-Dec. 18 and May 10-Sept. 3, which are poor. Turbidity records are poor.

EXTREMES FOR PERIOD OF RECORD.—

SPECIFIC CONDUCTANCE: Maximum, 1,120 microsiemens, Jan. 29, 2004; minimum, 191 microsiemens, Jan. 5, 2004.

pH: Maximum, 8.8 units, July 7-9 and Sept. 19, 2002; minimum, 7.5 units, Feb. 7, 8, and June 17, 2004.

WATER TEMPERATURE: Maximum, 31.5° C, Aug. 3, 2002; minimum, 0.2° C, many days in Jan. and Feb., 2004.

DISSOLVED OXYGEN: Maximum, 18.9 mg/L, Dec. 27, 2003; minimum, 4.9, July 24, 2002.

TURBIDITY: Maximum, 1,400 NTU, Jan. 5, 2004; minimum, 0.0 NTU, many days in 2003 and 2004.

EXTREMES FOR CURRENT YEAR.—

SPECIFIC CONDUCTANCE: Maximum, 1,120 microsiemens, Jan. 29; minimum, 199 microsiemens, Sept. 5.

pH: Maximum, 8.7 units, Oct. 24 and Nov. 8-10; minimum, 7.5 units, Feb. 7, 8, and June 17.

WATER TEMPERATURE: Maximum, 27.7° C, July 22; minimum, 0.2° C, many days in Jan. and Feb.

DISSOLVED OXYGEN: Maximum, 18.9 mg/L, Dec. 27; minimum 5.4, July 14.

TURBIDITY: Maximum, 1,400 NTU, Jan. 5; minimum, 0.0 NTU, many days.

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

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	629	596	614	677	664	673	560	514	539	637	573	609
2	651	629	642	686	674	680	594	560	578	633	484	531
3	668	651	662	688	674	681	635	594	616	511	476	490
4	671	664	669	698	675	685	658	635	648	499	225	383
5	687	671	680	700	687	696	666	656	660	225	191	202
6	687	672	680	707	698	704	662	581	624	362	214	282
7	708	678	691	711	698	705	608	576	587	481	362	428
8	705	687	698	711	699	704	653	608	634	550	481	520
9	702	689	696	712	698	705	675	653	666	592	550	572
10	702	685	694	713	695	704	681	641	672	626	592	611
11	703	685	694	706	658	698	641	571	594	651	626	638
12	699	688	694	668	547	636	614	576	593	664	650	656
13	707	696	700	578	542	554	656	614	637	677	664	670
14	703	548	666	629	578	606	681	656	666	680	677	678
15	585	407	443	667	629	650	717	680	691	690	680	685
16	523	437	481	690	667	681	747	683	716	699	690	695
17	580	523	554	701	690	696	683	580	605	716	699	707
18	611	580	597	707	696	701	615	575	590	730	698	709
19	634	611	624	707	447	529	669	615	644	894	722	783
20	653	634	647	534	454	486	695	669	683	727	709	720
21	665	652	661	611	534	576	715	695	709	766	717	751
22	699	665	682	648	611	632	723	714	719	746	737	740
23	700	692	695	668	648	660	725	498	669	768	746	762
24	710	694	701	678	668	673	498	429	440	773	755	767
25	705	689	700	682	595	621	562	455	513	785	773	780
26	689	543	631	647	614	631	629	562	600	788	764	777
27	576	532	557	650	299	474	671	629	653	780	745	759
28	626	576	599	305	294	297	692	671	682	871	758	799
29	654	626	640	422	305	356	699	678	693	1120	871	1030
30	667	654	663	514	422	473	678	527	575	928	837	856
31	673	663	668	---	---	---	573	525	541	870	835	845
MONTH	710	407	646	713	294	619	747	429	627	1120	191	659

03265000 Stillwater River at Pleasant Hill, Ohio—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
1	8.5	8.3	8.4	8.6	8.4	8.5	8.3	8.2	8.2	8.3	8.2	8.2
2	8.5	8.4	8.5	8.6	8.4	8.5	8.4	8.3	8.3	8.3	8.0	8.0
3	8.6	8.4	8.5	8.6	8.4	8.6	8.4	8.2	8.4	8.0	8.0	8.0
4	8.6	8.4	8.5	8.6	8.3	8.5	8.5	8.4	8.4	8.0	7.8	7.9
5	8.6	8.5	8.5	8.5	8.3	8.4	8.5	8.4	8.5	7.9	7.8	7.9
6	8.6	8.5	8.5	8.4	8.3	8.4	8.5	8.3	8.3	7.9	7.8	7.9
7	8.6	8.5	8.6	8.6	8.4	8.4	8.4	8.3	8.3	8.1	7.9	8.0
8	8.6	8.5	8.6	8.7	8.5	8.6	8.5	8.4	8.4	8.1	8.1	8.1
9	8.6	8.5	8.6	8.7	8.5	8.6	8.4	8.4	8.4	8.2	8.1	8.2
10	8.6	8.5	8.6	8.7	8.5	8.6	8.4	8.4	8.4	8.3	8.2	8.2
11	8.6	8.4	8.5	8.6	8.3	8.4	8.4	8.2	8.3	8.3	8.2	8.2
12	8.6	8.4	8.5	8.3	8.0	8.2	8.4	8.2	8.3	8.3	8.3	8.3
13	8.6	8.4	8.5	8.2	8.0	8.0	8.4	8.3	8.3	8.3	8.3	8.3
14	8.5	8.0	8.4	8.4	8.1	8.2	8.4	8.4	8.4	8.3	8.3	8.3
15	8.0	7.7	7.8	8.4	8.2	8.3	8.5	8.4	8.4	8.4	8.3	8.3
16	8.1	7.8	8.0	8.4	8.3	8.3	8.5	8.4	8.4	8.4	8.3	8.4
17	8.3	8.1	8.2	8.5	8.3	8.3	8.4	8.2	8.2	8.4	8.3	8.4
18	8.4	8.2	8.3	8.5	8.3	8.4	8.2	8.1	8.2	8.4	8.3	8.3
19	8.4	8.3	8.4	8.3	7.8	7.8	8.2	8.1	8.1	8.4	8.3	8.4
20	8.5	8.3	8.4	8.0	7.8	7.9	8.2	8.1	8.2	8.4	8.3	8.4
21	8.5	8.3	8.4	8.2	8.0	8.2	8.3	8.2	8.2	8.4	8.3	8.4
22	8.6	8.3	8.5	8.4	8.2	8.3	8.3	8.2	8.3	8.4	8.3	8.4
23	8.6	8.5	8.6	8.4	8.3	8.4	8.3	8.0	8.2	8.4	8.3	8.4
24	8.7	8.5	8.6	8.4	8.3	8.4	8.0	7.9	7.9	8.3	8.3	8.3
25	8.6	8.5	8.6	8.4	8.3	8.3	8.1	8.0	8.1	8.3	8.3	8.3
26	8.6	8.2	8.4	8.5	8.3	8.4	8.3	8.1	8.2	---	---	---
27	8.3	8.1	8.2	8.5	7.8	8.1	8.3	8.2	8.2	---	---	---
28	8.4	8.3	8.3	7.8	7.8	7.8	8.3	8.3	8.3	---	---	---
29	8.6	8.4	8.4	8.0	7.8	7.9	8.3	8.3	8.3	---	---	---
30	8.6	8.4	8.5	8.2	8.0	8.1	8.3	8.1	8.1	---	---	---
31	8.6	8.4	8.5	---	---	---	8.2	8.1	8.1	---	---	---
MAX	8.7	8.5	8.6	8.7	8.5	8.6	8.5	8.4	8.5	8.4	8.3	8.4
MIN	8.0	7.7	7.8	7.8	7.8	7.8	8.0	7.9	7.9	7.9	7.8	7.9

DAY	FEBRUARY			MARCH			APRIL			MAY		
	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
1	---	---	---	8.5	8.3	8.4	8.1	7.8	7.9	8.3	8.1	8.2
2	---	---	---	8.4	8.1	8.3	8.4	8.0	8.1	8.2	7.8	7.9
3	---	---	---	8.5	8.1	8.2	8.5	8.1	8.3	8.0	7.8	7.8
4	---	---	---	8.5	8.2	8.3	8.5	8.2	8.4	8.2	8.0	8.0
5	7.8	7.8	7.8	8.3	7.9	8.0	8.6	8.3	8.5	8.3	8.1	8.2
6	7.8	7.6	7.6	8.2	8.0	8.0	8.5	8.3	8.5	8.4	8.1	8.3
7	7.6	7.5	7.5	8.5	8.2	8.2	8.5	8.3	8.4	8.3	8.1	8.2
8	7.7	7.5	7.6	8.5	8.3	8.4	8.4	8.3	8.3	8.4	8.2	8.2
9	7.9	7.7	7.8	8.5	8.2	8.4	8.3	8.2	8.2	8.3	8.1	8.2
10	8.1	7.9	8.0	8.5	8.2	8.5	8.3	8.1	8.2	8.4	8.1	8.2
11	8.2	8.0	8.0	8.5	8.3	8.4	8.2	8.1	8.2	8.4	8.1	8.3
12	8.1	7.9	8.0	8.6	8.3	8.4	8.2	8.1	8.1	8.5	8.1	8.3
13	8.0	7.9	8.0	8.6	8.4	8.5	8.2	8.1	8.1	8.3	8.1	8.2
14	8.2	7.9	8.0	8.6	8.4	8.5	8.2	8.1	8.1	8.3	8.1	8.2
15	8.2	8.0	8.0	8.6	8.4	8.5	8.2	7.9	8.2	8.3	8.2	8.2
16	8.2	8.0	8.1	8.6	8.4	8.5	8.1	8.0	8.1	8.4	8.2	8.2
17	8.3	8.0	8.2	8.6	8.4	8.5	8.1	8.0	8.0	8.4	8.2	8.3
18	8.3	8.2	8.2	8.6	8.4	8.5	8.1	7.9	8.0	8.4	8.3	8.3
19	8.2	8.1	8.2	8.5	8.3	8.5	8.2	7.9	7.9	8.3	8.0	8.1
20	8.1	7.8	7.9	8.5	8.1	8.2	8.3	8.0	8.2	8.2	8.1	8.1
21	7.9	7.8	7.8	8.2	8.0	8.0	8.3	8.1	8.2	8.2	8.1	8.2
22	8.1	7.9	7.9	8.4	8.0	8.1	8.3	8.1	8.2	8.3	8.2	8.2
23	8.3	8.0	8.1	8.6	8.2	8.4	8.4	8.1	8.3	8.3	8.2	8.2
24	8.2	8.1	8.2	8.6	8.2	8.5	8.5	8.2	8.3	8.6	8.2	8.3
25	8.4	8.1	8.2	8.6	8.2	8.5	8.4	8.2	8.3	8.4	8.3	8.3
26	8.5	8.2	8.4	8.5	8.2	8.4	8.5	8.2	8.3	8.4	8.3	8.3
27	8.5	8.3	8.4	8.4	8.0	8.2	8.5	8.2	8.4	8.4	8.3	8.4
28	8.5	8.3	8.4	8.3	7.9	8.0	8.6	8.3	8.4	8.4	8.0	8.1
29	8.6	8.3	8.5	8.3	8.0	8.2	8.6	8.3	8.4	8.0	7.9	8.0
30	---	---	---	8.5	8.1	8.3	8.4	8.2	8.3	8.1	8.0	8.1
31	---	---	---	8.5	7.8	8.0	---	---	---	8.3	8.0	8.1
MAX	8.6	8.3	8.5	8.6	8.4	8.5	8.6	8.3	8.5	8.6	8.3	8.4
MIN	7.6	7.5	7.5	8.2	7.8	8.0	8.1	7.8	7.9	8.0	7.8	7.8

03265000 Stillwater River at Pleasant Hill, Ohio—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
 WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
1	8.2	8.0	8.1	8.5	8.4	8.5	8.2	8.1	8.1	8.2	7.9	8.0
2	8.3	8.2	8.2	8.5	8.2	8.4	8.2	8.0	8.1	8.2	7.9	8.0
3	8.3	8.1	8.2	8.4	8.2	8.2	8.2	8.1	8.1	8.2	7.9	8.0
4	8.2	8.2	8.2	8.4	8.1	8.2	8.2	7.9	8.1	8.3	7.9	8.0
5	8.3	8.2	8.2	8.4	8.2	8.3	8.2	8.1	8.1	8.3	8.0	8.1
6	8.3	8.2	8.2	8.3	8.1	8.2	8.3	8.2	8.2	8.4	8.0	8.1
7	8.3	8.2	8.3	8.3	8.1	8.2	8.4	8.2	8.2	8.4	8.1	8.2
8	8.3	8.2	8.3	8.4	8.2	8.3	8.4	8.2	8.3	8.3	8.1	8.2
9	8.3	8.2	8.3	8.6	8.2	8.3	8.5	8.2	8.3	8.4	8.1	8.2
10	8.3	8.2	8.3	8.5	8.3	8.3	8.4	8.2	8.3	8.4	8.1	8.2
11	8.3	7.6	8.1	8.3	8.1	8.3	8.5	8.2	8.3	8.4	8.1	8.2
12	7.7	7.6	7.6	8.4	8.2	8.3	8.6	8.2	8.3	8.4	8.1	8.2
13	7.9	7.7	7.8	8.4	8.2	8.3	8.6	8.3	8.4	8.5	8.1	8.2
14	8.0	7.8	7.9	8.4	8.2	8.3	8.6	8.3	8.4	8.5	8.2	8.3
15	8.0	7.7	7.9	8.5	8.3	8.3	8.6	8.4	8.5	8.5	8.2	8.3
16	7.7	7.6	7.7	8.5	8.3	8.3	8.5	8.3	8.4	8.5	8.2	8.3
17	7.6	7.5	7.6	8.5	8.3	8.3	8.4	8.3	8.3	8.4	8.2	8.2
18	7.9	7.6	7.8	8.5	8.3	8.3	8.4	8.2	8.3	8.4	8.2	8.3
19	8.0	7.9	7.9	8.5	8.3	8.3	8.3	8.1	8.2	8.4	8.2	8.3
20	8.2	8.0	8.1	8.5	8.3	8.3	8.2	8.0	8.1	8.4	8.2	8.3
21	8.2	8.2	8.2	8.5	8.2	8.3	8.0	7.9	8.0	8.4	8.2	8.3
22	8.2	8.2	8.2	8.4	8.2	8.3	8.0	7.8	8.0	8.4	8.2	8.3
23	8.4	8.2	8.3	8.3	8.0	8.2	8.1	8.0	8.0	8.4	8.2	8.2
24	8.4	8.3	8.4	8.3	8.1	8.1	8.2	7.9	8.0	8.4	8.1	8.2
25	8.5	8.4	8.5	8.3	8.1	8.2	8.2	7.9	8.0	8.4	8.1	8.2
26	8.6	8.5	8.5	8.2	8.1	8.1	8.2	7.9	8.0	8.4	8.1	8.3
27	8.5	8.4	8.4	8.1	8.0	8.1	8.3	8.0	8.0	8.4	8.1	8.2
28	8.5	8.4	8.4	8.2	8.1	8.1	8.2	7.9	8.0	8.4	8.1	8.2
29	8.5	8.4	8.5	8.3	8.1	8.1	8.2	7.9	8.0	8.3	8.1	8.2
30	8.5	8.4	8.5	8.3	8.1	8.1	8.0	7.8	7.9	8.5	8.1	8.3
31	---	---	---	8.2	8.0	8.1	8.0	7.8	7.9	---	---	---
MAX	8.6	8.5	8.5	8.6	8.4	8.5	8.6	8.4	8.5	8.5	8.2	8.3
MIN	7.6	7.5	7.6	8.1	8.0	8.1	8.0	7.8	7.9	8.2	7.9	8.0
YEAR	MAX	MAXIMUM	8.7	MIN	MAXIMUM	8.5	MEDIAN	MAXIMUM	8.6	MINIMUM	7.5	
		MINIMUM	7.6		MINIMUM	7.5		MINIMUM	7.5			

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

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	13.5	11.6	12.5	14.4	14.0	14.2	6.6	5.8	6.1	5.1	3.6	4.3
2	12.6	10.6	11.6	16.2	14.0	14.9	5.8	4.7	5.2	7.5	5.1	6.2
3	11.4	9.7	10.5	16.2	14.4	15.3	5.1	4.5	4.7	8.8	7.5	8.4
4	12.5	10.8	11.4	16.1	14.2	15.3	5.4	4.3	4.7	8.7	4.7	6.8
5	13.1	11.0	11.9	15.7	14.2	15.3	5.8	5.4	5.6	4.7	3.1	3.8
6	13.7	11.2	12.3	14.2	11.1	12.6	5.8	5.1	5.5	3.1	0.7	1.9
7	13.8	11.1	12.5	11.1	8.8	9.8	5.6	4.6	5.1	1.2	0.3	0.7
8	15.2	12.4	13.5	8.8	6.8	7.7	5.5	4.3	4.8	2.1	1.0	1.4
9	14.8	13.4	14.1	7.0	5.1	6.0	7.2	5.5	6.2	2.4	1.7	2.1
10	16.5	14.5	15.2	7.0	5.2	6.0	7.9	7.2	7.6	1.7	0.3	1.0
11	17.5	14.9	16.0	9.7	6.8	8.1	7.9	5.7	6.9	1.7	0.7	1.2
12	18.0	16.2	16.7	11.8	9.7	10.9	5.7	3.8	4.7	3.0	1.7	2.3
13	16.6	14.2	15.4	11.4	8.1	9.7	3.8	2.5	2.8	3.0	2.6	2.8
14	15.1	13.6	14.3	8.1	6.5	7.1	2.6	1.5	2.0	3.1	2.2	2.7
15	13.6	12.7	13.2	7.2	6.7	6.9	3.1	2.4	2.6	3.0	1.5	2.1
16	13.5	12.2	12.8	8.0	7.0	7.5	4.4	2.5	3.4	1.5	0.9	1.2
17	13.3	12.3	12.8	9.9	8.0	8.8	4.3	3.4	3.7	1.5	0.8	1.1
18	12.7	10.9	11.9	11.4	9.4	10.1	3.4	2.8	3.2	2.2	1.2	1.8
19	13.3	11.1	12.1	12.5	11.5	12.0	3.3	2.7	2.9	1.2	0.3	0.8
20	13.9	11.2	12.5	11.5	10.3	10.8	2.9	2.0	2.4	1.0	0.2	0.5
21	14.1	13.5	13.8	10.8	9.4	10.2	2.5	1.1	1.8	0.8	0.2	0.4
22	13.6	11.8	12.5	11.4	9.8	10.5	3.9	2.3	2.9	0.9	0.3	0.5
23	12.5	10.9	11.6	12.6	11.4	11.9	5.5	3.9	4.9	0.5	0.2	0.4
24	11.2	9.1	10.3	12.5	7.8	10.5	5.3	4.1	4.7	0.4	0.3	0.3
25	11.3	10.1	10.7	7.8	6.1	6.6	4.1	3.0	3.4	0.4	0.3	0.3
26	11.8	11.1	11.4	6.6	5.6	6.1	3.3	2.1	2.7	0.4	0.3	0.3
27	11.3	10.3	10.8	7.6	6.6	7.2	3.4	2.0	2.7	0.5	0.2	0.3
28	10.3	9.5	9.8	7.7	6.0	7.0	4.4	2.7	3.5	0.3	0.2	0.2
29	10.4	9.2	9.8	6.0	4.7	5.0	5.8	4.4	5.0	0.3	0.2	0.3
30	11.7	9.2	10.4	6.3	4.7	5.5	5.8	4.7	5.2	0.3	0.2	0.2
31	14.1	11.5	12.5	---	---	---	5.0	3.9	4.5	0.3	0.2	0.3
MONTH	18.0	9.1	12.5	16.2	4.7	9.7	7.9	1.1	4.2	8.8	0.2	1.8

03265000 Stillwater River at Pleasant Hill, Ohio—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	12.2	10.4	11.1	10.6	8.6	9.5	12.1	11.7	11.8	17.7	16.6	17.1
2	13.2	10.8	11.6	---	---	---	12.9	12.1	12.5	16.6	14.9	15.6
3	13.8	11.3	12.2	---	---	---	14.4	12.6	13.4	14.9	14.0	14.3
4	13.3	11.0	11.9	---	---	---	14.5	13.6	14.1	15.4	14.0	14.8
5	13.8	10.9	12.0	11.3	7.3	9.0	13.6	13.2	13.4	15.8	15.4	15.6
6	14.2	10.8	12.0	7.7	6.3	7.0	13.4	13.1	13.3	16.9	15.8	16.4
7	14.9	10.8	12.3	12.9	6.6	9.3	13.8	13.1	13.4	17.4	16.9	17.0
8	14.9	10.7	12.3	14.1	10.0	11.7	14.3	13.5	13.8	16.9	15.0	16.1
9	15.3	10.4	12.4	14.7	10.5	12.3	13.6	12.8	13.2	15.0	12.7	14.0
10	14.8	10.1	12.1	16.1	11.7	13.6	13.0	12.3	12.7	12.7	10.5	11.7
11	14.0	9.8	11.5	14.0	8.9	11.7	12.8	12.3	12.5	---	---	---
12	14.4	9.0	11.1	12.2	8.5	10.9	13.7	12.8	13.3	---	---	---
13	14.5	9.1	11.1	12.0	10.5	11.4	14.1	13.5	13.8	---	---	---
14	11.4	9.3	10.0	13.8	11.6	12.6	---	---	---	---	---	---
15	9.7	8.7	9.0	13.2	12.2	12.8	---	---	---	---	---	---
16	10.3	9.7	10.1	13.3	12.1	12.6	---	---	---	---	---	---
17	11.0	10.2	10.6	15.8	12.1	13.4	---	---	---	---	---	---
18	12.3	10.6	11.2	13.4	11.8	12.4	---	---	---	---	---	---
19	12.7	10.7	11.3	11.2	10.6	10.8	14.8	13.5	14.1	---	---	---
20	13.0	10.4	11.2	11.3	10.8	11.1	16.3	14.4	15.2	---	---	---
21	11.5	9.4	10.3	12.6	11.1	11.6	17.2	15.4	16.1	---	---	---
22	12.3	9.7	10.8	12.0	10.9	11.3	16.5	15.5	15.9	---	---	---
23	13.4	9.8	11.1	11.9	10.3	10.9	15.5	14.3	14.7	---	---	---
24	14.2	10.3	11.7	10.5	9.2	9.9	15.7	14.3	15.0	---	---	---
25	12.9	10.3	11.6	11.2	10.2	10.7	16.9	15.7	16.5	---	---	---
26	11.2	9.7	10.2	12.8	10.8	11.6	18.1	16.9	17.6	---	---	---
27	10.5	9.7	10.1	12.1	10.3	10.9	18.9	17.5	18.0	14.4	13.6	14.0
28	10.9	10.2	10.5	---	---	---	18.8	17.1	17.8	15.0	14.1	14.4
29	12.3	10.3	11.0	11.9	10.9	11.6	17.1	15.9	16.6	15.2	14.3	14.7
30	12.7	10.2	11.0	12.0	11.6	11.8	16.4	15.8	16.1	15.1	14.3	14.7
31	12.5	9.5	10.6	---	---	---	17.0	16.4	16.7	15.4	14.4	14.8
MONTH	15.3	8.7	11.2	16.1	6.3	11.2	18.9	11.7	14.7	17.7	10.5	15.0

DAY	FEBRUARY			MARCH			APRIL			MAY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	15.5	14.6	14.9	15.5	11.8	13.3	11.6	10.6	11.1	12.7	7.8	10.0
2	15.5	14.6	15.0	13.4	11.6	12.3	13.7	11.0	12.0	10.5	8.9	9.9
3	15.0	14.2	14.7	15.3	11.8	13.1	16.0	10.7	12.8	11.4	10.2	10.9
4	15.0	14.3	14.7	13.6	11.7	12.6	16.2	10.3	12.8	13.2	10.7	11.7
5	14.3	13.7	14.1	12.1	10.8	11.5	18.5	10.8	14.0	14.1	10.1	11.6
6	13.8	13.6	13.7	11.9	10.7	11.1	18.0	10.7	14.0	13.6	9.0	11.0
7	13.8	13.5	13.6	15.0	11.4	12.7	16.8	9.6	13.1	13.0	7.7	9.8
8	14.1	13.6	13.8	14.7	12.0	13.0	14.6	9.2	11.8	13.8	8.5	10.8
9	14.4	13.6	13.9	16.0	11.5	13.4	13.6	8.7	11.0	13.3	7.2	9.9
10	14.5	13.7	14.0	16.3	11.8	13.8	13.2	8.6	10.7	11.8	6.1	8.5
11	15.0	13.7	14.2	16.0	11.2	13.3	11.8	8.5	10.1	12.5	6.0	8.8
12	14.4	13.5	13.8	18.2	11.5	14.6	12.1	9.1	10.5	12.4	5.9	8.9
13	14.2	13.3	13.7	18.1	12.9	15.4	12.0	10.2	11.0	10.5	5.9	8.2
14	15.1	13.6	14.1	17.3	11.9	14.4	14.5	11.0	12.4	9.8	5.9	7.7
15	14.8	13.3	13.9	18.6	12.1	14.9	14.0	9.8	11.8	9.1	6.3	7.6
16	15.7	14.0	14.6	18.0	11.6	14.5	12.9	9.2	10.9	11.7	7.9	9.2
17	16.1	14.0	14.9	18.2	12.2	15.2	11.9	8.0	9.8	11.8	7.8	9.6
18	16.4	14.0	14.9	17.0	12.2	14.6	11.9	7.0	9.1	11.4	7.0	8.8
19	14.4	12.8	13.6	17.2	12.0	14.3	11.0	6.4	8.3	8.9	7.3	8.1
20	12.8	12.1	12.3	14.1	11.4	12.5	11.9	7.1	9.3	8.7	8.0	8.3
21	12.7	12.1	12.4	12.1	11.2	11.6	10.4	7.3	9.0	9.3	7.8	8.3
22	13.8	12.7	13.2	15.2	11.9	13.2	11.0	7.6	9.2	9.1	7.6	8.2
23	14.6	12.9	13.6	17.9	12.3	14.5	12.8	8.3	10.3	9.0	7.3	7.9
24	13.8	12.4	13.0	17.4	11.2	13.9	14.8	9.4	11.7	9.7	7.2	8.5
25	16.2	13.0	14.2	17.8	9.9	13.4	12.9	8.8	10.5	10.1	7.3	8.4
26	17.0	13.2	14.7	15.5	9.3	11.9	13.3	8.8	10.9	9.6	7.2	8.2
27	17.4	13.1	14.7	11.5	9.0	10.1	15.2	8.7	11.6	9.6	7.7	8.4
28	17.9	12.8	14.8	11.5	9.5	10.2	16.6	10.0	12.9	9.4	8.1	9.0
29	17.8	12.5	14.7	11.9	8.8	10.1	16.6	9.4	12.6	9.5	9.1	9.3
30	---	---	---	14.9	9.4	11.5	12.2	8.0	9.9	9.1	8.7	9.0
31	---	---	---	11.1	9.7	10.2	---	---	---	9.7	8.6	9.0
MONTH	17.9	12.1	14.1	18.6	8.8	12.9	18.5	6.4	11.2	14.1	5.9	9.1

03265000 Stillwater River at Pleasant Hill, Ohio—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	8.9	8.4	8.7	14.1	9.0	11.2	9.4	6.7	7.7	9.6	7.0	7.8
2	8.7	8.4	8.6	14.4	9.0	11.3	9.7	6.5	7.8	10.5	7.0	8.1
3	8.6	7.0	7.9	15.0	8.4	11.3	9.5	6.3	7.6	9.9	6.9	8.1
4	9.2	7.2	8.1	14.6	7.7	10.6	7.8	6.1	6.8	11.2	6.4	8.1
5	9.6	7.4	8.5	14.4	7.6	10.6	9.3	6.3	7.6	11.1	6.4	8.0
6	9.7	8.3	8.9	13.9	7.1	10.3	10.3	7.3	8.4	10.8	6.1	7.8
7	10.2	8.3	9.1	12.7	7.0	9.2	11.8	7.9	9.2	9.5	5.9	7.2
8	10.0	7.7	8.7	13.7	6.8	9.5	12.1	7.9	9.4	8.2	6.0	7.0
9	10.0	7.3	8.5	13.6	7.3	10.3	12.5	7.8	9.6	10.5	6.2	7.6
10	9.2	7.0	8.1	12.9	7.5	9.6	12.6	7.7	9.4	10.8	6.4	8.0
11	8.3	7.4	7.9	9.1	6.6	8.0	13.4	7.6	9.7	11.1	6.3	8.0
12	8.2	7.7	8.0	9.4	6.3	7.6	14.8	8.0	10.6	11.2	6.3	8.0
13	8.2	7.6	8.0	9.2	5.6	7.3	15.0	8.6	11.2	11.0	6.2	8.0
14	7.9	6.5	7.4	8.3	5.4	6.5	15.7	9.0	11.7	12.0	6.0	8.5
15	7.3	6.1	7.0	---	---	---	16.7	9.5	12.3	12.3	6.6	8.7
16	6.8	6.0	6.4	---	---	---	16.6	9.3	12.0	11.9	6.3	8.4
17	6.0	5.7	5.8	---	---	---	15.9	9.1	11.6	10.3	6.0	7.6
18	6.2	5.8	6.0	---	---	---	15.4	8.0	10.9	11.7	6.6	8.6
19	6.6	6.2	6.4	---	---	---	15.0	7.3	10.2	11.9	6.9	8.7
20	---	---	---	---	---	---	9.4	6.7	7.4	11.7	6.9	8.6
21	---	---	---	---	---	---	8.6	6.7	7.6	11.8	6.9	8.6
22	---	---	---	---	---	---	9.0	7.0	7.7	11.8	6.9	8.8
23	---	---	---	---	---	---	9.4	6.8	7.7	12.3	6.6	8.7
24	---	---	---	10.7	6.5	8.1	9.7	6.7	7.8	12.4	6.5	8.7
25	10.2	8.0	8.9	10.1	7.2	8.3	9.9	6.4	7.6	12.5	6.3	8.8
26	10.9	8.8	9.6	8.8	7.2	7.8	9.6	6.1	7.4	13.0	6.7	9.2
27	11.3	8.9	10.0	8.7	7.1	7.8	10.3	5.9	7.4	13.5	6.9	9.4
28	12.7	8.8	10.3	10.6	7.5	8.7	10.1	5.5	7.1	12.7	7.0	9.4
29	13.1	9.3	10.8	10.3	7.5	8.6	8.7	5.5	6.8	11.5	7.1	8.7
30	13.7	9.2	11.2	9.8	7.3	8.1	7.2	6.5	6.8	13.4	7.1	10.2
31	---	---	---	9.0	6.8	7.5	8.4	6.4	7.2	---	---	---
MONTH	13.7	5.7	8.4	15.0	5.4	9.0	16.7	5.5	8.8	13.5	5.9	8.4
YEAR	18.9	5.4	11.0									

TURBIDITY, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	30	22	26	20	17	18	63	37	50	67	21	36
2	23	18	20	20	16	17	42	26	34	370	16	200
3	18	16	17	18	15	17	33	18	23	310	150	220
4	17	16	16	19	15	17	20	13	16	1200	170	450
5	18	15	16	19	16	17	14	11	12	1400	38	770
6	17	14	15	17	15	15	61	11	40	1200	220	470
7	16	14	15	16	14	14	55	27	40	270	120	190
8	16	14	15	14	14	14	28	13	19	160	77	110
9	16	15	15	14	14	14	14	9.6	12	88	51	67
10	16	14	15	14	13	13	38	9.5	12	54	28	41
11	17	14	15	20	13	14	120	38	81	33	18	25
12	17	14	15	87	17	39	92	37	59	22	12	17
13	18	14	15	94	43	69	39	17	26	15	8.0	11
14	120	14	24	46	24	34	17	8.5	12	8.0	5.0	6.5
15	260	110	180	26	17	21	8.5	6.8	7.3	---	---	---
16	110	51	83	18	16	16	14	5.9	7.6	---	---	---
17	53	30	41	16	14	15	48	14	36	---	---	---
18	32	19	25	23	14	14	39	13	26	---	---	---
19	20	17	19	400	17	240	16	3.0	8.7	---	---	---
20	20	16	17	230	84	140	4.0	0.0	1.2	---	---	---
21	19	15	17	88	32	55	---	---	---	---	---	---
22	17	14	15	32	18	25	---	---	---	---	---	---
23	16	14	15	19	14	16	210	0.0	40	---	---	---
24	15	14	14	22	12	15	260	120	190	---	---	---
25	15	14	15	64	21	47	140	41	81	---	---	---
26	84	15	40	43	21	31	51	19	32	---	---	---
27	86	40	61	520	21	240	19	5.0	11	11	9.0	9.7
28	45	25	33	290	180	240	6.0	2.0	3.9	10	9.0	9.2
29	26	18	20	260	110	160	6.0	2.0	3.6	10	9.0	9.4
30	18	16	18	120	58	84	160	6.0	91	10	9.0	9.0
31	19	17	18	---	---	---	130	57	87	10	9.0	9.5
MONTH	260	14	28	520	12	56	260	0.0	37	1400	5.0	140

03266000 Stillwater River at Englewood, Ohio

LOCATION.—Latitude 39°52'13", longitude 84°17'10", in NW ¼ sec. 23, T.5 N., R.5 E., Montgomery County, Hydrologic Unit 05080001, on right bank 1,000 ft upstream from Englewood Dam, 1 mi southeast of Englewood, Ohio, and at mile 8.5.

DRAINAGE AREA.—650 mi².

PERIOD OF RECORD.—October 1925 to current year (monthly discharge only, October 1925, published in WSP 1305).

REVISED RECORDS.—WSP 1908: Drainage area.

GAGE.—Water-stage recorder and concrete control. Datum of gage is 780.00 ft above sea level. Prior to Oct. 2003, site 2,000 ft downstream at datum 80.18 ft lower.

REMARKS.—Records good except for periods of estimated record, which are poor. Flood flow regulated by Englewood retarding basin.

COOPERATION.—Base data furnished by Miami Conservancy District.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood in Mar. 1913, reached a discharge of 85,400 ft³/s at site 1 mi downstream, computed by Miami Conservancy District.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	713	435	4660	972	e270	542	1540	366	3050	268	174	146
2	537	424	1970	1860	e320	1210	989	1590	1570	252	167	107
3	450	417	1040	2670	e380	1170	731	2290	1020	234	149	94
4	417	392	835	3740	e460	896	589	1210	713	235	155	82
5	389	370	814	e5950	583	1540	497	764	562	234	209	76
6	348	347	1320	e7580	1470	1550	435	549	491	219	194	70
7	320	319	1220	7130	1870	932	412	457	445	198	165	72
8	298	297	909	5990	939	668	400	403	400	178	133	72
9	279	280	739	4420	549	541	378	363	361	165	117	71
10	271	267	727	1170	547	470	339	333	350	161	109	68
11	261	275	1320	752	617	417	320	312	1660	218	105	67
12	248	1040	1070	688	627	400	319	291	4440	244	95	64
13	246	1670	715	610	665	367	344	285	4660	217	98	68
14	340	864	611	558	511	342	457	282	3160	179	96	70
15	3030	573	547	525	486	340	401	290	2000	152	e94	66
16	3140	478	522	e450	482	354	345	332	e3330	134	92	66
17	1300	419	1450	e425	e394	357	317	325	e3800	138	93	64
18	765	389	1140	e440	355	358	306	324	e4000	139	103	59
19	559	1520	750	e385	491	457	298	1530	2160	125	97	64
20	459	2710	570	e350	1680	1030	302	1430	1140	106	161	62
21	402	1250	481	e325	2040	1400	310	830	835	100	365	63
22	373	808	451	e305	1300	988	365	806	723	124	348	58
23	341	596	717	e295	825	648	495	672	730	142	208	55
24	311	587	3310	e290	865	531	443	489	530	154	147	54
25	290	934	2130	e285	813	479	425	403	489	130	115	47
26	855	673	1020	e300	584	443	430	361	413	117	108	46
27	1690	e2300	708	e330	520	668	393	438	358	120	97	39
28	988	e5250	587	e295	474	992	347	3240	317	129	95	38
29	676	6210	554	e275	478	685	315	3650	318	133	114	43
30	565	5800	1700	e265	---	582	325	2170	291	127	204	44
31	477	---	1570	e250	---	1150	---	2960	---	172	230	---
TOTAL	21338	37894	36157	49880	21595	22507	13567	29745	44316	5244	4637	1995
MEAN	688	1263	1166	1609	745	726	452	960	1477	169	150	66.5
MAX	3140	6210	4660	7580	2040	1550	1540	3650	4660	268	365	146
MIN	246	267	451	250	270	340	298	282	291	100	92	38
CFSM	1.06	1.94	1.79	2.48	1.15	1.12	0.70	1.48	2.27	0.26	0.23	0.10
IN.	1.22	2.17	2.07	2.85	1.24	1.29	0.78	1.70	2.54	0.30	0.27	0.11
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926-2004, BY WATER YEAR (WY)												
MEAN	193	352	577	880	925	1137	1077	705	594	379	207	166
MAX	1815	2215	2495	5129	2840	3147	3015	2931	4244	2112	2438	1993
(WY)	2002	1973	1991	1937	1950	1963	1964	1933	1958	2003	1979	1926
MIN	15.6	27.3	27.9	28.6	63.0	111	180	61.1	52.2	30.0	19.7	17.9
(WY)	1964	1945	1945	1945	1964	1941	1941	1941	1934	1988	1988	1963
SUMMARY STATISTICS												
				FOR 2003 CALENDAR YEAR				FOR 2004 WATER YEAR				WATER YEARS 1926-2004
ANNUAL TOTAL				379525				288875				
ANNUAL MEAN				1040				789				
HIGHEST ANNUAL MEAN												597
LOWEST ANNUAL MEAN												1027
HIGHEST DAILY MEAN				7710				7580				1958
LOWEST DAILY MEAN				80				38				1941
ANNUAL SEVEN-DAY MINIMUM				102				44				1941
MAXIMUM PEAK FLOW								7670				1958
MAXIMUM PEAK STAGE								32.75				1958
INSTANTANEOUS LOW FLOW												3.7
ANNUAL RUNOFF (CFSM)				1.60				1.21				0.92
ANNUAL RUNOFF (INCHES)				21.72				16.53				12.49
10 PERCENT EXCEEDS				2840				1690				1440
50 PERCENT EXCEEDS				459				417				205
90 PERCENT EXCEEDS				170				98				44

e Estimated.

03266560 Mad River at West Liberty, Ohio

LOCATION.—Latitude 40°15'08", longitude 83°44'59", Logan County, Hydrologic Unit 05080001, on left bank upstream from the State Route 245 bridge, on east side of West Liberty, Ohio, 0.4 mi east of intersection of State Route 245 and State Route 68.

DRAINAGE AREA.—36.6 mi².

PERIOD OF RECORD.—December 1993 to current year.

GAGE.—Water-stage recorder. Datum of gage is 1,078.00 ft above sea level.

REMARKS.—Records good except for periods of estimated record, which are fair.

REVISIONS.—The maximum discharges for some water years have been revised, as shown in the following table. They supersede figures published in reports for 1995-2003.

[ft³/s, cubic feet per second; ft, feet]

Water year	Date	Discharge (ft³/s)	Gage height (ft)
1995	May 19, 1995	853	6.72
1996	May 11, 1996	969	7.05
1997	Jun. 2, 1997	1,520	8.43
1998	Jan. 8, 1998	790	6.53
1999	Jan. 22, 1999	919	6.91
2000	Sept. 23, 2000	1,110	7.42
2001	May 17, 2001	768	6.46
2002	Apr. 20, 2002	1,300	7.92
2003	Sept. 1, 2003	1,100	7.39

03266560 Mad River at West Liberty, Ohio—Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
1	47	40	81	84	e49	94	e94	64	75	59	39	28			
2	45	39	63	152	e52	93	e90	292	70	57	37	28			
3	44	39	56	130	110	75	e85	126	62	55	38	28			
4	45	38	58	564	64	96	e80	91	57	53	42	28			
5	42	37	80	226	67	100	e73	78	54	52	39	28			
6	41	37	74	124	206	77	e73	68	52	51	36	27			
7	40	36	60	99	83	67	e67	68	51	50	36	27			
8	39	36	56	93	66	62	e64	64	49	48	37	28			
9	38	35	73	89	63	59	e61	60	48	47	36	28			
10	38	35	154	82	62	56	e60	57	47	46	35	27			
11	38	40	112	e79	57	56	e58	55	347	46	35	25			
12	38	40	69	e76	57	51	e60	49	185	45	34	25			
13	36	40	58	e73	54	50	e67	46	142	44	34	25			
14	72	38	e58	e70	54	52	e96	52	997	43	34	24			
15	70	37	57	e66	51	49	e87	57	276	41	34	24			
16	48	36	89	64	49	51	56	62	209	47	33	25			
17	44	35	81	e66	49	49	53	64	184	57	32	27			
18	41	43	61	70	51	52	50	114	178	51	32	26			
19	39	72	59	62	86	63	50	375	129	43	32	25			
20	37	49	53	56	137	94	51	156	115	42	46	25			
21	36	43	52	e54	90	78	53	194	105	40	52	24			
22	36	39	57	e53	67	62	59	171	96	82	36	24			
23	36	37	169	e53	74	56	89	101	86	52	33	23			
24	35	45	123	e54	73	54	64	86	87	46	32	22			
25	38	41	79	e55	61	52	69	77	97	44	31	23			
26	99	39	68	57	59	56	66	70	79	43	30	23			
27	57	291	65	63	58	74	59	69	72	44	29	23			
28	49	300	64	57	58	61	54	67	69	41	30	23			
29	51	139	89	e53	59	75	52	62	67	40	31	28			
30	44	103	124	e51	---	132	53	60	61	39	30	25			
31	41	---	81	e49	---	e100	---	125	---	48	29	---			
TOTAL	1404	1879	2423	2924	2066	2146	1993	3080	4146	1496	1084	766			
MEAN	45.3	62.6	78.2	94.3	71.2	69.2	66.4	99.4	138	48.3	35.0	25.5			
MAX	99	300	169	564	206	132	96	375	997	82	52	28			
MIN	35	35	52	49	49	49	50	46	47	39	29	22			
CFSM	1.24	1.71	2.14	2.58	1.95	1.89	1.82	2.71	3.78	1.32	0.96	0.70			
IN.	1.43	1.91	2.46	2.97	2.10	2.18	2.03	3.13	4.21	1.52	1.10	0.78			
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994-2004, BY WATER YEAR (WY)															
MEAN	26.1	28.6	39.6	45.1	44.3	52.1	68.2	71.7	62.5	40.7	29.2	28.5			
MAX	45.3	62.6	81.2	94.3	71.2	86.6	133	140	138	102	58.3	79.2			
(WY)	2004	2004	1997	2004	2004	1997	2002	1996	2004	2003	2003	2003			
MIN	12.4	14.0	14.4	15.9	17.1	27.1	45.4	30.6	22.2	20.6	16.6	12.9			
(WY)	2000	1995	2000	1995	1995	2000	1995	1999	1999	1994	1994	1999			
SUMMARY STATISTICS															
ANNUAL TOTAL				FOR 2003 CALENDAR YEAR				FOR 2004 WATER YEAR				WATER YEARS 1994-2004			
23516				23516				25407							
ANNUAL MEAN				64.4				69.4				45.4			
HIGHEST ANNUAL MEAN												69.4			
LOWEST ANNUAL MEAN												28.5			
HIGHEST DAILY MEAN				513				997				997			
LOWEST DAILY MEAN				23				22				7.2			
ANNUAL SEVEN-DAY MINIMUM				23				23				7.7			
MAXIMUM PEAK FLOW								1640				1640			
MAXIMUM PEAK STAGE								8.73				8.73			
INSTANTANEOUS LOW FLOW												5.0			
ANNUAL RUNOFF (CFSM)				1.76				1.90				1.24			
ANNUAL RUNOFF (INCHES)				23.90				25.82				16.86			
10 PERCENT EXCEEDS				111				104				79			
50 PERCENT EXCEEDS				48				55				32			
90 PERCENT EXCEEDS				29				31				16			

e Estimated.

03267000 Mad River near Urbana, Ohio

LOCATION.—Latitude 40°06'27", longitude 83°47'57", on west line of sec. 35, T.5.E., R.11.N., Champaign County, Hydrologic Unit 05080001, on left bank at downstream side of bridge on U.S. Highway 36, 1.8 mi upstream from Dugan Run, 1.8 mi downstream from Muddy Creek, 2.5 mi west of Urbana, Ohio, and at mile 39.7.

DRAINAGE AREA.—162 mi².

PERIOD OF RECORD.—September 1925 to September 1931, August 1939 to September 1998, October 1998 to September 2002, recording crest-stage gage; October 2002 to September 2003.

REVISED RECORDS.—WSP 1305; 1930(M), WSP 1505: 1956. WSP 1625: 1929. WSP 1908: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 985.22 ft above sea level. Prior to May 18, 1930, nonrecording gage at same site and datum. May 18, 1930 to Sept. 30, 1931, nonrecording gage at site 600 ft downstream at datum 0.36 ft lower. Aug. 1 to Sept. 25, 1939, nonrecording gage at present site and datum.

REMARKS.—Records fair except for periods of estimated record, which are poor. Sediment data collected at this site.

COOPERATION.—Base data furnished by Miami Conservancy District.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	248	183	359	272	200	267	249	198	e320	219	141	113
2	237	181	318	603	194	333	240	e860	e280	215	136	112
3	227	180	292	443	367	289	225	e500	256	211	136	110
4	224	179	277	1300	282	296	212	e320	240	207	138	107
5	211	171	305	1560	247	329	202	e270	234	202	139	106
6	204	169	345	611	927	292	198	249	232	198	134	105
7	200	170	291	469	422	268	194	238	227	193	131	103
8	194	164	265	422	297	248	191	235	224	188	130	104
9	187	162	261	394	266	235	185	216	220	184	127	104
10	180	164	328	360	282	232	182	208	222	183	127	103
11	175	168	394	342	273	220	180	202	698	180	126	103
12	168	182	291	331	269	219	178	198	549	176	125	101
13	167	176	261	319	251	212	199	193	400	172	125	100
14	201	167	257	305	233	216	262	200	1170	168	125	99
15	290	166	249	287	236	217	232	210	544	165	123	100
16	230	165	269	269	218	217	216	215	481	162	122	99
17	206	167	338	269	213	216	208	204	483	188	120	101
18	194	164	269	278	209	214	206	322	460	172	119	98
19	184	213	250	255	259	212	206	585	363	161	120	97
20	177	197	236	243	344	238	204	473	321	157	137	97
21	174	181	224	237	376	262	208	360	302	151	185	97
22	167	174	225	235	248	213	224	e1100	290	188	137	96
23	164	172	331	223	228	206	274	e640	273	164	129	96
24	161	183	454	224	259	203	233	e420	264	152	125	96
25	160	182	307	218	232	200	225	e340	285	145	119	97
26	269	175	265	218	227	199	232	e310	257	147	118	96
27	244	821	248	230	217	231	210	e280	241	150	118	95
28	210	985	244	221	223	220	200	e330	236	147	117	93
29	205	567	248	214	229	210	194	e280	231	145	118	100
30	196	417	415	210	---	389	196	e260	224	142	115	97
31	190	---	307	203	---	287	---	e760	---	158	113	---
TOTAL	6244	7345	9123	11765	8228	7590	6365	11176	10527	5390	3975	3025
MEAN	201	245	294	380	284	245	212	361	351	174	128	101
MAX	290	985	454	1560	927	389	274	1100	1170	219	185	113
MIN	160	162	224	203	194	199	178	193	220	142	113	93
CFSM	1.24	1.51	1.82	2.34	1.75	1.51	1.31	2.23	2.17	1.07	0.79	0.62
IN.	1.43	1.69	2.09	2.70	1.89	1.74	1.46	2.57	2.42	1.24	0.91	0.69
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926-2004, BY WATER YEAR (WY)												
MEAN	86.5	103	133	178	202	225	222	193	168	139	105	89.7
MAX	355	315	473	730	523	567	486	620	507	454	302	319
(WY)	1987	1973	1991	1950	1950	1963	1948	1996	1947	1993	1995	2003
MIN	29.3	29.7	27.8	36.7	33.8	65.3	90.7	61.7	59.3	41.8	35.8	30.3
(WY)	1964	1964	1964	1964	1964	1992	1953	1941	1962	1954	1963	1963
SUMMARY STATISTICS				FOR 2003 CALENDAR YEAR				FOR 2004 WATER YEAR			WATER YEARS 1926-2004	
ANNUAL TOTAL				91836				90753				
ANNUAL MEAN				252				248			154	
HIGHEST ANNUAL MEAN											248	
LOWEST ANNUAL MEAN											58.1	
HIGHEST DAILY MEAN				1970		Jul 9		1560		Jan 5		5740
LOWEST DAILY MEAN				99		Feb 16		93		Sep 28		24
ANNUAL SEVEN-DAY MINIMUM				103		Feb 15		96		Sep 22		25
MAXIMUM PEAK FLOW							2890		Jan 5a		8000	
MAXIMUM PEAK STAGE							7.61		Jan 5		12.05	
INSTANTANEOUS LOW FLOW										24		Feb 2
ANNUAL RUNOFF (CFSM)				1.55				1.53			0.95	
ANNUAL RUNOFF (INCHES)				21.09				20.84			12.88	
10 PERCENT EXCEEDS				378				364			274	
50 PERCENT EXCEEDS				210				215			112	
90 PERCENT EXCEEDS				135				119			52	

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

03267900 Mad River at St. Paris Pike at Eagle City, Ohio

LOCATION.—Latitude 39°57'51", longitude 83°49'54", in W ½ sec. 1, R.10, T.4, Clark County, Hydrologic Unit 05080001, on left bank at downstream side of bridge on St. Paris Pike, 0.8 mi southeast of Eagle City, Ohio, 1.1 mi downstream from Moore Run, 3.1 mi upstream from Buck Creek, 3.3 mi south of Tremont City, Ohio, and at mile 29.5.

DRAINAGE AREA.—310 mi².

Water-Discharge Records

PERIOD OF RECORD.—October 1965 to September 1996, October 1998 to current year.

GAGE.—Water-stage recorder. Datum of gage is 904.66 ft above sea level.

REMARKS.—Records fair except for periods of estimated record, which are poor. Recharge to well field largely by induced infiltration from Mad River and Moore

Run. Pumpage averaging 18.9 ft³/s in 2004, is returned as sewage 1.4 mi upstream from gaging station near Springfield (station 03269500). Satellite telemeter at station operated for U.S. Army Corps of Engineers. Water-quality data collected at this site.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood in Mar. 1913, reached a stage of 19.8 ft, from data furnished by Miami Conservancy District. Flood of Jan. 21, 1959, reached a stage of 15.7 ft.

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	430	343	e888	521	353	438	575	336	664	372	267	188	
2	397	333	e593	1600	e351	e632	508	1400	636	360	249	186	
3	376	326	547	1150	e1080	e572	470	907	524	349	243	185	
4	373	320	508	3640	563	e565	430	603	469	345	261	183	
5	350	319	552	4280	489	e599	399	513	435	336	254	181	
6	335	308	709	1510	2190	e547	381	460	415	328	236	178	
7	325	301	563	1030	978	e498	372	430	399	319	230	177	
8	316	294	517	859	585	e458	361	416	380	312	225	183	
9	309	288	504	762	507	e426	345	391	368	304	219	183	
10	305	287	556	672	e532	e397	334	369	365	299	218	181	
11	300	299	773	631	e495	e361	329	355	1310	295	215	176	
12	294	649	567	606	e487	e334	327	344	1140	e290	211	176	
13	290	421	494	577	e465	e315	366	336	764	286	208	175	
14	444	360	478	e553	416	e321	566	353	1420	277	205	180	
15	675	338	453	e549	e416	e314	442	380	895	274	203	175	
16	459	327	479	e489	e376	e350	391	397	842	269	200	172	
17	407	312	663	488	e367	e327	363	366	1110	333	197	171	
18	372	316	517	544	e361	331	344	503	853	298	193	170	
19	354	480	473	476	e392	372	333	1320	662	279	194	168	
20	337	423	444	446	e506	482	332	858	581	269	256	165	
21	330	369	421	431	675	504	334	668	535	263	377	164	
22	319	347	418	e426	447	409	371	1470	509	302	245	162	
23	313	330	576	e401	423	372	465	703	476	287	222	160	
24	302	360	1010	405	457	358	404	569	455	263	211	161	
25	297	e349	625	388	420	e345	411	506	504	256	206	159	
26	593	339	515	394	400	338	438	468	453	258	200	160	
27	518	e968	477	e420	386	405	379	445	423	267	197	158	
28	425	e2270	457	405	376	400	348	526	410	256	197	159	
29	410	e1390	444	e380	377	373	330	442	399	250	207	161	
30	377	e1020	874	e380	---	e695	333	431	385	245	196	165	
31	354	---	618	360	---	874	---	1190	---	333	192	---	
TOTAL	11686	14786	17713	25773	15870	13712	11781	18455	18781	9174	6934	5162	
MEAN	377	493	571	831	547	442	393	595	626	296	224	172	
MAX	675	2270	1010	4280	2190	874	575	1470	1420	372	377	188	
MIN	290	287	418	360	351	314	327	336	365	245	192	158	
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966-2004, BY WATER YEAR (WY)													
MEAN	186	241	332	340	399	434	453	405	337	300	220	182	
MAX	765	689	1020	831	946	778	837	781	788	863	712	633	
(WY)	1987	1973	1991	2004	1975	1978	2002	1990	1980	1993	1995	2003	
MIN	82.3	111	106	89.8	133	157	196	146	132	93.3	88.1	88.8	
(WY)	1989	1995	1977	1977	1992	1983	1971	1988	1988	1988	1988	1988	
SUMMARY STATISTICS													
				FOR 2003 CALENDAR YEAR				FOR 2004 WATER YEAR				WATER YEARS 1966-2004	
ANNUAL TOTAL				174120				169827					
ANNUAL MEAN				477				464				319	
HIGHEST ANNUAL MEAN												468	1973
LOWEST ANNUAL MEAN												166	1988
HIGHEST DAILY MEAN				4590	Jul 9		4280	Jan 5		6000	Dec 30 1990		
LOWEST DAILY MEAN				187	Feb 16		158	Sep 27		60	Jan 27 1977		
ANNUAL SEVEN-DAY MINIMUM				192	Feb 15		160	Sep 23		62	Jan 23 1977		
MAXIMUM PEAK FLOW								7890				9700	Jun 26 1971
MAXIMUM PEAK STAGE								16.11				16.68	Dec 30 1990
INSTANTANEOUS LOW FLOW												60	Jan 27 1977
10 PERCENT EXCEEDS				771				697				568	
50 PERCENT EXCEEDS				373				380				230	
90 PERCENT EXCEEDS				248				197				120	

e Estimated.

03267900 Mad River at St. Paris Pike at Eagle City, Ohio—Continued

Water-Quality Records

PERIOD OF RECORD.—June 2002 to current year (discontinued).

PERIOD OF DAILY RECORD—

SPECIFIC CONDUCTANCE: June 2002 to current year.

pH: June 2002 to current year.

WATER TEMPERATURE: June 2002 to current year.

DISSOLVED OXYGEN: June 2002 to current year.

TURBIDITY: June 2002 to current year

INSTRUMENTATION.—Water-quality monitor. Electronic data logger. Set for 1-hour interval. Satellite telemeter at station.

REMARKS.—Interruptions in water-quality record are due to malfunction of the instrument. Specific conductance records are good except Oct. 1-21, July 16-Aug. 2, and Aug. 4, which are fair. pH records are good except Oct. 1-22, Nov. 4, 14-21, 25, July 13-29, Aug. 13, 15, 27, Sept. 10, and 24, which are fair. Water temperature records are good except Oct. 1-21, July 16-Aug. 2, which are fair. Dissolved oxygen records are fair except Oct. 1-22, Nov. 4, 21, 25, July 29, Aug. 13-27, Sept. 10, and 24-30, which are poor. Turbidity records are poor. Specific conductance and water temperature records were from a sonde deployed in the stream for the year, except for Oct. 1-21 and July 16-Aug. 2, when there were equipment problems and supplemental data from the sonde in the gaging house was used and this supplemental record was downgraded. pH, dissolved oxygen, and turbidity records were from the sonde in the gaging station. Additional water-quality data for this station are published under "Results from selected sites in the White, Great Miami, and Little Miami River Basin" in volume 2 of this report.

EXTREMES FOR PERIOD OF RECORD.—

SPECIFIC CONDUCTANCE: Maximum, 941 microsiemens, Jan. 18, 2004; minimum, 232 microsiemens, Jan. 4, 2004.

pH: Maximum, 8.8 units, Feb. 2 and Aug. 27, 2003; minimum, 7.0 units, Dec. 27, 2002.

WATER TEMPERATURE: Maximum, 25.0° C, Aug. 27, 2003; minimum, 0.0° C, Jan. 27, 2002.

DISSOLVED OXYGEN: Maximum, 19.9 mg/L, Apr. 28, 2003; minimum, 1.1 mg/L, July 6, 2003.

TURBIDITY: Maximum, 930 NTU, Sept. 27, 2003; minimum, 0.0 NTU, multiple days in 2002-2004.

EXTREMES FOR CURRENT YEAR.—

SPECIFIC CONDUCTANCE: Maximum, 941 microsiemens, Jan. 18; minimum, 232 microsiemens, Jan. 4.

pH: Maximum, 8.7 units, July 15; minimum, 7.6 units, Nov. 12-15.

WATER TEMPERATURE: Maximum, 22.5° C, June 14; minimum, 0.5° C, Jan. 31.

DISSOLVED OXYGEN: Maximum, 15.8 mg/L, Nov 25; minimum, 6.0 mg/L, Nov. 1.

TURBIDITY: Maximum, 470 NTU, Oct. 27; minimum, 0.0 NTU, multiple days.

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

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	723	707	717	706	698	702	665	640	652	706	686	700
2	731	723	728	708	693	702	682	665	674	695	329	465
3	734	730	731	707	687	699	715	682	695	600	513	559
4	732	726	728	711	691	701	718	715	716	557	232	384
5	731	727	729	714	695	705	718	662	704	542	242	386
6	734	730	732	716	705	711	677	624	647	647	542	602
7	738	732	735	719	699	711	704	677	693	684	647	670
8	739	735	737	716	698	709	713	704	709	697	684	690
9	738	734	736	715	698	709	714	712	713	708	697	702
10	739	731	736	715	694	707	716	657	695	717	708	713
11	737	728	734	711	677	705	660	579	618	718	716	716
12	737	729	734	677	473	575	705	660	686	718	714	716
13	737	731	734	694	642	673	719	705	712	723	717	719
14	738	579	692	710	694	700	729	712	716	724	721	723
15	660	606	624	713	706	710	763	723	735	729	722	724
16	710	660	691	715	709	712	767	698	729	731	728	729
17	722	710	716	717	700	710	698	640	659	732	716	727
18	725	722	723	716	701	710	716	683	704	941	717	768
19	727	723	726	704	636	662	722	716	719	737	728	732
20	730	727	728	689	642	665	741	722	729	745	737	740
21	733	717	730	702	689	696	741	730	734	746	741	743
22	722	713	718	708	694	703	734	728	731	747	740	743
23	720	711	716	708	692	703	733	537	697	780	747	755
24	718	708	714	707	682	696	630	505	555	758	742	748
25	717	706	714	711	684	694	691	630	666	793	751	764
26	713	567	625	728	697	712	713	691	704	752	744	747
27	669	579	629	708	300	506	723	713	716	934	752	825
28	692	669	684	420	336	389	731	704	720	809	740	765
29	697	686	691	600	419	529	722	701	717	750	734	742
30	701	693	697	640	600	625	704	537	589	746	736	738
31	706	695	701	---	---	---	691	608	660	756	741	748
MONTH	739	567	711	728	300	671	767	505	690	941	232	693

03267900 Mad River at St. Paris Pike at Eagle City, Ohio—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
1	---	---	---	---	---	---	8.2	8.0	8.1	8.2	8.0	8.1
2	---	---	---	---	---	---	8.2	8.0	8.1	8.3	8.0	8.1
3	---	---	---	---	---	---	8.2	8.0	8.1	8.3	8.0	8.1
4	---	---	---	---	---	---	8.1	8.0	8.0	8.3	8.0	8.1
5	---	---	---	---	---	---	8.2	8.0	8.1	8.3	8.0	8.1
6	---	---	---	---	---	---	8.2	8.1	8.1	8.3	8.0	8.1
7	---	---	---	---	---	---	8.2	8.1	8.1	8.2	8.0	8.1
8	---	---	---	---	---	---	8.2	8.1	8.1	8.2	8.1	8.1
9	---	---	---	---	---	---	8.3	8.1	8.1	8.3	8.1	8.1
10	---	---	---	---	---	---	8.2	8.1	8.1	8.3	8.1	8.1
11	---	---	---	---	---	---	8.3	8.1	8.1	8.3	8.1	8.1
12	---	---	---	---	---	---	8.3	8.1	8.1	8.3	8.1	8.1
13	---	---	---	---	---	---	8.2	8.1	8.1	8.3	8.1	8.1
14	---	---	---	8.6	8.2	8.4	8.2	8.0	8.1	8.3	8.0	8.1
15	---	---	---	8.7	8.2	8.3	8.2	8.0	8.1	8.4	8.0	8.1
16	---	---	---	8.6	8.2	8.3	8.3	8.0	8.1	8.4	8.0	8.1
17	---	---	---	8.5	8.1	8.3	8.3	8.0	8.1	8.3	8.0	8.1
18	---	---	---	8.6	8.1	8.3	8.3	8.0	8.1	8.4	8.1	8.2
19	---	---	---	8.5	8.1	8.3	8.2	8.0	8.1	8.4	8.1	8.2
20	---	---	---	8.4	8.1	8.2	8.0	7.8	8.0	8.4	8.1	8.2
21	---	---	---	8.5	8.1	8.2	8.1	7.9	8.0	8.4	8.1	8.1
22	---	---	---	8.4	8.1	8.2	8.1	8.0	8.0	8.4	8.1	8.1
23	---	---	---	8.4	8.1	8.2	8.2	8.0	8.0	8.4	8.1	8.2
24	---	---	---	8.4	8.2	8.3	8.2	8.0	8.0	8.5	8.1	8.2
25	---	---	---	8.4	8.2	8.3	8.2	8.0	8.1	8.5	8.1	8.2
26	---	---	---	8.3	8.2	8.3	8.2	8.0	8.1	8.5	8.1	8.2
27	---	---	---	8.3	8.2	8.3	8.2	8.0	8.1	8.5	8.1	8.2
28	---	---	---	8.4	8.1	8.3	8.2	8.0	8.0	8.4	8.1	8.2
29	---	---	---	8.3	8.1	8.2	8.2	8.0	8.1	8.4	8.1	8.2
30	---	---	---	8.3	8.0	8.1	8.2	8.0	8.1	8.5	8.1	8.2
31	---	---	---	8.2	7.9	8.1	8.2	8.0	8.1	---	---	---
MAX	---	---	---	8.7	8.2	8.4	8.3	8.1	8.1	8.5	8.1	8.2
MIN	---	---	---	8.2	7.9	8.1	8.0	7.8	8.0	8.2	8.0	8.1
YEAR	MAX	MAXIMUM 8.7 MINIMUM 7.6		MIN	MAXIMUM 8.2 MINIMUM 7.6		MEDIAN	MAXIMUM 8.4 MINIMUM 7.6				

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

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	12.5	11.5	12.0	15.0	14.0	14.5	8.0	7.0	7.5	7.5	5.5	6.5
2	12.0	10.5	11.5	16.0	13.5	14.5	7.0	6.0	6.5	9.0	6.0	7.5
3	11.5	10.0	11.0	15.5	13.0	14.5	6.5	6.0	6.5	10.5	9.0	10.0
4	13.0	11.5	12.0	15.0	13.0	14.0	7.5	6.5	7.0	9.5	4.5	6.5
5	13.0	11.0	12.0	15.0	13.5	14.5	8.0	7.0	7.5	5.5	4.5	5.0
6	13.5	11.5	12.5	13.5	10.5	12.0	7.0	6.5	7.0	5.5	3.5	4.5
7	13.5	11.0	12.0	10.5	9.0	9.5	7.0	6.0	6.5	4.5	3.0	4.0
8	14.5	12.5	13.5	9.0	7.5	8.0	7.5	6.0	7.0	6.0	4.5	5.0
9	14.5	13.0	13.5	8.5	6.0	7.5	9.5	7.5	8.5	6.0	5.0	6.0
10	16.0	14.0	15.0	9.5	7.0	8.0	9.5	8.5	9.0	5.0	4.0	4.5
11	16.0	14.5	15.5	12.0	9.5	10.5	8.5	6.0	7.0	5.5	4.5	5.0
12	16.5	15.0	15.5	13.0	11.5	12.0	6.0	5.0	5.5	7.0	5.5	6.5
13	15.0	12.5	13.5	12.0	7.0	9.0	5.0	4.5	5.0	6.5	6.0	6.5
14	14.0	13.0	13.5	8.0	6.0	7.0	6.0	4.5	5.5	6.5	5.5	6.0
15	13.5	12.0	12.5	9.0	8.0	8.5	6.5	5.5	6.0	6.5	5.0	5.5
16	13.0	11.5	12.5	10.5	9.0	9.5	7.0	6.0	6.5	5.0	4.5	4.5
17	13.0	12.0	12.5	12.0	10.0	11.0	6.5	4.5	5.0	5.5	4.5	5.0
18	12.0	10.5	11.5	12.5	11.0	11.5	6.0	4.5	5.0	6.0	4.5	5.5
19	13.5	11.0	12.0	13.0	11.0	12.5	5.5	5.0	5.5	4.5	3.5	4.0
20	13.5	11.5	12.5	11.0	9.0	10.0	5.5	4.5	5.0	4.5	3.5	4.0
21	14.0	13.0	13.5	11.5	9.5	10.5	5.5	4.0	5.0	5.0	3.5	4.0
22	13.0	11.0	12.0	12.0	10.0	11.0	7.5	5.5	6.5	4.5	3.0	4.5
23	11.5	10.0	11.0	13.5	12.0	12.5	8.5	6.5	8.0	3.0	2.0	2.5
24	11.0	8.5	10.0	12.5	7.0	10.5	6.5	5.0	5.5	5.0	3.0	4.0
25	12.5	10.5	11.0	7.0	5.5	6.5	5.0	4.0	4.5	3.5	2.5	2.5
26	12.5	11.0	11.5	8.5	6.5	7.5	5.5	4.0	5.0	5.5	2.5	3.5
27	11.0	9.5	10.5	8.5	7.0	8.0	6.5	4.5	5.5	6.0	4.0	5.5
28	10.5	9.5	10.0	8.0	5.5	7.0	7.5	6.0	6.5	4.0	2.0	3.0
29	11.0	9.5	10.5	6.0	5.0	5.5	8.5	7.5	8.0	3.5	2.5	3.0
30	12.5	9.5	11.0	8.0	6.0	7.0	8.5	5.5	6.0	3.5	1.5	2.5
31	15.0	12.5	13.5	---	---	---	6.5	5.0	6.0	2.5	0.5	1.5
MONTH	16.5	8.5	12.5	16.0	5.0	10.0	9.5	4.0	6.5	10.5	0.5	5.0

03267900 Mad River at St. Paris Pike at Eagle City, Ohio—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	---	---	---	---	---	---	11.2	8.8	9.6	11.9	9.0	10.0
2	---	---	---	---	---	---	10.6	8.2	9.2	11.9	9.0	9.9
3	---	---	---	---	---	---	9.4	7.3	8.3	11.9	8.7	9.8
4	---	---	---	---	---	---	---	---	---	12.4	8.8	10.0
5	---	---	---	---	---	---	---	---	---	12.6	8.8	10.1
6	---	---	---	---	---	---	---	---	---	12.1	8.7	9.6
7	---	---	---	---	---	---	---	---	---	11.2	8.6	9.7
8	---	---	---	---	---	---	---	---	---	10.7	9.0	9.7
9	---	---	---	---	---	---	---	---	---	12.3	9.3	10.3
10	---	---	---	---	---	---	---	---	---	11.8	8.8	10.1
11	---	---	---	---	---	---	---	---	---	11.8	8.8	9.7
12	---	---	---	---	---	---	---	---	---	12.1	8.7	9.7
13	---	---	---	---	---	---	---	---	---	12.0	8.5	9.7
14	---	---	---	13.8	7.7	9.8	11.3	8.8	9.7	12.3	8.2	9.6
15	---	---	---	14.1	8.2	10.4	11.4	8.9	9.5	12.1	8.0	9.3
16	---	---	---	13.7	8.5	10.3	11.6	9.1	9.9	12.3	8.0	9.4
17	---	---	---	11.5	7.9	9.5	11.5	9.0	9.9	10.9	8.1	9.0
18	---	---	---	12.1	8.7	10.0	11.2	8.9	9.8	12.4	8.9	10.0
19	---	---	---	12.5	8.7	10.2	11.3	8.7	9.6	12.6	9.1	10.2
20	---	---	---	12.4	8.6	10.1	9.5	7.6	8.7	12.6	9.0	10.1
21	---	---	---	12.4	8.5	9.9	10.3	8.4	9.2	12.7	8.9	10.0
22	---	---	---	11.7	8.1	9.2	11.0	9.0	9.7	12.8	8.7	10.0
23	---	---	---	12.0	8.0	9.4	11.2	9.2	9.9	13.0	8.5	9.9
24	---	---	---	12.4	8.6	9.9	11.4	9.1	9.9	13.5	8.3	10.3
25	---	---	---	11.6	9.0	10.1	11.5	9.2	9.9	13.5	8.5	10.2
26	---	---	---	11.0	9.2	9.8	11.6	8.9	10.0	14.1	8.9	10.5
27	---	---	---	11.0	9.2	9.9	10.7	8.0	9.2	14.8	9.0	10.9
28	---	---	---	11.9	9.4	10.3	10.6	7.9	8.7	13.8	8.9	10.3
29	---	---	---	12.6	8.7	10.5	10.8	7.9	9.1	13.2	8.7	10.3
30	---	---	---	12.4	9.4	10.3	11.3	8.3	9.4	14.3	9.4	10.8
31	---	---	---	11.0	8.5	9.4	11.5	8.8	9.7	---	---	---
MONTH	---	---	---	14.1	7.7	9.9	11.6	7.3	9.5	14.8	8.0	10.0
YEAR	15.8	6.0	9.9									

TURBIDITY, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	48	23	33	---	---	---	---	---	---	---	---	---
2	24	22	23	---	---	---	---	---	---	---	---	---
3	23	21	22	---	---	---	---	---	---	---	---	---
4	22	21	22	---	---	---	---	---	---	---	---	---
5	22	20	20	16	11	12	---	---	---	---	---	---
6	21	20	20	12	11	12	---	---	---	---	---	---
7	24	0.0	17	12	11	12	---	---	---	---	---	---
8	14	12	13	13	11	11	---	---	---	---	---	---
9	14	12	13	12	11	11	---	---	---	---	---	---
10	14	13	13	12	11	11	---	---	---	---	---	---
11	14	12	13	12	11	11	---	---	---	---	---	---
12	14	12	13	28	12	18	---	---	---	---	---	---
13	14	12	13	15	11	12	---	---	---	---	---	---
14	80	13	25	12	11	11	---	---	---	---	---	---
15	43	21	30	12	9.7	11	---	---	---	---	---	---
16	42	15	22	10	9.4	9.9	---	---	---	---	---	---
17	24	14	17	12	9.0	9.8	---	---	---	---	---	---
18	31	13	17	10	8.7	9.4	---	---	---	---	---	---
19	25	13	15	11	9.3	10	---	---	---	---	---	---
20	37	13	18	10	8.6	9.2	---	---	---	---	---	---
21	16	12	13	10.0	7.0	8.3	---	---	---	---	---	---
22	17	12	13	9.0	7.0	8.0	---	---	---	---	---	---
23	13	12	12	10	7.0	8.2	---	---	---	---	---	---
24	13	12	12	12	8.0	9.2	---	---	---	---	---	---
25	13	12	13	14.0	7.0	8.6	---	---	---	---	---	---
26	200	13	58	9.0	7.0	7.7	---	---	---	---	---	---
27	470	130	290	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	470	0.0	29	28	7.0	10	---	---	---	---	---	---

03269500 Mad River near Springfield, Ohio

LOCATION.—Latitude 39°55'23", longitude 83°52'13", in NW ¼ sec. 16, R.9, T.4, Clark County, Hydrologic Unit 05080001, on right bank 150 ft downstream from Rock Run, 300 ft downstream from bridge on Lower Valley Pike, 2 mi downstream from Buck Creek, 3 mi west of Springfield, Ohio, and at mile 24.1.

DRAINAGE AREA.—490 mi².

PERIOD OF RECORD.—January 1904 to March 1906 (fragmentary), February 1914 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.—WSP 603: 1924. WSP 823: 1929(M). WSP 1305: 1914(M), 1916-17(M), 1922-23(M), 1925(M). WSP 1625: 1924(M). WSP 1908: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 881.42 ft National Geodetic Vertical Datum of 1912. Jan. 1, 1904-Mar. 31, 1906, nonrecording gage at site 0.3 mi downstream at different datum; Feb. 1, 1914-Feb. 29, 1924, nonrecording gage at site 1.8 mi upstream at datum 6.39 ft higher; Mar. 1, 1924-July 31, 1925, nonrecording gage at site 300 ft upstream at same datum.

REMARKS.—Records good except for periods of estimated record, which are poor. Some regulation by C.J. Brown Reservoir, 8.3 mi upstream on Buck Creek, since 1972. Occasional low-flow regulation by powerplant 2.3 mi upstream; daily flows are not affected appreciably. Water-quality data formerly collected at this site.

COOPERATION.—Base data furnished by Miami Conservancy District.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 30,500 ft³/s Jan. 21, 1959, gage height, 15.76 ft, from rating curve extended above 14,000 ft³/s on basis of slope-area and contracted opening measurements of peak flow; minimum daily discharge, 30 ft³/s Sept. 15, 1904.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Mar. 25, 1913, reached a stage of 16.9 ft, present datum; discharge, 55,400 ft³/s computed by Miami Conservancy District.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	719	627	1180	e840	593	686	899	546	1240	529	471	294
2	670	591	880	e1500	605	864	863	1930	1300	520	435	304
3	642	576	806	e2600	1450	773	800	1390	1130	504	420	345
4	645	561	765	e4700	975	766	735	968	836	497	494	351
5	605	559	860	e8000	1070	795	646	888	621	489	358	341
6	575	541	1010	e5000	3110	736	583	854	582	484	324	273
7	558	529	839	e2000	1500	680	526	795	554	464	311	271
8	548	509	777	e1500	1170	642	507	695	524	458	304	301
9	534	483	761	e1300	1080	614	478	615	518	438	298	284
10	526	482	858	e1200	1030	590	463	551	542	403	298	276
11	520	535	1070	e1100	904	575	450	554	2050	395	296	266
12	509	1200	832	e1300	863	541	471	533	1620	395	300	262
13	504	788	747	e1400	792	522	575	519	1260	385	304	262
14	814	679	729	e1500	680	524	987	589	1890	363	303	299
15	1090	630	700	e1400	671	518	700	649	1540	353	300	343
16	781	607	760	e1200	616	556	585	648	1450	474	299	328
17	702	580	953	910	603	535	530	620	1550	525	292	316
18	647	594	784	1130	587	572	506	870	1090	481	287	306
19	618	893	730	907	615	661	484	2020	908	454	286	285
20	592	867	676	e720	796	848	492	1360	820	400	423	284
21	561	718	620	e700	956	863	507	1160	776	348	619	282
22	478	605	603	e680	716	728	579	2190	754	450	433	280
23	542	582	811	e660	684	664	781	1250	709	385	385	278
24	525	662	1260	e640	723	640	639	951	671	416	355	279
25	516	645	886	e620	679	612	698	852	774	338	334	276
26	854	609	766	687	648	605	712	809	616	347	282	276
27	808	1900	e740	766	628	716	597	823	571	395	276	276
28	708	2740	e720	704	605	694	532	1070	550	339	455	278
29	688	1740	e700	671	588	673	496	769	544	328	393	281
30	639	1350	e1200	660	---	1400	532	724	541	333	288	289
31	604	---	e1000	625	---	1290	---	2170	---	626	277	---
TOTAL	19722	24382	26023	47620	25937	21883	18353	30362	28531	13316	10900	8786
MEAN	636	813	839	1536	894	706	612	979	951	430	352	293
MAX	1090	2740	1260	8000	3110	1400	987	2190	2050	626	619	351
MIN	478	482	603	620	587	518	450	519	518	328	276	262
CFSM	1.30	1.66	1.71	3.13	1.83	1.44	1.25	2.00	1.94	0.88	0.72	0.60
IN.	1.50	1.85	1.98	3.62	1.97	1.66	1.39	2.31	2.17	1.01	0.83	0.67
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974-2004, BY WATER YEAR (WY)												
MEAN	366	431	548	598	667	699	716	703	606	494	360	344
MAX	1081	904	1583	1536	1409	1279	1174	2106	1371	1284	947	1279
(WY)	1987	1986	1991	2004	1975	1978	1996	1996	1980	1993	1979	1979
MIN	176	190	188	189	235	251	312	240	174	189	162	177
(WY)	1989	2000	1977	1977	1992	1983	1976	1988	1988	1988	1988	1977
SUMMARY STATISTICS												
ANNUAL TOTAL				FOR 2003 CALENDAR YEAR			FOR 2004 WATER YEAR			WATER YEARS 1974-2004		
ANNUAL MEAN				274262			275815					
HIGHEST ANNUAL MEAN				751			754			544		
LOWEST ANNUAL MEAN										792		
HIGHEST DAILY MEAN				3960			Sep 2			8200		
LOWEST DAILY MEAN				292			Feb 16			100		
ANNUAL SEVEN-DAY MINIMUM				306			Feb 15			275		
MAXIMUM PEAK FLOW							unknown			Jan 5		
MAXIMUM PEAK STAGE							unknown			Jan 5		
INSTANTANEOUS LOW FLOW							254			Sep 13		
ANNUAL RUNOFF (CFSM)				1.53			1.54			1.11		
ANNUAL RUNOFF (INCHES)				20.82			20.94			15.08		
10 PERCENT EXCEEDS				1270			1250			1000		
50 PERCENT EXCEEDS				620			620			396		
90 PERCENT EXCEEDS				375			304			219		

e Estimated

03270000 Mad River near Dayton, Ohio

LOCATION.—Latitude 39°47'50", longitude 84°05'19", in SW ¼ sec. 7, R. 8, T.2, Greene County, Hydrologic Unit 05080001, on left bank in retarding basin 300 ft upstream from Huffman Dam, 2.3 mi downstream from Mud Run, 6.2 mi northeast of Dayton, Ohio, and at mile 6.1.

DRAINAGE AREA.—635 mi².

PERIOD OF RECORD.—October 1914 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.—WSP 453: 1915. WSP 743: 1929-32. WSP 1305: 1916(M), 1925(M) 1930-32(M). WSP 1908: Drainage area. WDR-OH-82-1: 1980.

GAGE.—Water-stage recorder. Datum of gage is 777.06 ft, National Geodetic Vertical Datum of 1912. Jan. 21, 1959-Dec. 14, 1967, at site 900 ft downstream at datum 77.01 ft lower. See WSP 1725 for history of changes prior to Jan. 21, 1959. Water-quality data collected at this site 1947-1948, 1962-1963, 1966-1980.

REMARKS.—Records good except for periods of estimated record, which are poor. Flood flows affected by backwater from Huffman retarding dam beginning in 1921, some regulation by C. J. Brown Reservoir 26 mi upstream on Buck Creek since 1974. Water-quality data was formerly collected on left bank 900 ft downstream.

COOPERATION.—Base data furnished by Miami Conservancy District.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 21,200 ft³/s Jan. 22, 1959 (based on Huffman retarding basin outflow records); maximum gage height, 87.9 ft Feb. 26, 1929, at site and datum then in use; minimum daily discharge, 94 ft³/s Aug. 6, 1934, but may have been less during 1921-1924.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Mar. 25, 1913, reached a stage of 14.0 ft, original site and datum; discharge 75,700 ft³/s, computed by Miami Conservancy District.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
1	895	759	1670	1110	786	854	1340	763	1920	632	580	e360			
2	818	727	1210	2040	774	1140	1210	2160	1740	616	504	e370			
3	768	703	1080	2580	1880	1040	1120	2320	1490	600	484	e380			
4	768	682	1010	6300	1520	999	1010	1420	1230	596	601	403			
5	728	672	1090	10200	1350	1040	903	1200	868	582	513	418			
6	699	658	1400	5330	4220	986	811	1140	793	576	427	349			
7	668	645	1170	2460	2740	893	731	1060	747	560	406	332			
8	651	627	1060	1990	1660	842	705	932	699	545	393	352			
9	638	595	1000	1760	e1400	802	665	852	671	541	382	345			
10	629	588	1070	1560	e1350	767	635	740	716	509	375	333			
11	621	602	1440	1530	e1100	745	618	733	2090	554	363	e320			
12	612	1580	1150	1760	e1020	706	620	711	2940	522	358	e315			
13	603	1100	1000	1880	e940	673	762	691	1730	485	355	e310			
14	867	868	964	1970	e880	662	1490	759	2120	466	351	e300			
15	1540	e789	929	1930	e840	658	1070	825	2110	452	349	e340			
16	1010	e745	951	1810	e800	702	854	875	1860	445	348	382			
17	855	711	1300	1250	e780	694	759	798	2100	672	342	360			
18	781	698	1080	1600	e760	699	706	899	1490	569	336	361			
19	737	974	983	1410	803	875	668	2620	1230	528	336	338			
20	701	1070	913	1030	983	1160	670	2050	1080	498	402	335			
21	679	907	836	1000	1250	1250	687	1380	1000	432	805	332			
22	587	750	803	981	987	1020	766	2590	960	522	537	332			
23	629	709	920	917	906	907	1050	1710	893	470	475	331			
24	614	796	1800	923	934	856	918	1270	835	478	442	326			
25	601	807	1280	884	916	815	932	1090	1030	425	430	327			
26	892	749	1050	897	858	785	1030	1020	800	412	379	328			
27	1020	1340	966	991	827	898	856	1130	720	463	358	328			
28	836	3980	926	958	805	924	758	2300	687	420	478	330			
29	808	2900	911	872	779	875	700	1220	659	399	918	335			
30	754	1850	1670	856	---	1710	729	1020	652	390	434	341			
31	713	---	1360	811	---	1960	---	3050	---	738	376	---			
TOTAL	23722	30581	34992	61590	34848	28937	25773	41328	37860	16097	13837	10313			
MEAN	765	1019	1129	1987	1202	933	859	1333	1262	519	446	344			
MAX	1540	3980	1800	10200	4220	1960	1490	3050	2940	738	918	418			
MIN	587	588	803	811	760	658	618	691	652	390	336	300			
CFSM	1.21	1.61	1.78	3.13	1.89	1.47	1.35	2.10	1.99	0.82	0.70	0.54			
IN.	1.39	1.79	2.05	3.61	2.04	1.70	1.51	2.42	2.22	0.94	0.81	0.60			
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974-2004, BY WATER YEAR (WY)															
MEAN	442	541	717	782	882	938	959	935	781	619	449	420			
MAX	1425	1175	2027	1987	1839	1637	1609	2885	1745	1525	1235	1528			
(WY)	1987	1986	1991	2004	1975	1978	2002	1996	1981	1993	1979	1979			
MIN	198	188	208	239	287	344	444	268	192	211	172	178			
(WY)	2000	2000	2000	1977	1992	1983	1976	1988	1988	1988	1988	1999			
SUMMARY STATISTICS															
ANNUAL TOTAL				FOR 2003 CALENDAR YEAR				FOR 2004 WATER YEAR				WATER YEARS 1974-2004			
ANNUAL TOTAL				375173				359878							
ANNUAL MEAN				1028				983							
HIGHEST ANNUAL MEAN												704			
HIGHEST ANNUAL MEAN												1029			
LOWEST ANNUAL MEAN												336			
HIGHEST DAILY MEAN				5400				Sep 2				10300			
LOWEST DAILY MEAN				425				Feb 16				112			
ANNUAL SEVEN-DAY MINIMUM				437				Jan 27				124			
MAXIMUM PEAK FLOW								11000				Jan 5			
MAXIMUM PEAK STAGE								18.55				Jan 5			
INSTANTANEOUS LOW FLOW												112			
ANNUAL RUNOFF (CFSM)				1.62				1.55				1.11			
ANNUAL RUNOFF (INCHES)				21.98				21.08				15.07			
10 PERCENT EXCEEDS				1770				1730				1310			
50 PERCENT EXCEEDS				836				805				506			
90 PERCENT EXCEEDS				517				374				254			

e Estimated.

03270500 Great Miami River at Dayton, Ohio

LOCATION.—Latitude 39°45'55", longitude 84°11'51", in sec. 10, R.7, T.1, Montgomery County, Hydrologic Unit 05080002, on left bank 1,000 ft downstream from Main Street bridge in Dayton, Ohio, 0.7 mi upstream from Wolf Creek, 0.8 mi downstream from Mad River, and at mile 80.

DRAINAGE AREA.—2,511 mi².

PERIOD OF RECORD.—April to September 1905, January to September 1906, January 1907 to December 1909 (gage heights only), April 1913 to current year. Monthly discharge only for October 1919 to September 1921, published in WSP 1305. Gage-height records collected at Main Street bridge since January 1892 are contained in reports of National Weather Service. Prior to October 1962, published as Miami River at Dayton.

REVISED RECORDS.—WSP 1385: 1917. WSP 1908: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 700 ft, National Geodetic Vertical Datum of 1912 (as requested by cooperator, 699.71 ft adjustment of 1929). Prior to Oct. 1, 1921, nonrecording gage at Main Street bridge at datum 23.73 ft higher; Oct. 1, 1921-July 24, 1931, nonrecording gage at Main Street bridge at datum 21.00 ft higher.

REMARKS.—Records good except for periods of estimated record, which are poor. Flood flow regulated by four retarding basins upstream from station beginning in 1920 on Mad River 6.5 mi upstream, on Stillwater River 10.5 mi upstream, on Great Miami River 11.5 mi upstream, and on Loramic Creek 40 mi upstream. Also see REMARKS for stations 03261500, 03261950, and 03269500. Much of the flow is diverted to the Little Miami River Basin through the Dayton sewer systems. Sediment data formerly collected at this site. U.S. Army Corps of Engineers satellite telemeter at station.

COOPERATION.—Base data furnished by Miami Conservancy District.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 60,900 ft³/s Jan. 22, 1959, gage height, 36 ft Jan. 22, 1959; minimum discharge 109 ft³/s Aug. 8, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Mar. 26, 1913, reached a stage of 29.0 ft, site and datum then in use; discharge, 250,000 ft³/s, computed by Miami Conservancy District.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2660	2340	12200	5010	e1300	2120	4680	1700	7430	1470	1140	779
2	2240	2130	7280	7470	e1200	3910	3660	5090	5490	1400	1080	666
3	1990	2060	5080	10600	e2500	4510	3090	8800	4050	1320	976	658
4	1920	1940	4240	19600	e3500	3790	2620	5490	3160	1320	1130	628
5	1770	1860	4070	32000	3410	5080	2390	3810	2340	1280	1080	622
6	1710	1740	5710	28500	8640	5870	2110	2990	1990	1260	970	551
7	1610	1660	5550	20100	8420	4150	1830	2510	1780	1180	928	528
8	1500	1560	4460	13400	4730	3220	1710	2190	1600	1100	791	528
9	1420	1450	3840	9860	3390	2710	1650	2030	1440	1050	705	523
10	1370	1400	3730	5460	e3100	2300	1560	1760	1440	1040	657	537
11	1330	1400	5650	4200	e2900	2000	1450	1620	6000	1100	630	569
12	1290	e3900	5530	3990	e2700	1850	1400	1500	13700	1150	597	511
13	1260	e4500	4260	3790	e2400	1740	1700	1430	12100	1040	591	484
14	2020	3240	3640	3670	e2200	1610	3010	1610	11100	921	577	482
15	6980	2530	3280	3440	e2000	1540	2420	1680	11900	846	e570	515
16	7310	2100	3070	3190	e1900	1650	1900	1870	14100	804	567	517
17	4440	1890	5130	2710	e1700	1710	1640	1830	16700	1090	541	519
18	3300	1840	5000	3210	e1600	1770	1510	2000	15200	1220	539	502
19	2680	3330	3870	2900	1820	2030	1410	6980	10100	1170	523	478
20	2220	6430	3280	e2100	3930	3440	1440	5860	5550	1000	875	518
21	1960	4110	2840	e2000	6060	4530	1560	4680	4140	856	1970	489
22	1720	2930	2610	e1800	4830	4020	1830	7950	3430	1130	1610	461
23	1680	2420	3150	e1700	3430	3010	2460	6560	2950	1170	1180	470
24	1580	2470	10600	e1600	3230	2430	2480	4870	2460	1410	884	436
25	1470	3110	8720	e1600	3140	2180	2480	3590	2740	1060	807	433
26	3000	2790	5520	e1500	2560	2040	2420	2910	2330	888	686	422
27	5680	6530	4180	e1600	2220	2530	2070	3690	2030	915	630	417
28	4160	19900	3550	e1800	1920	3900	1780	8370	1790	849	1100	411
29	3240	21300	3320	e1600	1920	3270	1650	5900	1630	831	1400	451
30	2820	16900	6570	e1500	---	3710	1620	4290	1550	778	888	469
31	2460	---	7030	e1400	---	4700	---	9050	---	1680	982	---
TOTAL	80790	131760	156960	203300	92650	93320	63530	124610	172220	34328	27604	15574
MEAN	2606	4392	5063	6558	3195	3010	2118	4020	5741	1107	890	519
MAX	7310	21300	12200	32000	8640	5870	4680	9050	16700	1680	1970	779
MIN	1260	1400	2610	1400	1200	1540	1400	1430	1440	778	523	411
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974-2004, BY WATER YEAR (WY)												
MEAN	1107	1747	2742	3016	3554	4114	3960	3186	2737	2167	1190	940
MAX	5792	6233	9210	7217	8926	10140	8184	11030	7357	8483	5727	5692
(WY)	1987	1994	1991	1996	1975	1978	2002	1996	1981	2003	1979	2003
MIN	232	236	296	270	636	890	1069	583	259	299	196	175
(WY)	2000	2000	1977	1977	1992	1992	1976	1988	1988	1977	1988	1999
SUMMARY STATISTICS												
				FOR 2003 CALENDAR YEAR			FOR 2004 WATER YEAR			WATER YEARS 1974-2004		
ANNUAL TOTAL				1528132			1196646					
ANNUAL MEAN				4187			3270			2533		
HIGHEST ANNUAL MEAN										3765		
LOWEST ANNUAL MEAN										881		
HIGHEST DAILY MEAN				34400			Jul 10			39700		
LOWEST DAILY MEAN				650			Feb 21			111		
ANNUAL SEVEN-DAY MINIMUM				694			Jan 27			125		
MAXIMUM PEAK FLOW							35600			43800		
MAXIMUM PEAK STAGE							32.58			33.15		
INSTANTANEOUS LOW FLOW							369			111		
10 PERCENT EXCEEDS				8530			6540			5880		
50 PERCENT EXCEEDS				2460			2030			1320		
90 PERCENT EXCEEDS				1160			630			380		

e Estimated.

03271000 Wolf Creek at Dayton, Ohio

LOCATION.—Latitude 39°46'00", longitude 84°14'10", Montgomery County, Hydrologic Unit 05080002, on right bank at West Riverview Avenue bridge in Dayton, Ohio, and 1.8 mi upstream from mouth.

DRAINAGE AREA.—68.7 mi².

PERIOD OF RECORD.—September 1938 to September 1950, October 1953 to September 1973 (low-flow partial-records site), October 1986 to September 1996, October 1997 to September 2002 (recording crest-stage gage), October 2002 to September 2003.

REVISED RECORDS.—WDR Ohio 1990: 1989 (p).

GAGE.—Water-stage recorder. Datum of gage is 739.83 ft above sea level. Prior to 1950, recording gage at same location at datum 39.83 ft lower.

REMARKS.—Records fair except for periods of estimated record, which are poor.

COOPERATION.—Base data furnished by Miami Conservancy District.

EXTREMES OUTSIDE PERIOD OF RECORD.—Maximum discharge during flood in January 1959, about 12,800 ft³/s at gage height 13.1 ft, computed by Miami Conservancy District.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	e54	98	87	e19	e60	151	99	200	29	37	18
2	21	e74	77	250	e25	e82	101	503	142	27	24	15
3	20	e62	66	921	259	e64	78	176	97	25	20	19
4	20	e52	56	3290	91	e76	61	99	78	36	65	15
5	19	e45	137	1140	159	77	48	74	66	27	40	14
6	18	e39	133	256	617	60	42	57	58	30	24	13
7	17	e32	84	140	122	46	40	46	53	26	18	12
8	17	28	69	104	65	40	39	40	50	22	15	13
9	17	26	61	86	e56	35	34	35	45	20	13	12
10	17	26	125	71	91	e34	30	32	50	23	12	12
11	16	35	145	63	82	e34	29	28	1150	20	7.1	11
12	16	212	84	59	70	e33	35	26	281	28	6.0	10
13	17	82	64	53	59	e32	92	32	151	25	5.6	10
14	286	52	63	48	42	e32	251	54	116	20	6.0	10
15	153	45	57	e47	42	e33	86	61	80	17	5.9	9.8
16	62	41	99	e46	32	e35	60	39	150	16	5.7	9.8
17	45	35	127	e66	e30	e45	48	31	160	18	5.6	18
18	36	54	78	e125	28	e70	40	101	84	19	5.8	10
19	31	119	66	e64	35	114	35	603	57	16	5.9	9.4
20	27	73	54	e45	e62	193	48	127	44	15	102	9.1
21	26	54	49	e36	e90	151	86	71	39	14	145	8.8
22	25	46	49	e31	e58	81	145	48	43	90	30	8.4
23	23	41	172	e28	e60	61	213	36	34	30	19	8.3
24	21	109	250	e27	e62	56	91	38	36	20	16	8.0
25	21	69	109	e26	e54	47	176	30	141	16	16	7.9
26	335	53	75	e24	e50	44	101	57	52	23	13	7.9
27	114	497	63	e23	e46	70	68	900	43	26	12	7.9
28	71	725	57	e22	e44	54	52	2750	38	19	352	8.1
29	61	243	85	e21	e46	56	43	245	35	15	86	9.2
30	e47	138	317	e20	---	149	100	143	31	20	31	8.7
31	e43	---	119	e19	---	569	---	1290	---	202	22	---
TOTAL	1666	3161	3088	7238	2496	2533	2423	7871	3604	934	1165.6	333.3
MEAN	53.7	105	99.6	233	86.1	81.7	80.8	254	120	30.1	37.6	11.1
MAX	335	725	317	3290	617	569	251	2750	1150	202	352	19
MIN	16	26	49	19	19	32	29	26	31	14	5.6	7.9

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939-2004, BY WATER YEAR (WY)

MEAN	18.7	37.4	66.6	96.0	96.6	104	120	100	79.2	42.9	25.0	18.3
MAX	116	115	367	365	251	280	313	345	299	182	155	98.1
(WY)	1987	1994	1991	1950	1990	1945	1996	1996	1945	2003	1995	1950
MIN	2.42	2.23	1.98	3.03	14.7	12.6	15.3	5.95	8.18	3.35	3.56	2.04
(WY)	1945	1945	1945	1945	1944	1941	1941	1941	1988	1944	1948	1944

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1939-2004

ANNUAL TOTAL	36758											
ANNUAL MEAN	101									67.9		
HIGHEST ANNUAL MEAN										123		1996
LOWEST ANNUAL MEAN										16.1		1941
HIGHEST DAILY MEAN	1280	May 10				3290	Jan 4			3530	Apr 29	1996
LOWEST DAILY MEAN	11	Feb 21				5.6	Aug 13			1.1	Sep 18	1944
ANNUAL SEVEN-DAY MINIMUM	13	Jan 28				5.8	Aug 13			1.4	Aug 31	1948
MAXIMUM PEAK FLOW						9420	May 28a			9950	Mar 19	1943
MAXIMUM PEAK STAGE						13.50	May 28			53.50	Mar 19	1943
INSTANTANEOUS LOW FLOW						5.0	Sep 7			0.80	Sep 18	1948
10 PERCENT EXCEEDS	230					152				133		
50 PERCENT EXCEEDS	53					46				23		
90 PERCENT EXCEEDS	17					13				5.4		

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

03271300 Holes Creek near Kettering, Ohio

LOCATION.—Latitude 39°39'15", longitude 84°11'45", Montgomery County, Hydrologic Unit 05080001, on upstream left bank of Mad River Road bridge, 200 ft south of Alexandria-Bellbrook Road, and 2.8 mi southwest of Kettering, Ohio .

DRAINAGE AREA.—18.7 mi².

Water Discharge Records

PERIOD OF RECORD.—Partial-record site and miscellaneous measurement 1965-2002, October 2002 to current year (discontinued).

GAGE.—Elevation of gage is 890 ft (from topographic map).

REMARKS.—Records fair except for periods of estimated record, which are poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	218	19	17	18	e9.4	34	40	46	21	3.0	13	4.6
2	22	12	13	85	e9.0	23	32	220	15	2.6	5.4	3.4
3	13	8.1	11	527	e80	14	26	41	11	2.2	3.0	11
4	8.7	7.0	10	994	35	19	20	23	8.6	2.1	19	7.0
5	6.8	5.8	38	482	91	19	17	18	7.1	2.1	12	3.7
6	5.9	10	30	53	320	15	15	15	6.3	2.7	3.1	3.1
7	5.5	11	16	29	45	12	15	12	5.8	2.7	1.7	3.0
8	9.7	6.6	13	e17	25	11	14	10	5.2	2.0	1.5	17
9	7.3	5.3	12	e13	23	9.7	13	9.5	8.4	1.9	1.6	9.0
10	5.2	5.1	45	e11	29	9.2	12	8.0	5.1	3.4	2.4	4.0
11	4.7	8.1	42	e9.6	25	9.4	12	6.5	400	13	3.0	3.0
12	4.2	167	19	e8.8	21	9.1	26	6.0	69	11	2.7	2.5
13	3.9	33	14	e8.3	e15	8.5	84	10	27	3.2	2.5	2.3
14	3.7	13	15	e8.0	e11	8.7	154	19	54	2.2	2.4	2.2
15	4.1	12	15	e7.8	e9.6	8.9	29	50	51	1.8	2.4	2.3
16	5.0	12	26	12	e8.7	31	21	22	86	1.5	2.5	2.4
17	6.3	9.3	30	26	e8.0	20	18	13	38	11	2.6	4.8
18	6.8	13	17	68	e7.5	23	16	14	41	3.3	2.8	3.4
19	39	43	e13	22	e9.0	33	14	178	18	2.1	2.7	2.3
20	117	18	e11	15	e10	51	20	32	12	1.6	23	2.1
21	12	12	e10	e12	e14	42	26	17	9.0	1.5	30	2.1
22	8.6	9.9	e10	e11	e13	19	119	12	7.5	44	6.9	2.1
23	9.3	8.9	56	e10	e12	16	164	10	5.8	24	4.6	2.2
24	6.9	44	71	e9.6	14	15	32	32	4.5	3.0	3.2	2.5
25	5.9	17	23	e9.4	13	14	147	11	4.9	1.7	4.2	2.5
26	6.5	11	16	e10	11	12	41	38	3.5	6.2	16	2.4
27	6.8	97	14	e20	10	26	21	96	3.2	15	7.7	2.7
28	6.4	227	14	e15	9.4	15	17	218	6.0	6.2	25	3.9
29	5.7	48	27	12	9.1	23	14	23	6.9	2.8	26	5.9
30	6.7	23	125	e11	---	154	44	16	3.5	11	22	5.9
31	6.7	---	26	e9.8	---	124	---	145	---	155	8.2	---
TOTAL	578.3	916.1	799	2544.3	896.7	828.5	1223	1371.0	944.3	345.8	263.1	125.3
MEAN	18.7	30.5	25.8	82.1	30.9	26.7	40.8	44.2	31.5	11.2	8.49	4.18
MAX	218	227	125	994	320	154	164	220	400	155	30	17
MIN	3.7	5.1	10	7.8	7.5	8.5	12	6.0	3.2	1.5	1.5	2.1
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999-2004, BY WATER YEAR (WY)												
MEAN	17.6	28.0	33.0	35.5	29.9	29.8	36.8	37.9	28.3	24.5	9.99	12.9
MAX	38.2	64.6	58.5	82.1	40.6	48.8	70.2	91.4	54.0	47.5	18.5	37.5
(WY)	2002	2002	2002	2004	2000	2003	2002	2002	2002	2002	2001	2003
MIN	1.88	4.07	9.85	9.40	16.3	8.84	19.0	6.63	7.49	5.96	5.92	1.80
(WY)	2000	2000	2000	2000	2001	2001	2001	1999	1999	1999	1999	1999
SUMMARY STATISTICS												
ANNUAL TOTAL				FOR 2003 CALENDAR YEAR			FOR 2004 WATER YEAR			WATER YEARS 1999-2004		
ANNUAL MEAN				11213.8			10835.4					
HIGHEST ANNUAL MEAN				30.7			29.6			24.1		
LOWEST ANNUAL MEAN										32.6		
HIGHEST DAILY MEAN				417			994			15.9		
LOWEST DAILY MEAN				2.2			1.5			0.19		
ANNUAL SEVEN-DAY MINIMUM				2.6			2.2			0.46		
MAXIMUM PEAK FLOW							2170			2170		
MAXIMUM PEAK STAGE							7.25			7.25		
10 PERCENT EXCEEDS				69			50			51		
50 PERCENT EXCEEDS				12			12			8.6		
90 PERCENT EXCEEDS				4.3			2.7			2.0		

e Estimated.

03271300 Holes Creek near Kettering, Ohio—Continued

Water-Quality Records

PERIOD OF RECORD.—October 2002 to current year (discontinued).

PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: October 2002 to current year.

pH: October 2002 to current year.

WATER TEMPERATURE: October 2002 to current year.

INSTRUMENTATION.—Water-quality monitor. Electronic data logger. Set for 1-hour interval.

REMARKS.—Interruptions in the water-quality monitor record were due to malfunction of instrument. Specific conductance records are fair except Jan. 1-Feb.

19, which are poor. pH records are good except Dec. 4-Jan. 7 and Apr. 27-June 8, which are fair. Water temperature records are good.

EXTREMES FOR PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: Maximum, 4,880 microsiemens, Feb. 21, 2003; minimum, 169 microsiemens, Sept. 1, 2003.

pH: Maximum, 9.0 units, Dec. 8-10, 2002; minimum, 7.4 units, July 16, 2003.

WATER TEMPERATURE: Maximum, 26.5° C, July 8, 2003; minimum, 0.0° C, Feb. 8 and 12, 2003.

EXTREMES FOR CURRENT YEAR.—

SPECIFIC CONDUCTANCE: Maximum, 4,280 microsiemens, Feb. 3; minimum, 198 microsiemens, May 27.

pH: Maximum, 8.7 units, July 18; minimum, 7.5 units, Oct. 16, Nov. 30, Aug. 22, 23, 27, and 28.

WATER TEMPERATURE: Maximum, 26.3° C, July 2 and 22; minimum, 0.1° C, Feb. 3.

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

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	718	666	691	834	558	673	836	774	801	927	897	910
2	743	708	730	713	656	678	853	836	846	913	591	756
3	763	743	753	774	713	744	---	---	---	813	278	552
4	773	717	748	804	748	775	---	---	---	481	221	334
5	727	704	710	815	781	800	853	670	781	596	236	430
6	806	699	772	825	712	781	775	721	763	773	596	699
7	816	802	809	769	711	738	801	773	786	---	---	---
8	817	802	812	826	769	789	824	801	811	---	---	---
9	826	810	818	843	810	825	836	818	832	1450	1290	1380
10	825	817	821	846	812	834	849	555	728	1420	1280	1340
11	828	819	825	854	270	753	684	639	656	1330	1310	1320
12	840	825	831	484	379	450	759	684	725	1310	1270	1290
13	847	840	843	605	480	542	791	759	779	1270	1230	1250
14	852	313	611	661	605	638	2690	791	1150	1230	1190	1210
15	541	426	477	705	661	685	2800	1340	1810	1220	1190	1210
16	687	541	601	723	675	693	1780	1350	1500	1240	1210	1230
17	662	629	645	768	723	748	1780	1300	1460	4060	1200	1850
18	682	655	665	778	567	725	1370	1280	1340	2270	1640	1870
19	734	669	694	635	557	606	1930	1360	1460	1640	1420	1510
20	763	728	737	712	619	668	2410	1850	2080	1420	1360	1380
21	781	763	772	763	689	734	1980	1740	1880	1360	1300	1340
22	790	766	778	789	763	775	1740	1680	1720	1340	1290	1310
23	799	779	793	814	789	801	1760	1430	1650	1350	1290	1320
24	814	796	808	812	472	617	1430	1090	1160	1340	1300	1320
25	824	603	797	741	668	706	1180	1100	1160	1370	1320	1360
26	607	499	565	778	741	760	1160	1140	1150	1550	1360	1390
27	684	579	635	785	377	577	1150	1110	1140	4170	1550	2920
28	729	684	707	515	377	424	1110	1030	1060	3990	3200	3620
29	712	609	642	707	515	640	1070	862	1030	3200	2570	2790
30	769	678	720	774	686	727	908	743	799	2570	2470	2510
31	819	758	781	---	---	---	897	821	863	2820	2560	2680
MONTH	852	313	729	854	270	697	2800	555	1140	4170	221	1490

03271300 Holes Creek near Kettering, Ohio—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
1	8.4	8.2	8.3	8.1	8.0	8.0	8.1	7.8	8.1	8.4	8.1	8.2
2	8.3	8.3	8.3	8.4	8.0	8.0	8.2	8.1	8.2	8.2	8.0	8.1
3	8.4	8.3	8.3	8.4	7.9	8.1	---	---	---	8.1	7.7	7.9
4	8.4	8.2	8.3	8.4	7.8	8.0	---	---	---	7.8	7.6	7.8
5	8.3	8.2	8.3	8.3	8.0	8.1	8.2	8.1	8.2	8.0	7.8	7.8
6	8.3	8.2	8.3	8.2	8.0	8.1	8.4	8.1	8.2	8.1	8.0	8.1
7	8.3	8.2	8.3	8.5	8.0	8.2	8.4	8.2	8.3	---	---	---
8	8.3	8.2	8.2	8.5	8.2	8.3	8.4	8.2	8.2	---	---	---
9	8.3	8.2	8.2	8.5	8.2	8.3	8.3	8.2	8.3	8.1	8.1	8.1
10	8.3	8.2	8.2	8.5	8.1	8.3	8.3	8.1	8.2	8.2	8.1	8.2
11	8.3	8.1	8.2	8.3	7.8	8.1	8.2	8.1	8.2	8.2	8.1	8.2
12	8.2	8.1	8.1	7.9	7.8	7.8	8.4	8.2	8.3	8.2	8.2	8.2
13	8.2	8.1	8.1	8.0	7.9	8.0	8.3	8.2	8.3	8.2	8.2	8.2
14	8.1	7.9	8.1	8.1	8.0	8.0	8.4	8.2	8.3	8.3	8.2	8.2
15	7.9	7.6	7.8	8.1	8.0	8.0	8.4	8.2	8.2	8.4	8.3	8.3
16	7.9	7.5	7.7	8.1	8.0	8.1	8.4	8.1	8.2	8.3	8.3	8.3
17	8.0	7.7	7.8	8.3	8.0	8.1	8.4	8.1	8.2	8.4	8.2	8.3
18	8.1	7.9	8.0	8.2	7.9	8.1	8.4	8.2	8.3	8.2	8.2	8.2
19	8.1	7.8	7.9	8.1	8.0	8.0	8.4	8.2	8.3	8.2	8.2	8.2
20	8.1	7.8	7.9	8.2	8.0	8.1	8.4	8.2	8.3	8.3	8.2	8.2
21	8.2	8.0	8.1	8.2	8.0	8.1	8.4	8.2	8.3	8.3	8.2	8.3
22	8.3	8.0	8.1	8.3	8.0	8.1	8.4	8.2	8.3	8.3	8.2	8.3
23	8.4	8.2	8.3	8.3	8.0	8.1	8.3	8.0	8.2	8.3	8.2	8.3
24	8.4	8.2	8.3	8.1	7.9	8.0	8.2	8.0	8.1	8.3	8.2	8.2
25	8.4	8.0	8.2	8.2	7.9	8.0	8.4	8.1	8.2	8.3	8.2	8.3
26	8.2	8.0	8.1	8.2	7.9	8.1	8.4	8.2	8.3	8.2	8.1	8.2
27	8.3	8.0	8.2	8.1	7.9	7.9	8.4	8.2	8.3	8.2	8.2	8.2
28	8.3	8.1	8.2	7.9	7.8	7.8	8.4	8.2	8.3	8.2	8.1	8.2
29	8.4	8.1	8.2	7.8	7.6	7.6	8.4	8.0	8.2	8.4	8.2	8.3
30	8.3	8.0	8.1	7.9	7.5	7.8	8.2	8.0	8.1	8.4	8.3	8.3
31	8.4	8.0	8.1	---	---	---	8.4	8.1	8.2	8.3	8.2	8.2
MAX	8.4	8.3	8.3	8.5	8.2	8.3	8.4	8.2	8.3	8.4	8.3	8.3
MIN	7.9	7.5	7.7	7.8	7.5	7.6	8.1	7.8	8.1	7.8	7.6	7.8

DAY	FEBRUARY			MARCH			APRIL			MAY		
	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
1	8.3	8.2	8.2	8.1	8.0	8.0	8.4	8.1	8.2	8.2	8.0	8.1
2	8.3	8.2	8.2	8.4	7.9	8.1	8.5	8.2	8.3	8.1	7.9	8.0
3	8.3	8.1	8.2	8.4	8.0	8.1	8.6	8.2	8.4	8.2	8.0	8.1
4	8.2	8.0	8.1	8.3	8.0	8.1	8.6	8.2	8.3	8.2	8.1	8.2
5	8.3	8.1	8.2	8.4	8.0	8.0	---	---	---	8.2	8.1	8.1
6	8.2	8.1	8.2	8.4	7.9	8.1	---	---	---	8.2	8.0	8.1
7	8.1	8.0	8.1	8.4	8.0	8.1	---	---	---	8.2	8.0	8.1
8	8.2	8.1	8.1	8.3	8.0	8.1	8.4	8.1	8.2	8.2	8.0	8.1
9	8.3	8.2	8.2	8.4	8.0	8.1	---	---	---	8.3	8.0	8.1
10	8.3	8.2	8.2	8.3	8.0	8.1	---	---	---	8.1	8.0	8.1
11	8.3	8.2	8.3	8.3	8.0	8.0	---	---	---	8.1	8.0	8.1
12	8.4	8.2	8.2	8.3	8.0	8.1	---	---	---	8.1	8.0	8.1
13	8.5	8.4	8.4	8.3	7.9	8.1	---	---	---	8.1	8.0	8.1
14	8.4	8.3	8.4	8.2	7.9	7.9	---	---	---	8.1	8.0	8.0
15	8.4	8.3	8.4	8.3	7.8	8.0	---	---	---	8.0	7.8	8.0
16	8.5	8.3	8.4	8.3	7.8	8.1	---	---	---	8.2	8.0	8.1
17	8.3	8.2	8.3	8.3	8.0	8.1	---	---	---	8.1	8.0	8.1
18	8.3	8.2	8.3	8.3	8.0	8.1	---	---	---	8.1	8.0	8.0
19	8.3	8.2	8.2	8.3	8.0	8.1	---	---	---	8.0	7.8	7.9
20	8.3	8.1	8.2	8.3	7.9	8.1	---	---	---	8.1	7.9	7.9
21	8.3	8.1	8.2	8.2	7.9	8.0	---	---	---	8.0	7.8	7.9
22	8.4	8.1	8.2	8.2	8.0	8.1	---	---	---	7.9	7.7	7.8
23	8.4	8.1	8.2	8.2	8.0	8.1	---	---	---	8.0	7.8	7.8
24	8.4	8.0	8.2	8.4	7.9	8.1	---	---	---	8.1	7.8	8.0
25	8.4	8.1	8.2	8.3	8.0	8.2	---	---	---	8.1	7.9	8.0
26	8.5	8.1	8.2	8.0	7.9	8.0	---	---	---	8.1	7.8	7.9
27	8.4	8.1	8.2	8.3	7.9	8.1	---	---	---	8.1	7.8	8.0
28	8.4	8.1	8.1	8.2	8.0	8.1	8.3	8.1	8.2	8.0	7.8	8.0
29	8.5	8.0	8.1	8.2	8.0	8.0	8.2	8.1	8.1	8.1	8.0	8.1
30	---	---	---	8.1	7.7	8.0	8.1	8.0	8.1	8.1	8.0	8.1
31	---	---	---	8.1	8.0	8.1	---	---	---	8.1	7.8	7.9
MAX	8.5	8.4	8.4	8.4	8.0	8.2	8.6	8.2	8.4	8.3	8.1	8.2
MIN	8.1	8.0	8.1	8.0	7.7	7.9	8.1	8.0	8.1	7.9	7.7	7.8

03271300 Holes Creek near Kettering, Ohio—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
1	8.1	7.9	8.0	8.3	8.3	8.3	8.2	8.0	8.1	---	---	---
2	8.1	8.0	8.0	8.4	8.3	8.3	8.2	7.9	8.1	---	---	---
3	8.1	8.0	8.1	8.3	8.2	8.3	8.2	7.9	8.0	---	---	---
4	8.1	8.0	8.1	8.3	8.2	8.3	8.0	7.8	7.9	---	---	---
5	8.2	8.0	8.1	8.4	8.1	8.2	8.1	7.8	7.9	---	---	---
6	8.2	8.0	8.1	8.4	8.2	8.3	8.1	7.9	8.0	---	---	---
7	8.2	8.0	8.1	8.3	8.1	8.3	8.1	7.9	7.9	---	---	---
8	8.2	8.0	8.1	8.4	8.2	8.3	8.1	7.8	7.9	---	---	---
9	8.2	7.8	8.1	8.4	8.1	8.2	8.1	7.8	8.0	---	---	---
10	8.1	7.9	8.0	8.2	8.0	8.2	8.2	7.8	8.0	---	---	---
11	8.0	7.7	7.8	8.3	8.0	8.2	8.2	7.8	8.0	---	---	---
12	7.9	7.7	7.8	8.4	8.1	8.2	8.2	7.8	8.0	---	---	---
13	8.1	7.8	8.0	8.5	8.1	8.2	8.2	7.9	8.0	---	---	---
14	8.0	7.8	7.8	8.5	7.8	8.3	8.2	7.9	8.0	---	---	---
15	8.2	7.7	7.9	8.5	8.2	8.4	8.3	7.8	8.0	---	---	---
16	8.0	7.8	7.9	8.5	8.3	8.4	8.3	7.9	8.0	---	---	---
17	8.1	7.9	8.0	8.5	8.2	8.4	8.2	7.9	8.0	---	---	---
18	8.1	7.9	8.0	8.7	8.3	8.4	8.1	7.7	7.9	---	---	---
19	8.2	8.0	8.1	8.5	7.9	8.3	8.1	7.7	7.8	---	---	---
20	8.3	8.1	8.2	8.5	8.1	8.3	7.9	7.6	7.7	---	---	---
21	8.3	8.2	8.2	8.5	8.2	8.3	7.9	7.6	7.7	---	---	---
22	8.3	8.2	8.2	8.4	8.1	8.2	7.7	7.5	7.6	---	---	---
23	8.3	8.2	8.2	8.4	8.0	8.1	7.8	7.5	7.6	8.2	7.8	7.9
24	8.3	8.2	8.2	8.5	8.2	8.3	7.9	7.6	7.8	8.2	7.6	7.9
25	8.3	8.2	8.2	8.5	8.3	8.4	7.9	7.7	7.8	8.2	7.7	7.8
26	8.3	8.2	8.3	8.4	8.1	8.3	7.8	7.6	7.7	8.2	7.7	7.8
27	8.3	8.2	8.3	8.5	7.9	8.2	7.7	7.5	7.6	8.2	7.7	7.8
28	8.3	8.1	8.2	8.4	8.0	8.1	7.9	7.5	7.6	8.1	7.7	7.8
29	8.4	8.0	8.2	8.5	8.0	8.3	7.9	7.7	7.8	8.1	7.7	7.8
30	8.4	8.3	8.3	8.5	7.9	8.3	---	---	---	8.2	7.8	7.9
31	---	---	---	8.2	8.0	8.1	---	---	---	---	---	---
MAX	8.4	8.3	8.3	8.7	8.3	8.4	8.3	8.0	8.1	8.2	7.8	7.9
MIN	7.9	7.7	7.8	8.2	7.8	8.1	7.7	7.5	7.6	8.1	7.6	7.8
YEAR	MAX	MAXIMUM	8.7	MIN	MAXIMUM	8.4	MEDIAN	MAXIMUM	8.4	MINIMUM	7.5	
		MINIMUM	7.7		MINIMUM	7.5		MINIMUM	7.5			

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

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	13.2	11.2	12.2	15.8	14.4	15.1	5.4	3.3	4.6	5.7	2.8	4.1
2	11.9	9.6	10.7	17.3	14.5	15.7	4.0	2.7	3.4	8.2	5.7	6.9
3	11.0	8.1	9.7	16.5	13.6	14.8	---	---	---	11.6	8.2	10.2
4	12.8	10.8	11.6	16.0	12.7	14.6	---	---	---	10.4	5.9	7.5
5	13.8	11.2	12.2	16.3	12.9	14.9	5.4	4.5	4.9	6.0	5.1	5.8
6	13.8	10.9	12.3	12.9	9.7	11.7	5.1	4.3	4.6	5.1	0.7	2.6
7	13.8	10.3	12.1	10.2	7.1	9.0	4.7	3.3	3.9	---	---	---
8	15.0	11.7	13.2	8.1	5.1	6.7	5.3	2.8	3.9	---	---	---
9	15.3	12.5	13.9	6.7	4.5	5.4	7.6	5.3	6.5	2.9	1.6	2.3
10	17.1	14.7	15.7	8.4	4.5	6.7	8.2	7.4	7.7	1.6	0.7	1.1
11	17.5	14.7	16.1	12.8	8.4	10.2	7.4	4.2	5.9	2.7	1.3	1.9
12	17.4	15.0	16.2	13.4	10.3	12.4	4.2	1.9	2.9	3.4	2.1	2.8
13	15.3	12.4	13.9	10.3	5.7	7.9	2.0	1.2	1.6	3.3	2.7	3.0
14	16.7	13.2	14.7	6.8	5.1	6.2	2.5	1.5	2.1	3.6	1.7	2.8
15	15.2	13.2	14.1	7.5	6.6	7.2	3.1	2.3	2.6	3.4	1.5	2.2
16	14.0	11.5	12.8	8.8	7.5	8.4	4.9	2.3	3.6	2.4	1.3	1.8
17	13.5	12.1	13.0	9.8	7.7	8.8	3.6	2.0	2.7	2.3	1.5	1.8
18	12.5	9.9	11.2	12.5	9.3	11.2	2.6	1.5	2.0	2.8	1.3	2.1
19	13.6	10.4	11.8	12.6	9.7	11.6	2.3	1.5	1.8	1.6	0.7	1.1
20	14.3	10.3	12.3	10.4	8.8	9.7	2.0	0.8	1.2	1.6	0.8	1.1
21	14.6	13.3	13.9	11.5	8.8	9.8	2.0	0.4	1.2	2.4	0.9	1.6
22	13.6	10.7	11.8	12.0	9.3	11.0	4.6	1.7	3.0	2.2	0.5	1.6
23	12.2	8.8	10.6	13.6	11.8	12.7	6.0	4.6	5.3	1.3	0.3	0.7
24	10.8	7.9	9.3	12.6	5.6	8.8	4.8	2.9	3.8	2.5	0.7	1.7
25	12.5	9.5	11.4	6.3	5.0	5.7	2.9	1.7	2.3	0.7	0.4	0.5
26	12.6	10.5	12.0	7.6	5.5	6.8	2.2	0.5	1.4	2.2	0.5	1.2
27	10.6	8.6	9.7	8.9	7.6	8.3	2.8	0.8	1.8	2.2	0.3	1.2
28	10.1	8.6	9.5	8.9	5.3	7.1	4.8	2.2	3.4	0.9	0.2	0.5
29	10.6	9.0	9.8	5.3	4.1	4.8	7.0	4.2	5.4	1.4	0.3	0.7
30	12.4	8.7	10.8	5.8	4.0	5.2	6.0	4.1	4.9	0.8	0.2	0.4
31	15.2	11.6	13.8	---	---	---	4.8	3.4	4.1	0.6	0.3	0.4
MONTH	17.5	7.9	12.3	17.3	4.0	9.6	8.2	0.4	3.5	11.6	0.2	2.5

03271510 Great Miami River near Linden Avenue at Miamisburg, Ohio

LOCATION.—Latitude 39°38'14", longitude 84°17'33", Montgomery County, Hydrologic Unit 05080002, on left bank at Miamisburg, 1 mi downstream from Bear Creek, 0.6 mi downstream from discharge station at Miamisburg, 0.65 mi downstream from discharge station below Miamisburg, and at mile 65.75.

DRAINAGE AREA.—2,713 mi².

Water-Quality Records

PERIOD OF RECORD.—June 1978 to current year.

PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: June 1978 to current year.

pH: June 1978 to current year.

WATER TEMPERATURE: June 1978 to current year.

DISSOLVED OXYGEN: June 1978 to current year.

INSTRUMENTATION.—Water-quality monitor. Electronic data logger. Set for 1-hour interval. Satellite telemeter at station.

REMARKS.—Interruptions in the water-quality record are due to malfunction of the instrument. Prior to June 1978, records published as 03271600, Great Miami River near Miamisburg, Ohio. See records of discharge for gaging station below Miamisburg (station 03271601). Water-quality records are good except for dissolved oxygen, which are fair except Oct. 1-7, Nov. 13-18, Mar. 30-May 5, and June 10-Aug. 17, which are poor.

EXTREMES FOR PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: Maximum, 2,080 microsiemens, Jan. 13, 1999; minimum, 206 microsiemens, Feb. 18, 1982.

pH: Maximum, 9.8 units, Oct. 12, 1992; minimum, 7 units, July 30, Aug. 30, 1979.

WATER TEMPERATURE: Maximum, 33° C, July 20, 22, 1978; minimum, 0.0° C, on many days during winters.

DISSOLVED OXYGEN: Maximum, >20 mg/L, on several days in water years 1978-1994, 2000, and 2001; minimum, 0.4 mg/L, Aug. 27, 1981 and Aug. 2, 1982.

EXTREMES FOR CURRENT YEAR.—

SPECIFIC CONDUCTANCE: Maximum, 1,270 microsiemens, Feb. 3; minimum, 269 microsiemens, May 28.

pH: Maximum, 9.0 units, Aug. 7, 8, 11-13, 16, and 17; minimum, 7.4 units, Nov. 3 and Jan. 25.

WATER TEMPERATURE: Maximum, 28.4° C, July 13; minimum, 0.3° C, Jan. 25, 26, 31, and Feb. 1.

DISSOLVED OXYGEN: Maximum, 19.5 mg/L, Mar. 15; minimum, 6.3 mg/L, Aug. 20.

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

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	673	617	640	722	693	712	518	435	474	609	580	593
2	701	673	685	726	696	716	584	518	556	628	550	611
3	721	701	710	742	722	728	627	584	606	550	383	427
4	733	721	729	759	742	750	658	627	644	471	315	388
5	743	730	739	772	757	762	677	657	671	315	284	292
6	766	743	751	776	751	767	677	653	668	333	285	311
7	766	753	760	780	761	768	653	629	637	368	333	347
8	773	765	768	791	780	785	650	630	636	466	368	414
9	781	767	777	797	779	788	691	650	671	557	466	504
10	790	774	786	800	784	793	701	686	692	646	557	606
11	801	783	793	811	789	803	697	671	683	680	646	665
12	787	775	781	795	582	669	672	623	638	696	680	688
13	783	773	778	650	586	611	650	622	630	702	696	698
14	796	568	722	711	650	674	779	650	712	711	702	706
15	611	532	572	724	706	713	786	742	761	720	709	714
16	582	515	533	727	724	725	825	756	785	728	720	722
17	587	543	559	741	727	731	803	733	777	939	726	797
18	629	587	607	756	724	743	733	663	688	1010	864	918
19	665	629	647	760	714	730	692	676	681	865	776	817
20	700	665	676	714	578	649	729	692	708	798	774	786
21	732	700	713	646	579	607	756	729	743	820	797	804
22	747	732	737	685	646	665	772	753	763	828	807	817
23	766	747	757	715	685	698	830	771	793	829	816	820
24	782	762	772	720	686	705	808	519	680	839	827	831
25	783	766	773	720	700	713	532	502	513	833	823	827
26	773	637	704	735	717	725	601	532	564	911	831	863
27	646	621	635	735	552	681	651	601	628	1230	895	1080
28	648	613	628	552	372	410	687	651	669	1180	1080	1130
29	660	636	644	389	371	376	707	682	698	1080	968	1010
30	691	660	672	435	389	412	700	639	677	1010	927	956
31	719	691	702	---	---	---	639	568	587	943	902	924
MONTH	801	515	702	811	371	687	830	435	666	1230	284	712

03271510 Great Miami River near Linden Avenue at Miamisburg, Ohio—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
1	7.7	7.6	7.7	8.3	8.0	8.2	8.1	8.0	8.1	8.2	8.1	8.1
2	8.1	7.6	8.1	8.2	7.9	8.2	8.2	8.1	8.2	8.2	8.1	8.2
3	8.2	8.1	8.1	8.3	7.4	8.1	8.2	8.0	8.2	8.1	8.0	8.1
4	8.2	8.1	8.2	8.3	8.0	8.2	8.2	8.1	8.2	8.1	7.9	8.0
5	8.2	8.1	8.2	8.3	8.0	8.2	8.2	8.1	8.2	8.0	7.8	7.9
6	8.2	8.1	8.2	8.2	8.1	8.2	8.2	8.1	8.2	7.9	7.9	7.9
7	8.2	8.0	8.2	8.3	8.1	8.2	8.2	8.2	8.2	7.9	7.9	7.9
8	8.2	8.0	8.1	8.4	8.2	8.3	8.2	8.1	8.2	8.0	7.9	7.9
9	8.3	8.1	8.1	8.4	8.2	8.3	8.2	8.1	8.2	8.0	8.0	8.0
10	8.3	8.1	8.1	8.4	8.1	8.3	8.2	8.2	8.2	8.1	8.0	8.0
11	8.3	8.1	8.1	8.3	8.1	8.2	8.2	8.2	8.2	8.1	8.0	8.1
12	8.4	8.1	8.2	8.2	8.0	8.1	8.2	8.2	8.2	8.1	8.0	8.1
13	8.4	8.1	8.2	8.2	8.1	8.1	8.2	8.1	8.2	8.1	8.0	8.1
14	8.3	8.1	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.1	8.0	8.1
15	8.1	7.9	7.9	8.2	8.2	8.2	8.2	8.2	8.2	8.1	7.9	8.1
16	7.9	7.8	7.8	8.2	8.1	8.2	8.2	8.2	8.2	8.1	8.0	8.1
17	8.0	7.8	7.9	8.3	8.1	8.2	8.3	8.2	8.2	8.1	8.0	8.1
18	8.0	8.0	8.0	8.2	7.5	8.2	8.3	8.1	8.2	8.1	7.9	8.1
19	8.1	8.0	8.1	8.2	8.2	8.2	8.2	8.2	8.2	8.1	7.9	8.0
20	8.2	8.0	8.1	8.3	8.1	8.2	8.2	8.1	8.2	8.1	7.6	8.1
21	8.2	7.9	8.1	8.2	8.1	8.1	8.3	8.1	8.2	8.1	7.6	8.0
22	8.3	8.2	8.3	8.2	8.1	8.2	8.3	8.1	8.2	8.1	7.8	8.1
23	8.4	8.2	8.3	8.2	8.1	8.2	8.2	8.1	8.2	8.1	7.8	8.0
24	8.4	8.3	8.4	8.3	8.2	8.3	8.2	8.1	8.2	8.1	7.8	7.9
25	8.4	8.3	8.3	8.3	8.3	8.3	8.1	8.0	8.1	8.1	7.4	7.9
26	8.4	8.1	8.3	8.4	8.3	8.4	8.2	8.1	8.1	8.1	7.5	8.0
27	8.3	8.2	8.2	8.3	8.2	8.3	8.2	8.1	8.1	8.2	8.0	8.1
28	8.2	8.2	8.2	8.2	8.0	8.0	8.2	8.0	8.2	8.2	7.9	8.1
29	8.3	7.9	8.2	8.0	8.0	8.0	8.2	8.1	8.1	8.1	7.9	8.1
30	8.3	7.9	8.2	8.0	8.0	8.0	8.2	8.1	8.2	8.1	7.9	8.1
31	8.3	8.0	8.2	---	---	---	8.2	8.1	8.2	8.1	7.8	7.9
MAX	8.4	8.3	8.4	8.4	8.3	8.4	8.3	8.2	8.2	8.2	8.1	8.2
MIN	7.7	7.6	7.7	8.0	7.4	8.0	8.1	8.0	8.1	7.9	7.4	7.9

DAY	FEBRUARY			MARCH			APRIL			MAY		
	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
1	8.1	7.8	7.9	8.5	8.3	8.4	8.2	8.1	8.2	8.4	8.2	8.3
2	8.1	7.9	8.0	8.5	8.3	8.4	8.2	8.1	8.2	8.4	8.1	8.3
3	8.1	7.9	8.1	8.5	8.3	8.4	8.3	8.2	8.2	8.2	8.1	8.1
4	8.0	7.8	8.0	8.4	7.9	8.3	8.4	8.2	8.3	8.2	8.0	8.1
5	8.1	7.9	8.0	8.3	8.2	8.3	8.5	8.3	8.3	8.1	8.0	8.1
6	8.0	7.7	8.0	8.4	8.2	8.2	8.5	8.2	8.4	8.1	7.8	8.1
7	7.9	7.7	7.8	8.3	8.2	8.2	8.5	8.2	8.4	8.2	7.9	8.1
8	7.9	7.7	7.8	8.4	8.3	8.3	8.5	8.3	8.4	8.2	8.1	8.2
9	7.9	7.8	7.9	8.5	8.3	8.4	8.5	8.3	8.4	8.2	8.0	8.1
10	8.0	7.9	7.9	8.6	8.4	8.5	8.6	8.3	8.4	8.2	8.1	8.1
11	8.0	7.9	8.0	8.6	8.4	8.5	8.6	8.3	8.4	8.6	8.1	8.2
12	8.0	7.9	8.0	8.7	8.4	8.5	8.6	8.3	8.4	8.3	8.1	8.2
13	8.0	7.9	8.0	8.7	8.4	8.6	8.4	8.3	8.4	8.4	8.2	8.3
14	8.1	7.9	8.0	8.6	8.4	8.6	8.3	8.1	8.2	8.3	8.1	8.2
15	8.1	7.8	8.0	8.7	8.4	8.5	8.3	8.1	8.2	8.2	8.1	8.1
16	8.1	7.8	8.0	8.7	8.4	8.6	8.4	8.1	8.3	8.2	8.1	8.1
17	8.1	7.8	8.0	8.7	8.4	8.5	8.4	8.1	8.2	8.2	8.1	8.1
18	8.1	7.9	8.0	8.6	8.1	8.5	8.4	8.1	8.3	8.2	8.1	8.1
19	8.2	7.9	8.0	8.6	8.4	8.5	8.5	7.9	8.3	8.1	7.6	7.9
20	8.3	8.1	8.2	8.5	8.4	8.5	8.5	8.2	8.3	7.8	7.6	7.7
21	8.3	8.0	8.1	8.5	8.3	8.4	8.3	8.1	8.3	7.9	7.7	7.8
22	8.1	8.0	8.0	8.4	8.2	8.3	8.2	8.1	8.1	7.9	7.6	7.8
23	8.1	8.1	8.1	8.4	8.2	8.3	8.2	8.1	8.1	7.8	7.6	7.7
24	8.2	8.1	8.2	8.5	8.3	8.3	8.3	8.1	8.2	7.9	7.8	7.8
25	8.4	8.2	8.3	8.5	8.3	8.4	8.3	8.1	8.2	7.9	7.8	7.9
26	8.4	8.3	8.3	8.5	8.4	8.4	8.3	8.1	8.3	8.0	7.9	8.0
27	8.5	8.3	8.4	8.5	8.3	8.4	8.5	8.2	8.3	8.0	8.0	8.0
28	8.5	8.3	8.4	8.5	8.3	8.4	8.6	8.3	8.4	8.0	7.7	7.8
29	8.5	8.2	8.4	8.3	8.2	8.2	8.5	8.3	8.4	7.9	7.7	7.8
30	---	---	---	8.2	8.0	8.2	8.4	8.3	8.4	7.9	7.8	7.9
31	---	---	---	8.2	8.1	8.1	---	---	---	8.0	7.8	7.9
MAX	8.5	8.3	8.4	8.7	8.4	8.6	8.6	8.3	8.4	8.6	8.2	8.3
MIN	7.9	7.7	7.8	8.2	7.9	8.1	8.2	7.9	8.1	7.8	7.6	7.7

03271510 Great Miami River near Linden Avenue at Miamisburg, Ohio—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
1	7.9	7.8	7.9	8.3	8.1	8.2	8.5	8.3	8.4	8.6	8.2	8.4
2	8.0	7.9	7.9	8.3	8.1	8.2	8.7	8.3	8.5	8.6	8.3	8.4
3	8.0	7.9	7.9	8.3	8.0	8.1	8.8	8.5	8.6	8.5	8.2	8.4
4	8.0	7.9	8.0	8.3	7.9	8.1	8.6	8.3	8.5	8.4	8.2	8.3
5	8.1	8.0	8.1	8.4	8.1	8.2	8.7	8.3	8.4	8.4	8.2	8.3
6	8.1	8.0	8.1	8.4	8.0	8.1	8.9	8.5	8.6	8.4	8.2	8.3
7	8.2	8.0	8.1	8.4	8.1	8.1	9.0	8.6	8.7	8.4	8.2	8.3
8	8.2	8.0	8.1	8.8	8.1	8.2	9.0	8.6	8.8	8.3	8.2	8.3
9	8.3	8.1	8.2	8.6	8.4	8.5	8.9	8.6	8.8	8.3	8.2	8.3
10	8.4	8.2	8.2	8.6	8.3	8.4	8.9	8.6	8.8	8.5	8.3	8.3
11	8.2	7.8	8.1	8.7	8.3	8.5	9.0	8.6	8.7	8.6	8.3	8.4
12	7.8	7.7	7.7	8.7	8.3	8.5	9.0	8.6	8.8	8.7	8.5	8.6
13	7.8	7.7	7.7	8.7	8.4	8.5	9.0	8.6	8.8	8.7	8.5	8.6
14	7.9	7.7	7.8	8.7	8.5	8.5	8.9	8.5	8.7	8.7	8.5	8.6
15	7.8	7.6	7.7	8.8	8.5	8.6	8.9	8.6	8.7	8.6	8.4	8.6
16	7.8	7.6	7.7	8.8	8.5	8.6	9.0	8.7	8.8	8.6	8.4	8.5
17	7.7	7.6	7.7	8.7	8.4	8.5	9.0	8.6	8.8	8.6	8.4	8.4
18	7.8	7.6	7.7	8.7	8.4	8.5	8.9	8.4	8.7	8.6	8.4	8.5
19	7.9	7.7	7.8	8.7	8.5	8.6	8.9	8.4	8.6	8.6	8.4	8.5
20	8.0	7.9	7.9	8.7	8.5	8.6	8.7	8.3	8.5	8.7	8.5	8.5
21	8.1	7.9	8.0	8.7	8.5	8.6	8.4	8.1	8.2	8.7	8.5	8.6
22	8.1	8.0	8.0	8.6	8.3	8.5	8.3	8.1	8.1	8.8	8.6	8.7
23	8.2	8.1	8.1	8.6	8.2	8.3	8.4	8.2	8.2	8.8	8.6	8.7
24	8.3	8.1	8.2	8.6	8.3	8.4	8.5	8.2	8.3	8.7	8.5	8.7
25	8.3	8.1	8.2	8.8	8.5	8.6	8.5	8.2	8.3	8.8	8.5	8.6
26	8.3	8.1	8.2	8.6	8.3	8.5	8.5	8.2	8.3	8.8	8.4	8.6
27	8.4	8.2	8.3	8.3	8.2	8.3	8.4	8.2	8.3	8.8	8.5	8.6
28	8.4	8.2	8.3	8.4	8.2	8.3	8.3	8.1	8.2	8.8	8.5	8.7
29	8.4	8.2	8.3	8.6	8.3	8.4	8.2	8.0	8.0	8.7	8.5	8.6
30	8.4	8.2	8.4	8.7	8.3	8.5	8.0	7.9	8.0	8.7	8.4	8.6
31	---	---	---	8.6	8.3	8.4	8.3	7.9	8.1	---	---	---
MAX	8.4	8.2	8.4	8.8	8.5	8.6	9.0	8.7	8.8	8.8	8.6	8.7
MIN	7.7	7.6	7.7	8.3	7.9	8.1	8.0	7.9	8.0	8.3	8.2	8.3
YEAR	MAX	MAXIMUM	9.0	MIN	MAXIMUM	8.7	MEDIAN	MAXIMUM	8.8			
		MINIMUM	7.7		MINIMUM	7.4		MINIMUM	7.7			

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

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	14.6	13.8	14.2	15.2	13.9	14.8	5.8	5.4	5.6	5.3	4.5	4.9
2	14.1	13.0	13.6	16.4	15.2	15.6	5.6	5.2	5.5	7.1	5.3	6.2
3	13.3	12.6	12.9	16.9	15.7	16.2	5.5	4.9	5.1	10.3	7.1	10.0
4	13.7	12.6	13.0	17.0	15.8	16.3	5.1	4.7	4.8	10.1	6.5	8.2
5	14.9	13.1	13.8	17.0	15.9	16.5	6.0	5.1	5.6	6.5	4.7	5.5
6	15.6	14.0	14.6	15.9	13.7	14.9	6.2	5.9	6.0	4.7	2.4	3.6
7	16.0	14.1	14.9	13.7	11.6	12.8	6.0	5.3	5.6	2.4	1.5	1.8
8	16.8	14.7	15.5	11.6	9.5	10.7	5.6	5.1	5.3	1.9	1.5	1.7
9	17.1	15.4	16.1	9.6	8.4	9.1	7.0	5.6	6.2	2.1	1.8	1.9
10	18.0	16.2	16.9	9.5	8.2	8.7	8.0	7.0	7.5	2.4	1.7	2.0
11	19.2	17.0	17.8	10.7	8.9	9.8	8.0	6.6	7.4	2.7	1.9	2.3
12	19.5	18.0	18.6	12.5	10.7	11.9	6.6	5.1	5.7	3.8	2.7	3.2
13	18.8	17.1	17.8	12.0	9.7	10.5	5.1	3.6	4.2	3.9	3.8	3.8
14	17.4	15.8	16.8	9.7	7.9	8.6	3.6	3.3	3.5	4.0	3.5	3.8
15	15.8	14.1	14.7	7.9	7.5	7.7	3.7	3.4	3.5	4.0	3.4	3.7
16	14.1	13.1	13.6	8.8	7.8	8.3	4.6	3.5	4.1	3.6	2.8	3.0
17	14.0	13.4	13.6	10.3	8.8	9.4	4.6	3.8	4.2	3.0	2.6	2.7
18	13.7	12.7	13.2	11.8	10.0	11.0	3.8	3.4	3.6	3.6	3.0	3.4
19	13.9	12.7	13.2	12.8	11.8	12.4	3.6	3.3	3.4	3.3	2.3	2.7
20	14.6	13.2	13.8	12.4	11.3	11.6	3.4	2.8	3.1	2.4	1.7	2.1
21	15.0	14.3	14.6	11.4	10.5	11.0	3.2	2.6	3.0	2.5	2.0	2.2
22	14.4	13.3	14.0	11.8	10.9	11.3	4.4	3.2	3.6	2.7	1.9	2.3
23	13.9	12.8	13.3	12.9	11.8	12.4	6.0	4.4	5.3	1.9	0.9	1.2
24	13.3	12.2	12.7	13.0	9.8	11.7	6.0	4.7	5.3	2.3	1.0	1.6
25	13.1	12.2	12.6	9.8	7.9	8.5	4.7	3.4	4.0	1.5	0.3	0.9
26	13.1	12.5	12.8	7.9	7.3	7.6	3.4	2.8	3.2	1.9	0.3	1
27	12.5	11.2	11.7	8.3	7.6	8.0	3.5	2.7	3.2	2.7	1.9	2.3
28	11.2	10.5	10.7	8.3	7.2	7.9	4.4	3.2	3.7	2.0	0.8	1.3
29	11.1	10.4	10.7	7.2	5.5	6.2	5.9	4.4	5.0	1.5	1.0	1.3
30	12.1	10.7	11.3	5.7	5.0	5.3	6.0	5.5	5.8	1.2	0.4	0.9
31	13.9	12.1	13.0	---	---	---	5.5	4.6	5.0	1.3	0.3	0.6
MONTH	19.5	10.4	14.1	17.0	5.0	10.9	8.0	2.6	4.7	10.3	0.3	3.0

03271510 Great Miami River near Linden Avenue at Miamisburg, Ohio—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	10.2	9.6	9.8	---	---	---	12.6	12.4	12.5	13.2	13.1	13.2
2	10.7	9.6	10.1	---	---	---	12.5	12.3	12.4	13.2	12.3	12.7
3	10.8	9.8	10.2	---	---	---	13.4	12.3	12.8	12.3	10.9	11.0
4	10.8	9.6	10.1	11.8	9.4	10.2	13.5	13.3	13.4	12.2	10.9	11.6
5	10.9	9.4	9.9	11.1	9.4	9.9	13.4	13.0	13.2	13.2	12.2	12.7
6	11.0	9.1	9.8	10.6	9.5	10.0	13.3	12.9	13.1	14.2	13.2	13.7
7	11.1	9.0	9.7	12.9	10.2	11.2	13.5	13.2	13.3	14.7	14.2	14.5
8	11.5	8.9	9.9	14.2	11.1	12.3	13.7	13.3	13.5	14.7	14.5	14.5
9	12.0	8.8	10.0	14.9	12.1	13.0	13.4	12.8	13.2	14.5	14.3	14.5
10	12.1	8.6	9.8	15.2	12.4	13.3	12.8	12.1	12.5	14.3	14.2	14.3
11	12.8	8.4	9.9	12.7	11.3	12.1	12.8	12.1	12.4	14.4	14.1	14.2
12	12.6	8.1	9.7	11.3	10.4	10.8	13.5	12.8	13.1	14.1	13.7	13.9
13	13.3	8.2	10.0	11.9	10.7	11.4	14.1	13.4	13.8	13.7	13.6	13.6
14	9.2	8.4	8.6	13.1	11.9	12.4	14.1	13.9	14.1	13.8	13.5	13.7
15	9.1	8.4	8.8	13.3	12.6	12.8	14.3	13.9	14.0	13.9	13.5	13.7
16	9.4	8.9	9.2	12.9	12.2	12.5	13.9	13.4	13.7	14.3	13.8	14.0
17	9.9	9.4	9.6	13.9	11.8	12.6	13.7	13.3	13.5	14.2	13.9	14.1
18	10.7	9.8	10.2	12.4	11.0	11.6	13.7	13.5	13.6	13.9	13.6	13.7
19	11.2	10.1	10.5	12.0	10.6	11.0	13.9	13.6	13.8	14.3	13.6	14.0
20	11.5	10.0	10.5	11.1	10.9	11.0	14.5	13.9	14.2	14.7	14.2	14.4
21	10.7	9.4	9.9	11.5	11.1	11.3	14.8	14.3	14.5	14.4	13.9	14.2
22	11.3	9.3	10.0	11.7	11.0	11.3	14.4	13.9	14.2	14.2	13.9	14.1
23	12.1	9.7	10.5	11.5	10.6	11.0	13.9	13.0	13.4	14.7	14.1	14.3
24	12.8	10.0	11.0	11.1	10.3	10.7	13.6	13.0	13.2	14.6	14.2	14.4
25	12.3	10.3	10.9	12.8	11.1	12.0	14.2	13.6	13.9	14.8	14.2	14.5
26	10.3	9.8	10.1	13.3	12.2	12.6	14.6	14.2	14.4	14.7	14.2	14.5
27	10.7	9.9	10.3	12.3	11.5	12.0	14.8	14.5	14.6	14.2	13.9	14.0
28	10.9	10.5	10.7	11.8	11.3	11.5	14.6	14.1	14.4	14.8	14.0	14.5
29	10.6	9.0	10.1	12.5	11.8	12.2	14.1	12.6	13.5	15.0	14.3	14.6
30	9.0	7.4	8.2	12.7	12.4	12.6	12.8	12.5	12.7	15.2	14.4	14.7
31	7.4	6.5	7.1	---	---	---	13.2	12.8	13.0	15.5	14.7	15.0
MONTH	13.3	6.5	9.8	15.2	9.4	11.7	14.8	12.1	13.5	15.5	10.9	13.9

DAY	FEBRUARY			MARCH			APRIL			MAY		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
1	15.5	14.8	15.1	13.7	12.1	13.0	12.8	11.7	12.4	12.0	8.7	9.9
2	15.2	14.3	14.8	13.8	11.7	12.6	13.3	12.7	12.9	9.4	8.7	9.0
3	14.3	14.0	14.2	12.9	11.9	12.5	14.3	12.5	13.2	10.4	9.3	10.1
4	14.7	14.3	14.6	12.6	12.1	12.4	14.7	12.0	13.1	10.7	10.1	10.4
5	14.7	14.4	14.6	12.6	11.7	12.1	16.3	12.4	13.9	10.6	9.8	10.2
6	14.6	14.0	14.3	11.7	11.2	11.4	16.1	12.4	14.0	10.8	9.3	9.9
7	14.9	14.5	14.8	12.3	11.6	11.9	17.2	11.6	13.8	10.8	8.6	9.6
8	14.7	14.5	14.7	13.3	12.2	12.7	16.0	10.8	13.0	11.9	8.7	10.0
9	14.5	14.0	14.3	15.1	12.7	13.7	16.6	10.3	13.1	12.0	8.4	10
10	14.2	13.8	13.9	16.7	13.2	14.5	18.1	10.6	13.7	11.9	8.0	9.6
11	14.5	13.8	14.0	15.8	13.1	14.1	16.4	10.3	12.6	12.2	7.9	9.7
12	14.5	13.7	14.0	17.4	13.0	14.8	14.6	10.5	12.2	12.8	8.0	10.1
13	14.3	13.7	13.9	18.9	14.1	15.9	12.8	11.1	11.9	12.3	8.0	9.9
14	15.2	14.0	14.5	16.8	13.9	14.9	13.3	12.0	12.6	10.0	7.6	8.7
15	15.2	13.8	14.4	19.5	13.5	15.6	13.4	11.4	12.2	9.5	8.0	8.7
16	15.6	14.0	14.6	16.8	13.1	14.4	14.0	10.4	11.8	10.8	8.7	9.6
17	15.7	14.1	14.7	17.2	13.4	14.8	13.2	9.5	11.2	11.4	9.1	10.0
18	15.6	13.9	14.5	17.1	13.8	14.7	14.5	8.9	11.2	10.7	8.5	9.5
19	14.8	13.2	13.9	17.0	13.7	14.9	12.8	8.5	10.4	9.0	7.9	8.1
20	13.3	12.7	13.0	14.9	13.3	14.0	12.5	8.5	10.3	8.5	8.0	8.3
21	13.2	12.8	13.0	14.1	12.6	13.3	10.1	8.6	9.3	8.4	8.0	8.2
22	13.7	13.1	13.5	15.4	13.7	14.4	9.9	8.5	9.2	8.4	7.7	8.0
23	14.0	13.4	13.7	15.9	13.9	14.7	10.5	9.4	9.9	8.1	7.7	8.0
24	13.5	12.9	13.2	15.8	13.4	14.4	12.0	9.8	10.7	8.2	7.9	8.1
25	15.2	13.2	14.0	15.7	12.6	13.9	10.5	9.4	9.8	8.5	8.0	8.2
26	15.8	13.4	14.3	15.1	11.8	13.1	11.1	9.1	9.9	8.7	8.2	8.4
27	16.2	13.2	14.3	15.8	11.1	12.9	12.3	9.3	10.5	9.2	8.3	8.7
28	16.6	13.1	14.3	14.5	10.9	12.6	13.3	10.0	11.4	8.9	8.3	8.5
29	16.6	12.9	14.3	11.7	10.3	11.0	13.7	9.8	11.4	9.1	8.7	9.0
30	---	---	---	12.3	10.7	11.3	11.3	9.1	9.9	9.3	9.0	9.1
31	---	---	---	11.7	11.2	11.5	---	---	---	9.1	8.9	9.0
MONTH	16.6	12.7	14.2	19.5	10.3	13.5	18.1	8.5	11.7	12.8	7.6	9.2

03271601 Great Miami River below Miamisburg, Ohio

LOCATION.—Latitude 39°36'24", longitude 84°17'13", in sec. 23, R.5, T.2, Montgomery County, Hydrologic Unit 05080002, on right bank 50 ft below outflow and dam of Hutchings Power station, 0.3 mi upstream of Crains Run at south edge of Miamisburg, Ohio corporate boundary, and at mile 63.4.

DRAINAGE AREA.—2,715 mi².

PERIOD OF RECORD.—October 1991 to current year.

GAGE.—Water-stage recorder. Datum of gage is 670.00 ft above sea level.

REMARKS.—Records good except for periods of estimated record, which are fair. Diurnal fluctuation caused by powerplant at gage. Flood flow regulated by retarding dams on Mad River 22 mi upstream, Stillwater River 26 mi upstream, Great Miami River 26 mi upstream, and Loramie Creek 55 mi upstream.

COOPERATION.—Base data furnished by Miami Conservancy District.

REVISIONS.—Daily discharges for water year 2003 have been revised.

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1170	863	996	15800	1080	2730	3940	1290	1920	1440	1770	7240
2	1010	780	926	13400	1100	2660	3330	1420	1850	1410	4310	21700
3	896	719	892	8420	1190	2780	2810	1600	2410	1200	4990	28200
4	935	691	878	5650	2030	2760	2520	1770	2980	1640	10200	22100
5	1040	780	846	4430	3270	5730	4110	5290	3300	4200	11000	15000
6	778	968	854	3730	2850	12100	6690	7110	2700	7860	9740	11100
7	706	873	880	3020	2220	8440	5790	6910	2260	16100	6140	6680
8	662	816	818	2770	1700	6450	6510	6530	2340	23100	4810	4100
9	649	790	779	3210	1580	13500	6110	7040	2730	29200	3610	3290
10	645	2280	665	4480	1560	13800	4930	12500	2470	33900	2620	2780
11	597	8470	810	3850	1440	9430	4040	14100	3630	33200	2220	2450
12	618	4770	867	2740	1320	7280	3370	12800	3580	30600	1990	2140
13	621	3070	898	2120	1150	9210	2850	8740	4830	26200	1910	1960
14	613	2190	1370	2150	1170	15200	2500	6080	9530	17000	2080	1870
15	592	1700	1310	1800	1220	13600	2240	5900	9200	10000	2160	1800
16	586	1580	1130	1530	1110	11200	2120	5540	8920	8000	1740	1780
17	561	1370	1090	1570	1030	9370	1960	4830	6100	6080	1510	1710
18	547	1280	1250	1430	1100	7670	1970	4370	4360	4800	1400	1600
19	648	1180	3210	1410	1170	6250	1950	3670	4190	3890	1240	1550
20	634	1120	9470	1430	1210	5810	1900	3660	3530	3520	1090	1490
21	597	1100	7770	1390	1190	8000	2610	5390	2770	3300	1010	1430
22	572	1270	4730	1240	2840	11800	2100	4660	2320	6350	987	2010
23	568	1310	3170	1180	7310	9160	1890	3580	2000	10500	1030	2340
24	558	1260	2350	1110	7410	5760	1710	2900	1750	10800	1020	2010
25	1190	1260	2130	1100	5220	4550	1610	2490	1590	10700	964	1900
26	2110	1270	1840	1130	3860	5080	1650	2340	1530	8660	859	1750
27	1200	1260	1640	1070	3190	5640	1550	2180	1730	6460	1190	6530
28	990	1180	1510	1020	2950	4600	1500	2170	1500	5560	1750	9570
29	1310	1110	1470	1070	---	5460	1380	2140	1370	2990	1260	6270
30	1330	1060	3260	1080	---	5920	1330	1890	1290	1990	5950	4250
31	994	---	9820	1040	---	4820	---	2130	---	1680	7630	---
TOTAL	25927	48370	69629	97370	64470	236760	88970	153020	100680	332330	100180	178600
MEAN	836	1612	2246	3141	2302	7637	2966	4936	3356	10720	3232	5953
MAX	2110	8470	9820	15800	7410	15200	6690	14100	9530	33900	11000	28200
MIN	547	691	665	1020	1030	2660	1330	1290	1290	1200	859	1430
CFSM	0.31	0.59	0.83	1.16	0.85	2.81	1.09	1.82	1.24	3.95	1.19	2.19
IN.	0.36	0.66	0.95	1.33	0.88	3.24	1.22	2.10	1.38	4.55	1.37	2.45

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992-2003, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
MEAN	1222	1984	2477	3340	3024	4033	4721	4167	3424	3316	1600	1316
MAX	5359	6603	7690	7884	4820	7637	9141	11920	6770	10720	5404	5953
(WY)	2002	1994	1997	1996	1997	2003	2002	1996	1997	2003	1995	2003
MIN	402	403	553	867	842	1143	2124	1239	978	832	464	298
(WY)	2000	2000	2000	1992	1992	1992	1997	1992	1999	1999	1999	1999

SUMMARY STATISTICS

	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1992-2003
ANNUAL TOTAL	1116216	1496306	
ANNUAL MEAN	3058	4099	2885
HIGHEST ANNUAL MEAN			4283
LOWEST ANNUAL MEAN			1742
HIGHEST DAILY MEAN	24100	Apr 15	33900 Jul 10 2003
LOWEST DAILY MEAN	286	Sep 13	250 Sep 27 1999
ANNUAL SEVEN-DAY MINIMUM	368	Sep 8	265 Sep 23 1999
MAXIMUM PEAK FLOW			36200 Jul 10 2003
MAXIMUM PEAK STAGE		18.62	Jul 10 2003
INSTANTANEOUS LOW FLOW		468	Oct 18 122 Aug 25 2000
ANNUAL RUNOFF (CFSM)	1.13	1.51	1.06
ANNUAL RUNOFF (INCHES)	15.29	20.50	14.44
10 PERCENT EXCEEDS	8030	9450	6760
50 PERCENT EXCEEDS	1640	2140	1500
90 PERCENT EXCEEDS	563	879	522

03271601 Great Miami River below Miamisburg, Ohio—Continued

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	3110	2790	13200	5760	e1500	2510	5700	2150	8910	1680	1530	972			
2	2580	2530	8400	7610	e1700	4060	4390	5940	6690	1590	1280	844			
3	2280	2380	5650	14100	e2800	5140	3620	10000	4870	1520	1120	829			
4	2190	2200	4660	24600	4690	4330	3070	6620	24600	1500	1350	780			
5	2040	2090	4520	35300	4190	5150	2710	4570	2850	1450	1450	800			
6	1910	1960	6030	32200	10400	6720	2420	3480	2370	1390	1170	713			
7	1810	1830	6240	23600	10000	4850	2150	2930	2140	1350	1120	668			
8	1690	1750	5000	16200	5830	3640	1980	2560	1920	1290	972	693			
9	1600	1620	4230	12100	4100	3040	1900	2360	1740	1210	884	662			
10	e1500	1530	4170	7230	3810	2610	1800	2100	1700	1200	832	640			
11	e1400	1530	5930	4860	3700	2270	1700	1920	7220	1220	808	679			
12	e1350	4320	6200	4560	3460	2090	1650	1820	14600	1360	758	624			
13	e1300	5050	4810	4300	3360	2020	2030	1770	12900	1200	723	614			
14	e2100	3780	3990	4150	2880	1890	4060	2010	11600	1100	709	582			
15	e6800	3050	3580	3930	2500	1780	2990	2070	12600	1040	694	602			
16	e8200	2510	3370	3670	2490	1910	2300	2220	14400	971	697	650			
17	5220	2240	5130	3150	2230	1970	1970	2150	17000	1150	703	673			
18	3800	2170	5590	3870	2050	2010	1790	2170	16100	1310	719	632			
19	3090	3220	4280	3420	2030	2320	1670	8430	11800	1350	684	608			
20	2590	6950	3530	2720	3800	3680	1690	7020	6520	1180	925	643			
21	2260	4940	3020	2400	6550	5140	1830	5480	4800	1040	2310	624			
22	2010	3470	2740	e2200	5750	4730	2350	7810	e4000	e1550	1810	590			
23	1890	2830	3220	e2000	3960	3480	3530	7540	e3200	e1400	1420	580			
24	1790	2960	10300	e1900	3620	2800	2930	5720	2790	e1600	1130	536			
25	1670	3370	9860	e1800	3600	2480	3270	4150	3420	e1400	1060	529			
26	3200	3230	6350	e1800	2990	2290	3010	3460	2660	e1150	909	533			
27	6050	5890	4730	e2000	2600	2580	2470	3650	2350	e1200	769	540			
28	4850	20400	3910	e2200	2390	4190	2150	14500	2110	e1100	1090	532			
29	3740	22100	3600	e2000	2290	3690	1960	7230	1920	1020	2330	546			
30	3210	18100	6940	e1800	---	4380	2070	5400	1820	984	1080	584			
31	2830	---	8050	e1600	---	6610	---	11600	---	2530	1170	---			
TOTAL	90060	142790	171230	239030	111270	106360	77160	150830	190810	41035	34206	19502			
MEAN	2905	4760	5524	7711	3837	3431	2572	4865	6360	1324	1103	650			
MAX	8200	22100	13200	35300	10400	6720	5700	14500	17000	2530	2330	972			
MIN	1300	1530	2740	1600	1500	1780	1650	1770	1700	971	684	529			
CFSM	1.07	1.75	2.03	2.84	1.41	1.26	0.95	1.79	2.34	0.49	0.41	0.24			
IN.	1.23	1.96	2.35	3.28	1.52	1.46	1.06	2.07	2.61	0.56	0.47	0.27			
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992-2004, BY WATER YEAR (WY)															
MAX (WY)	5359	6603	7690	7884	4820	7637	9141	11920	6770	10720	5404	5953			
MIN (WY)	2002	1994	1997	1996	1997	2003	2002	1996	1997	2003	1995	2003			
MAX (WY)	402	403	553	867	842	1143	2124	1239	978	832	464	298			
MIN (WY)	2000	2000	2000	1992	1992	1992	1997	1992	1999	1999	1999	1999			
SUMMARY STATISTICS															
ANNUAL TOTAL				FOR 2003 CALENDAR YEAR				FOR 2004 WATER YEAR				WATER YEARS 1992-2004			
ANNUAL MEAN				1756460				1374283							
HIGHEST ANNUAL MEAN				4812				3755				2952			
LOWEST ANNUAL MEAN												4283			
HIGHEST DAILY MEAN				33900				Jul 10				35300			
LOWEST DAILY MEAN				859				Aug 26				250			
ANNUAL SEVEN-DAY MINIMUM				994				Aug 20				542			
MAXIMUM PEAK FLOW												39700			
MAXIMUM PEAK STAGE												19.71			
INSTANTANEOUS LOW FLOW												427			
ANNUAL RUNOFF (CFSM)				1.77								1.38			
ANNUAL RUNOFF (INCHES)				24.07								18.83			
10 PERCENT EXCEEDS				9920								7220			
50 PERCENT EXCEEDS				3050								2400			
90 PERCENT EXCEEDS				1310								806			

e Estimated.

03272000 Twin Creek near Germantown, Ohio

LOCATION.—Latitude 39°38'16", longitude 84°24'14", in NW ¼ sec. 11, T.3 N., R.4 E., Montgomery County, Hydrologic Unit 05080002, on left bank upstream side of Germantown Dam, 1.5 mi northwest of Germantown, Ohio, and 3.3 mi upstream from Little Twin Creek.

DRAINAGE AREA.—275 mi².

PERIOD OF RECORD.—April 1914 to December 1923, December 1926 to current year.

REVISED RECORDS.—WSP 403: 1914(M). WSP 1385: 1915(M).

GAGE.—Water-stage recorder. Datum of gage is 724.00 ft, National Geodetic Vertical Datum of 1912. Prior to Dec. 18, 1926, nonrecording gage at site 1.3 mi downstream at datum 11.27 ft lower. Dec. 1926 to Oct. 2003 at site 0.3 mi downstream at datum 23.76 ft lower.

REMARKS.—Records good except for periods of estimated record, which are poor. Flood flow regulated by Germantown retarding basin, 0.3 mi upstream, beginning in 1920.

COOPERATION.—Base data furnished by Miami Conservancy District.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 9,390 ft³/s July 8, 1915, gage height 11.7 ft, from graph based on gage readings, site and datum then in use.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Mar. 25, 1913, reached a stage of 18.3 ft, original site and datum; discharge, 66,000 ft³/s, computed by Miami Conservancy District.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
1	144	324	693	473	e62	202	560	380	1880	85	98	24			
2	123	412	459	1200	e60	382	388	2330	657	79	60	22			
3	108	353	339	2530	e900	323	332	1350	421	76	47	22			
4	102	282	277	5720	e700	297	266	617	308	102	46	21			
5	99	244	395	7620	e360	346	202	400	256	92	49	20			
6	87	193	777	6770	e2000	332	172	295	205	78	44	19			
7	81	153	498	e2000	964	247	161	247	166	73	38	19			
8	75	129	369	e700	319	198	152	212	141	66	33	18			
9	69	111	297	e450	e220	169	138	176	123	59	31	18			
10	66	101	400	e300	e320	148	122	154	115	58	30	17			
11	64	107	722	e260	e420	138	113	136	1560	57	28	17			
12	60	755	421	e220	e320	133	111	123	4260	58	26	17			
13	57	615	287	e210	e260	120	131	116	1420	83	24	15			
14	398	297	264	e200	e210	115	534	114	1170	59	22	15			
15	995	236	231	e190	e170	114	318	118	735	49	e22	15			
16	469	212	282	e180	e140	129	231	122	1240	44	21	14			
17	278	181	882	220	e130	132	177	113	2290	49	20	14			
18	208	168	467	e500	e110	128	151	155	855	54	20	14			
19	172	727	316	e330	e130	223	132	1700	483	44	19	13			
20	147	634	e220	e200	e200	572	129	919	317	40	22	13			
21	131	337	e190	e160	411	715	137	436	250	37	186	13			
22	125	266	e180	e140	e250	397	232	292	225	120	106	12			
23	114	236	477	e130	e210	283	715	245	189	127	57	12			
24	106	308	1650	e100	e240	239	385	186	141	63	41	12			
25	97	389	657	e78	e230	215	421	150	473	46	34	12			
26	885	271	366	e74	e200	196	423	138	218	42	32	11			
27	688	1400	e240	e72	e170	194	283	220	159	46	30	11			
28	369	4630	e220	e70	161	190	206	4220	123	47	29	11			
29	284	2430	e240	e68	158	184	153	3260	107	43	32	10			
30	e260	1060	1630	e66	---	241	211	1270	94	40	28	10			
31	e240	---	800	e64	---	534	---	3920	---	128	26	---			
TOTAL	7101	17561	15246	31295	10025	7836	7686	24114	20581	2044	1301	461			
MEAN	229	585	492	1010	346	253	256	778	686	65.9	42.0	15.4			
MAX	995	4630	1650	7620	2000	715	715	4220	4260	128	186	24			
MIN	57	101	180	64	60	114	111	113	94	37	19	10			
CFSM	0.83	2.13	1.79	3.67	1.26	0.92	0.93	2.83	2.49	0.24	0.15	0.06			
IN.	0.96	2.38	2.06	4.23	1.36	1.06	1.04	3.26	2.78	0.28	0.18	0.06			
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921-2004, BY WATER YEAR (WY)															
MEAN	65.1	161	302	445	444	519	482	355	248	137	71.5	47.4			
MAX	718	978	1398	2669	1214	1304	1421	1723	1237	882	636	509			
(WY)	1987	1986	1991	1937	1950	1978	1922	1996	1958	1929	1979	1950			
MIN	4.07	5.24	5.19	9.23	20.1	54.7	69.5	26.4	14.1	8.46	5.77	3.79			
(WY)	1945	1945	1945	1945	1935	1954	1941	1934	1934	1930	1988	1953			
SUMMARY STATISTICS															
ANNUAL TOTAL				FOR 2003 CALENDAR YEAR				FOR 2004 WATER YEAR				WATER YEARS 1921 - 2004			
ANNUAL MEAN				160761				145251							
HIGHEST ANNUAL MEAN				440				397				271			
LOWEST ANNUAL MEAN												493			
HIGHEST DAILY MEAN				4630				Nov 28				7620			
LOWEST DAILY MEAN				35				Feb 22				10			
ANNUAL SEVEN-DAY MINIMUM				41				Feb 16				11			
MAXIMUM PEAK FLOW												7830			
MAXIMUM PEAK STAGE												48.38			
INSTANTANEOUS LOW FLOW												10			
ANNUAL RUNOFF (CFSM)				1.60				1.44				0.98			
ANNUAL RUNOFF (INCHES)				21.75				19.65				13.37			
10 PERCENT EXCEEDS				983				762				600			
50 PERCENT EXCEEDS				208				178				84			
90 PERCENT EXCEEDS				57				23				13			

e Estimated.

03272100 Great Miami River at Middletown, Ohio

LOCATION.—Latitude 39°31'12", longitude 84°24'51", Butler County, Hydrologic Unit 05080002, on downstream side of Central Avenue bridge on State Route 122, 1.9 mi downstream from Browns Run, and on northwest side of city of Middletown, Ohio.

DRAINAGE AREA.—3,134 mi².

PERIOD OF RECORD.—July 1994 to current year.

GAGE.—Water-stage recorder. Datum of gage is 626 ft above sea level (levels by Miami Conservancy District).

REMARKS.—Records fair except for periods of estimated record, which are poor. Some regulation and diversion at low flow by industrial plants upstream from station. Flood flow regulated by five retarding basins upstream from station (see REMARKS for station numbers 03271500 and 03272000). Water-temperature data formerly collected at this site.

COOPERATION.—Base data furnished by Miami Conservancy District.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2760	2340	13900	6970	e2300	3680	7190	3370	11400	2470	2360	1120
2	2120	2230	9570	8430	e2600	5110	5940	8080	8130	2330	1890	962
3	1780	2010	6800	17300	e4000	6300	5200	11000	6350	2200	1800	926
4	1690	1820	5860	33800	6500	5670	4540	8050	5340	2150	1950	888
5	1580	1710	5660	42700	5550	5930	4010	6200	4270	2160	2190	838
6	1450	1580	6980	37800	12500	7600	3680	5210	3600	2110	1700	787
7	1380	1470	7310	25700	11500	6120	3210	4470	3280	2000	1670	700
8	1290	1350	6130	16100	7190	5090	2850	3970	2990	1930	1520	740
9	1200	1230	5440	12000	5560	4380	2740	3660	2730	1820	1390	724
10	1130	1140	e6200	8360	5410	3880	2580	3350	2610	1790	e1200	689
11	1090	1110	6910	6360	5410	3430	2460	3080	8140	1840	e1150	723
12	1040	4560	7280	6040	5020	3220	2350	2900	18900	2030	e1050	694
13	1000	e5400	5970	5790	4850	2990	2870	2760	13700	1870	e960	659
14	1990	3830	5230	5610	4340	2810	5750	3130	12200	1700	e880	667
15	7230	2830	4820	5410	3810	2750	4520	3150	12900	1570	e840	636
16	9000	2190	4500	5160	3750	2910	3460	3420	14400	1470	e800	645
17	5550	1870	6260	4650	e3700	3060	2910	3260	19300	1630	e820	661
18	3590	1710	6860	5520	3150	3040	2600	3210	17200	1810	e840	629
19	2740	2890	5610	5070	3050	3550	2380	9340	12900	1920	e800	592
20	2170	7510	4840	4210	4460	4850	2460	8710	7780	1730	1200	604
21	1830	5410	4200	3680	7280	6530	2560	6850	6180	1580	3130	617
22	1590	3350	3860	e3400	6980	6190	3290	7950	5390	2210	2710	572
23	1420	2480	4140	e3100	5410	5000	5760	8450	4800	2050	2150	555
24	1370	2650	11100	e2900	5010	4140	4440	6810	4170	2220	e1700	554
25	1240	3200	10900	e2800	5040	3730	4880	5470	4880	1940	e1300	517
26	3040	3070	7480	e2700	4390	3450	4690	4670	3940	1630	e1100	509
27	6380	5740	5900	e2900	3900	3710	3770	4330	3440	1690	e900	504
28	5110	25000	5170	e3300	3620	5200	3220	17900	3070	1600	e1200	498
29	3570	25400	4760	e3000	3480	5010	2860	10900	2760	1490	e2700	502
30	2870	19700	8190	e2700	---	5670	3030	7070	2630	1460	1310	558
31	2430	---	9370	e2500	---	7810	---	15200	---	3510	1280	---
TOTAL	82630	146780	207200	295960	149760	142810	112200	195920	229380	59910	46490	20270
MEAN	2665	4893	6684	9547	5164	4607	3740	6320	7646	1933	1500	676
MAX	9000	25400	13900	42700	12500	7810	7190	17900	19300	3510	3130	1120
MIN	1000	1110	3860	2500	2300	2750	2350	2760	2610	1460	800	498
CFSM	0.85	1.56	2.13	3.05	1.65	1.47	1.19	2.02	2.44	0.62	0.48	0.22
IN.	0.98	1.74	2.46	3.51	1.78	1.70	1.33	2.33	2.72	0.71	0.55	0.24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994-2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1653	1778	3431	4342	3857	4971	5385	6051	4894	2796	1736	1387
MAX	6589	4893	8508	9547	5289	9319	11390	13960	7646	10250	5726	5894
(WY)	2002	2004	1997	2004	1999	2003	2002	1996	2004	2003	1995	2003
MIN	352	369	560	1220	1370	1739	2306	1637	1168	918	456	282
(WY)	2000	2000	2000	2000	1995	2001	1997	1999	1999	1999	1999	1999

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1994-2004

ANNUAL TOTAL	1979953	1689310										
ANNUAL MEAN	5425	4616								3539		
HIGHEST ANNUAL MEAN										4869		2002
LOWEST ANNUAL MEAN										1958		2000
HIGHEST DAILY MEAN			38000		Jul 10		42700	Jan 5		42700	Jan 5	2004
LOWEST DAILY MEAN			919		Sep 21		498	Sep 28		220	Sep 16	1999
ANNUAL SEVEN-DAY MINIMUM			1060		Sep 15		520	Sep 23		236	Sep 15	1999
MAXIMUM PEAK FLOW							49900	Jan 5		49900	Jan 5	2004
MAXIMUM PEAK STAGE							14.06	Jan 5		14.06	Jan 5	2004
INSTANTANEOUS LOW FLOW							224	Sep 15		110	Oct 8	1999
ANNUAL RUNOFF (CFSM)				1.73			1.47			1.13		
ANNUAL RUNOFF (INCHES)				23.50			20.05			15.34		
10 PERCENT EXCEEDS			11000				8240			8320		
50 PERCENT EXCEEDS			3380				3280			1900		
90 PERCENT EXCEEDS			1340				961			568		

e Estimated.

03272700 Sevenmile Creek at Camden, Ohio

LOCATION.—Latitude 39°37'45", longitude 84°38'40", Preble County, Hydrologic Unit 05080002, on downstream right bank of bridge on State Highway 725 in Camden, Ohio, 0.3 mi downstream from Beasley Run, and at mile 16.2.

DRAINAGE AREA.—69.0mi².

PERIOD OF RECORD.—December 1970 to September 2000, October 2000 to September 2002 (recording crest-stage gage), October 2002 to current year.

GAGE.—Water-stage recorder. Datum of gage is 818.57 ft above sea level (levels by Miami Conservancy District). Prior to Oct. 1, 1975 at same site, datum 3.02 ft higher.

REMARKS.—Records fair except for periods of estimated record, which are poor. Water-quality data formerly collected at this site.

COOPERATION.—Base data furnished by Miami Conservancy District.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
1	29	58	110	80	e19	59	75	223	244	38	29	6.2			
2	25	73	79	284	e22	84	66	651	e150	36	21	5.9			
3	23	58	66	1030	e22	65	59	281	e120	35	18	6.1			
4	23	50	59	4860	e100	65	51	147	e100	46	18	6.2			
5	21	44	112	e2300	117	73	45	100	e80	35	17	5.7			
6	19	38	142	e1000	606	65	43	78	e66	33	14	5.3			
7	19	34	87	e500	151	54	42	66	e56	32	13	5.2			
8	17	30	71	e330	68	49	41	57	e46	31	12	5.1			
9	16	27	62	e240	e54	46	38	53	e40	30	11	5.2			
10	15	27	106	e170	e66	41	e36	48	e200	29	10	5.4			
11	15	29	115	e110	e80	41	e35	45	e980	31	9.3	5.0			
12	15	121	75	e80	e70	39	e33	43	532	34	8.4	4.8			
13	14	71	61	e60	e56	37	e84	42	195	32	7.5	4.5			
14	191	50	60	e54	e46	37	e74	42	140	32	7.2	4.5			
15	165	45	51	e50	e40	37	67	46	89	30	7.2	4.5			
16	71	41	79	e48	e37	42	54	43	387	29	7.1	4.2			
17	50	36	128	e46	e34	40	48	40	446	28	7.1	4.2			
18	40	42	76	e139	e32	41	44	54	168	28	7.1	4.6			
19	35	203	62	e56	e44	63	42	331	98	27	6.9	4.1			
20	30	114	51	e46	e70	148	42	135	70	25	19	3.8			
21	28	73	46	e36	92	138	50	82	60	24	36	3.8			
22	26	59	46	e32	58	79	80	62	59	125	13	3.8			
23	24	51	153	e30	56	63	162	52	49	66	9.6	3.5			
24	22	99	231	e28	63	57	85	50	49	34	8.6	3.5			
25	22	85	99	e26	57	51	104	44	326	27	8.0	3.5			
26	292	65	70	e25	50	49	91	49	82	25	8.1	3.3			
27	128	635	59	e24	47	53	68	65	57	27	7.8	3.2			
28	76	953	54	e23	44	50	56	380	48	24	7.2	3.2			
29	66	356	74	e22	45	51	49	140	43	21	7.1	3.2			
30	54	173	306	e21	---	66	120	85	39	19	9.1	4.2			
31	46	---	117	e20	---	92	---	896	---	52	6.7	---			
TOTAL	1617	3740	2907	11770	2246	1875	1884	4430	5019	1085	371.0	135.7			
MEAN	52.2	125	93.8	380	77.4	60.5	62.8	143	167	35.0	12.0	4.52			
MAX	292	953	306	4860	606	148	162	896	980	125	36	6.2			
MIN	14	27	46	20	19	37	33	40	39	19	6.7	3.2			
CFSM	0.76	1.81	1.36	5.50	1.12	0.88	0.91	2.07	2.42	0.51	0.17	0.07			
IN.	0.87	2.02	1.57	6.35	1.21	1.01	1.02	2.39	2.71	0.58	0.20	0.07			
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971-2004, BY WATER YEAR (WY)															
MEAN	18.5	56.6	85.5	96.4	109	137	125	112	69.6	39.5	18.2	10.6			
MAX	126	266	281	380	276	344	323	421	269	210	91.6	60.4			
(WY)	1987	1986	1991	2004	1975	1978	1996	1989	1998	2003	1979	2003			
MIN	3.31	3.77	4.58	3.46	19.2	24.9	25.2	11.3	3.84	4.27	2.95	1.68			
(WY)	1998	2000	1977	1977	1978	1992	1976	1976	1988	1975	1975	1991			
SUMMARY STATISTICS															
ANNUAL TOTAL				FOR 2003 CALENDAR YEAR				FOR 2004 WATER YEAR				WATER YEARS 1971-2004			
ANNUAL MEAN				43431.7				37079.7				73.5			
HIGHEST ANNUAL MEAN				119				101				117			
LOWEST ANNUAL MEAN												28.0			
HIGHEST DAILY MEAN				2720				Jun 15				4860			
LOWEST DAILY MEAN				9.7				Aug 26				3.2			
ANNUAL SEVEN-DAY MINIMUM				11				Aug 20				3.3			
MAXIMUM PEAK FLOW												11100			
MAXIMUM PEAK STAGE												15.13			
INSTANTANEOUS LOW FLOW												1.2			
ANNUAL RUNOFF (CFSM)				1.72								1.47			
ANNUAL RUNOFF (INCHES)				23.42								19.99			
10 PERCENT EXCEEDS				250								156			
50 PERCENT EXCEEDS				55								48			
90 PERCENT EXCEEDS				19								7.2			

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.

e Estimated.

03274000 Great Miami River at Hamilton, Ohio

LOCATION.—Latitude 39°23'28", longitude 84°34'20", in NE ¼ sec. 6, T.1 N., R.3 E., Butler County, Hydrologic Unit 05080002, on right bank 1,000 ft downstream from Columbia Bridge at Hamilton, Ohio, 3 mi downstream from Four Mile Creek, 4.3 mi upstream from Pleasant Run, and at mile 34.8.

DRAINAGE AREA.—3,630 mi².

PERIOD OF RECORD.—January 1907 to June 1909 (fragmentary), January 1910 to September 1918, April 1927 to current year. Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected at site 0.7 mi upstream since 1911 are contained in reports of National Weather Service. Prior to October 1962 published as Miami River at Hamilton.

REVISED RECORDS.—WSP 803: 1936. WSP 1908: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 499.98 ft, National Geodetic Vertical Datum of 1912. Prior to Apr. 12, 1927, nonrecording gage at site 0.7 mi upstream at datum 64.65 ft higher.

REMARKS.—Records good except for periods of estimated record, which are fair. Some regulation and diversion at low flow by industrial plants upstream from station. Flood flow regulated by five retarding basins upstream from station beginning in 1920 (see REMARKS for station numbers 03271500 and 03272000). The Miami and Erie Canal diverted water from the basin 1.7 mi upstream from station until Nov. 1, 1930, when the canal was abandoned; amount of diversion not known. Water-temperature data formerly collected at this site.

COOPERATION.—Base data furnished by Miami Conservancy District.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of Mar. 26, 1913, reached a stage of 38.5 ft, site and datum then in use; discharge, 352,000 ft³/s, computed by Miami Conservancy District.

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

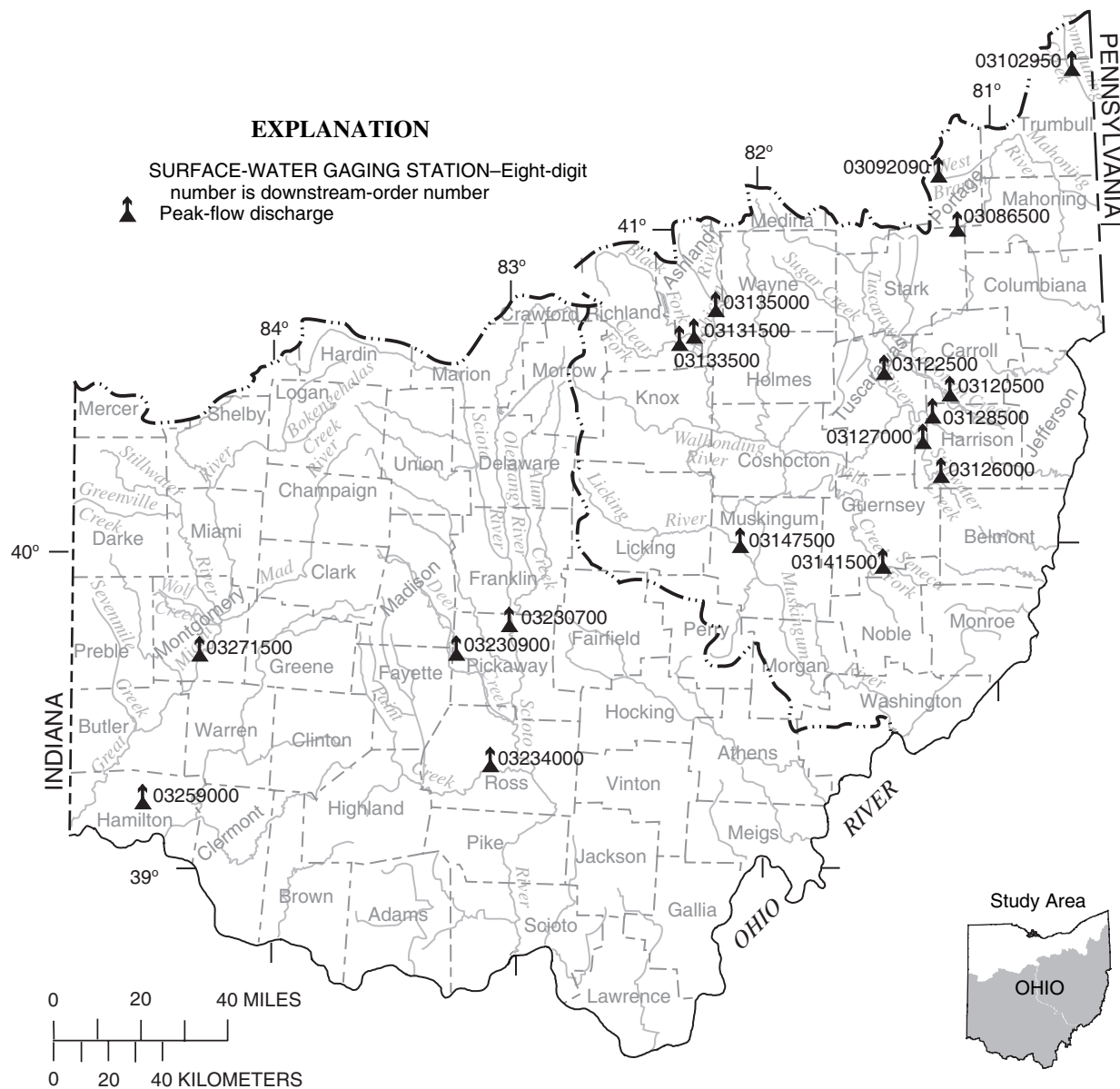
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP						
1	3720	3120	15300	7640	e2400	3580	7330	3840	13500	2520	2770	1100						
2	3000	3160	10800	9270	e2600	4810	5720	10400	8680	2370	2030	937						
3	2630	2850	7310	19100	6060	6330	4700	13400	6570	2280	1860	885						
4	2490	2600	6090	43500	7720	5740	4000	9310	5350	2240	1900	875						
5	2370	2440	5810	57500	6020	5610	3440	6450	4400	2300	2460	797						
6	2170	2310	7230	39000	15700	7650	3140	4990	3590	2170	1790	776						
7	2080	2180	7840	27800	14100	6240	2880	4080	3250	2150	1200	697						
8	1960	2030	6510	18100	8250	4970	2670	3530	3080	2070	1050	755						
9	1860	1890	5670	13400	6030	4270	2560	3190	2820	1990	942	756						
10	1770	1790	5640	9590	5910	3770	2410	2920	2700	2090	913	e730						
11	1710	1760	7230	6960	5980	3320	2290	2610	5830	2180	866	e800						
12	1660	5620	7740	6400	5400	3050	2160	2440	20600	2260	774	e780						
13	1570	6540	6280	6020	5140	2840	2770	2330	15300	2120	707	e760						
14	2020	4860	5290	5710	4550	2710	6630	2610	13400	1960	e680	e740						
15	7300	3810	4860	5470	3960	2620	4810	2690	13800	1720	e660	666						
16	9230	3160	4560	5130	3760	2800	3540	3010	15300	1590	e720	634						
17	6340	2770	6190	4720	3470	3020	2910	2800	20900	1740	785	651						
18	4440	2550	7360	6100	3200	2980	2630	2720	18800	1990	719	671						
19	3580	3900	5870	5410	3100	3470	2410	9440	14700	2130	690	623						
20	3000	7510	4950	4430	3940	4330	2340	10200	8500	1930	816	600						
21	2600	6380	4310	3870	7290	6420	2540	7380	6380	1760	2030	632						
22	2360	4410	3940	e3500	7410	6200	3150	7160	5340	2850	2160	618						
23	2130	3530	4140	e3300	5510	4870	7070	8850	4750	2800	1630	583						
24	2050	3630	11100	e3100	4910	4050	4760	6640	4160	2380	1270	592						
25	1900	4220	12100	e3000	4930	3590	5330	5040	4910	2170	1060	555						
26	3710	4150	8150	e3000	4400	3300	5250	e5000	4380	1840	1110	548						
27	6770	5800	6160	e3200	3870	3460	3880	e14500	3710	1830	838	536						
28	6020	25100	5180	e3300	3540	4530	3260	16500	3280	1770	762	523						
29	4580	25800	4750	e3000	3370	4730	2870	12300	2970	1660	2200	527						
30	3800	20600	8760	e2800	---	5360	3120	7430	2720	1620	1470	571						
31	3350	---	10300	e2600	---	8150	---	15700	---	3960	1170	---						
TOTAL	104170	170470	217420	335920	162520	138770	112570	209460	243670	66440	40032	20918						
MEAN	3360	5682	7014	10840	5604	4476	3752	6757	8122	2143	1291	697						
MAX	9230	25800	15300	57500	15700	8150	7330	16500	20900	3960	2770	1100						
MIN	1570	1760	3940	2600	2400	2620	2160	2330	2700	1590	660	523						
CFSM	0.93	1.57	1.93	2.99	1.54	1.23	1.03	1.86	2.24	0.59	0.36	0.19						
IN.	1.07	1.75	2.23	3.44	1.67	1.42	1.15	2.15	2.50	0.68	0.41	0.21						
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927-2004, BY WATER YEAR (WY)																		
MEAN	1137	1992	3353	4964	5158	6046	5863	4364	3321	2287	1416	1047						
MAX	6728	10060	13280	29460	14410	15590	13760	17390	14860	10100	7613	6861						
(WY)	1987	1973	1991	1937	1950	1963	1964	1996	1958	2003	1979	2003						
MIN	279	286	323	434	502	826	1219	602	445	335	391	319						
(WY)	1964	1935	1935	1977	1964	1941	1941	1934	1934	1936	1936	1963						
SUMMARY STATISTICS				FOR 2003 CALENDAR YEAR				FOR 2004 WATER YEAR				WATER YEARS 1927-2004						
ANNUAL TOTAL				2112830				1822360										
ANNUAL MEAN				5789				4979										
HIGHEST ANNUAL MEAN												5778	1973					
LOWEST ANNUAL MEAN												931	1954					
HIGHEST DAILY MEAN				35200				Jul 10				57500	Jan 5	73900	Jan 22	1959		
LOWEST DAILY MEAN				1290				Aug 27				523	Sep 28	155	Sep 27	1941		
ANNUAL SEVEN-DAY MINIMUM				1390				Jan 27				550	Sep 24	201	Sep 26	1941		
MAXIMUM PEAK FLOW								73500				Jan 5				108000	Jan 21	1959
MAXIMUM PEAK STAGE								75.84				Jan 5				79.47	Jan 21	1959
INSTANTANEOUS LOW FLOW																155	Sep 27	1941
ANNUAL RUNOFF (CFSM)				1.59												0.94		
ANNUAL RUNOFF (INCHES)				21.65												18.68		
10 PERCENT EXCEEDS				11800												7790		
50 PERCENT EXCEEDS				3800												1660		
90 PERCENT EXCEEDS				1660												511		

e Estimated.

Discharge at Partial-Record Stations and Miscellaneous Sites

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 USGS collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or flood-flow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at crest-stage partial-record stations are presented in the following table. Discharge measurements made at low-flow partial-record sites and at miscellaneous sites for special studies are given in separate tables in Volume 2 of this report.



The following table contains annual maximum discharge for crest-stage stations. A crest-stage gage is a device that will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

MEASUREMENTS OF DISCHARGE AT MISCELLANEOUS SITES

[mi², square miles; ft, feet; ft³/s, cubic feet per second; ≠, operated as a continuous-record gaging station]

Location	Drainage area (mi ²)	Period of record	Water year 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)
BEAVER RIVER BASIN								
3086500 Mahoning River at Alliance, Ohio								
Latitude 40°55'58", longitude 81°05'41", Stark County, Hydrologic Unit 05030103, on right bank 15 ft upstream from Webb Avenue bridge in Alliance, 0.2 mi upstream from water works dam, and 4 mi upstream from Beach Creek.	89.2	1941-93 1994-04	07/09/04	8.09	7,380	01/21/59	9.11	9,740
03092090 West Branch Mahoning River near Ravenna, Ohio								
Latitude 41°09'41", longitude 81°11'50", Portage County, Hydrologic Unit 05030103, on left bank at downstream side of bridge on Newton Falls Road, 2.5 mi east of Ravenna.	21.8	1965-93≠ 1994-04	05/22/04	7.98	1,800	07/22/03	10.76	4,810
03102950 Pymatuning Creek at Kinsman, Ohio								
Latitude 41°26'34", longitude 80°35'18", Trumbull County, Hydrologic Unit 05030102, on left bank at downstream side of bridge on State Highway 7 at Kinsman, 0.8 mi downstream from Sugar Creek, and 1.2 mi upstream from Stratton Creek.	96.7	1966-94≠ 1995-04	09/09/04	12.57	3,030	09/09/04	12.57	3,030
MUSKINGUM RIVER BASIN								
03120500 McGuire Creek below Leesville Dam, near Leesville, Ohio								
Latitude 40°28'13", longitude 81°11'48", Carroll County, Hydrologic Unit 05040001, on left bank at outlet of Leesville Dam, 1.3 mi upstream from mouth, and 1.4 mi northeast of Leesville.	48.3	1938-91≠ 1992-04	09/10/04	6.57	558	03/04/40	7.88	740
03122500 Tuscarawas River below Dover Dam, near Dover, Ohio								
Latitude 40°31'47", longitude 81°25'48", Tuscarawas County, Hydrologic Unit 05040001, on left bank at downstream side of bridge on State Highway 416, 2.2 mi downstream from Dover Dam, 1.5 mi east of Dover, and 3.4 mi upstream from Sugar Creek.	1,405	1923-91≠ 1992-04	05/19/04	7.21	4,810	01/26/37	15.51	26,400

MEASUREMENTS OF DISCHARGE AT MISCELLANEOUS SITES—Continued

[mi², square miles; ft, feet; ft³/s, cubic feet per second; ≠, operated as a continuous-record gaging station]

Location	Drainage area (mi ²)	Period of record	Water year 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)
MUSKINGUM RIVER BASIN—Continued								
03126000 Stillwater Creek at Piedmont, Ohio								
Latitude 40°11'41", longitude 81°12'56", Harrison County, Hydrologic Unit 05040001, on left bank 400 ft downstream from outlet of Piedmont Dam and Boggs Fork, and 0.7 mi northwest of Piedmont.	122	1938-91≠ 1992-04	09/09/04	11.98	1,520	09/09/04	11.98	1,520
03127000 Stillwater Creek at Tippecanoe, Ohio								
Latitude 40°16'13", longitude 81°17'26", Harrison County, Hydrologic Unit 05040001 on left bank downstream side of highway bridge at Tippecanoe, 0.4 mi downstream from Brushy Fork, 3.6 mi upstream from Weaver Run, 6 mi upstream from Laurel Creek, and 9 mi south of Dennison.	282	1938-91≠ 1992-04	09/10/04	17.64	4,740	09/10/04	17.64	4,740
03131500 Black Fork at Loudonville, Ohio								
Latitude 40°38'09", longitude 82°14'22", Ashland County, Hydrologic Unit 05040002, on right bank at downstream side of bridge on State Highway 39 at Loudonville, 1.5 mi downstream from Big Run.	349	1931-91≠ 1992-04	06/15/04	11.13	4,260	07/05/69	14.11	8,460
03133500 Clear Fork below Pleasant Hill Dam, near Perrysville, Ohio								
Latitude 40°37'13", longitude 82°19'28", Ashland County, Hydrologic Unit 05040002, on left bank 0.2 mi downstream from Pleasant Hill Dam, 2.8 mi south of Perrysville, and 4.7 mi upstream from the confluence of Clear Fork and Black Fork.	198	1938-91≠ 1992-04	06/02/04	3.77	1,440	01/23/59	4.89	2,340
03135000 Lake Fork below Mohicanville Dam, near Mohicanville, Ohio								
Latitude 40°43'24", longitude 82°09'18", Ashland County, Hydrologic Unit 05040002, on right bank 800 ft downstream from Mohicanville Dam, 2 mi east of Mohicanville, and 2.4 mi downstream from the confluence of Jerome and Muddy Forks.	271	1938-93≠ 1994-04	06/20/04	9.82	1,560	07/05/69	14.32	5,490
03141500 Seneca Fork below Senecaville Dam, near Senecaville, Ohio								
Latitude 39°55'28", longitude 81°26'17", Guernsey County, Hydrologic Unit 05040005, on left bank 650 ft downstream from Senecaville Dam, and 1.5 mi southeast of Senecaville.	118	1938-91≠ 1992-04	09/17/04	9.88	1,030	09/17/04	9.88	1,030

MEASUREMENTS OF DISCHARGE AT MISCELLANEOUS SITES—Continued

 [mi², square miles; ft, feet; ft³/s, cubic feet per second; ≠, operated as a continuous-record gaging station]

Location	Drainage area (mi ²)	Period of record	Water year 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)
MUSKINGUM RIVER BASIN—Continued								
03147500 Licking River below Dillon Dam, near Dillon Falls, Ohio								
Latitude 39°59'18", longitude 82°04'50", Muskingum County, Hydrologic Unit 05040006, on left bank 500 ft downstream from Dillon Dam, 2.0 mi northwest of Dillon Falls, and 5.8 mi upstream from mouth.	742	1939-91≠ 1992-04	06/22/04	9.73	5,230	01/22/59	32.46	47000
SCIOTO RIVER BASIN								
03230700 Scioto River at Circleville, Ohio								
Latitude 39°36'05", longitude 82°57'19", Pickaway County, Hydrologic Unit 05060002, on right bank 100 ft upstream from U.S. Highway 22 bridge, 1,400 ft downstream from Hargus Creek, and 1.0 mi downstream from Big Darby Creek.	3,217	1974-79≠ 2000-04	01/06/04	22.32	48,500	02/25/75	21.95	61,500
0323900 Deer Creek near Pancoastburg, Ohio								
Latitude 39°37'14", longitude 83°12'47", Pickaway County, Hydrologic Unit 05060002, on left bank 200 ft downstream from bridge on Crownover Mill Road, 1,200 ft downstream from Deer Creek Dam, and 2.8 mi east of Pancoastburg.	277	1964-66 1966-97≠ 1998-04	01/11/04	6.97	29.50	03/10/64	12.93	19,500
03234000 Paint Creek near Bourneville, Ohio								
Latitude 39°15'49", longitude 83°10'01", Ross County, Hydrologic Unit 05060001, on upstream side of left abutment of highway bridge, 0.2 mi downstream from Sulfer Lick, 1.2 mi southwest of Bourneville.	807	1921-37 1938-98≠ 1999-04	01/05/04	11.41	9,640	03/10/64	20.50	56,900
MILL CREEK BASIN								
03259000 Mill Creek at Carthage, Ohio								
Latitude 39°12'07", longitude 84°28'06", Hamilton County, Hydrologic Unit 05090203, on right bank at Anthony Wayne Avenue bridge in Carthage, Ohio, 1 mi downstream from West Fork Mill Creek and 11 mi upstream from mouth.	115	1946-02≠ 2003-04	01/04/04	16.22	5,510	09/14/79	21.82	9,030

MEASUREMENTS OF DISCHARGE AT MISCELLANEOUS SITES—Continued

[mi², square miles; ft, feet; ft³/s, cubic feet per second; ≠, operated as a continuous-record gaging station]

Location	Drainage area (mi ²)	Period of record	Water year 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft ³ /s)	Date	Gage height (ft)	Discharge (ft ³ /s)
GREAT MIAMI RIVER BASIN								
	03271500	Great Miami River at Miamisburg, Ohio						
Latitude 39°38'40", longitude 84°17'32", Montgomery County, Hydrologic Unit 05080002, on left bank 600 ft downstream from bridge on U.S. Highway 725, at Miamisburg, 0.3 mi downstream from Bear Creek, 3.2 mi upstream from Craine Run and at mile 66.4.	2,711	1916-20≠ 1924-35≠ 1952-95≠ 1996-04	01/05/04	16.43	40,000	01/21/59	21.30	61,800

Peak Discharge and Stage at Continuous-Record Surface Discharge Stations

For continuous-record surface-water-discharge stations meeting certain criteria, all peak discharges and stages occurring during the water year and greater than a selected base discharge are presented in this table. The peaks greater than the base discharge, excluding the highest one, are referred to as secondary peaks. The peaks are listed in chronological order. Peak discharges are not published for canals, ditches, drains, or streams for which the peaks are subject to substantial control by human intervention. The time of occurrence for peaks is expressed in 24-hour local standard time. For example, 12:30 a.m. is 0030 and 1:30 p.m. is 1330.

PEAK DISCHARGES EQUAL TO OR GREATER THAN BASE DISCHARGES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

[ft³/s, cubic feet per second; ft, feet; *, maximum peak discharge and gage height; --, no data]

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
BEAVER RIVER BASIN							
03093000 Eagle Creek at Phalanx Station, Ohio (Base discharge: 1,300 ft ³ /s)							
Jan. 5	1800	1,700	11.63	May 22	2200	*3,050	*12.68
Mar. 21	1500	1,610	11.51	Sept. 10	0100	1,360	10.65
Apr. 2	2300	1,450	10.79	Sept. 18	1600	2,030	11.70
LITTLE BEAVER CREEK BASIN							
03109500 Little Beaver Creek near East Liverpool, Ohio (Base discharge: 5,000 ft ³ /s)							
Jan. 5	0400	7,140	10.08	Aug. 28	1000	11,500	12.31
May 23	0500	12,000	12.52	Sept. 9	1000	*22,300	*16.48
June 15	1200	6,550	9.73	Sept. 17	2300	15,200	13.87
Aug. 21	1200	6,580	9.75				
YELLOW CREEK BASIN							
03110000 Yellow Creek near Hammondsville, Ohio (Base discharge: 2,000 ft ³ /s)							
Jan. 5	1300	4,300	8.47	Aug. 21	1400	2,710	6.87
Feb. 6	1200	2,520	6.64	Sept. 9	1000	*10,500	*12.98
May 21	2100	2,600	6.74	Sept. 18	0500	8,530	11.81
June 14	1900	2,580	6.71				
SHORT CREEK BASIN							
03111500 Short Creek near Dillonvale, Ohio (Base discharge: 1,200 ft ³ /s)							
Nov. 19	1830	1,46	5.83	June 14	0830	1,590	5.89
Jan. 4	1300	4,490	9.72	Aug. 21	1400	1,500	5.73
Feb. 6	1400	2,580	7.41	Sept. 9	0330	6,530	11.41
May 21	1400	1,980	6.53	Sept. 17	2300	*9,110	*12.65
WHEELING CREEK BASIN							
03111548 Wheeling Creek below Blaine, Ohio (Base discharge: 1,500 ft ³ /s)							
Jan. 5	0000	4,380	7.65	Aug. 20	2300	3,320	7.66
Feb. 1	2000	1,720	5.09	Sept. 9	0400	5,350	9.86
Feb. 6	1200	2,650	6.21	Sept. 17	1400	*8,500	*12.54
June 14	0800	1,970	5.42				

PEAK DISCHARGES EQUAL TO OR GREATER THAN BASE DISCHARGES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

[ft³/s, cubic feet per second; ft, feet; *, maximum peak discharge and gage height; --, no data]

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
WHEELING CREEK BASIN—Continued							
03113990 Captina Creek at State Route 148 at Armstrongs Mill, Ohio							
(Base discharge: 3,000 ft ³ /s)							
Oct. 14	1930	5,470	7.59	Feb. 6	0830	5,060	9.25
Nov. 12	0530	7,280	8.57	Apr. 13	1700	3,490	7.86
Nov. 19	1430	6,270	8.01	May 22	0045	3,800	8.14
Dec. 10	2330	4,430	7.09	Sept. 8	2345	14,000	15.65
Jan. 4	0800	7,750	8.82	Sept. 17	1845	*21,300	*19.87
Feb. 3	0730	6,070	7.91				
LITTLE MUSKINGUM RIVER BASIN							
03115400 Little Muskingum River at Bloomfield, Ohio							
(Base discharge: 3,000 ft ³ /s)							
Nov. 12	1830	7,440	21.49	Mar. 6	1300	5,760	19.34
Nov. 20	0230	7,810	21.90	Apr. 14	0300	7,110	21.10
Dec. 11	0830	3,290	14.74	May 22	1100	6,360	20.20
Jan. 5	1500	7,370	21.41	June 12	0200	4,420	17.15
Feb. 3	1830	4,500	17.31	Sept. 9	1030	17,600	27.63
Feb. 6	1930	6,330	20.16	Sept. 18	--	*41,600	*32.16
MUSKINGUM RIVER BASIN							
03115973 Schocalog Run at Copley Junction, Ohio							
(Base discharge: 90 ft ³ /s)							
May 22	0655	*267	*13.59	Sept. 17	1735	102	12.46
03117500 Sandy Creek at Waynesburg, Ohio							
(Base discharge: 1,800 ft ³ /s)							
Jan. 5	2000	3,870	7.52	Aug. 29	0000	4,300	7.80
May 22	2100	3,560	7.27	Sept. 10	0000	*7,970	*9.00
June 15	2000	5,110	8.24	Sept. 18	0800	2,850	6.52
Aug. 21	1300	3,480	7.20				
03118000 Middle Branch Nimishillen Creek at Canton, Ohio							
(Base discharge: 400 ft ³ /s)							
Jan. 5	1330	577	5.41	Sept. 9	2130	592	5.47
May 22	2000	*1,080	*6.42	Sept. 18	1200	460	4.89
June 15	1900	529	5.21				
03118500 Nimishillen Creek at North Industry, Ohio							
(Base discharge: 2,000 ft ³ /s)							
Jan. 5	0435	3,810	8.39	Aug. 21	0630	3,440	7.91
Feb. 6	1735	2,160	6.10	Sept. 9	0935	4,280	8.98
May 22	1635	3,390	7.85	Sept. 18	0035	2,700	6.93
June 15	1135	*6,480	*11.46				

PEAK DISCHARGES EQUAL TO OR GREATER THAN BASE DISCHARGES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

[ft³/s, cubic feet per second; ft, feet; *, maximum peak discharge and gage height; --, no data]

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
MUSKINGUM RIVER BASIN—Continued							
03121850 Huff Run at Mineral City, Ohio							
(Base discharge: 100 ft ³ /s)							
Jan. 5	0700	659	4.35	June 17	1200	528e	4.11e
Feb. 6	1400	403	3.84	Aug. 20	2345	1,820	5.78
May 18	2300	602	4.25	Aug. 28	2015	245	3.41
May 22	0415	706	4.43	Sept. 9	0500	*1,860	*5.82
June 11	2345	153	3.06	Sept. 17	2345	466	3.98
June 14	1045	204	3.27				
03139000 Killbuck Creek at Killbuck, Ohio							
(Base discharge: 2,000 ft ³ /s)							
Jan. 5	2000	2,860	16.51	May 22	1800	2,620	16.27
Apr. 3	1400	2,250	15.85	June 18	0300	*3,530	*17.01
03140000 Mill Creek near Coshocton, Ohio							
(Base discharge: 700 ft ³ /s)							
Jan. 5	0015	1,400	10.60	June 15	0130	855	9.19
Feb. 6	0715	896	9.33	June 18	0345	1,200	10.23
May 31	0845	774	8.80	Aug. 19	2230	804	8.96
June 11	1915	858	9.20	Aug. 21	0800	940	9.48
June 14	0445	*2,310	*11.92	Sept. 9	0015	1,360	10.53
03141870 Leatherwood Creek near Kipling, Ohio							
(Base discharge: 950 ft ³ /s)							
Nov. 28	2130	1,010	11.16	May 19	1800	1,440	12.07
Jan. 5	0700	2,940	13.65	May 22	0900	1,060	11.18
Feb. 6	1530	1,430	12.06	Sept. 9	0930	5,300	15.45
Apr. 14	0500	1,120	11.35	Sept. 18	0830	*10,100	*17.21
03144000 Wakatomika Creek near Frazeyburg, Ohio							
(Base discharge: 1,600 ft ³ /s)							
Jan. 5	0200	*8,140	*10.65	Aug. 21	1000	1,930	5.26
Feb. 6	1700	e2,900	6.46	Aug. 28	1600	2,780	6.33
May 22	0900	2,040	5.41	Sept. 9	0400	2,430	5.91
June 14	2000	5,680	9.13				
03146500 Licking River near Newark, Ohio							
(Base discharge: 6,500 ft ³ /s)							
Jan. 5	0500	*19,800	*14.89	June 14	1900	12,500	12.38
Feb. 6	2100	9,650	11.19				
HOCKING RIVER BASIN							
03157000 Clear Creek near Rockbridge, Ohio							
(Base discharge: 1,900 ft ³ /s)							
Jan. 5	1200	2,130	7.18	June 15	2145	1,990	6.88
May 19	0900	*3,140	*9.17	June 17	2330	2,640	8.22
June 11	1715	2,325	7.63				

PEAK DISCHARGES EQUAL TO OR GREATER THAN BASE DISCHARGES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

[ft³/s, cubic feet per second; ft, feet; *, maximum peak discharge and gage height; --, no data]

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
HOCKING RIVER BASIN—Continued							
03157500 Hocking River at Enterprise, Ohio							
(Base discharge: 3,500 ft ³ /s)							
Jan. 5	1200	*11,500	*16.68	June 12	0600	5,580	11.68
Feb. 6	2000	7,510	13.71	June 18	0700	5,520	11.61
Apr. 14	0900	4,160	9.72	July 31	1900	3,620	8.84
May 19	1700	7,140	13.35	Sept. 9	0800	5,700	11.81
May 28	0700	3,850	9.22				
SHADE RIVER BASIN							
03159540 Shade River near Chester, Ohio							
(Base discharge: 2,400 ft ³ /s)							
Nov. 13	0730	3,140	17.70	Apr. 14	1200	4,100	20.14
Nov. 19	1930	3,410	18.47	May 28	1130	2,670	16.24
Jan. 5	1330	3,140	17.70	Sept. 9	1930	4,760	21.55
Feb. 7	0100	2,990	17.28	Sept. 18	1000	*11,100	*30.04
Mar. 6	0700	3,570	18.92				
RACCOON CREEK BASIN							
03201902 Raccoon Creek near Bolin Mills, Ohio							
(Base discharge: 1,500 ft ³ /s)							
Nov. 13	0900	2,420	13.93	Apr. 3	0430	1,570	11.82
Nov. 29	1700	2,320	13.70	Apr. 14	2080	2,270	13.39
Jan. 6	1200	2,910	14.97	May 29	0900	2,000	12.93
Feb. 7	1100	2,400	13.88	Sept. 10	2200	2,990	14.83
Mar. 7	0330	1,690	12.14	Sept/ 13	1100	*3,000	*17.05
03201980 Little Raccoon Creek at Ewingtown, Ohio							
(Base discharge: 860 ft ³ /s)							
Nov. 13	1430	1,100	11.60	Mar. 6	1630	929	11.09
Nov. 29	1930	1,070	11.55	Apr. 14	1545	938	11.13
Jan. 5	2015	2,180	13.15	May 28	1015	2,500	13.39
Feb. 7	1415	991	11.36	Sept. 18	1330	*6,270	*15.18
03202000 Raccoon Creek near Adamsville, Ohio							
(Base discharge: 3,000 ft ³ /s)							
Nov. 15	0700	3,730	14.57	Apr. 2	1600	3,470	14.03
Dec. 1	0900	3,870	14.85	Apr. 15	1900	4,290	15.68
Jan. 7	2000	6,000	18.72	May 28	0900	4,730	16.52
Feb. 9	0100	4,330	15.77	Sept. 9	0100	4,140	15.40
Mar. 6	0900	4,610	16.30	Sept. 20	1100	*6,910	*20.18

PEAK DISCHARGES EQUAL TO OR GREATER THAN BASE DISCHARGES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

[ft³/s, cubic feet per second; ft, feet; *, maximum peak discharge and gage height; --, no data]

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
SYMMES CREEK BASIN							
03205470 Symmes Creek at Aid, Ohio							
(Base discharge: 2,900 ft ³ /s)							
Nov. 13	0530	2,990	17.44	May 28	2345	3,860	19.23
Feb. 7	0045	3,120	17.83	Sept. 9	1445	3,060	17.68
Mar. 6	1645	4,210	19.85	Sept. 18	0630	*6,510	*23.44
Apr. 14	0600	3,270	18.14				
SCIOTO RIVER BASIN							
03219500 Scioto River near Prospect, Ohio							
(Base discharge: 3,600 ft ³ /s)							
Nov. 30	1500	5,360	11.08	June 2	1400	3,760	9.09
Jan. 6	2200	6,020	11.83	June 16	0300	*6,820	*12.69
May 24	0600	4,980	10.63				
03220000 Mill Creek near Bellepoint, Ohio							
(Base Discharge: 2,500 Ft ³ /s)							
Nov. 28	1400	3,780	7.71	May 3	0700	2,930	6.94
Jan. 5	0500	*6,130	*9.20	May 22	2000	2,710	6.72
Feb. 6	0500	2,710	6.72	June 14	0500	3,820	7.74
Mar. 30	2200	2,640	6.65				
03223425 Whetstone Creek at Mt. Gilead, Ohio							
(Base discharge: 615 ft ³ /s)							
Nov. 27	2105	686	6.27	May 22	0020	1,260	7.70
Dec. 30	0620	683	6.26	May 31	0920	935	7.00
Jan. 4	2305	*1,470	*8.10	June 14	0520	1,040	7.25
May 2	1505	843	6.77				
03228300 Big Walnut Creek at Sunbury, Ohio							
(Base discharge: 2,200 ft ³ /s)							
Jan. 4	1500	3,940	9.72	May 31	1030	3,290	9.29
May 2	1400	3,180	9.21	June 14	0600	*6,300	*11.23
May 22	0000	4,400	10.00	Aug. 29	0000	3,030	9.10
03228750 Alum Creek near Kilbourne, Ohio							
(Base discharge: 1000 ft ³ /s)							
Nov. 28	1200	1,290	6.82	May 19	0700	1,670	7.29
Dec. 30	0600	1,190	6.61	May 21	2200	1,350	6.76
Jan. 2	0600	1,050	6.27	May 31	0800	2,770	8.70
Jan. 5	0000	*2,440	*9.07	June 14	0400	*3,060	*8.98
Feb. 6	1000	2,940	8.88	June 15	1600	1,110	6.27
Mar. 30	1100	1,060	6.16	Aug. 21	0100	1,560	7.13
May 2	1500	1,610	7.20	Aug. 28	1100	2,010	7.77

PEAK DISCHARGES EQUAL TO OR GREATER THAN BASE DISCHARGES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

[ft³/s, cubic feet per second; ft, feet; *, maximum peak discharge and gage height; --, no data]

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
SCIOTO RIVER BASIN—Continued							
03230310 Little Darby Creek at West Jefferson, Ohio							
(Base discharge: 1000 ft ³ /s)							
Nov. 29	0600	1,220	9.22	May 22	0800	1,740	10.37
Jan. 5	--	*5,530	*14.90	May 31	1400	1,890	10.66
Feb. 7	0400	1,880	10.63	June 11	2000	2,000	10.85
Mar. 31	0500	1,300	9.41	June 15	0400	1,670	10.24
May 3	0900	1,160	9.07				
03230450 Hellbranch Run near Harrisburg, Ohio							
(Base discharge: 300 ft ³ /s)							
Jan. 5	0433	*1,620	*9.62	May 21	2330	1,050	7.95
Feb. 6	0445	803	7.35	May 31	0945	410	6.57
Apr. 14	0515	491	6.75	June 11	2245	784	7.31
Apr. 23	0430	357	6.44	June 14	0300	1,130	8.17
May 2	1345	665	7.08				
03230500 Big Darby Creek at Darbyville, Ohio							
(Base discharge: 4,500 ft ³ /s)							
Nov. 29	1200	4,840	8.83	May 22	0900	5,380	9.09
Jan. 6	0000	*15,500	*14.01	June 12	0600	4,690	8.49
Feb. 7	0400	4,630	8.43	June 15	0600	5,120	8.87
03230800 Deer Creek at Mount Sterling, Ohio							
(Base discharge: 1,900 ft ³ /s)							
Jan. 5	1000	*11,700	*12.76	May 22	0700	3,110	8.98
Feb. 6	2000	4,520	9.82	June 1	0200	2,150	8.15
Apr. 14	1100	1,910	8.03	June 12	0400	3,860	9.47
May 3	0000	2,550	8.52	June 14	1500	4,060	9.58
May 19	1200	2,820	8.75	June 15	2100	1,960	7.96
03232000 Paint Creek near Greenfield, Ohio							
(Base discharge: 2,000 ft ³ /s)							
Jan. 5	1700	*8,500	*11.45	May 28	0500	6,150	10.21
Feb. 7	0600	3,340	7.89	June 13	0400	3,500	8.05
May 2	1400	2,400	6.79	July 31	1100	3,350	7.90
UPPER TWIN CREEK BASIN							
03237280 Upper Twin Creek at Mcgaw, Ohio							
(Base discharge: 666 ft ³ /s)							
Nov. 12	1045	*1,360	*6.96	May 28	0145	1,290	6.85
Nov. 28	0845	920	6.18	Sept. 17	1200	1,340	6.92
Mar. 6	0130	1,070	6.47				

PEAK DISCHARGES EQUAL TO OR GREATER THAN BASE DISCHARGES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

[ft³/s, cubic feet per second; ft, feet; *, maximum peak discharge and gage height; --, no data]

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
OHIO BRUSH CREEK BASIN							
		03237500		Ohio Brush Creek near West Union, Ohio			
				(Base discharge: 11,000 ft ³ /s)			
Nov. 12	1530	12,100	15.07	Feb. 6	1,245	16,400	17.00
Jan. 4	1,315	*24,100	*19.78				
WHITE OAK CREEK BASIN							
		03238500		White Oak Creek near Georgetown, Ohio			
				(Base discharge: 5,500 ft ³ /s)			
Nov. 12	2230	7,780	7.08	May 2	2030	7,010	6.84
Jan. 4	1700	*10,600	*7.85	Aug. 1	0830	7,390	6.96
Feb. 6	1400	9,290	7.51				
LITTLE MIAMI RIVER BASIN							
		03240000		Little Miami River near Oldtown, Ohio			
				(Base discharge: 800 ft ³ /s)			
Jan. 5	0200	*5,810	*10.51	May 19	2100	1,110	5.23
Feb. 6	1700	1,910	6.71	May 28	0230	2,710	7.89
May 3	0100	1,380	5.77	June 11	1300	2,030	6.90
		03241500		Massies Creek at Wilberforce, Ohio			
				(Base discharge: 600 ft ³ /s)			
Jan. 4	2300	*2,590	*9.82	May 28	0000	1,730	8.26
Feb. 6	1430	936	6.32	June 11	1200	1,460	7.71
May 3	0100	845	6.03				
		03245500		Little Miami River at Milford, Ohio			
				(Base discharge: 15,000 ft ³ /s)			
Jan. 5	0300	*39,700	*21.17	No other peaks above base			
GREAT MIAMI RIVER BASIN							
		03260706		Bokengehalas at DeGraff, Ohio			
				(Base discharge: 350 ft ³ /s)			
Nov. 28	1745	509	4.77	Feb. 6	1315	353	3.90
Jan. 5	0615	693	5.72	June 14	1700	*749	*5.99
		03261500		Great Miami River at Sidney, Ohio			
				(Base discharge: 4,000 ft ³ /s)			
Nov. 28	1530	5,350	8.95	May 21	2200	4,710	8.33
Jan. 5	0300	*7,260	*10.63				
		03261950		Loramie Creek near Newport, Ohio			
				(Base discharge: 1,500 ft ³ /s)			
Nov. 28	2200	2,620	11.60	June 15	1515	2,290	11.11
Jan. 5	1030	*3,780	*13.03				

PEAK DISCHARGES EQUAL TO OR GREATER THAN BASE DISCHARGES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—Continued

[ft³/s, cubic feet per second; ft, feet; *, maximum peak discharge and gage height; --, no data]

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
GREAT MIAMI RIVER BASIN—Continued							
03264000 Greenville Creek near Bradford, Ohio							
(Base discharge: 1,500 ft ³ /s)							
Nov. 28	1630	2,710	6.69	June 12	2030	2,190	6.01
Jan. 5	1845	*3,630	*7.75	June 17	0015	2,100	5.88
May 29	1015	2,050	5.81				
03265000 Stillwater River at Pleasant Hill, Ohio							
(Base discharge: 5,000 ft ³ /s)							
Nov. 28	1330	8,520	11.20	June 12	0030	6,020	9.01
Jan. 5	1030	*12,200	*13.79	June 17	0130	6,030	9.02
03267000 Mad River near Urbana, Ohio							
(Base discharge: 1,400 ft ³ /s)							
Nov. 27	2045	1,420	5.53	June 11	1645	1,540	5.72
Jan. 5	0300	2,890	7.61	June 14	1645	1,560	5.76
Jan. 4	2115	6,390	9.99	May 31	0330	4,420	8.09
May 19	0245	1,420	5.08	June 11	1430	3,200	6.89
May 28	0115	*9,420	*13.50	Aug. 28	1915	2,730	6.44
03272700 Sevenmile Creek at Camden, Ohio							
(Base discharge: 1,500 ft ³ /s)							
Jan. 3	1730	2,740	8.89	May 31	0600	1,650	7.32
Jan. 4	2100	*11,100	*15.13	June 11	1800	1,690	7.39

Ground-Water Records—Ashland County

405303082170700. Local Number, AS-2

LOCATION.—Latitude 40°53'03", longitude 82°17'07", Ashland County, Hydrologic Unit 05040002, 2 mi northeast of Ashland, Ohio. Owner: City of Ashland.
 AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled test water table well, diameter 6 in., depth 64 ft, cased.

INSTRUMENTATION.—Digital recorder, 60-minute punch.

DATUM.—Elevation of land-surface datum is 980 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 2.00 ft above land-surface datum.

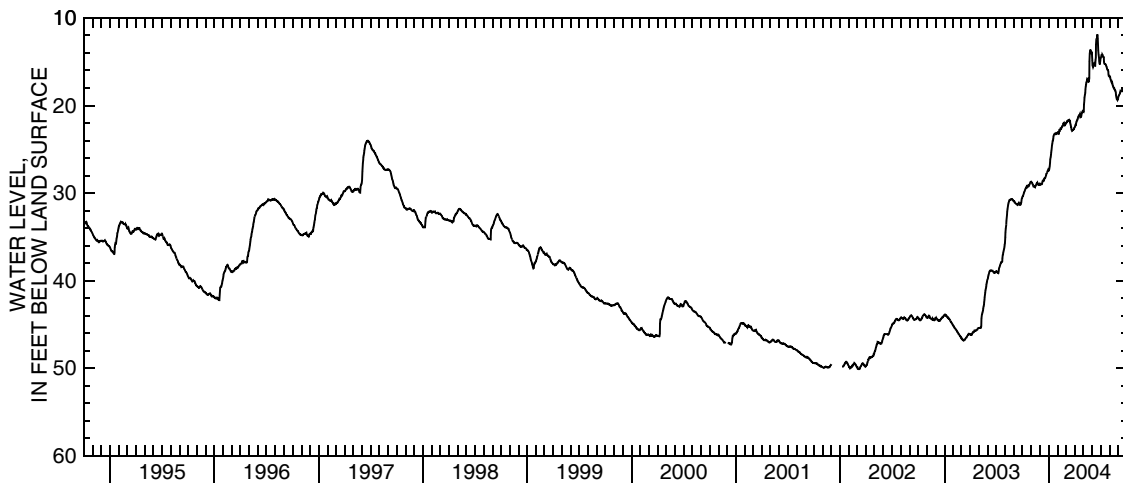
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—March 1964 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 50.12 ft below land-surface datum, Mar. 6 and 7, 2002; minimum daily low, 11.56 ft below land-surface datum, Jan. 1, 1991.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30.41	28.71	28.99	27.43	23.09	21.98	22.50	20.72	14.25	14.67	16.69	19.05
2	30.35	28.77	29.05	27.38	23.04	21.97	22.41	20.75	14.90	14.50	16.69	18.95
3	30.34	28.81	29.07	27.25	23.05	22.01	22.36	20.53	15.46	14.40	16.71	18.84
4	30.22	28.84	29.05	27.12	23.22	21.96	22.21	19.86	15.63	14.27	16.85	18.76
5	30.13	28.94	28.97	26.94	23.24	21.86	22.20	19.49	15.53	14.27	17.05	18.72
6	30.04	29.01	28.99	26.51	23.11	21.80	22.12	19.13	15.34	14.29	17.16	18.68
7	29.95	29.08	28.99	26.15	22.92	21.80	21.94	18.76	15.26	14.19	17.27	18.51
8	29.84	29.19	28.99	25.88	22.95	21.71	21.83	18.57	15.20	14.27	17.39	18.45
9	29.76	29.25	28.89	25.61	22.91	21.72	21.73	18.13	15.24	14.41	17.42	18.36
10	29.67	29.26	28.75	25.37	22.73	21.75	21.68	17.84	15.38	14.45	17.38	18.40
11	29.58	29.25	28.60	25.10	22.64	21.70	21.58	17.62	15.47	14.46	17.48	18.38
12	29.50	29.27	28.60	24.77	22.67	21.66	21.50	17.44	15.46	14.54	17.59	18.27
13	29.42	29.26	28.57	24.56	22.69	21.72	21.35	17.23	14.84	15.03	17.73	18.24
14	29.36	29.30	28.49	24.37	22.62	21.68	21.27	17.06	14.55	15.24	17.87	18.27
15	29.28	29.25	28.53	24.04	22.51	21.73	21.27	16.97	13.02	15.25	17.97	18.29
16	29.37	29.18	28.45	23.98	22.49	21.83	21.21	17.00	12.44	15.26	18.02	18.27
17	29.37	29.12	28.31	23.81	22.43	22.04	21.11	16.98	12.38	15.28	18.04	18.26
18	29.27	29.08	28.29	23.54	22.34	22.23	21.06	17.02	12.34	15.31	18.04	18.38
19	29.17	28.92	28.30	23.41	22.32	22.45	20.98	17.29	11.89	15.36	18.17	18.44
20	29.14	28.89	28.25	23.31	22.26	22.49	21.09	17.29	11.99	15.47	18.23	18.44
21	29.18	28.86	28.20	23.27	22.07	22.72	21.15	17.18	12.34	15.52	18.33	18.45
22	29.23	28.82	28.07	23.22	22.08	22.87	21.33	16.88	13.10	15.56	18.37	18.53
23	29.20	28.87	27.96	23.23	22.04	22.91	21.30	14.97	13.72	15.77	18.56	18.62
24	29.11	28.97	27.82	23.25	22.16	22.88	21.20	14.04	14.18	15.91	18.81	18.68
25	29.07	29.05	27.75	23.27	22.27	22.82	21.09	13.85	14.57	15.94	19.01	18.80
26	29.02	29.08	27.67	23.20	22.29	22.82	20.86	13.69	14.92	15.95	19.16	18.89
27	28.94	29.09	27.60	23.16	22.23	22.78	20.78	13.69	15.24	16.02	19.29	18.93
28	28.83	29.09	27.48	23.18	22.19	22.76	20.73	13.91	15.31	16.14	19.36	19.15
29	28.75	28.94	27.41	23.20	22.09	22.69	20.64	14.03	15.15	16.45	19.37	19.47
30	28.73	28.92	27.47	23.20	---	22.66	20.59	14.03	14.88	16.63	19.29	19.58
31	28.70	---	27.47	23.12	---	22.54	---	13.86	---	16.62	19.15	---
MAX	30.41	29.30	29.07	27.43	23.24	22.91	22.50	20.75	15.63	16.63	19.37	19.58
CAL YR 2003	LOW 46.86											
WTR YR 2004	LOW 30.41											



405425082173000. Local Number, AS-3

LOCATION.—Latitude 40°54'25", longitude 82°17'30", Ashland County, Hydrologic Unit 05040002, along Jerome Fork near Ashland, Ohio.

Owner: City of Ashland.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 8 in., depth 78 ft, cased.

INSTRUMENTATION.—Digital recorder, 60-minute punch.

DATUM.—Elevation of land-surface datum is 990 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 5.00 ft above land-surface datum.

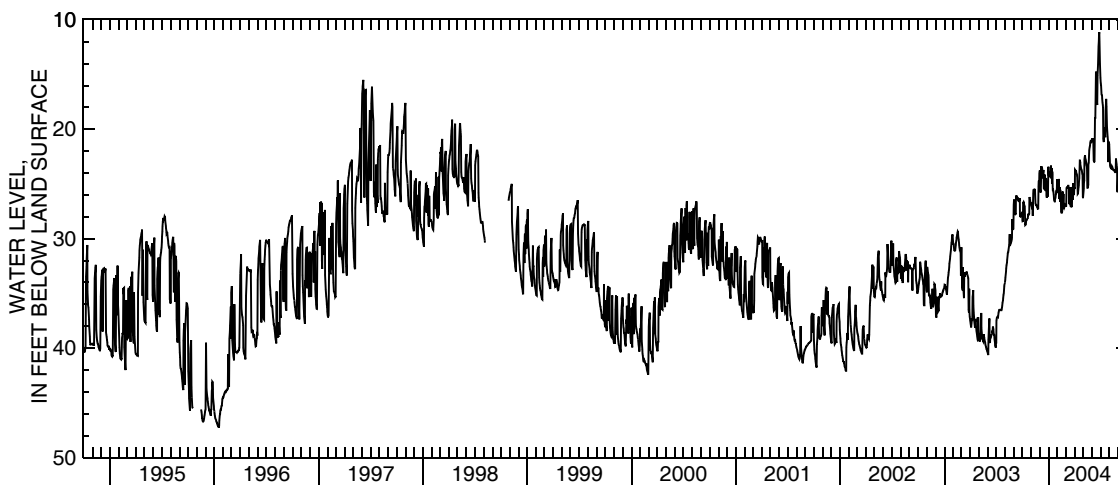
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—August 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 47.29 ft below land-surface datum, Jan. 17, 1996; minimum daily low, 5.14 ft below land-surface, Dec. 24, 1974.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27.55	26.97	23.77	23.44	25.82	26.94	25.31	26.30	20.91	15.31	21.40	25.76
2	28.41	27.08	25.33	24.22	25.75	27.01	25.47	25.96	21.00	15.79	22.08	24.52
3	28.39	27.17	25.62	24.25	25.58	27.01	23.70	25.43	21.08	16.01	23.29	24.72
4	26.71	27.22	25.72	24.21	25.78	25.36	23.75	24.92	21.05	16.35	23.38	24.89
5	26.65	27.19	25.73	24.03	24.57	25.33	23.83	24.68	20.89	16.85	23.48	24.97
6	26.75	26.71	23.81	23.87	24.64	25.34	23.83	22.76	20.87	16.94	23.48	25.03
7	26.86	27.92	23.38	24.14	26.27	25.30	23.92	22.54	22.90	17.22	23.54	25.23
8	26.94	25.86	24.52	24.22	26.36	25.22	24.06	22.41	22.98	17.59	23.61	25.35
9	27.01	25.56	23.64	24.45	25.30	25.18	24.13	22.63	23.00	17.80	23.63	25.49
10	27.10	25.55	23.62	23.34	26.64	25.18	24.21	22.79	22.97	18.00	23.41	25.60
11	28.77	25.53	23.86	24.52	25.55	25.18	24.35	22.96	20.24	20.88	23.47	25.70
12	28.76	25.52	24.02	23.58	25.72	25.41	25.91	23.06	18.91	21.19	23.53	25.83
13	28.68	25.55	24.08	24.99	25.83	25.53	25.87	23.27	19.04	20.60	23.61	27.42
14	28.38	25.54	23.73	23.86	27.53	26.85	25.65	23.40	16.44	19.95	23.67	27.40
15	28.37	25.54	25.41	24.12	27.62	25.74	25.40	23.61	14.76	19.86	23.73	27.19
16	28.31	26.82	25.42	25.55	27.63	25.30	25.12	25.34	17.11	20.32	23.75	26.95
17	28.27	26.91	25.50	25.53	27.62	26.79	24.78	25.35	17.57	20.63	23.74	26.75
18	28.20	26.94	24.69	25.72	27.52	26.98	24.48	25.32	17.50	20.74	23.75	26.53
19	28.18	26.98	24.16	25.98	25.78	27.09	22.86	25.07	17.65	18.30	23.85	26.36
20	28.15	26.92	25.57	26.40	25.69	27.02	22.86	23.17	17.78	17.60	23.88	26.17
21	27.95	27.03	25.49	26.53	27.03	27.08	23.05	23.04	15.11	17.24	23.92	25.99
22	27.72	27.11	25.66	26.61	25.93	27.06	23.29	22.41	14.10	17.95	23.93	25.80
23	27.78	27.13	24.46	26.61	27.20	26.97	23.46	21.93	13.30	19.22	23.90	25.64
24	27.83	27.26	24.71	26.37	27.23	25.36	23.57	21.63	12.42	19.80	22.69	25.47
25	27.76	27.28	26.07	26.26	27.16	25.30	23.65	21.50	11.95	20.24	22.93	25.35
26	26.21	27.32	26.28	25.97	26.97	26.48	23.74	21.24	11.36	20.71	23.19	25.23
27	26.31	25.26	25.13	25.93	27.04	25.05	23.91	21.12	11.15	21.02	23.42	25.06
28	26.43	24.71	26.11	25.69	27.04	24.93	24.02	21.16	12.77	23.02	23.59	24.88
29	26.57	25.60	26.11	25.71	27.00	26.01	24.14	21.17	14.02	21.50	25.57	23.67
30	26.71	24.05	26.04	25.72	---	25.96	26.17	21.05	14.77	21.14	25.76	23.84
31	26.86	---	23.81	24.57	---	25.56	---	20.91	---	21.31	24.23	---
MAX	28.77	27.92	26.28	26.61	27.63	27.09	26.17	26.30	23.00	23.02	25.76	27.42
CAL YR 2003	LOW 40.65											
WTR YR 2004	LOW 28.77											



Ground-Water Records—Athens County**392004082071600. Local Number, AT-2A**

LOCATION.—Latitude 39°20'04", longitude 82°07'16", Athens County, Hydrologic Unit 05030204, 1.1 mi west of city hall in Athens, Ohio. Owner: City of Athens.

AQUIFER.—Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.—Drilled unused water table well, diameter 12 in., depth 48 ft, cased.

INSTRUMENTATION.—Periodic measurement with chalked tape by Ohio Department of Natural Resources personnel.

DATUM.—Elevation of land-surface datum is 641.81 ft above sea level. Measuring point: Floor of instrument shelter, 2.37 ft above land-surface datum.

REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR. Prior to water year 1978, well depth reported as 43 ft.

PERIOD OF RECORD.—October 1966 to September 1982 continuous, periodic thereafter. This well replaced At-2, which has continuous record from March 1954 to September 1966.

EXTREMES FOR PERIOD OF RECORD.—Maximum measured low, 21.52 ft below land-surface datum, Oct. 15, 1993; minimum daily low, 1.05 ft below land-surface datum, May 25, 28, 1968.

WATER LEVEL,
IN FEET BELOW LAND-SURFACE DATUM
INSTANTANEOUS OBSERVATION
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water level
10-20-03	18.71
10-29-03	18.80
01-09-04	13.84
02-23-04	16.11
04-09-04	15.98
04-29-04	15.73
07-30-04	17.49

392009082072200. Local Number, AT-5

LOCATION.—Latitude 39°20'09", longitude 82°07'22", Athens County, Hydrologic Unit 05030204, along Hocking River in Athens, Ohio. Owner: City of Athens.

AQUIFER.—Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.—Drilled unused water table well, diameter 12 in., depth 48 ft, cased.

INSTRUMENTATION.—Digital recorder, 60-minute punch.

DATUM.—Elevation of land surface datum is 640 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter, 4.75 ft above land-surface datum.

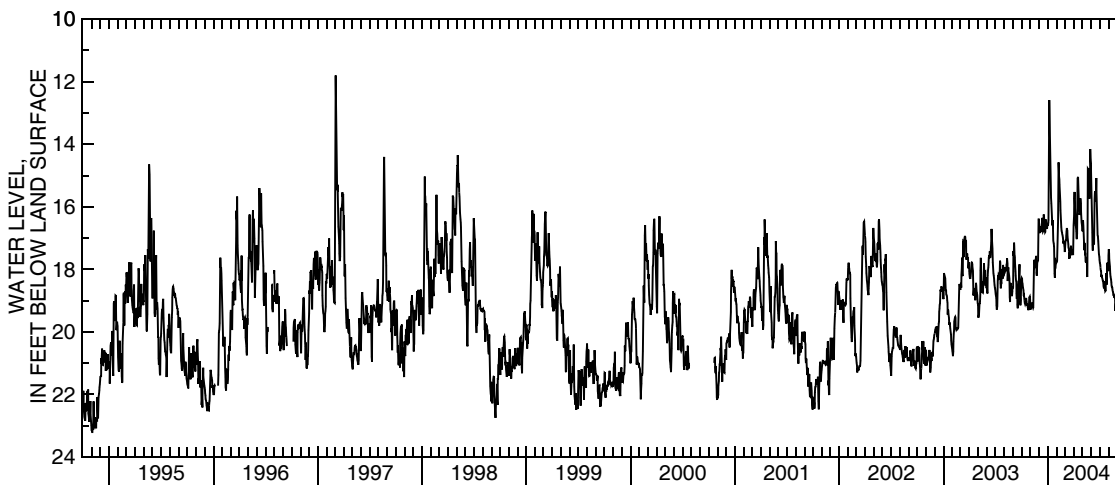
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water.

PERIOD OF RECORD.—July 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 24.06 ft below land-surface datum, Aug. 12, 13, 1993; minimum daily low 8.87 ft below land-surface datum, May 31, 1990.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.35	19.05	16.41	16.56	17.79	17.45	16.59	16.71	15.06	17.70	17.55	19.20
2	18.29	19.29	16.50	16.61	17.78	17.31	16.29	16.79	15.71	17.79	17.36	19.61
3	18.31	19.14	16.59	16.50	17.73	17.22	15.75	16.72	16.05	17.86	17.49	19.70
4	18.42	19.14	16.68	16.43	17.28	17.06	15.53	16.44	16.45	17.95	17.69	19.61
5	18.47	19.15	16.80	15.48	16.74	17.10	15.85	16.61	16.83	18.05	17.79	19.62
6	18.56	19.10	16.79	14.21	16.45	16.94	16.05	16.74	17.22	18.08	17.91	19.97
7	18.60	19.10	16.64	12.59	15.54	16.79	16.26	17.16	17.40	18.25	18.14	20.45
8	18.68	19.14	16.70	13.32	14.58	16.68	16.53	17.39	17.13	18.18	18.24	20.58
9	18.86	19.17	16.71	13.98	14.81	16.72	16.67	17.16	17.15	18.24	18.30	19.31
10	18.84	19.20	16.77	14.48	15.03	16.77	16.79	17.25	17.20	18.30	18.33	17.91
11	18.93	19.23	16.74	14.94	15.12	16.95	16.97	17.55	17.18	18.33	18.42	16.43
12	19.00	19.22	16.36	15.32	15.30	17.10	17.04	17.47	16.74	18.38	18.51	16.58
13	19.08	18.18	16.44	15.71	15.60	17.20	16.86	17.76	15.78	18.38	18.57	16.86
14	19.11	17.75	16.61	15.90	15.84	17.30	15.80	17.79	15.56	18.45	18.59	17.33
15	19.08	17.70	16.71	16.17	16.11	17.34	15.08	17.64	15.51	18.54	18.66	18.14
16	18.97	17.78	16.79	16.38	16.32	17.40	15.05	17.64	15.60	18.59	18.72	18.72
17	18.92	17.82	16.77	16.58	16.55	17.67	15.30	17.67	15.80	18.61	18.74	18.78
18	18.95	17.94	16.25	16.59	16.65	17.54	15.66	18.22	15.81	18.60	18.83	16.67
19	19.04	17.93	16.29	16.43	16.77	17.56	15.93	18.24	15.08	18.39	18.84	14.82
20	19.17	17.70	16.47	16.86	16.83	17.49	16.06	16.58	15.50	18.60	18.83	16.17
21	19.13	17.60	16.59	17.10	16.89	17.56	16.20	14.79	15.81	18.70	18.87	16.19
22	19.15	17.60	16.71	17.18	16.92	17.28	16.26	14.81	16.17	18.68	18.86	16.81
23	19.20	18.11	16.81	17.28	16.98	17.25	16.20	14.81	16.49	18.33	18.92	17.33
24	19.25	18.21	16.80	17.76	17.03	17.47	15.74	15.18	16.91	18.12	18.93	17.34
25	19.29	17.88	16.44	18.14	17.18	17.37	15.75	15.44	16.95	18.47	19.34	17.91
26	19.31	17.76	16.44	18.27	17.11	17.45	15.89	15.75	17.10	18.47	19.20	18.27
27	19.26	17.75	16.52	17.99	17.16	17.47	16.22	15.62	17.33	17.95	19.10	18.53
28	19.00	17.72	16.61	17.97	17.22	17.47	16.32	15.09	17.49	17.79	19.06	18.60
29	18.90	16.95	16.67	17.95	17.27	17.49	16.50	14.16	17.54	17.88	19.05	18.14
30	18.87	16.41	16.71	17.73	---	17.55	16.62	14.48	17.61	18.05	19.08	18.22
31	18.96	---	16.59	17.75	---	17.11	---	14.61	---	18.03	19.17	---
MAX	19.31	19.29	16.81	18.27	17.79	17.67	17.04	18.24	17.61	18.70	19.34	20.58
CAL YR 2003	LOW 20.78											
WTR YR 2004	LOW 20.58											



392630082130400. Local Number, AT-6

LOCATION.—Latitude 39°26'30", longitude 82°13'04", Athens County, Hydrologic Unit 05030204, at Hocking Technical College near Nelsonville, Ohio.
 Owner: State of Ohio.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused water table well, diameter 6 in., depth 54 ft, cased to 49 ft.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land surface datum is 670 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter, 4.00 ft above land-surface datum.

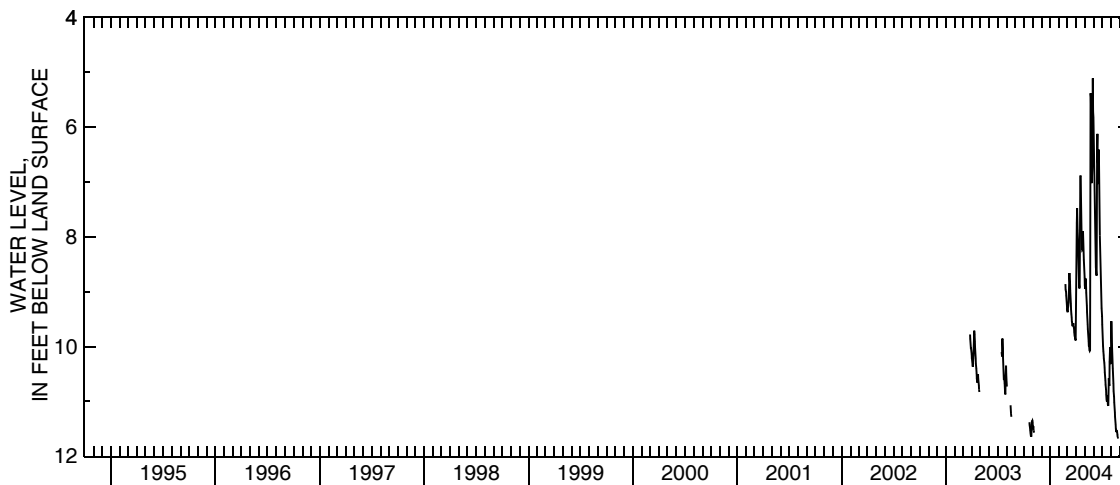
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water.

PERIOD OF RECORD.—March 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 11.68 ft below land-surface datum, Aug. 25, 2004; minimum daily low 5.11 ft below land-surface datum, May 29, 2004.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
 DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	11.44	---	---	---	9.36	8.92	8.88	6.08	9.60	9.89	---
2	---	11.47	---	---	---	9.36	8.43	8.95	6.51	9.74	9.54	---
3	---	11.47	---	---	---	9.32	7.75	8.90	6.90	9.88	9.72	---
4	---	11.53	---	---	---	9.26	7.48	8.76	7.24	9.99	9.90	---
5	---	11.57	---	---	---	9.19	7.70	8.91	7.54	10.09	10.07	---
6	---	---	---	---	---	9.10	7.88	9.02	7.84	10.16	10.24	---
7	---	---	---	---	---	8.84	8.08	9.14	8.10	10.22	10.40	---
8	---	---	---	---	---	8.66	8.30	9.26	8.34	10.30	10.55	11.66
9	---	---	---	---	---	8.75	8.49	9.37	8.55	10.39	10.68	11.62
10	---	---	---	---	---	8.86	8.68	9.50	8.68	10.47	10.81	---
11	---	---	---	---	---	8.98	8.86	9.60	8.71	10.56	10.92	---
12	---	---	---	---	---	9.10	8.94	9.68	8.27	10.63	11.02	---
13	---	---	---	---	---	9.22	8.91	9.80	6.37	10.70	11.11	---
14	---	---	---	---	---	9.32	8.07	9.90	6.12	10.79	11.20	---
15	---	---	---	---	---	9.41	6.90	9.98	6.52	10.88	11.28	---
16	---	---	---	---	---	9.47	6.88	9.98	6.72	10.97	11.36	---
17	---	---	---	---	---	9.54	7.22	10.07	7.02	11.00	11.43	---
18	---	---	---	---	---	9.60	7.49	10.08	7.02	10.96	11.50	---
19	---	---	---	---	---	9.63	7.76	10.06	6.41	10.90	11.56	---
20	11.38	---	---	---	---	9.60	7.98	6.42	6.89	10.98	11.54	---
21	11.43	---	---	---	---	9.59	8.16	5.38	7.29	11.06	11.54	---
22	11.49	---	---	---	---	9.59	8.24	5.44	7.67	11.08	11.56	---
23	11.53	---	---	---	8.86	9.63	8.23	5.91	7.98	10.76	11.61	---
24	11.59	---	---	---	8.96	9.68	7.90	6.46	8.27	10.58	11.65	---
25	11.63	---	---	---	9.00	9.74	7.92	6.92	8.51	10.69	11.68	---
26	11.63	---	---	---	9.07	9.80	8.08	7.02	8.74	10.72	---	---
27	11.63	---	---	---	9.16	9.83	8.26	6.72	8.95	10.28	---	---
28	11.47	---	---	---	9.24	9.84	8.42	6.08	9.14	10.02	---	---
29	11.37	---	---	---	9.31	9.88	8.60	5.11	9.30	10.14	---	---
30	11.35	---	---	---	---	9.88	8.74	5.72	9.45	10.29	---	---
31	11.39	---	---	---	---	9.56	---	5.82	---	10.32	---	---
MAX	11.63	11.57	---	---	9.31	9.88	8.94	10.08	9.45	11.08	11.68	11.66
CAL YR 2003		LOW 11.63										
WTR YR 2004		LOW 11.68										



Ground-Water Records—Auglaize County

403233083574500. Local Number, AU-3

LOCATION.—Latitude 40°32'33", longitude 83°57'45", Auglaize County, Hydrologic Unit 05080001, 1 mi southwest of New Hampshire, Ohio. Owner: State of Ohio.

AQUIFER.—Limestone of Silurian Age.

WELL CHARACTERISTICS.—Drilled test artesian well, diameter 12 in., depth 380 ft, cased to 52 ft.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 1,020 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter, 3.00 ft above land-surface datum.

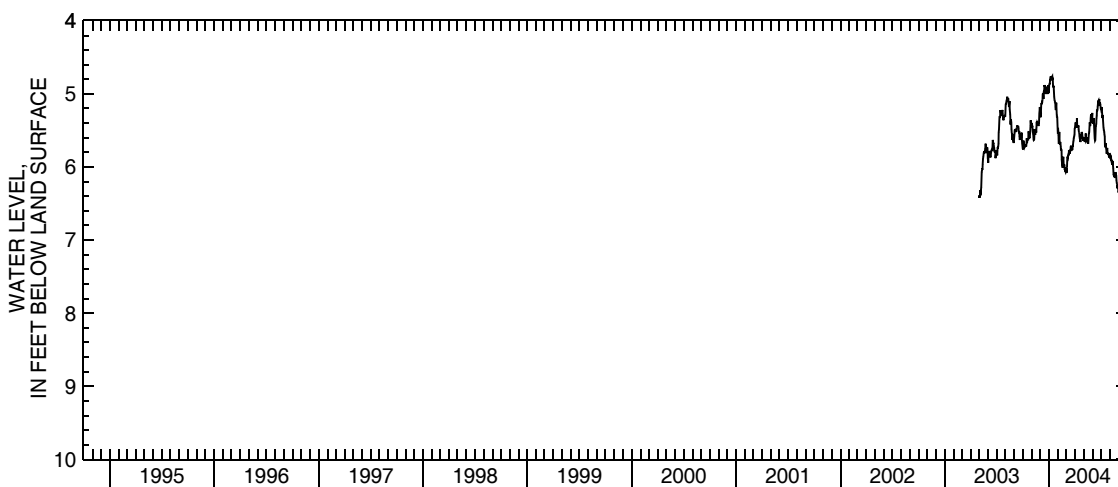
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—December 1974 to September 1982 continuous, periodic October 1982 to April 2003, continuous thereafter.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 11.87 ft below land-surface datum, Feb. 7-8, 1977; minimum measured low, 4.08 ft below land-surface datum, June 12, 1996.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.74	5.42	5.28	4.96	5.51	6.01	5.46	5.61	5.40	5.20	5.87	6.34
2	5.76	5.40	5.32	4.87	5.50	6.07	5.42	5.61	5.37	5.22	5.88	6.35
3	5.70	5.45	5.30	4.86	5.57	6.07	5.40	5.65	5.41	5.21	5.86	6.33
4	5.64	5.45	5.26	4.86	5.67	6.01	5.40	5.64	5.40	5.18	5.85	6.37
5	5.69	5.51	5.14	4.80	5.67	5.87	5.46	5.61	5.37	5.28	5.86	6.42
6	5.72	5.53	5.13	4.81	5.52	5.87	5.42	5.60	5.33	5.33	5.92	6.40
7	5.73	5.55	5.14	4.81	5.63	5.88	5.41	5.66	5.45	5.29	5.90	6.45
8	5.72	5.62	5.11	4.79	5.69	5.84	5.33	5.58	5.55	5.36	5.95	6.44
9	5.70	5.63	5.08	4.76	5.66	5.83	5.44	5.54	5.61	5.43	5.97	6.47
10	5.70	5.62	5.01	4.79	5.67	5.84	5.45	5.64	5.64	5.46	5.92	6.56
11	5.70	5.54	4.99	4.77	5.72	5.77	5.46	5.63	5.63	5.49	5.93	6.56
12	5.70	5.48	5.03	4.76	5.76	5.79	5.44	5.61	5.57	5.52	5.97	6.58
13	5.72	5.54	5.07	4.80	5.76	5.82	5.43	5.61	5.44	5.56	6.02	6.64
14	5.67	5.56	4.96	4.78	5.77	5.77	5.49	5.60	5.41	5.58	6.10	6.65
15	5.61	5.51	4.94	4.86	5.90	5.78	5.53	5.64	5.34	5.70	6.10	6.66
16	5.63	5.48	4.88	4.91	5.98	5.76	5.54	5.67	5.30	5.73	6.14	6.65
17	5.64	5.53	4.90	4.89	6.00	5.72	5.58	5.67	5.23	5.67	6.11	6.65
18	5.62	5.46	4.88	4.91	6.01	5.71	5.61	5.64	5.23	5.70	6.07	6.70
19	5.62	5.38	4.92	5.04	5.91	5.78	5.64	5.56	5.21	5.75	6.13	6.76
20	5.62	5.42	5.00	5.08	5.86	5.73	5.66	5.54	5.17	5.77	6.15	6.80
21	5.52	5.39	4.99	5.09	5.92	5.73	5.58	5.52	5.10	5.82	6.07	6.87
22	5.52	5.40	4.94	5.11	5.98	5.77	5.57	5.43	5.09	5.75	6.10	6.96
23	5.54	5.41	4.90	5.13	5.98	5.75	5.56	5.39	5.12	5.74	6.12	6.96
24	5.60	5.41	4.93	5.18	5.98	5.71	5.59	5.44	5.11	5.80	6.18	6.99
25	5.60	5.44	4.96	5.22	6.04	5.71	5.52	5.40	5.07	5.82	6.22	7.03
26	5.59	5.39	4.98	5.12	6.02	5.66	5.55	5.33	5.15	5.82	6.24	7.07
27	5.52	5.41	5.00	5.18	6.06	5.64	5.60	5.28	5.15	5.81	6.29	7.05
28	5.43	5.27	4.94	5.29	6.07	5.61	5.60	5.35	5.14	5.84	6.25	7.05
29	5.36	5.25	4.88	5.30	6.06	5.58	5.64	5.39	5.16	5.86	6.25	7.07
30	5.42	5.18	4.98	5.32	---	5.56	5.62	5.35	5.20	5.86	6.30	7.11
31	5.40	---	4.98	5.43	---	5.47	---	5.26	---	5.82	6.35	---
MAX	5.76	5.63	5.32	5.43	6.07	6.07	5.66	5.67	5.64	5.86	6.35	7.11
CAL YR 2003	LOW 6.42											
WTR YR 2004	LOW 7.11											



Ground-Water Records—Belmont County

400118081082200. Local Number, B-3

LOCATION.—Latitude 40°01'18", longitude 81°08'22", Belmont County, Hydrologic Unit 05040001, Mt. Olivett Public Square, Mt. Olivett, Ohio. Owner: Village of Mt. Olivett.

AQUIFER.—Shale of Pennsylvanian Age.

WELL CHARACTERISTICS.—Drilled observation well, diameter 6 in., depth 119 ft.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 1,265 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter, 1.5 ft above land-surface datum.

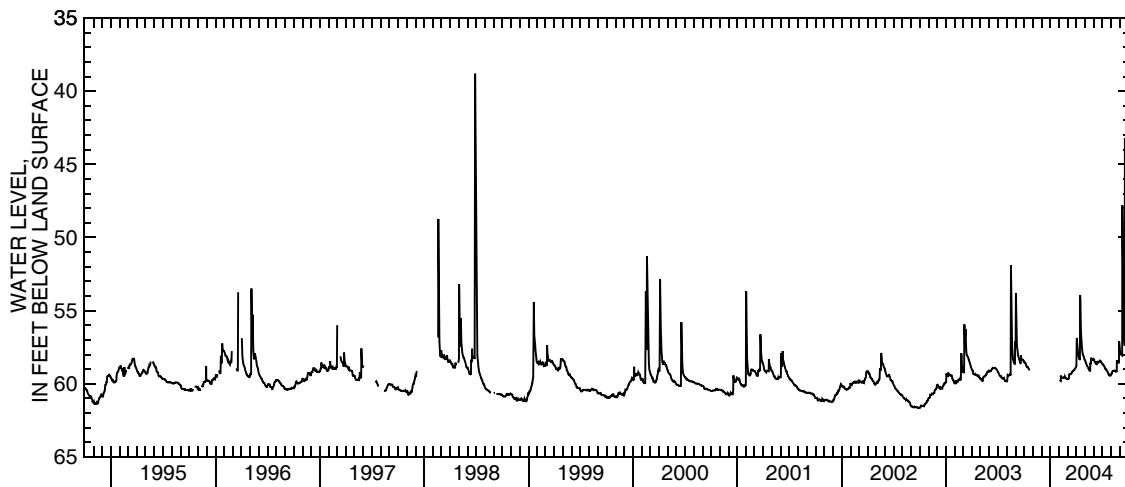
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water.

PERIOD OF RECORD.—July 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 62.94 ft below land-surface datum, Dec. 26, 1988; minimum daily low, 38.81 ft below land-surface datum, June 28, 1998.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58.54	---	---	---	---	59.70	58.80	58.41	58.35	58.67	59.34	57.79
2	58.56	---	---	---	---	59.70	57.11	58.44	58.39	58.68	59.33	57.89
3	58.58	---	---	---	---	59.70	56.88	58.52	58.46	58.70	59.28	57.93
4	58.54	---	---	---	59.76	59.70	57.30	58.58	58.52	58.70	59.21	57.98
5	58.58	---	---	---	59.81	59.68	57.63	58.62	58.53	58.74	59.16	58.01
6	58.62	---	---	---	59.82	59.61	57.83	58.67	58.54	58.77	59.14	58.05
7	58.68	---	---	---	59.46	59.36	57.95	58.74	58.59	58.80	59.14	58.07
8	58.74	---	---	---	59.57	59.36	58.02	58.79	58.64	58.83	59.14	58.08
9	58.79	---	---	---	59.61	59.36	58.13	58.80	58.67	58.89	59.14	47.81
10	58.82	---	---	---	59.61	59.36	58.22	58.83	58.68	58.97	59.14	49.25
11	58.85	---	---	---	59.61	59.36	58.29	58.88	58.68	58.98	59.10	51.42
12	58.85	---	---	---	59.61	59.33	58.34	58.92	58.56	59.01	59.10	52.99
13	58.89	---	---	---	59.61	59.31	58.34	58.95	58.59	59.03	59.10	54.29
14	58.89	---	---	---	59.60	59.31	53.94	58.98	58.59	59.03	59.13	55.38
15	58.89	---	---	---	59.57	59.28	54.24	59.03	58.52	59.04	59.14	56.33
16	58.97	---	---	---	59.57	59.27	55.37	59.07	58.53	59.09	59.18	57.09
17	59.01	---	---	---	59.60	59.19	56.21	59.12	58.53	59.14	59.18	57.41
18	59.03	---	---	---	59.60	59.16	56.79	59.13	58.52	59.16	59.18	43.22
19	59.03	---	---	---	59.60	59.14	57.18	59.13	58.50	59.19	59.16	46.20
20	59.01	---	---	---	59.60	59.14	57.47	58.58	58.49	59.24	59.16	48.51
21	---	---	---	---	59.54	59.12	57.66	58.68	58.49	59.29	58.41	50.37
22	---	---	---	---	59.58	59.10	57.81	58.50	58.49	59.33	58.53	51.93
23	---	---	---	---	59.60	59.10	57.93	58.24	58.44	59.34	58.58	53.28
24	---	---	---	---	59.61	59.07	58.04	58.32	58.46	59.43	58.58	54.45
25	---	---	---	---	59.64	59.04	58.07	58.34	58.50	59.46	58.58	55.52
26	---	---	---	---	59.67	59.01	58.13	58.35	58.50	59.46	58.58	56.46
27	---	---	---	---	59.67	58.98	58.17	58.35	58.53	59.46	58.54	57.27
28	---	---	---	---	59.68	58.95	58.26	58.34	58.56	59.45	58.52	57.95
29	---	---	---	---	59.70	58.92	58.34	58.37	58.61	59.45	57.11	58.53
30	---	---	---	---	---	58.89	58.37	58.37	58.65	59.43	57.45	59.01
31	---	---	---	---	---	58.85	---	58.37	---	59.39	57.66	---
MAX	59.03	---	---	---	59.82	59.70	58.80	59.13	58.68	59.46	59.34	59.01
CAL YR 2003	LOW 59.99											
WTR YR 2004	LOW 59.82											



Ground-Water Records—Brown County

385932083412400. Local Number, BR-20

LOCATION.—Latitude 38°59'32", longitude 83°41'24", Brown County, Hydrologic Unit 05090201, near Fincastle, Ohio. Owner: Davon Inc.

AQUIFER.—Limestone of Silurian Age.

WELL CHARACTERISTICS.—Drilled observation well, diameter 6 in., depth 40 ft, cased to 25 ft.

INSTRUMENTATION.—Digital recorder, 60-minute punch.

DATUM.—Elevation of land-surface datum is 1,026.27 ft above sea level. Measuring point: Floor of instrument shelter, 3.00 ft above land-surface datum.

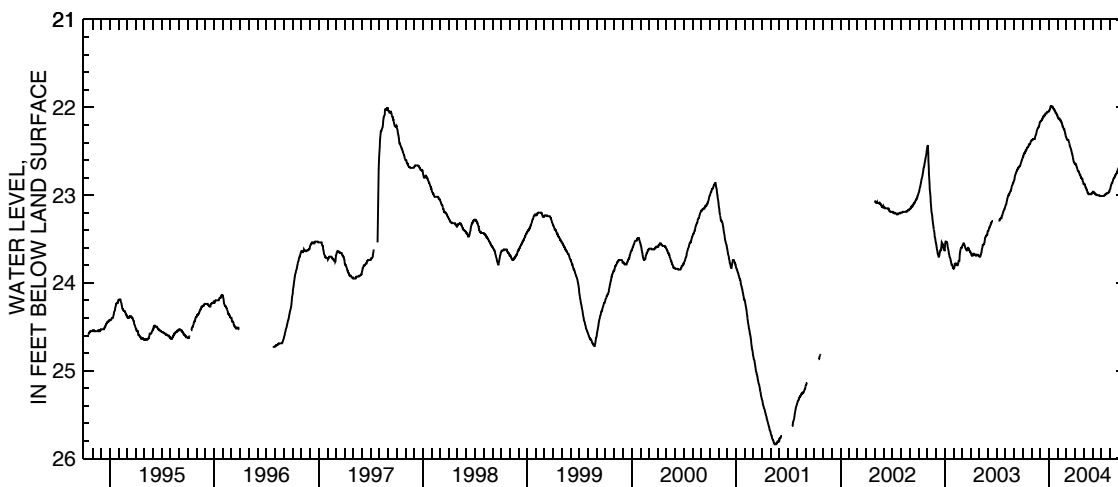
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water.

PERIOD OF RECORD.—March 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 25.84 ft below land-surface datum, May 16-21, 2001; minimum daily low, 21.98 ft below land-surface datum, Jan. 9, 2004.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.57	22.38	22.16	22.04	22.11	22.34	22.64	22.87	22.97	23.01	22.94	22.69
2	22.56	22.38	22.16	22.04	22.12	22.35	22.64	22.87	22.96	23.01	22.93	22.69
3	22.56	22.37	22.16	22.03	22.12	22.36	22.65	22.87	22.96	23.01	22.92	22.68
4	22.55	22.37	22.16	22.02	22.13	22.37	22.65	22.88	22.96	23.01	22.90	22.68
5	22.53	22.37	22.15	22.01	22.13	22.37	22.66	22.88	22.97	23.01	22.89	22.67
6	22.53	22.36	22.14	21.99	22.13	22.37	22.67	22.89	22.97	23.01	22.88	22.67
7	22.52	22.36	22.14	21.99	22.13	22.37	22.68	22.90	22.97	23.01	22.87	22.66
8	22.52	22.36	22.13	21.99	22.14	22.37	22.69	22.91	22.98	23.01	22.86	22.65
9	22.51	22.36	22.13	21.98	22.14	22.38	22.70	22.91	22.98	23.01	22.86	22.64
10	22.51	22.36	22.12	21.99	22.15	22.39	22.71	22.92	22.99	23.01	22.85	22.64
11	22.50	22.36	22.11	21.99	22.15	22.40	22.72	22.94	22.99	23.01	22.84	22.63
12	22.49	22.36	22.11	21.99	22.16	22.41	22.73	22.94	22.99	23.00	22.83	22.63
13	22.49	22.34	22.10	22.00	22.17	22.42	22.73	22.95	22.99	23.00	22.82	22.62
14	22.48	22.33	22.10	22.00	22.17	22.44	22.73	22.96	22.99	23.00	22.81	22.62
15	22.47	22.32	22.10	22.00	22.18	22.45	22.74	22.97	23.00	23.00	22.81	22.62
16	22.46	22.31	22.09	22.01	22.19	22.46	22.75	22.97	23.00	22.99	22.80	22.61
17	22.46	22.30	22.09	22.02	22.21	22.47	22.76	22.98	23.00	22.99	22.80	22.61
18	22.46	22.29	22.08	22.02	22.22	22.48	22.77	22.99	23.00	22.99	22.79	22.60
19	22.45	22.27	22.07	22.02	22.22	22.49	22.77	22.99	23.00	22.99	22.78	22.59
20	22.45	22.26	22.07	22.03	22.23	22.50	22.78	22.99	23.00	22.98	22.78	22.59
21	22.44	22.25	22.07	22.04	22.24	22.52	22.79	22.99	23.00	22.98	22.77	22.59
22	22.43	22.24	22.07	22.04	22.25	22.53	22.80	22.99	23.00	22.98	22.76	22.59
23	22.42	22.24	22.07	22.05	22.25	22.55	22.80	22.99	23.00	22.98	22.76	22.58
24	22.42	22.23	22.06	22.06	22.26	22.56	22.81	22.99	23.00	22.98	22.75	22.58
25	22.42	22.22	22.05	22.06	22.27	22.58	22.81	22.99	23.00	22.98	22.74	22.58
26	22.42	22.22	22.05	22.07	22.28	22.59	22.82	22.99	23.01	22.97	22.74	22.58
27	22.41	22.21	22.05	22.07	22.30	22.61	22.82	22.99	23.01	22.97	22.73	22.57
28	22.40	22.20	22.05	22.08	22.31	22.62	22.84	22.99	23.01	22.97	22.72	22.57
29	22.39	22.19	22.05	22.09	22.33	22.63	22.85	22.98	23.01	22.96	22.71	22.56
30	22.38	22.17	22.05	22.09	---	22.64	22.86	22.98	23.01	22.96	22.71	22.56
31	22.38	---	22.04	22.10	---	22.64	---	22.98	---	22.95	22.70	---
MAX	22.57	22.38	22.16	22.10	22.33	22.64	22.86	22.99	23.01	23.01	22.94	22.69
CAL YR 2003	LOW 23.84											
WTR YR 2004	LOW 23.01											



Ground-Water Records—Butler County

391904084371800. Local Number, BU-12

LOCATION.—Latitude 39°19'04", longitude 84°37'18", Butler County, Hydrologic Unit 05080002, 1.5 mi east of Ross, Ohio. Owner: City of Cincinnati.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused observation well, diameter 6 in., depth 157 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 547.33 ft above sea level. Measuring point: Floor of instrument shelter 7.8 ft above land-surface datum.

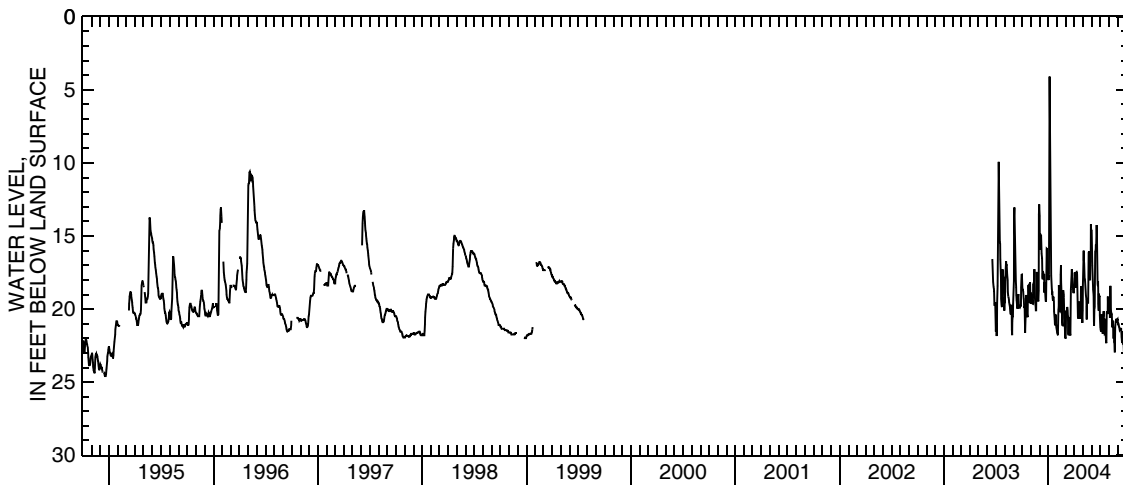
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—April 1968 to July 1999 and June 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 28.40 ft below land-surface datum, July 11, 1988; minimum daily low, 2.00 ft above land surface, May 24 and 25, 1968.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.98	18.89	13.63	17.96	21.65	22.04	17.90	18.40	15.04	21.24	19.60	21.03
2	18.57	19.05	15.52	18.01	21.75	21.24	17.50	17.70	16.18	21.41	19.80	21.02
3	18.70	19.19	15.92	17.63	21.74	20.11	17.70	16.01	17.04	21.54	20.62	21.08
4	18.70	19.39	14.86	14.22	20.92	20.35	17.92	16.66	17.67	20.80	19.75	21.16
5	18.82	19.43	15.02	4.10	20.06	20.34	18.14	16.86	18.22	20.38	18.42	21.25
6	19.28	19.53	15.02	7.29	19.85	20.31	18.32	17.21	18.67	21.22	19.56	21.42
7	19.36	19.63	15.02	10.24	18.37	19.86	18.54	17.91	19.04	21.39	20.01	21.40
8	19.90	19.65	16.21	13.33	19.14	20.12	17.48	18.00	20.87	21.22	20.26	21.41
9	19.83	18.34	16.44	14.98	19.82	20.43	17.46	18.14	21.14	21.69	20.33	21.36
10	19.96	18.22	16.54	16.56	20.10	20.99	17.55	18.67	19.96	20.57	20.36	21.37
11	21.29	18.19	17.80	17.71	20.16	21.68	17.65	19.06	19.86	20.53	21.26	21.36
12	21.63	18.07	17.97	18.45	20.14	21.81	18.75	19.16	18.63	20.15	20.77	21.30
13	20.56	17.28	17.57	18.64	17.66	20.60	20.55	19.35	16.09	20.63	20.87	21.91
14	20.36	18.43	17.53	18.82	17.01	20.62	20.60	20.72	15.96	20.88	20.94	22.20
15	19.98	19.15	17.64	18.80	18.14	20.67	20.66	19.80	15.60	21.29	21.05	22.31
16	19.04	19.56	17.68	19.25	19.09	20.67	19.53	19.57	15.68	21.74	22.03	21.55
17	19.70	19.85	17.68	19.44	19.45	21.69	19.50	19.29	15.25	21.73	21.28	21.60
18	20.12	20.09	18.88	19.22	20.82	21.82	19.60	19.56	14.26	20.67	22.24	22.41
19	20.48	20.09	18.18	19.22	21.11	19.22	19.70	19.56	15.01	21.70	22.32	21.69
20	20.56	18.70	18.52	19.51	21.12	18.67	19.77	18.11	16.31	22.04	22.91	22.56
21	19.42	17.46	18.81	20.17	19.62	18.16	19.72	16.13	18.29	22.30	22.92	22.87
22	19.58	18.35	19.38	20.45	18.72	17.51	20.68	16.07	18.44	22.34	21.26	23.08
23	18.41	18.69	19.51	20.73	19.01	17.28	20.55	16.72	18.09	20.30	20.85	23.52
24	18.38	19.00	19.35	21.02	19.20	18.05	18.56	17.10	19.63	20.17	20.80	23.70
25	19.43	19.22	18.11	21.11	20.22	18.50	18.44	17.28	20.12	20.23	20.89	23.72
26	19.56	19.41	15.87	20.38	20.62	18.52	18.94	18.03	18.96	20.33	20.66	23.72
27	19.18	19.49	15.89	20.99	20.74	18.57	20.08	17.05	19.15	19.15	20.80	22.57
28	18.48	18.75	17.57	21.08	21.51	18.86	20.63	16.74	19.16	20.21	20.94	23.24
29	18.20	13.54	17.83	21.24	21.92	18.87	20.95	14.22	20.42	20.25	20.76	23.72
30	19.17	12.85	17.24	21.36	---	18.87	20.12	14.62	20.94	20.27	20.70	22.72
31	19.65	---	17.49	21.52	---	18.59	---	14.63	---	20.12	20.83	---
MAX	21.63	20.09	19.51	21.52	21.92	22.04	20.95	20.72	21.14	22.34	22.92	23.72
CAL YR 2003	LOW 21.84											
WTR YR 2004	LOW 23.72											



391942084345700. Local Number, BU-18

LOCATION.—Latitude 39°19'42", longitude 84°34'57", Butler County, Hydrologic Unit 05080002, in Fairfield, Ohio. Owner: City of Hamilton.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused observation well, diameter 6 in., depth 210 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 570 ft above sea level from topographic map. Measuring point: Floor of instrument shelter 3.5 ft above land-surface datum.

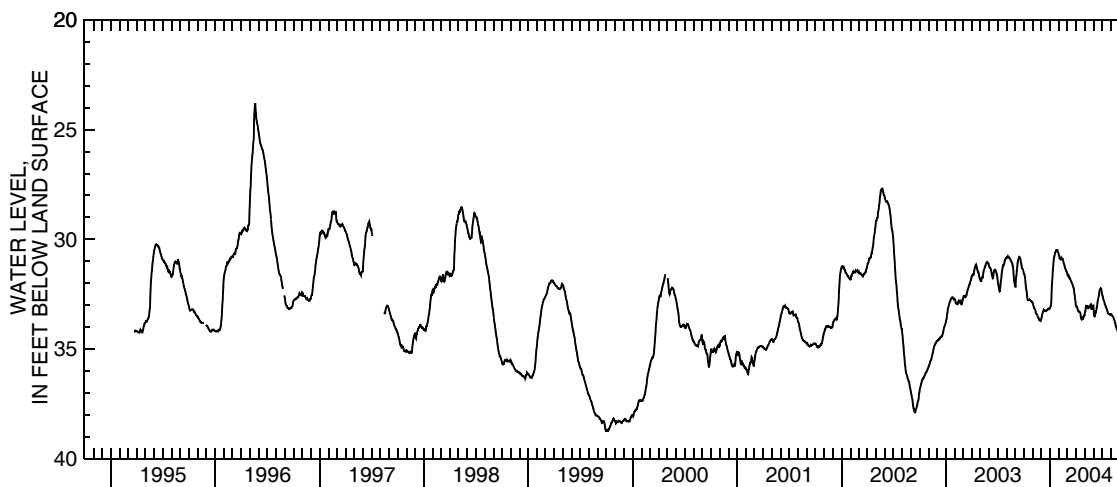
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water.

PERIOD OF RECORD.—March 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 38.74 ft below land-surface datum, Sept. 29, 30, Oct. 4 and 5, 1999; minimum daily low, 23.79 ft below land surface, May 20, 1996.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31.55	32.89	33.62	33.11	30.74	31.56	33.07	33.41	33.13	32.50	33.42	34.35
2	31.58	32.96	33.58	33.07	30.77	31.61	33.07	33.32	33.31	32.55	33.42	34.37
3	31.60	33.02	33.52	33.04	30.85	31.65	33.06	33.28	33.46	32.60	33.45	34.38
4	31.68	33.05	33.44	33.01	30.89	31.66	33.07	33.22	33.52	32.66	33.47	34.39
5	31.75	33.10	33.37	32.86	30.90	31.65	33.13	33.12	33.51	32.73	33.48	34.40
6	31.88	33.13	33.34	32.50	30.86	31.70	33.19	33.05	33.40	32.77	33.50	34.42
7	31.99	33.16	33.30	32.23	30.86	31.71	33.23	33.05	33.33	32.80	33.51	34.45
8	32.12	33.19	33.27	31.95	30.89	31.75	33.26	33.00	33.35	32.84	33.53	34.48
9	32.23	33.21	33.25	31.68	30.84	31.78	33.29	33.08	33.30	32.90	33.56	34.51
10	32.33	33.25	33.22	31.47	30.86	31.78	33.29	33.10	33.25	32.95	33.59	34.54
11	32.43	33.29	33.24	31.30	30.87	31.81	33.30	33.08	33.18	32.98	33.63	34.54
12	32.55	33.33	33.25	31.14	30.90	31.85	33.31	33.13	33.12	33.02	33.67	34.56
13	32.66	33.38	33.24	31.03	30.90	31.88	33.31	33.14	33.05	33.05	33.71	34.61
14	32.74	33.41	33.25	30.92	30.90	31.92	33.32	33.11	32.94	33.07	33.75	34.66
15	32.77	33.42	33.27	30.80	30.95	31.94	33.35	33.08	32.86	33.11	33.80	34.70
16	32.78	33.45	33.28	30.76	31.00	31.97	33.42	33.08	32.80	33.14	33.84	34.75
17	32.78	33.48	33.28	30.70	31.06	31.99	33.51	33.07	32.72	33.19	33.89	34.79
18	32.78	33.50	33.27	30.61	31.09	32.03	33.57	33.09	32.65	33.21	33.94	34.82
19	32.76	33.55	33.24	30.60	31.14	32.07	33.63	33.08	32.58	33.24	34.00	34.84
20	32.76	33.57	33.23	30.57	31.19	32.08	33.63	33.02	32.52	33.30	34.05	34.88
21	32.75	33.58	33.21	30.54	31.27	32.16	33.61	32.98	32.43	33.34	34.09	34.94
22	32.76	33.59	33.20	30.49	31.30	32.20	33.65	32.97	32.34	33.39	34.12	34.98
23	32.77	33.62	33.20	30.49	31.32	32.22	33.64	33.08	32.30	33.41	34.16	35.03
24	32.79	33.69	33.19	30.51	31.37	32.24	33.62	33.17	32.27	33.41	34.19	35.08
25	32.81	33.70	33.18	30.51	31.40	32.33	33.62	33.18	32.25	33.40	34.21	35.13
26	32.82	33.70	33.16	30.46	31.43	32.50	33.57	33.17	32.23	33.41	34.24	35.17
27	32.83	33.71	33.15	30.54	31.46	32.58	33.53	33.14	32.24	33.42	34.27	35.24
28	32.84	33.72	33.14	30.57	31.49	32.68	33.50	33.10	32.30	33.43	34.29	35.30
29	32.85	33.69	33.14	30.60	31.53	32.80	33.48	33.08	32.37	33.43	34.30	35.36
30	32.87	33.65	33.16	30.65	---	32.88	33.47	33.03	32.44	33.44	34.32	35.40
31	32.88	---	33.13	30.70	---	33.02	---	32.98	---	33.43	34.34	---
MAX	32.88	33.72	33.62	33.11	31.53	33.02	33.65	33.41	33.52	33.44	34.34	35.40
CAL YR 2003		LOW 33.78										
WTR YR 2004		LOW 35.40										



392017084345200. Local Number, BU-7

LOCATION.—Latitude 39°20'17", longitude 84°34'52", Butler County, Hydrologic Unit 05080002, 5584 East River Road in Fairfield, Ohio. Owner: C. E. Schiering.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused water-table well, diameter 6 in., depth 176 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 572.54 ft above sea level. Measuring point: Floor of instrument shelter 1.93 ft above land-surface datum.

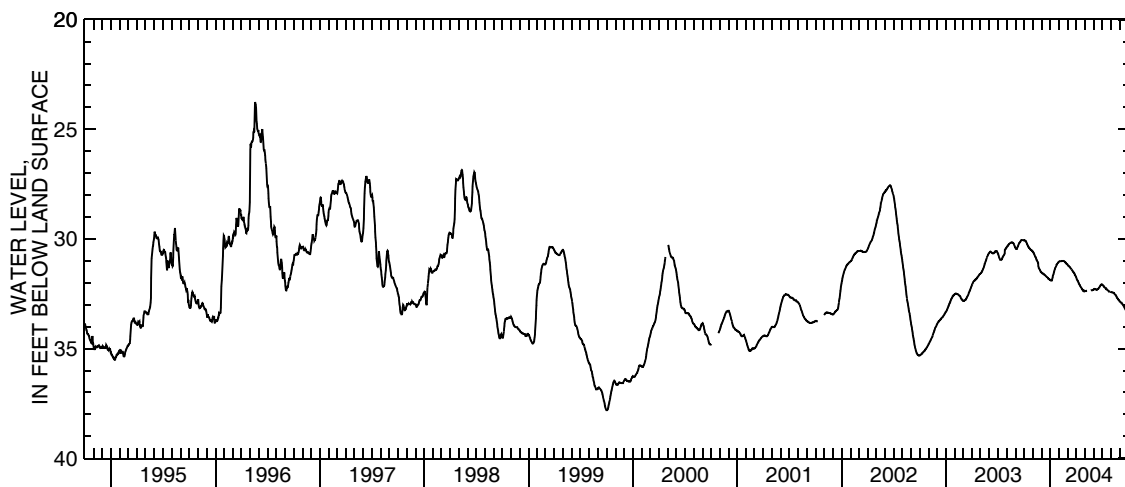
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—August 1943 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 37.81 ft below land-surface datum, Sept. 30, Oct. 1 and 2, 1999; minimum daily low, 11.45 ft below land-surface datum, June 6, 1947.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30.07	30.59	31.54	31.88	31.03	31.18	31.79	32.37	32.29	32.09	32.43	32.86
2	30.07	30.61	31.55	31.89	31.02	31.19	31.82	32.37	32.28	32.10	32.43	32.88
3	30.07	30.63	31.56	31.90	31.02	31.21	31.85	32.38	32.28	32.12	32.44	32.89
4	30.07	30.66	31.57	31.90	31.02	31.23	31.87	32.38	32.28	32.13	32.45	32.90
5	30.07	30.69	31.58	31.90	31.02	31.24	31.90	32.37	32.29	32.15	32.45	32.91
6	30.09	30.72	31.59	31.89	31.02	31.25	31.93	32.37	32.29	32.16	32.45	32.92
7	30.11	30.75	31.59	31.85	31.02	31.27	31.95	32.36	32.29	32.18	32.45	32.94
8	30.13	30.78	31.60	31.79	31.02	31.28	31.98	32.36	32.30	32.19	32.45	32.96
9	30.16	30.81	31.61	31.74	31.01	31.29	32.01	---	32.31	32.21	32.46	32.97
10	30.19	30.83	31.62	31.68	31.01	31.31	32.03	---	32.32	32.23	32.47	32.99
11	30.22	30.86	31.63	31.63	31.01	31.32	32.06	---	32.32	32.24	32.48	33.00
12	30.25	30.89	31.64	31.58	31.01	31.34	32.09	---	32.32	32.25	32.49	33.02
13	30.28	30.93	31.65	31.53	31.01	31.35	32.11	---	32.31	32.27	32.51	33.05
14	30.31	30.96	31.66	31.48	31.00	31.37	32.14	---	32.30	32.27	32.53	33.08
15	30.35	30.99	31.68	31.44	31.00	31.39	32.16	---	32.29	32.29	32.54	33.10
16	30.37	31.02	31.69	31.40	31.01	31.41	32.18	---	32.28	32.30	32.55	33.12
17	30.38	31.04	31.71	31.37	31.01	31.43	32.20	---	32.27	32.31	32.57	33.15
18	30.40	31.07	31.72	31.33	31.02	31.45	32.23	---	32.25	32.32	32.60	33.17
19	30.41	31.10	31.73	31.29	31.03	31.47	32.25	---	32.23	32.33	32.62	33.19
20	30.43	31.27	31.74	31.26	31.04	31.49	32.27	---	32.21	32.34	32.65	33.22
21	30.45	31.30	31.75	31.23	31.06	31.51	32.29	---	32.19	32.36	32.68	33.25
22	30.46	31.33	31.77	31.20	31.07	31.52	32.31	32.35	32.16	32.37	32.70	33.27
23	30.47	31.36	31.78	31.18	31.08	31.54	32.33	32.34	32.14	32.39	32.72	33.30
24	30.49	31.38	31.80	31.15	31.09	31.56	32.35	32.34	32.12	32.40	32.74	33.33
25	30.50	31.41	31.81	31.13	31.11	31.58	32.37	32.34	32.11	32.40	32.76	33.36
26	30.51	31.44	31.82	31.11	31.13	31.61	32.38	32.34	32.09	32.40	32.78	33.39
27	30.52	31.47	31.83	31.09	31.14	31.63	32.39	32.34	32.08	32.41	32.79	33.42
28	30.53	31.49	31.84	31.07	31.15	31.66	32.35	32.33	32.07	---	32.80	33.46
29	30.55	31.51	31.85	31.06	31.16	31.69	32.36	32.33	32.07	32.42	32.81	33.49
30	30.56	31.53	31.86	31.05	---	31.72	32.37	32.32	32.08	32.43	32.83	33.52
31	30.57	---	31.87	31.04	---	31.76	---	32.31	---	32.43	32.85	---
MAX	30.57	31.53	31.87	31.90	31.16	31.76	32.39	32.38	32.32	32.43	32.85	33.52
CAL YR 2003		LOW 33.31										
WTR YR 2004		LOW 33.52										



392048084311400. Local Number, BU-8

LOCATION.—Latitude 39°20'48", longitude 84°31'14", Butler County, Hydrologic Unit 05080002, Symmes and Gilmore Road, east of Hamilton, Ohio. Owner: City of Hamilton.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled test artesian well, diameter 6 in., depth 200 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 630 ft above sea level, from topographic map. Measuring point: Floor of instrument shelter 4.13 ft above land-surface datum.

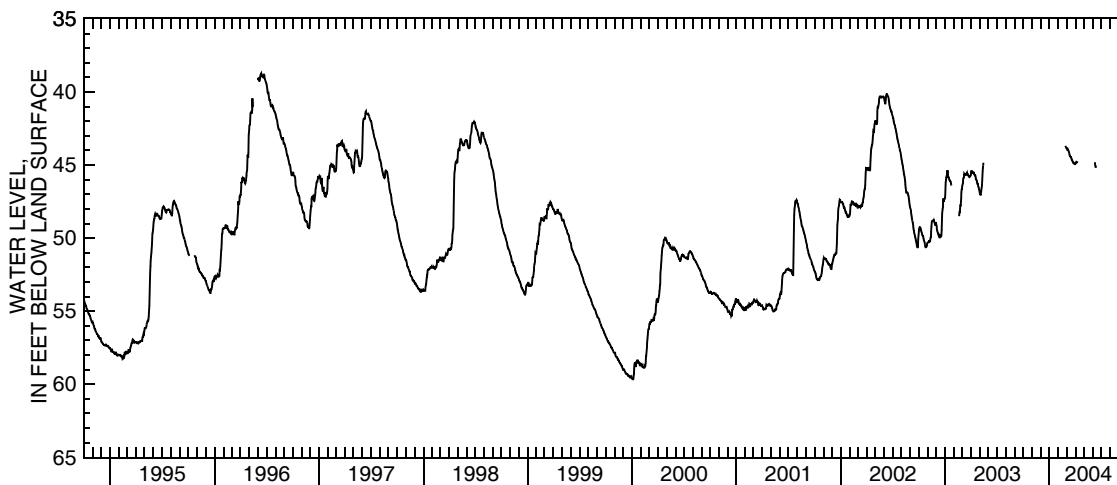
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—April 1944 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 71.70 ft below land-surface datum, Oct. 24, 1944; minimum daily low, 38.24 ft below land-surface datum, June 8, 1947.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	43.84	44.91	---	---	---	---	---
2	---	---	---	---	---	43.88	44.87	---	---	---	---	---
3	---	---	---	---	---	43.96	44.82	---	---	---	---	---
4	---	---	---	---	---	43.97	44.78	---	---	---	---	---
5	---	---	---	---	---	43.97	44.82	---	---	---	---	---
6	---	---	---	---	---	43.95	44.82	---	---	---	---	---
7	---	---	---	---	---	43.99	44.81	---	---	---	---	---
8	---	---	---	---	---	44.05	44.76	---	44.80	---	---	---
9	---	---	---	---	---	44.12	---	---	45.00	---	---	---
10	---	---	---	---	---	44.21	---	---	45.10	---	---	---
11	---	---	---	---	---	44.24	---	---	45.10	---	---	---
12	---	---	---	---	---	44.32	---	---	45.20	---	---	---
13	---	---	---	---	---	44.41	---	---	---	---	---	---
14	---	---	---	---	---	44.42	---	---	---	---	---	---
15	---	---	---	---	---	44.48	---	---	---	---	---	---
16	---	---	---	---	---	44.48	---	---	---	---	---	---
17	---	---	---	---	---	44.51	---	---	---	---	---	---
18	---	---	---	---	---	44.56	---	---	---	---	---	---
19	---	---	---	---	---	44.66	---	---	---	---	---	---
20	---	---	---	---	---	44.67	---	---	---	---	---	---
21	---	---	---	---	---	44.70	---	---	---	---	---	---
22	---	---	---	---	---	44.76	---	---	---	---	---	---
23	---	---	---	---	---	44.80	---	---	---	---	---	---
24	---	---	---	---	---	44.81	---	---	---	---	---	---
25	---	---	---	---	---	44.85	---	---	---	---	---	---
26	---	---	---	---	43.70	44.88	---	---	---	---	---	---
27	---	---	---	---	43.76	44.90	---	---	---	---	---	---
28	---	---	---	---	43.82	44.91	---	---	---	---	---	---
29	---	---	---	---	43.84	44.93	---	---	---	---	---	---
30	---	---	---	---	---	44.94	---	---	---	---	---	---
31	---	---	---	---	---	44.93	---	---	---	---	---	---
MAX	---	---	---	---	43.84	44.94	44.91	---	45.20	---	---	---
CAL YR 2003	LOW 48.50											
WTR YR 2004	LOW 45.20											



392737084291300. Local Number, BU-16

LOCATION.—Latitude 39°27'37", longitude 84°29'13", Butler County, Hydrologic Unit 05080002, Wayne–Madison Road 2 mi southwest of Trenton, Ohio.

Owner: Miller Brewing Company.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled test water table well, diameter 4 in., depth 218 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

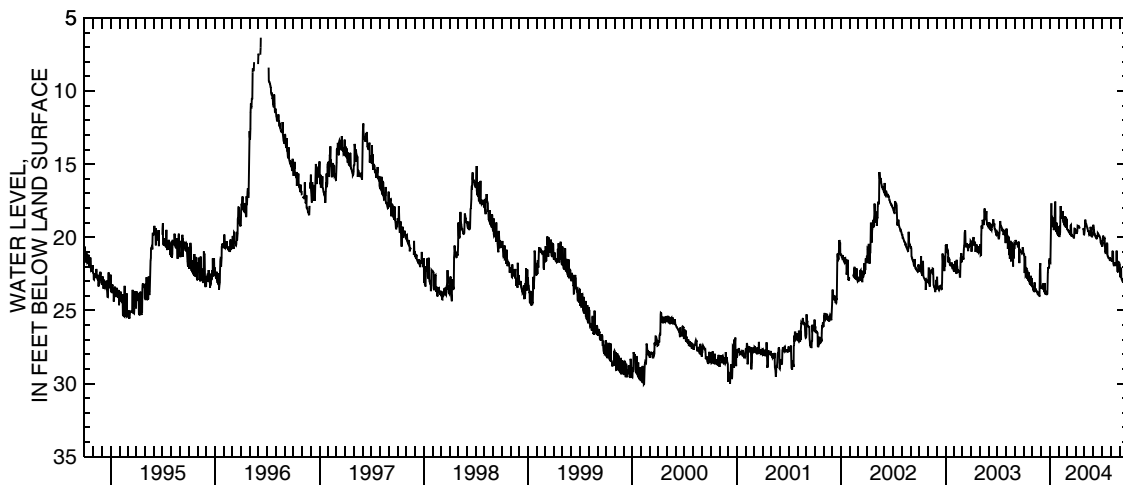
DATUM.—Elevation of land-surface datum is 640 ft above sea level, from topographic map. Measuring point: Floor of instrument shelter, 4.5 ft above land-surface datum.

REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 30.05 ft below land-surface datum, Feb. 10, 2000; minimum daily low, 5.71 ft below land-surface datum, April. 17, 1991.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.13	23.38	23.40	21.77	19.31	19.40	19.70	19.75	19.14	20.57	21.48	21.83
2	21.19	23.38	23.51	21.75	19.28	19.44	19.70	19.53	19.32	20.64	21.51	21.89
3	21.18	23.54	23.40	21.77	19.98	19.49	19.70	19.08	19.47	20.40	21.57	22.68
4	21.25	23.53	23.45	20.51	19.75	19.52	19.61	18.80	19.56	20.42	21.57	22.72
5	22.45	23.54	23.47	18.56	19.74	19.55	19.64	18.97	19.77	19.88	21.63	22.14
6	21.31	23.64	23.47	17.69	19.65	19.58	19.61	19.06	19.77	19.95	21.63	22.08
7	21.34	23.62	23.54	18.77	18.61	19.56	19.22	19.17	19.85	19.97	20.97	22.74
8	22.69	23.68	23.16	19.11	17.86	19.59	19.23	19.15	19.94	20.03	20.96	22.85
9	22.68	23.08	23.57	19.25	18.61	19.67	19.23	19.22	19.94	20.07	21.00	22.91
10	22.66	23.68	23.54	19.25	18.61	19.68	19.22	19.31	20.01	20.11	21.75	22.97
11	22.12	23.67	23.49	18.68	18.63	19.68	19.22	19.35	20.07	20.09	21.84	23.01
12	22.13	23.61	23.72	18.74	18.60	19.79	19.28	19.40	20.09	20.93	21.93	23.01
13	22.78	23.50	23.73	19.20	18.68	19.81	19.31	19.53	20.09	20.99	21.93	23.04
14	22.27	23.64	23.12	19.20	18.72	19.19	19.38	19.58	19.88	20.96	21.75	22.79
15	22.86	23.68	23.79	19.52	18.20	19.15	19.40	19.64	19.94	21.02	21.75	23.07
16	22.69	23.68	23.78	19.35	18.92	19.85	---	19.55	19.89	21.06	21.81	23.13
17	22.87	23.74	23.75	18.99	18.97	19.90	---	19.67	19.71	20.93	21.87	23.19
18	22.96	23.77	23.87	18.95	18.97	19.90	---	19.86	19.74	20.52	21.86	23.00
19	22.39	23.76	23.87	17.61	19.05	19.90	---	19.85	19.80	20.37	21.92	22.98
20	23.01	23.90	23.87	17.61	19.10	19.88	---	19.72	19.86	20.47	21.95	23.01
21	22.99	23.91	23.90	19.19	19.08	19.92	---	19.71	19.88	21.26	21.51	23.01
22	23.10	23.90	23.90	19.22	19.15	19.94	---	19.80	19.89	21.30	20.91	23.34
23	23.17	23.87	23.88	19.25	18.56	19.89	---	19.28	19.97	21.35	22.02	23.39
24	23.20	23.96	23.24	19.64	19.19	19.98	---	19.52	20.00	21.41	22.31	23.43
25	23.20	24.02	22.44	19.00	18.60	20.03	19.45	19.89	20.06	21.42	22.34	23.51
26	23.23	24.02	22.04	19.62	19.32	20.03	19.44	19.89	20.10	21.45	22.40	23.51
27	22.63	22.25	22.08	19.70	18.72	19.40	19.43	19.95	20.36	21.44	21.69	23.61
28	23.27	21.89	22.10	19.67	19.34	19.40	19.41	19.95	20.40	21.36	21.71	23.60
29	23.32	21.77	22.07	19.81	18.72	19.43	19.80	19.81	20.46	21.56	21.69	23.78
30	22.78	23.24	21.51	19.86	---	19.72	19.81	19.85	20.49	21.57	21.72	23.88
31	23.41	---	21.53	19.90	---	19.72	---	19.81	---	21.56	21.77	---
MAX	23.41	24.02	23.90	21.77	19.98	20.03	19.81	19.95	20.49	21.57	22.40	23.88
CAL YR 2003		LOW 24.02										
WTR YR 2004		LOW 24.02										



392743084295500. Local Number, BU-17

LOCATION.—Latitude 39°27'43", longitude 84°29'55", Butler County, Hydrologic Unit 05080002, southwest of Trenton, Ohio. Owner: Southwest Regional Water District.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled test water table well, diameter 8 in., depth 212 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 635.28 ft above sea level. Measuring point: Floor of instrument shelter, 2.2 ft above land-surface datum.

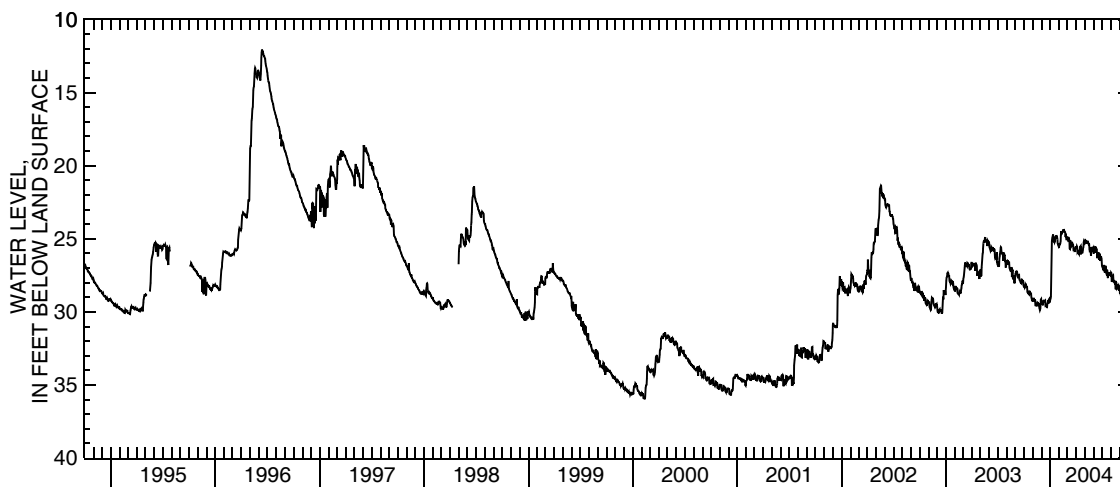
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Prior to 1992 published as 392733084293000.

PERIOD OF RECORD.—March 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 35.94 ft below land-surface datum, Feb. 11, 2000; minimum daily low, 12.06 ft below land-surface datum, June 12, 1996.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.26	29.27	29.37	29.19	25.58	24.86	25.58	25.28	26.01	26.93	27.32	28.71
2	28.31	29.24	29.38	29.06	25.33	24.95	25.58	25.19	25.90	27.00	27.35	28.76
3	28.29	29.04	29.45	28.97	25.44	24.95	25.52	25.26	25.63	27.05	27.95	28.80
4	28.33	29.08	29.46	28.44	25.40	24.97	25.58	25.13	25.67	27.02	27.93	28.88
5	28.29	29.12	29.51	27.08	25.29	25.02	25.90	25.14	25.74	26.96	27.47	28.82
6	28.11	29.18	29.52	25.80	25.16	25.07	25.88	25.19	25.70	27.15	27.92	28.56
7	28.14	29.19	29.51	25.16	24.78	25.04	25.93	25.25	25.52	26.79	27.57	28.89
8	28.14	29.22	29.21	24.89	24.48	25.26	25.98	25.29	25.97	27.21	27.53	28.97
9	28.26	29.22	29.28	24.83	24.71	25.68	26.00	25.35	25.61	27.26	27.87	29.03
10	28.26	29.54	29.24	24.77	24.62	25.70	26.03	25.14	25.68	27.30	27.88	29.08
11	28.28	29.54	29.27	24.71	24.56	25.11	26.06	25.20	25.73	26.90	27.95	29.15
12	28.31	29.55	29.28	25.04	24.54	25.38	25.83	25.25	25.76	26.90	27.99	29.10
13	28.62	29.51	29.24	25.10	24.50	25.55	25.83	25.31	26.33	26.90	28.01	28.89
14	28.62	29.55	29.22	25.05	24.51	25.53	25.70	25.35	26.07	26.96	28.08	28.89
15	28.70	29.57	29.57	25.14	24.56	25.29	25.53	25.40	26.12	27.38	28.11	28.95
16	28.74	29.55	29.55	25.22	24.35	25.31	25.50	25.38	26.04	27.45	27.88	29.00
17	28.74	29.36	29.60	25.16	24.42	25.40	26.07	25.70	26.01	27.50	28.47	29.06
18	28.80	29.37	29.65	25.16	24.41	25.43	25.56	25.79	26.00	27.12	27.95	29.63
19	28.82	29.45	29.67	24.86	24.48	25.44	25.92	25.76	26.04	27.21	28.01	29.52
20	28.61	29.48	29.63	24.84	24.51	25.40	25.93	25.73	26.45	27.66	28.28	29.40
21	28.61	29.51	29.65	24.84	24.53	25.44	25.93	25.73	26.03	27.69	28.37	29.40
22	28.65	29.48	29.42	24.81	24.56	25.73	26.00	26.15	26.06	27.35	28.32	29.51
23	28.74	29.49	29.36	24.81	24.83	25.71	25.90	26.13	26.10	27.35	28.11	29.57
24	28.77	29.78	29.30	24.93	24.89	25.74	25.77	25.56	26.51	27.42	28.15	29.61
25	28.76	29.83	29.21	24.93	24.65	25.82	25.65	25.89	26.19	27.43	28.29	29.68
26	28.76	29.87	29.43	25.05	25.01	25.80	25.58	25.56	26.24	27.39	28.22	29.65
27	29.03	29.78	29.15	25.33	24.99	25.85	25.25	25.63	26.24	27.42	28.28	29.51
28	29.07	29.36	29.12	25.37	25.02	25.85	25.19	25.63	26.36	27.42	28.29	29.49
29	29.18	29.16	29.37	25.47	25.04	25.59	25.28	25.63	26.45	27.51	28.28	29.82
30	29.16	29.12	29.28	25.53	---	25.58	25.31	25.61	26.85	27.53	28.56	29.60
31	29.27	---	29.21	25.59	---	25.58	---	25.71	---	27.54	28.37	---
MAX	29.27	29.87	29.67	29.19	25.58	25.85	26.07	26.15	26.85	27.69	28.56	29.82
CAL YR 2003		LOW 29.87										
WTR YR 2004		LOW 29.87										



392939084231700. Local Number, BU-3

LOCATION.—Latitude 39°29'39", longitude 84°23'17", Butler County, Hydrologic Unit 05080002, Armco Steel Corp., Route 122 in Middletown, Ohio. Owner: Armco Steel Corp.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 24 in., depth 250 ft, cased.

INSTRUMENTATION.—Digital recorder, 60-minute punch.

DATUM.—Elevation of land-surface datum is 668 ft above sea level, from topographic map. Measuring point: Floor of instrument shelter 1.08 ft above land-surface datum.

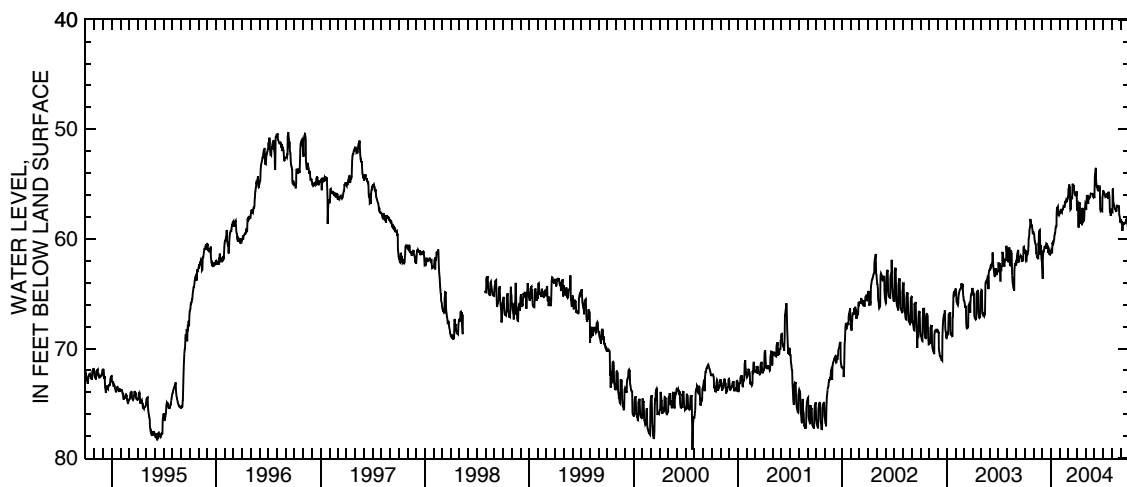
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—July 1938 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 147.27 ft below land-surface datum, Apr. 4, 1955; minimum daily low, 45.27 ft below land-surface datum, July 21, 1980.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61.23	59.47	62.67	61.26	57.63	56.19	57.11	56.74	56.29	55.93	57.48	58.32
2	61.25	59.52	62.88	61.09	57.52	55.48	57.42	56.84	54.82	55.59	57.57	58.30
3	61.31	59.62	63.64	61.17	57.62	55.46	56.86	57.35	54.23	55.70	57.59	58.52
4	61.07	59.91	61.74	61.17	57.68	55.21	56.83	56.69	54.04	55.74	55.52	58.56
5	61.13	60.14	61.18	61.19	57.53	55.04	56.87	56.43	53.72	55.87	55.41	58.47
6	62.05	60.24	61.20	60.35	57.28	55.23	58.85	56.01	53.53	55.87	56.53	58.45
7	62.04	60.37	61.12	60.47	57.54	55.29	58.97	56.48	54.89	55.96	56.73	59.27
8	61.56	60.49	60.92	60.36	57.62	56.88	56.75	56.49	55.00	56.03	56.84	58.90
9	61.51	60.53	60.84	60.42	57.32	57.32	56.80	56.39	55.17	56.12	56.96	58.78
10	61.46	61.28	60.65	60.35	57.32	57.28	56.77	56.81	55.28	56.19	57.07	58.74
11	61.44	61.28	60.78	60.14	57.33	56.19	56.76	56.40	55.28	56.14	57.19	58.61
12	61.25	61.43	60.86	60.02	57.33	56.29	58.09	56.22	55.41	56.00	57.25	58.58
13	61.16	61.62	60.80	59.69	57.18	56.41	58.26	56.27	55.36	55.98	57.29	58.70
14	60.67	61.59	60.54	59.62	57.02	56.23	58.41	56.25	55.67	55.95	57.31	58.52
15	60.04	61.47	60.86	59.47	57.03	56.34	58.52	56.28	55.12	56.01	57.41	58.62
16	59.85	61.79	60.44	59.42	57.03	55.29	58.50	56.22	55.25	55.95	57.40	58.55
17	59.65	61.87	60.46	59.13	57.14	54.98	58.59	56.13	55.50	56.07	57.41	58.55
18	59.22	60.52	60.57	58.89	56.94	55.12	58.66	56.05	55.58	56.08	57.33	58.54
19	58.94	60.56	60.71	58.90	56.67	55.29	58.59	55.91	55.38	56.36	56.97	58.41
20	58.80	59.61	60.83	58.87	56.53	55.09	57.17	55.93	55.35	55.99	56.98	58.23
21	58.18	59.34	60.79	57.69	56.71	55.22	58.25	55.89	57.21	55.69	57.01	58.20
22	58.42	59.22	61.24	57.18	56.63	55.70	58.51	55.93	57.40	55.88	57.04	58.34
23	58.52	59.19	60.90	57.14	56.47	55.85	58.29	55.93	57.37	56.08	57.07	58.25
24	58.63	60.26	60.89	57.12	56.50	55.89	58.28	55.92	57.41	56.17	57.04	58.47
25	58.80	61.49	61.27	57.04	56.53	55.95	58.18	55.88	57.40	57.59	57.02	58.67
26	58.71	60.68	61.41	57.41	56.43	55.92	58.23	55.84	57.40	57.46	57.08	58.96
27	58.99	60.56	61.42	57.78	56.47	55.96	57.49	55.98	57.48	57.20	57.78	58.99
28	59.18	61.11	61.41	57.83	56.43	55.93	57.24	56.20	57.49	57.91	57.89	58.87
29	59.44	61.80	61.32	57.71	56.28	56.10	57.17	56.23	56.27	57.59	58.05	58.88
30	59.57	62.14	61.37	57.67	---	55.88	56.98	56.16	56.06	57.41	58.50	58.76
31	59.32	---	61.29	57.72	---	55.67	---	56.15	---	57.29	58.26	---
MAX	62.05	62.14	63.64	61.26	57.68	57.32	58.97	57.35	57.49	57.91	58.50	59.27
CAL YR 2003	LOW 68.87											
WTR YR 2004	LOW 63.64											



393202084241500. Local Number, BU-15

LOCATION.—Latitude 39°32'02", longitude 84°24'15", Butler County, Hydrologic Unit 05080002, at Hook Field (municipal airport) at Middletown, Ohio.
Owner: City of Middletown.

AQUIFER.—Sand and gravel of Pleistocene Age.

INSTRUMENTATION.—Periodic measurement with chalked tape by Ohio Department of Natural Resources personnel.

WELL CHARACTERISTICS.—Drilled observation water table well, diameter 6 in., depth 23 ft, cased.

DATUM.—Elevation of land-surface datum is 641 ft, from topographic map. Measuring point: Floor of instrument shelter 3.50 ft above land-surface datum.

REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR. Water level affected by pumping wells nearby in Middletown well field.

PERIOD OF RECORD.—June 1972 to October 1982 continuous, periodic thereafter.

EXTREMES FOR PERIOD OF RECORD.—Maximum measured low, 15.72 ft below land-surface datum, Oct. 24, 1994; minimum daily low, 0.06 ft below land-surface datum, Feb. 25, 1975.

WATER LEVEL,
IN FEET BELOW LAND-SURFACE DATUM
INSTANTANEOUS OBSERVATION
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water level
04-27-2004	10.74

Ground-Water Records—Carroll County

403709081052800. Local Number, C-1

LOCATION.—Latitude 40°37'09", longitude 81°05'28", Carroll County, Hydrologic Unit 05040001, State Route 171, 3 mi north of Carrollton, Ohio. Owner: Village of Carrollton.

AQUIFER.—Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 10 in., depth 70 ft, cased.

INSTRUMENTATION.—Digital recorder, 60-minute punch.

DATUM.—Elevation of land-surface datum is 1,050 ft above sea level (from topographic map). Measuring point: Top of platform 3 ft above land-surface datum.

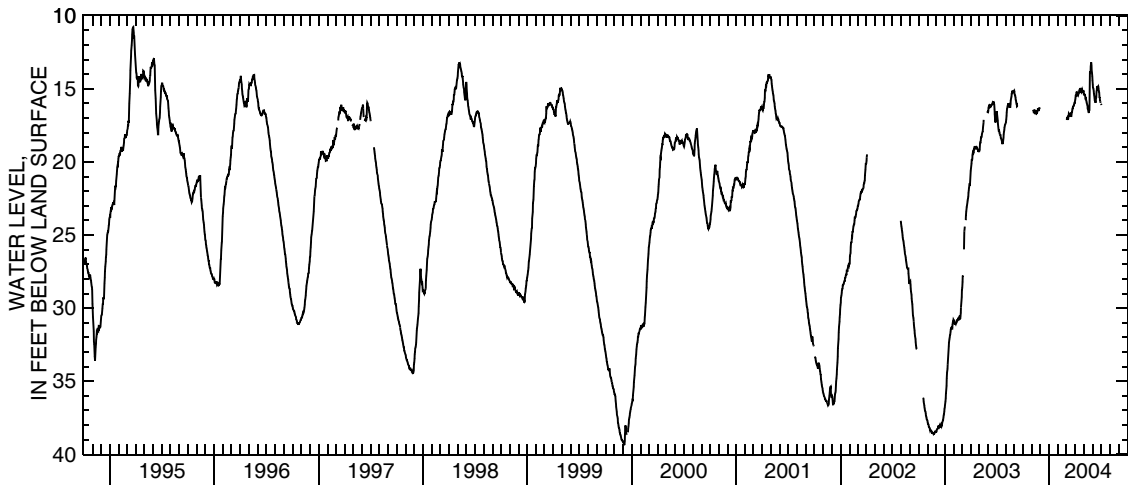
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—August 1951 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 41.05 ft below land-surface datum, Dec. 5, 1971; minimum daily low, 7.20 ft below land-surface datum, Jan. 10 and 14, 1971.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	15.78	15.18	14.43	16.03	---	---
2	---	---	---	---	---	---	15.63	15.41	14.72	16.11	---	---
3	---	---	---	---	---	17.12	15.48	15.40	14.93	---	---	---
4	---	---	---	---	---	16.93	15.49	15.40	15.00	---	---	---
5	---	---	---	---	---	17.01	15.44	15.39	15.17	---	---	---
6	---	16.44	---	---	---	17.13	15.25	15.40	15.33	---	---	---
7	---	16.50	---	---	---	16.89	15.24	15.65	15.47	---	---	---
8	---	16.62	---	---	---	16.87	15.42	15.64	15.63	---	---	---
9	---	16.62	---	---	---	16.89	15.42	15.69	15.79	---	---	---
10	---	16.54	---	---	---	16.72	15.47	15.79	15.83	---	---	---
11	---	16.48	---	---	---	16.74	15.48	15.90	15.96	---	---	---
12	---	16.48	---	---	---	16.88	15.39	15.96	15.88	---	---	---
13	---	16.74	---	---	---	16.73	15.32	16.08	15.66	---	---	---
14	---	16.67	---	---	---	16.73	15.30	16.16	15.57	---	---	---
15	---	16.63	---	---	---	16.69	15.16	16.39	15.24	---	---	---
16	---	16.59	---	---	---	16.67	15.09	16.45	15.10	---	---	---
17	---	16.66	---	---	---	16.72	15.11	16.50	14.87	---	---	---
18	---	16.46	---	---	---	16.93	14.98	16.59	14.86	---	---	---
19	---	16.68	---	---	---	16.79	15.11	16.65	14.90	---	---	---
20	---	16.67	---	---	---	16.65	15.09	16.53	14.90	---	---	---
21	---	16.54	---	---	---	16.60	15.19	16.46	14.86	---	---	---
22	---	16.48	---	---	---	16.46	15.20	15.54	15.02	---	---	---
23	---	16.32	---	---	---	16.34	15.25	13.90	15.12	---	---	---
24	---	16.52	---	---	---	16.33	15.03	13.91	15.26	---	---	---
25	---	16.42	---	---	---	16.23	15.02	13.84	15.60	---	---	---
26	---	16.43	---	---	---	16.18	15.11	13.46	15.56	---	---	---
27	---	16.33	---	---	---	16.17	15.16	13.20	15.80	---	---	---
28	---	16.33	---	---	---	16.08	15.18	13.38	15.88	---	---	---
29	---	16.29	---	---	---	16.04	15.17	13.73	15.96	---	---	---
30	---	---	---	---	---	15.97	15.15	13.92	---	---	---	---
31	---	---	---	---	---	15.97	---	14.17	---	---	---	---
MAX	---	16.74	---	---	---	17.13	15.78	16.65	15.96	16.11	---	---
CAL YR 2003	LOW 36.80											
WTR YR 2004	LOW 17.13											



Ground-Water Records—Champaign County

400638083453900. Local Number, CH-3

LOCATION.—Latitude 40°06'38", longitude 83°45'39", Champaign County, Hydrologic Unit 05080001, in Urbana, Ohio. Owner: Howard Paper Company.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled test water table well, diameter 8 in., depth 40 ft, cased.

INSTRUMENTATION.—Digital recorder, 60-minute punch.

DATUM.—Elevation of land-surface datum is 1,030 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 4.5 ft above land-surface datum.

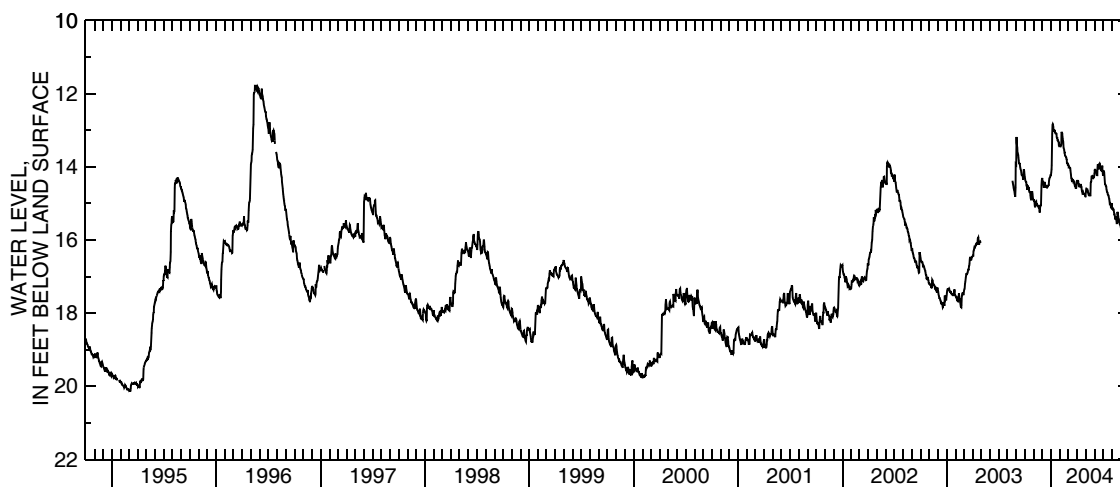
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—June 1957 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 24.80 ft below land-surface datum, Feb. 26 to Mar. 4, 1964; minimum daily low, 11.76 ft below land-surface datum, May 20, 1996.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.26	14.90	14.30	14.23	13.38	13.94	14.41	14.81	14.18	14.21	14.99	15.63
2	14.31	14.92	14.38	14.16	13.44	13.96	14.39	14.70	14.11	14.24	15.14	15.69
3	14.38	14.92	14.40	14.07	13.44	14.00	14.36	14.59	14.08	14.13	15.14	15.72
4	14.39	14.95	14.41	13.96	13.38	13.99	14.40	14.59	14.08	14.10	15.13	15.75
5	14.41	15.06	14.41	13.10	13.43	14.00	14.40	14.60	14.10	14.15	15.14	15.70
6	14.42	15.09	14.50	12.84	13.37	14.02	14.46	14.62	14.11	14.28	15.17	15.65
7	14.51	15.09	14.55	12.83	13.04	14.03	14.47	14.66	14.13	14.35	15.17	15.74
8	14.52	15.00	14.55	12.85	13.06	14.04	14.49	14.65	14.17	14.47	15.20	15.79
9	14.55	14.97	14.43	12.91	13.08	14.09	14.53	14.69	14.22	14.48	15.30	15.84
10	14.62	14.95	14.41	12.97	13.17	14.17	14.56	14.71	14.23	14.49	15.30	15.86
11	14.54	15.05	14.48	13.02	13.23	14.20	14.48	14.74	14.23	14.52	15.33	15.90
12	14.52	14.99	14.50	13.02	13.28	14.30	14.51	14.77	14.03	14.54	15.36	15.95
13	14.54	15.05	14.51	13.01	13.31	14.31	14.50	14.78	13.93	14.61	15.41	15.98
14	14.62	15.05	14.55	13.01	13.47	14.36	14.47	14.78	14.01	14.64	15.44	15.98
15	14.56	15.06	14.56	13.06	13.50	14.41	14.51	14.78	14.05	14.68	15.36	16.01
16	14.64	15.06	14.54	13.08	13.54	14.38	14.54	14.76	14.05	14.69	15.46	16.05
17	14.67	15.07	14.50	13.08	13.61	14.35	14.57	14.78	13.99	14.70	15.48	16.11
18	14.69	15.09	14.55	13.08	13.61	14.36	14.64	14.78	13.92	14.75	15.54	16.11
19	14.69	15.13	14.56	13.08	13.69	14.37	14.66	14.42	13.91	14.77	15.54	16.00
20	14.72	15.11	14.53	13.09	13.70	14.41	14.70	14.41	13.92	14.78	15.51	16.11
21	14.78	15.13	14.53	13.19	13.71	14.40	14.69	14.40	13.98	14.81	15.23	16.13
22	14.87	15.20	14.51	13.21	13.72	14.43	14.73	14.27	14.01	14.86	15.30	16.14
23	14.88	15.25	14.50	13.21	13.75	14.46	14.73	14.27	14.05	14.88	15.35	16.16
24	14.91	15.09	14.51	13.27	13.79	14.50	14.73	14.26	14.08	14.93	15.41	16.19
25	14.84	15.04	14.39	13.27	13.80	14.53	14.73	14.30	14.08	15.01	15.43	16.20
26	14.74	15.05	14.33	13.29	13.89	14.54	14.73	14.28	14.10	15.00	15.46	16.22
27	14.67	15.05	14.31	13.31	13.90	14.53	14.74	14.29	14.13	15.01	15.52	16.26
28	14.74	14.75	14.29	13.38	13.90	14.58	14.77	14.26	13.97	15.03	15.55	16.32
29	14.79	14.50	14.26	13.37	13.94	14.58	14.79	14.31	14.08	15.11	15.57	16.37
30	14.88	14.36	14.23	13.40	---	14.49	14.81	14.27	14.17	15.12	15.59	16.38
31	14.90	---	14.23	13.43	---	14.41	---	14.24	---	15.13	15.61	---
MAX	14.91	15.25	14.56	14.23	13.94	14.58	14.81	14.81	14.23	15.13	15.61	16.38
CAL YR 2003	LOW 17.85											
WTR YR 2004	LOW 16.38											



Ground-Water Records—Clark County

395639084012200. Local Number, CL-9

LOCATION.—Latitude 39°56'39", longitude 84°01'22", Clark County, Hydrologic Unit 05080001, at north edge of New Carlisle, Ohio. Owner: City of New Carlisle.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 12 in., depth 113 ft, cased.

INSTRUMENTATION.—Digital recorder, 60-minute punch.

DATUM.—Elevation of land-surface datum is 900 ft above sea level (from topographic map). Measuring point: Top of platform 2.5 ft above land-surface datum.

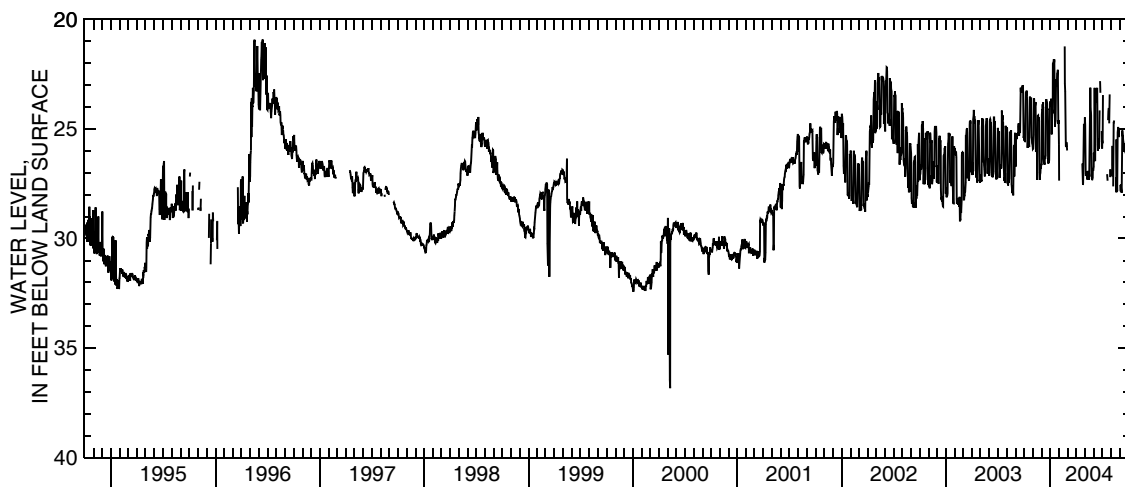
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—September 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 36.82 ft below land-surface datum, May 10, 2000; minimum daily low, 18.20 ft below land-surface datum, July 4, 1980.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.06	25.91	26.61	23.75	27.36	---	---	24.48	26.09	25.54	---	---
2	25.54	25.89	24.36	24.00	---	---	---	24.82	26.35	25.65	---	27.55
3	25.10	25.27	24.10	23.70	---	---	---	27.04	26.09	23.46	27.14	27.85
4	25.60	23.61	24.14	23.63	---	---	---	27.14	23.13	---	27.14	27.54
5	25.57	23.64	23.87	25.25	---	---	---	27.08	26.09	---	25.78	27.77
6	24.61	23.84	24.14	24.83	---	---	---	27.06	26.47	---	26.68	27.92
7	23.35	23.86	23.79	24.49	---	---	---	27.12	23.86	---	---	27.19
8	23.36	23.78	26.35	24.14	---	---	---	26.94	23.76	---	27.63	25.36
9	23.47	23.94	26.53	24.29	---	---	---	27.31	23.81	---	24.72	25.07
10	23.25	23.78	26.49	22.01	---	---	---	27.26	23.50	---	24.72	25.31
11	23.51	26.06	26.63	21.97	---	---	---	26.92	23.42	---	24.62	25.32
12	23.67	25.99	26.60	21.91	---	---	---	27.30	23.16	---	---	25.50
13	25.87	25.86	26.27	21.81	---	---	---	27.28	23.13	---	---	25.65
14	25.51	26.02	26.37	21.96	---	---	---	26.94	25.73	---	---	25.76
15	25.57	25.82	26.21	21.83	---	---	---	27.31	26.00	23.50	---	25.94
16	25.67	27.33	23.99	24.22	---	---	---	27.26	25.82	---	---	25.90
17	25.69	25.58	24.16	24.91	---	---	---	26.03	25.45	---	---	25.65
18	25.55	24.40	23.65	24.76	---	---	---	25.61	25.91	27.06	25.48	25.90
19	25.83	24.38	23.90	24.63	---	---	---	24.82	25.49	27.36	27.89	26.01
20	24.40	24.57	23.88	23.94	21.24	---	---	23.12	25.60	---	27.20	25.98
21	23.53	24.61	24.12	22.73	22.93	---	---	24.05	24.16	24.60	27.38	26.03
22	23.62	24.46	24.07	22.90	23.30	---	26.58	24.24	---	24.18	27.84	26.06
23	23.59	24.65	26.17	23.05	25.40	---	27.11	24.38	22.82	24.04	25.16	26.08
24	23.79	26.98	26.54	22.91	25.78	---	27.56	27.18	23.35	---	25.09	25.98
25	23.70	27.32	26.58	22.48	25.80	---	27.46	27.03	---	24.75	24.91	26.10
26	23.57	27.07	26.35	22.41	25.60	---	26.49	27.34	---	23.43	25.11	26.28
27	25.38	27.00	26.52	22.30	25.68	---	24.77	27.28	---	---	24.99	26.83
28	25.49	26.71	26.42	23.75	25.83	---	24.93	27.22	25.10	26.84	25.37	---
29	25.66	26.82	25.34	24.76	25.98	---	24.89	26.80	25.80	27.19	24.99	---
30	25.71	26.63	23.84	24.61	---	---	24.97	26.91	25.90	26.86	---	---
31	25.80	---	23.80	25.74	---	---	---	26.73	---	27.14	---	---
MAX	25.87	27.33	26.63	25.74	27.36	---	27.56	27.34	26.47	27.36	27.89	27.92
CAL YR 2003	LOW 29.21											
WTR YR 2004	LOW 27.92											



395840083495200. Local Number, CL-7

LOCATION.—Latitude 39°58'40", longitude 83°49'52", Clark County, Hydrologic Unit 05080001. Eagle City Road northwest of Springfield, Ohio. Owner: State of Ohio.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled test water table well, diameter 6 in., depth 50 ft, cased.

INSTRUMENTATION.—Digital recorder, 60-minute punch.

DATUM.—Elevation of land-surface datum is 928.02 ft. Measuring point: Floor of instrument shelter 2.00 ft above land-surface datum.

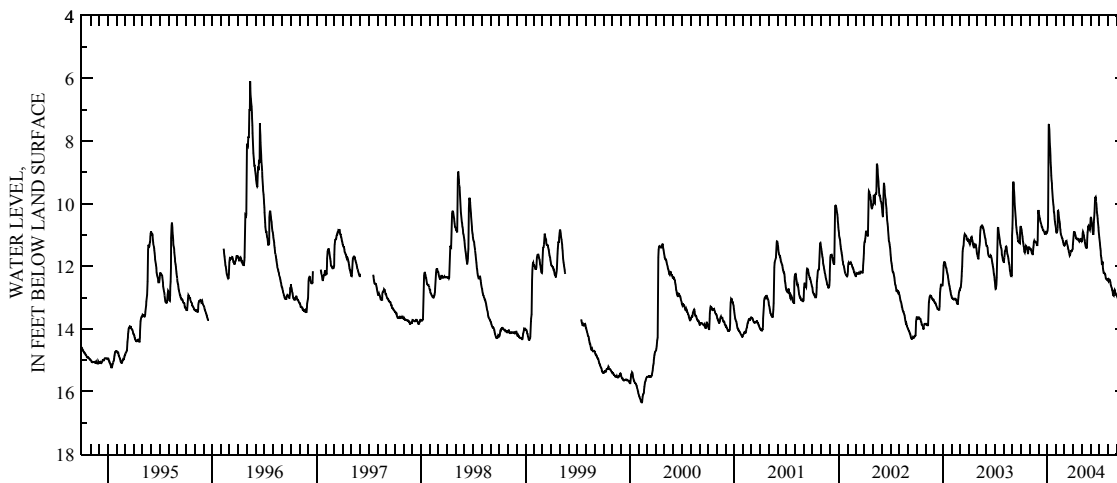
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—October 1960 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 30.17 ft below land-surface datum, Feb. 18, 19, 1961; minimum daily low, 6.10 ft below land-surface datum, May 12, 1996.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.75	11.45	10.21	10.90	10.89	11.35	11.13	11.19	10.46	11.08	12.42	12.96
2	10.81	11.45	10.29	10.86	10.93	11.34	11.01	11.18	10.43	11.17	12.41	12.99
3	10.85	11.46	10.36	10.75	10.95	11.32	10.94	11.07	10.49	11.26	12.45	13.02
4	10.93	11.43	10.39	10.52	10.90	11.26	10.89	10.95	10.57	11.33	12.47	13.04
5	10.99	11.48	10.46	8.26	10.87	11.24	10.92	10.90	10.64	11.43	12.43	13.06
6	11.06	11.50	10.48	7.48	10.79	11.21	10.93	10.93	10.72	11.51	12.43	13.07
7	11.12	11.54	10.52	7.46	10.24	11.21	10.94	11.00	10.79	11.66	12.44	13.11
8	11.21	11.59	10.57	7.64	10.23	11.20	11.01	11.02	10.89	11.74	12.48	13.12
9	11.27	11.60	10.62	7.89	10.28	11.26	11.04	11.07	10.95	11.83	12.52	13.13
10	11.35	11.62	10.63	8.09	10.34	11.29	11.07	11.15	11.00	11.93	12.58	13.15
11	11.39	11.62	10.68	8.25	10.44	11.32	11.11	11.17	10.87	11.94	12.63	13.16
12	11.46	11.60	10.72	8.48	10.53	11.35	11.11	11.25	10.60	11.88	12.66	13.17
13	11.54	11.40	10.75	8.69	10.58	11.39	11.13	11.33	10.43	11.88	12.69	13.18
14	11.56	11.33	10.75	8.85	10.65	11.43	11.14	11.38	10.30	12.08	12.72	13.23
15	11.53	11.22	10.79	9.11	10.77	11.48	11.14	11.39	10.20	12.14	12.76	13.25
16	11.43	11.19	10.82	9.27	10.84	11.51	11.13	11.41	9.92	12.21	12.78	13.26
17	11.38	11.22	10.85	9.35	10.95	11.56	11.14	11.41	9.81	12.21	12.82	13.28
18	11.36	11.22	10.85	9.51	10.98	11.61	11.16	11.43	9.79	12.21	12.88	13.29
19	11.38	11.21	10.88	9.65	11.04	11.66	11.16	11.40	9.86	12.22	12.94	13.29
20	11.38	11.22	10.90	9.79	11.06	11.65	11.17	11.09	9.93	12.23	12.95	13.31
21	11.41	11.23	10.91	9.87	11.09	11.63	11.19	10.92	10.02	12.26	12.85	13.34
22	11.43	11.24	10.94	10.04	11.11	11.56	11.21	10.85	10.16	12.27	12.78	13.37
23	11.47	11.25	10.97	10.11	11.12	11.52	11.19	10.73	10.27	12.36	12.75	13.45
24	11.52	11.27	10.97	10.25	11.18	11.52	11.19	10.71	10.38	12.39	12.77	13.49
25	11.59	11.28	10.92	10.30	11.20	11.53	11.14	10.74	10.48	12.41	12.82	13.54
26	11.59	11.33	10.91	10.40	11.25	11.53	11.13	10.77	10.57	12.42	12.86	13.57
27	11.48	11.33	10.92	10.49	11.30	11.52	11.13	10.81	10.66	12.42	12.88	13.57
28	11.40	11.17	10.92	10.58	11.32	11.49	11.16	10.83	10.77	12.42	12.91	13.58
29	11.40	10.73	10.92	10.66	11.34	11.48	11.18	10.84	10.87	12.42	12.91	13.59
30	11.40	10.33	10.94	10.71	---	11.45	11.20	10.70	10.97	12.46	12.91	13.59
31	11.42	---	10.93	10.79	---	11.31	---	10.60	---	12.47	12.92	---
MAX	11.59	11.62	10.97	10.90	11.34	11.66	11.21	11.43	11.00	12.47	12.95	13.59
CAL YR 2003	LOW 13.21											
WTR YR 2004	LOW 13.59											



Ground-Water Records—Coshocton County

401256081525100. Local Number, CS-3

LOCATION.—Latitude 40°12'56", longitude 81°52'51", Coshocton County, Hydrologic Unit 05040004, 1.5 mi north of Conesville, Ohio. Owner: Universal Cyclops Corp.

AQUIFER.—Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.—Drilled test water table well, diameter 8 in., depth 110 ft, cased.

INSTRUMENTATION.—Digital recorder, 60-minute punch.

DATUM.—Elevation of land-surface datum is 745 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 2.8 ft above land-surface datum.

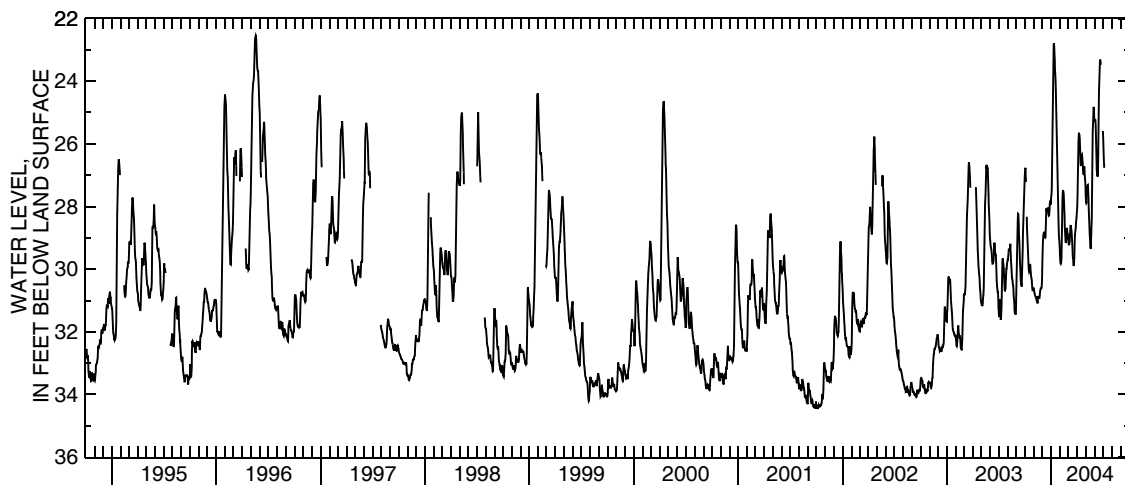
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—April 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 36.86 ft below land-surface datum, Sept. 28, 1973; minimum daily low, 21.10 ft below land-surface datum, Feb. 15, 1959.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27.06	30.63	29.99	27.77	29.51	29.05	28.03	27.63	25.27	25.59	---	---
2	26.80	30.68	29.62	27.62	29.71	29.16	27.70	27.85	25.27	25.99	---	---
3	26.77	30.73	29.30	27.44	29.82	29.21	27.31	27.89	25.21	26.42	---	---
4	26.98	30.76	29.09	27.29	29.83	29.21	26.76	27.88	25.25	26.58	---	---
5	27.22	30.80	28.91	26.87	29.78	29.16	26.25	27.71	25.46	26.77	---	---
6	---	30.83	28.84	25.62	29.61	29.11	25.92	27.60	25.73	---	---	---
7	---	30.88	28.83	24.53	29.32	28.92	25.70	27.37	26.11	---	---	---
8	28.33	30.88	28.83	23.66	28.73	28.72	25.65	27.32	26.53	---	---	---
9	28.65	30.87	28.91	23.08	28.12	28.62	25.73	27.31	26.81	---	---	---
10	28.98	30.94	28.98	22.85	27.74	28.62	25.83	27.52	27.02	---	---	---
11	29.23	30.98	29.00	22.79	27.54	28.65	26.02	27.79	27.03	---	---	---
12	29.42	31.02	28.96	22.96	27.48	28.77	26.30	28.06	27.03	---	---	---
13	29.65	31.07	28.77	23.14	27.54	28.88	26.60	28.34	26.95	---	---	---
14	29.86	31.07	28.39	23.34	27.64	29.01	26.67	28.62	26.49	---	---	---
15	30.01	31.07	28.08	23.61	27.75	29.20	26.66	28.87	25.89	---	---	---
16	30.09	30.94	28.08	23.87	28.01	29.39	26.50	29.06	24.97	---	---	---
17	30.07	30.86	28.15	24.18	28.30	29.57	26.36	29.23	24.36	---	---	---
18	29.98	30.88	28.15	24.52	28.61	29.73	26.34	29.33	23.96	---	---	---
19	29.84	30.90	28.07	24.91	28.86	29.88	26.46	29.33	23.63	---	---	---
20	29.87	30.92	28.06	25.29	29.07	29.88	26.55	29.17	23.39	---	---	27.07
21	30.00	30.92	28.06	25.66	29.14	29.84	26.64	28.80	23.31	---	---	26.88
22	30.11	30.85	28.16	26.11	29.14	29.64	26.84	28.40	23.38	---	---	26.76
23	30.20	30.77	28.28	26.59	29.00	29.38	26.97	27.68	23.48	---	---	26.86
24	30.29	30.67	28.30	27.12	28.81	29.11	26.97	26.97	---	---	---	26.97
25	30.35	30.64	28.27	27.57	28.74	28.89	26.89	26.23	---	---	---	---
26	30.44	30.62	28.10	28.04	28.68	28.77	26.71	25.61	---	---	---	---
27	30.59	30.62	27.96	28.46	28.86	28.68	26.86	25.21	---	---	---	---
28	30.67	30.59	27.84	28.80	28.88	28.56	27.00	24.94	---	---	---	---
29	30.67	30.57	27.84	28.98	28.91	28.44	27.18	24.82	---	---	---	---
30	30.63	30.38	27.92	29.14	---	28.33	27.38	24.97	---	---	---	---
31	30.59	---	27.92	29.34	---	28.25	---	25.24	---	---	---	---
MAX	30.67	31.07	29.99	29.34	29.83	29.88	28.03	29.33	27.03	26.77	---	27.07
CAL YR 2003		LOW 32.57										
WTR YR 2004		LOW 31.07										



401734081523800. Local Number, CS-2A

LOCATION.—Latitude 40°17'34", longitude 81°52'38", Coshocton County, Hydrologic Unit 05040003, at Coshocton, Ohio. Owner: State of Ohio.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled test well, diameter 6 in., depth 86 ft, cased to 81 ft.

INSTRUMENTATION.—Digital recorder, 60-minute punch.

DATUM.—Elevation of land-surface datum is 740 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 8.50 ft above land-surface datum.

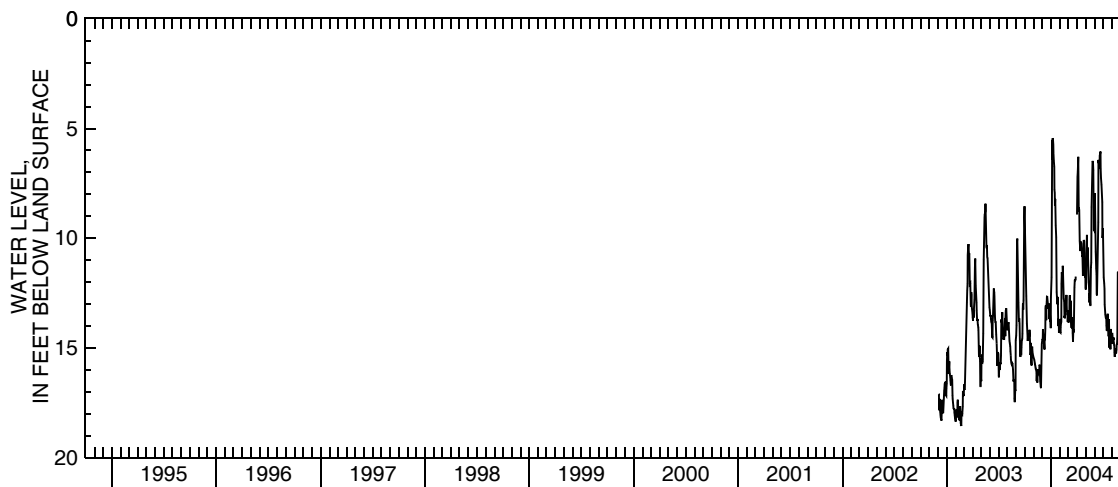
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water.

PERIOD OF RECORD.—December 2002 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 18.56 ft below land-surface datum, Feb. 21, 2003; minimum measured low, 5.44 ft below land-surface datum, Jan. 7, 2004.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.88	15.45	14.64	12.72	13.71	13.28	8.92	12.24	8.44	9.54	14.57	12.83
2	9.51	15.49	14.63	12.15	14.30	13.85	8.21	12.34	8.03	10.73	14.32	13.22
3	10.15	15.55	14.55	11.79	14.32	13.71	7.21	12.01	7.95	11.36	14.45	13.70
4	11.37	15.60	14.16	10.49	14.06	13.77	6.95	10.68	9.13	11.79	14.82	14.59
5	12.05	15.68	14.41	5.52	13.87	13.51	6.29	10.10	9.94	12.05	14.53	14.66
6	12.64	15.74	14.55	6.44	13.82	12.80	7.45	9.85	10.63	12.32	14.64	13.85
7	13.10	15.81	14.56	5.44	12.08	12.60	8.81	10.98	11.37	13.03	14.52	14.29
8	13.54	15.89	14.89	5.51	11.55	13.36	8.62	10.70	11.65	13.25	14.77	14.61
9	13.90	15.97	15.08	5.74	11.91	13.57	8.72	10.43	12.54	13.48	14.87	13.71
10	14.19	15.99	14.65	6.13	12.20	13.57	9.51	11.36	12.61	13.54	15.21	12.55
11	14.46	16.15	14.61	6.45	11.26	12.86	10.12	11.81	12.03	13.64	15.41	12.42
12	14.69	16.52	14.13	6.75	11.42	13.78	10.52	12.06	11.17	13.66	15.27	12.15
13	14.34	16.14	13.22	7.78	12.08	14.09	10.58	12.41	10.24	13.99	15.02	11.89
14	14.43	16.59	13.07	7.94	12.51	13.61	10.28	12.69	9.27	14.22	15.19	12.09
15	14.50	16.22	13.74	8.52	12.76	14.11	10.16	12.94	6.43	14.15	15.21	12.92
16	14.48	16.18	13.10	8.21	12.87	13.77	10.26	12.52	6.58	14.24	15.22	12.84
17	14.45	15.97	12.88	8.88	13.64	14.33	10.42	13.05	6.46	13.77	15.09	12.88
18	14.18	16.10	12.67	9.42	13.54	14.72	10.61	13.05	6.58	13.45	14.86	12.36
19	14.42	16.16	12.68	9.95	13.65	14.24	10.85	12.21	6.84	14.06	14.82	12.38
20	15.11	16.18	12.82	10.64	13.15	14.16	10.79	11.34	6.24	14.47	14.57	12.45
21	15.33	16.13	12.89	12.46	13.33	14.29	11.42	11.12	6.14	14.23	14.06	12.08
22	15.22	15.77	13.15	12.75	13.32	13.22	11.71	8.58	6.05	13.71	11.56	12.16
23	14.77	15.82	13.21	12.67	12.73	12.25	11.19	8.35	6.84	14.82	11.55	12.47
24	15.61	16.53	13.10	13.02	12.59	11.93	10.26	7.46	7.25	15.00	11.75	13.31
25	15.80	16.64	12.98	12.69	13.14	11.87	10.09	6.53	7.47	14.21	12.07	13.55
26	15.20	16.77	13.66	14.01	13.38	11.92	10.13	6.48	7.56	14.93	13.23	13.76
27	14.94	16.84	13.69	13.73	13.47	11.90	11.09	6.55	7.82	15.07	13.62	13.85
28	15.19	16.07	13.13	13.74	13.49	11.75	11.46	6.90	8.36	14.60	13.00	14.03
29	15.28	15.58	13.82	14.30	13.82	---	11.78	8.37	9.99	14.14	12.85	14.32
30	15.33	14.82	13.74	14.07	---	---	11.52	9.62	9.90	14.69	12.69	14.52
31	15.40	---	14.10	13.69	---	---	---	9.66	---	14.71	12.74	---
MAX	15.80	16.84	15.08	14.30	14.32	14.72	11.78	13.05	12.61	15.07	15.41	14.66
CAL YR 2003		LOW 18.56										
WTR YR 2004		LOW 16.84										



Ground-Water Records—Darke County

400514084345700. Local Number, D-2

LOCATION.—Latitude 40°05'14", longitude 84°34'57", Darke County, Hydrologic Unit 05080001, State Route 571, 3 mi east of Greenville, Ohio. Owner: City of Greenville.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused water table well, diameter 6 in., depth 70 ft, cased.

INSTRUMENTATION.—Digital recorder, 60-minute punch.

DATUM.—Elevation of land-surface datum is 1,038 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 4.00 ft above land-surface datum.

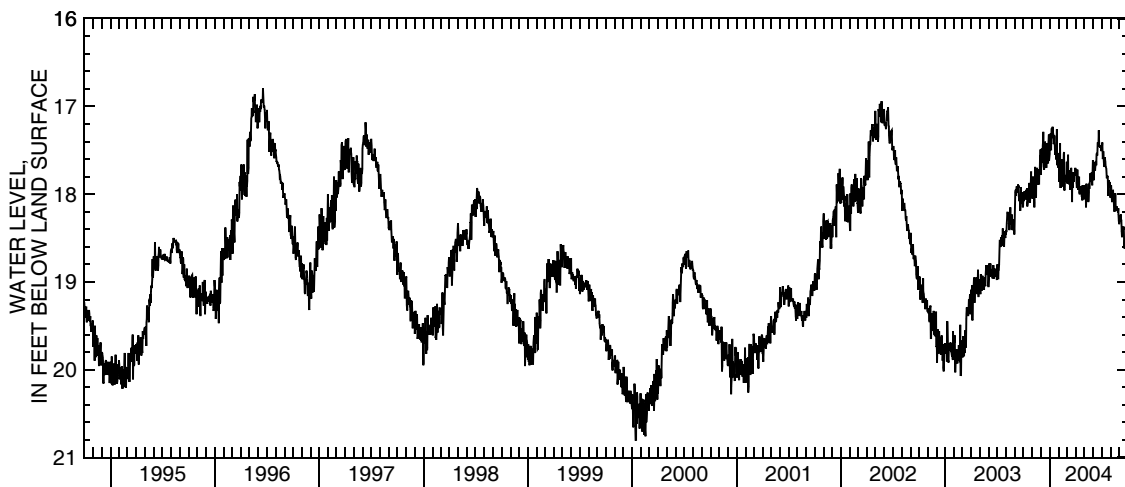
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—August 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 20.87 ft below land-surface datum, Apr. 12, 1992; minimum daily low, 16.72 ft below land-surface datum, Feb. 13, Mar. 27, 1991.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.07	18.05	17.78	17.54	17.70	17.63	17.72	17.90	17.62	17.44	18.04	18.33
2	18.07	17.94	17.74	17.31	17.64	17.87	17.74	18.04	17.76	17.46	17.95	18.25
3	17.97	17.87	17.65	17.32	17.76	17.87	17.74	18.05	17.84	17.41	17.90	18.24
4	17.98	17.80	17.48	17.32	17.86	17.67	17.87	18.00	17.77	17.46	17.94	18.30
5	18.01	18.00	17.49	17.40	17.79	17.55	17.93	17.90	17.66	17.60	18.04	18.29
6	18.03	18.00	17.64	17.50	17.42	17.80	17.84	17.91	17.63	17.56	18.09	18.23
7	18.02	18.03	17.55	17.35	17.80	17.80	17.72	18.15	17.70	17.51	18.02	18.30
8	18.06	18.15	17.44	17.25	17.93	17.78	17.83	18.05	17.73	17.62	18.05	18.30
9	17.99	18.10	17.39	17.35	17.66	17.88	17.95	17.88	17.69	17.68	18.04	18.42
10	17.95	17.90	17.29	17.36	17.62	17.88	17.89	17.98	17.66	17.68	17.95	18.49
11	17.96	17.69	17.68	17.23	17.69	17.73	17.86	18.03	17.62	17.64	18.03	18.41
12	17.99	17.79	17.72	17.29	17.73	17.86	17.86	17.95	17.67	17.58	18.06	18.40
13	18.01	18.04	17.71	17.32	17.73	17.95	17.80	17.95	17.54	17.60	18.13	18.41
14	17.93	18.02	17.41	17.32	17.60	17.75	17.98	17.96	17.53	17.63	18.18	18.40
15	18.14	17.81	17.51	17.43	17.87	17.83	18.00	18.09	17.55	17.69	18.20	18.39
16	18.09	17.83	17.40	17.41	17.91	17.70	17.92	18.07	17.55	17.70	18.17	18.37
17	18.07	17.88	17.46	17.33	17.77	17.71	17.93	17.98	17.41	17.71	18.08	18.51
18	18.04	17.70	17.44	17.35	17.77	17.83	17.95	17.88	17.42	17.74	17.99	18.60
19	17.96	17.80	17.55	17.47	17.54	18.09	17.93	17.94	17.43	17.82	18.16	18.62
20	17.96	17.89	17.70	17.55	17.52	17.81	17.93	17.87	17.42	17.80	18.17	18.53
21	17.87	17.78	17.65	17.48	17.95	17.91	17.91	17.85	17.27	17.80	18.19	18.53
22	17.93	17.75	17.44	17.50	17.95	17.93	18.03	17.78	17.41	17.80	18.18	18.55
23	18.01	17.72	17.42	17.51	17.81	17.82	18.02	17.76	17.44	17.98	18.14	18.54
24	18.10	17.88	17.52	17.60	17.84	17.75	18.07	17.86	17.46	18.02	18.17	18.50
25	18.02	17.88	17.56	17.60	17.84	17.86	17.90	17.84	17.46	17.94	18.18	18.56
26	18.02	17.73	17.65	17.26	17.78	17.78	17.96	17.80	17.44	17.84	18.18	18.57
27	17.90	17.73	17.57	17.54	17.83	17.79	18.02	17.75	17.47	17.85	18.21	18.49
28	17.74	17.56	17.41	17.67	17.83	17.76	18.03	17.88	17.45	17.91	18.16	18.60
29	17.95	17.68	17.32	17.54	17.74	17.79	18.06	17.90	17.50	17.91	18.23	18.60
30	17.98	17.49	17.62	17.53	---	17.71	17.98	17.73	17.50	17.86	18.30	18.65
31	17.98	---	17.58	17.66	---	17.70	---	17.62	---	17.98	18.34	---
MAX	18.14	18.15	17.78	17.67	17.95	18.09	18.07	18.15	17.84	18.02	18.34	18.65
CAL YR 2003	LOW 20.07											
WTR YR 2004	LOW 18.65											



Ground-Water Records—Delaware County

402126083040400. Local Number, DL-3

LOCATION.—Latitude 40°21'26", longitude 83°04'04", Delaware County, Hydrologic Unit 05060001, east bank of Olentangy River at toe of Delaware dam.

Owner: U.S. Army Corps of Engineers.

AQUIFER.—Limestone of Devonian Age.

WELL CHARACTERISTICS.—Drilled test artesian well, diameter 12 in., depth 135 ft, cased.

INSTRUMENTATION.—Type F continuous recorder.

DATUM.—Elevation of land-surface datum is 900 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 2.60 ft above land-surface datum.

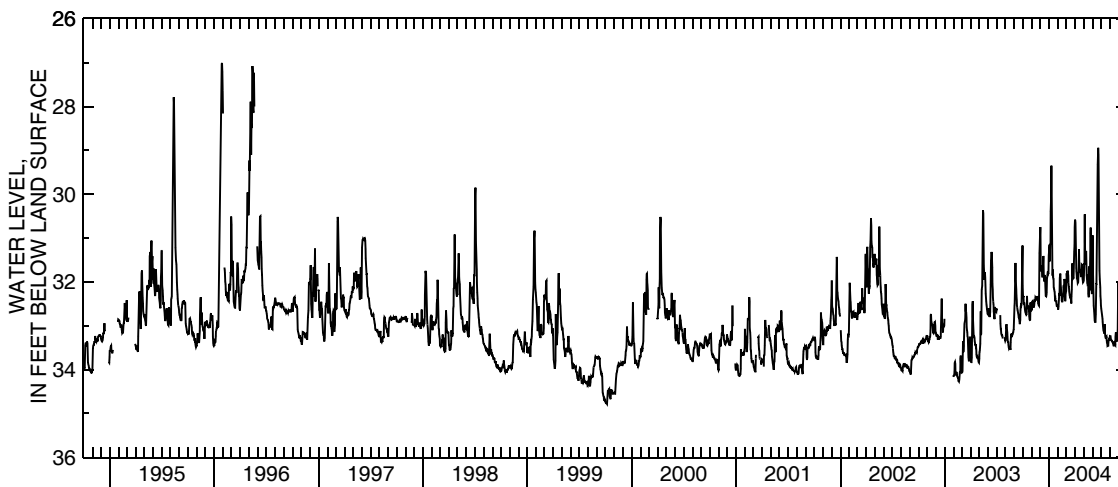
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—October 1948 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 37.04 ft below land-surface datum, Nov. 1, 1948, Dec. 2, 3, 1949; minimum daily low, 20.43 ft below land-surface datum, Jan. 27, 1959.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32.09	32.65	30.75	31.34	32.56	32.20	30.58	31.99	32.27	32.53	33.29	33.05
2	32.31	32.55	30.77	31.24	32.63	32.03	30.61	31.96	30.94	32.61	33.22	33.05
3	32.35	32.45	31.63	31.15	32.56	31.80	30.65	31.58	31.70	32.67	33.24	33.10
4	32.32	32.45	31.73	31.53	32.49	31.91	31.09	31.60	32.02	32.70	33.27	33.14
5	32.51	32.44	31.73	31.13	32.38	31.75	31.68	30.46	32.32	32.78	33.32	33.16
6	32.47	32.48	31.76	31.15	32.25	31.76	31.76	31.09	32.54	32.84	33.33	33.15
7	32.52	32.53	31.62	30.39	32.32	31.76	31.86	31.40	32.68	32.91	33.33	33.17
8	32.58	32.57	31.88	30.15	31.91	31.86	31.85	31.31	32.81	33.01	33.35	33.14
9	32.63	32.57	31.88	29.35	31.81	32.02	31.93	31.32	32.88	33.08	33.36	33.00
10	32.67	32.53	31.84	29.37	31.84	32.10	31.98	31.32	32.91	33.12	33.37	33.01
11	32.70	32.46	31.65	29.82	32.09	32.11	32.02	31.73	32.92	33.14	33.37	32.88
12	32.72	32.43	31.41	30.85	32.12	32.22	32.00	31.84	32.93	33.15	33.40	32.80
13	32.75	32.43	31.42	31.84	32.25	32.28	31.80	31.94	32.74	33.18	33.42	32.85
14	32.74	32.42	31.89	31.85	32.29	32.31	31.71	32.00	32.05	32.96	33.45	32.89
15	32.69	32.35	31.99	31.72	32.42	32.35	31.25	32.04	32.05	33.13	33.45	32.89
16	32.32	32.36	31.96	31.92	32.46	32.34	31.63	32.03	31.19	33.23	33.45	32.88
17	32.52	32.40	31.94	31.93	32.43	32.37	31.71	31.82	30.97	33.26	33.43	32.87
18	32.56	32.37	31.84	32.12	32.39	32.39	31.74	32.27	30.06	33.29	33.41	32.90
19	32.58	32.34	32.04	32.17	32.33	32.49	31.72	32.35	29.76	33.26	33.43	32.80
20	32.60	32.40	32.21	32.23	32.30	32.33	31.71	31.68	29.32	33.25	33.44	32.90
21	32.54	32.40	32.32	32.24	32.12	32.17	31.80	31.65	28.94	33.33	33.25	32.94
22	32.58	32.32	32.33	32.38	32.13	31.58	31.87	32.18	29.10	33.38	33.15	32.96
23	32.60	32.38	32.29	32.37	32.07	31.68	31.87	32.19	30.45	33.41	33.18	32.98
24	32.78	32.49	32.24	32.43	31.93	31.85	31.70	31.57	31.12	33.46	33.27	32.97
25	32.86	32.50	31.91	32.44	31.97	31.87	31.60	30.89	31.45	33.45	33.34	32.99
26	32.87	32.53	31.88	32.44	32.12	31.92	31.61	30.76	31.75	33.45	33.34	33.00
27	32.86	32.54	31.83	32.50	32.44	31.91	31.92	31.46	31.93	33.37	33.27	32.99
28	32.47	32.19	31.76	32.55	32.27	31.80	31.94	31.88	32.12	33.32	33.15	32.98
29	32.62	31.34	31.81	32.55	32.25	31.32	32.01	32.14	32.32	33.31	33.10	32.98
30	32.67	31.09	31.80	32.54	---	31.16	32.00	32.26	32.42	33.31	32.05	32.99
31	32.58	---	31.39	32.55	---	30.75	---	32.26	---	33.28	32.00	---
MAX	32.87	32.65	32.33	32.55	32.63	32.49	32.02	32.35	32.93	33.46	33.45	33.17
CAL YR 2003		LOW 34.27										
WTR YR 2004		LOW 33.46										



Ground-Water Records—Fairfield County

393450082403600. Local Number, F-7

LOCATION.—Latitude 39°34'50", longitude 82°40'36", Fairfield County, Hydrologic Unit 05030204, southeast of Amanda, Ohio. Owner: Pine Grove Springs Water Company Inc.

AQUIFER.—Sandstone of Mississippian Age.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 5 in., depth 120 ft, cased to 31 ft.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 980 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 0.60 ft above land-surface datum.

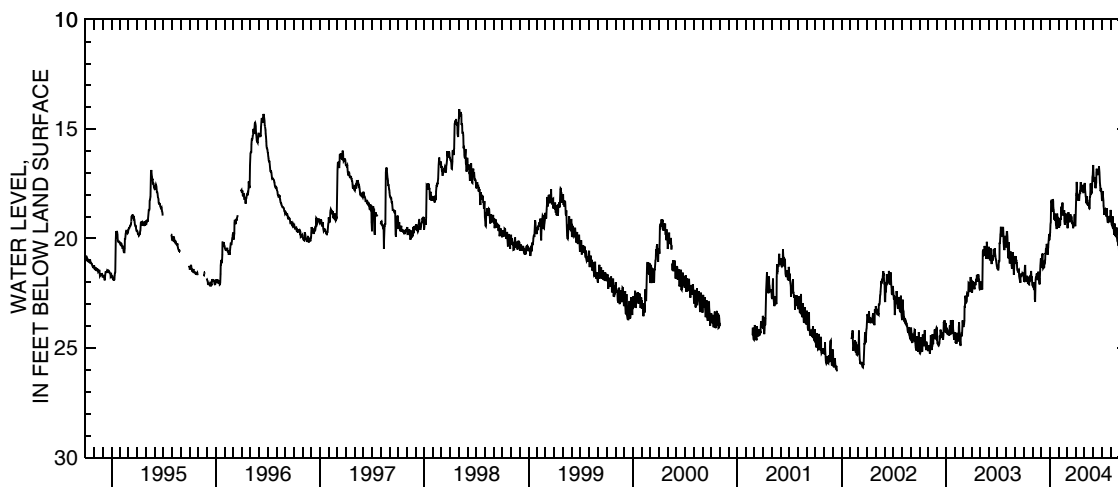
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water.

PERIOD OF RECORD.—August 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 26.07 ft below land-surface datum, Dec. 16, 2001; minimum daily low, 12.38 ft below land-surface datum, Apr. 17, 1991.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.58	22.16	21.24	19.89	19.09	19.18	18.34	17.61	16.90	18.19	18.69	20.49
2	21.94	22.13	20.95	19.72	19.51	19.43	18.00	17.46	17.23	18.29	19.07	20.79
3	21.95	22.11	21.35	19.35	19.36	19.53	18.01	17.83	17.41	18.15	19.23	20.79
4	21.59	22.05	21.24	19.26	19.24	19.24	17.41	17.91	17.35	17.83	19.36	20.15
5	21.31	21.99	20.75	18.30	19.39	19.23	18.00	18.06	17.34	18.04	19.40	20.29
6	21.21	22.31	20.68	18.32	19.38	18.80	18.00	18.09	17.19	18.28	19.34	19.97
7	21.50	22.33	21.24	18.23	19.08	18.98	18.00	18.35	17.58	18.50	19.24	20.65
8	21.96	21.99	21.36	18.38	19.14	18.92	18.16	18.37	17.70	18.67	18.99	20.67
9	21.94	22.76	21.33	18.63	18.72	19.10	18.20	18.06	17.68	18.79	19.35	20.42
10	21.86	22.90	21.33	18.77	18.54	19.22	18.28	18.24	17.57	18.92	19.53	20.50
11	21.96	22.37	21.28	18.20	18.78	19.26	18.01	18.26	17.44	18.69	19.53	20.39
12	21.70	21.88	21.33	18.30	18.89	19.04	18.28	18.27	16.98	18.66	19.64	19.88
13	21.88	21.75	21.01	18.60	18.62	18.89	18.07	18.46	16.81	18.72	19.83	20.47
14	21.76	21.79	21.06	18.69	18.36	18.98	17.98	18.50	16.99	18.78	19.62	20.62
15	21.94	21.63	20.99	18.77	18.72	19.10	17.86	18.37	17.03	18.88	19.32	20.74
16	22.06	21.62	20.66	19.11	18.93	18.99	17.88	18.44	17.01	18.99	19.83	20.78
17	21.79	21.90	20.70	19.13	18.93	19.09	17.66	18.63	16.87	18.78	19.86	20.78
18	22.00	21.69	20.50	18.86	18.92	19.17	17.42	18.64	16.95	18.61	19.78	20.28
19	22.09	21.70	20.51	18.89	18.91	19.34	17.62	18.60	17.08	18.94	19.91	20.05
20	22.10	21.89	20.29	19.19	18.71	19.25	17.78	18.11	17.09	19.14	19.79	20.37
21	21.75	21.52	20.25	19.04	19.22	19.34	17.79	18.09	16.70	19.24	19.63	20.51
22	21.73	21.83	20.40	19.35	19.38	19.53	17.78	17.74	16.96	19.25	19.50	20.65
23	21.87	21.91	20.63	19.41	19.01	19.38	17.82	17.48	17.15	19.18	19.99	20.56
24	21.90	21.80	20.74	19.53	18.84	19.44	17.84	17.89	17.46	19.26	20.10	20.65
25	21.83	22.07	20.54	19.53	19.20	19.35	17.69	17.93	17.59	19.07	20.10	20.44
26	21.67	22.07	20.40	18.86	19.13	19.27	17.55	17.92	17.84	19.01	20.25	20.04
27	21.48	21.71	20.24	19.30	19.25	19.01	17.74	17.87	17.81	19.01	20.29	20.31
28	21.77	21.41	19.94	19.40	19.13	18.89	17.79	17.50	17.78	19.14	20.30	20.50
29	21.77	21.22	19.79	19.26	18.89	19.43	17.86	17.20	17.87	19.25	19.95	20.77
30	21.77	20.91	20.08	19.05	---	19.40	17.91	17.12	18.00	19.09	20.56	20.70
31	22.12	---	19.83	19.07	---	18.90	---	16.64	---	18.96	20.63	---
MAX	22.12	22.90	21.36	19.89	19.51	19.53	18.34	18.64	18.00	19.26	20.63	20.79
CAL YR 2003		LOW 24.87										
WTR YR 2004		LOW 22.90										



393913082330900. Local Number, F-8

LOCATION.—Latitude 39°39'13", longitude 82°33'09", Fairfield County, Hydrologic Unit 05030204. Lancaster, Ohio. Owner: City of Lancaster.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused water table well, diameter 6 in., depth 87 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 791.5 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 2.5 ft above land-surface datum.

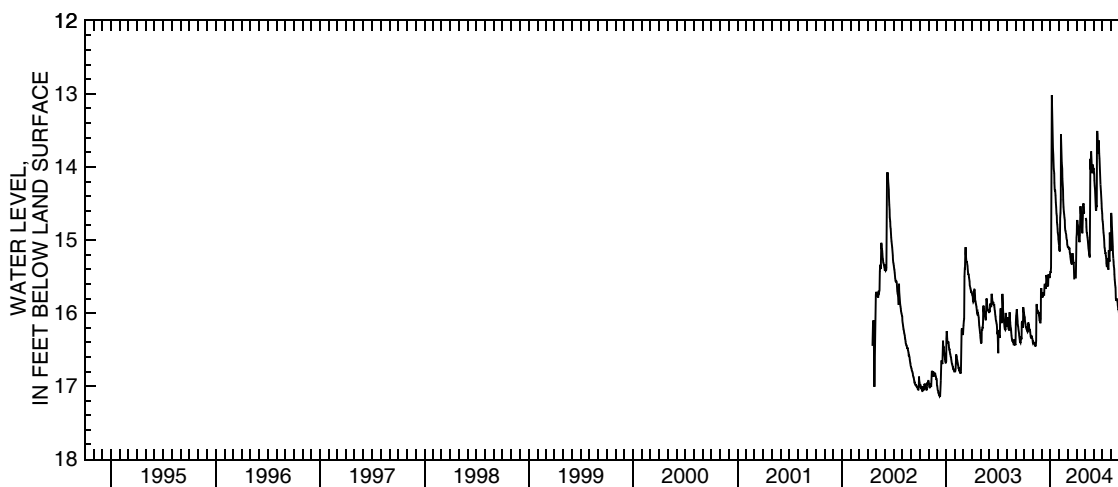
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water.

PERIOD OF RECORD.—April 2002 to current year.

EXREMES FOR PERIOD OF RECORD.—Maximum daily low, 17.14 ft below land-surface datum, Dec. 9, 2002; minimum daily low, 13.02 ft below land-surface datum, Jan. 6, 2004.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.02	16.41	15.72	15.44	15.14	15.08	14.97	---	14.03	14.72	14.63	16.13
2	16.05	16.40	15.75	15.44	15.15	15.10	14.91	---	14.10	14.75	14.69	16.13
3	16.06	16.41	15.78	15.38	15.15	15.10	14.76	---	14.19	14.79	14.82	16.16
4	16.11	16.41	15.78	15.25	14.70	15.10	14.73	14.70	14.26	14.84	14.88	16.17
5	16.14	16.41	15.78	13.89	14.63	15.12	14.76	14.73	14.31	14.90	15.00	16.20
6	16.16	16.43	15.75	13.02	14.45	15.12	14.79	14.82	14.35	14.94	15.09	16.22
7	16.19	16.44	15.72	13.26	13.56	15.12	14.82	14.90	14.45	15.00	15.18	16.26
8	16.20	16.45	15.74	13.44	13.71	15.12	14.87	14.91	14.58	15.10	15.25	16.19
9	16.22	16.45	15.75	13.62	13.83	15.17	14.93	14.94	14.60	15.12	15.30	14.75
10	16.23	16.45	15.75	13.75	13.94	15.20	14.97	14.97	14.54	15.15	15.35	14.69
11	16.23	16.44	15.63	13.83	14.03	15.23	15.01	15.01	14.54	15.18	15.40	14.87
12	16.25	16.38	15.60	13.95	14.16	15.27	15.03	15.06	13.53	15.18	15.47	15.05
13	16.26	15.89	15.62	14.03	14.24	15.30	14.94	15.12	13.51	15.21	15.54	15.17
14	16.25	15.89	15.63	14.09	14.31	15.32	14.69	15.15	13.55	15.25	15.59	15.27
15	16.13	15.93	15.66	14.22	14.45	15.33	14.54	15.17	13.68	15.32	15.62	15.42
16	16.14	15.98	15.66	14.31	14.55	15.33	14.63	15.21	13.75	15.36	15.65	15.51
17	16.17	15.99	15.56	14.33	14.61	15.27	14.63	15.23	13.82	15.36	15.80	15.50
18	16.17	15.99	15.48	14.33	14.65	15.18	14.65	15.23	13.64	15.25	15.83	15.06
19	16.22	16.00	15.51	14.39	14.70	15.24	14.72	14.87	13.73	15.32	15.81	15.17
20	16.23	15.99	15.57	14.49	14.73	15.24	14.76	13.89	13.82	15.38	15.81	15.24
21	16.23	16.00	15.62	14.55	14.82	15.29	14.91	14.04	13.89	15.40	15.81	15.35
22	16.26	16.04	15.63	14.64	14.87	15.32	14.90	13.80	14.03	15.40	15.84	15.40
23	16.29	16.05	15.63	14.67	14.88	15.32	14.75	13.80	14.12	15.14	15.85	15.50
24	16.32	16.10	15.62	14.76	14.91	15.54	14.58	13.90	14.24	15.23	15.89	15.53
25	16.34	16.10	15.47	14.79	14.93	---	14.52	14.01	14.31	15.29	15.95	15.57
26	16.34	16.13	15.48	14.85	14.97	---	14.50	14.06	14.34	15.29	15.95	15.62
27	16.32	16.13	15.50	14.90	15.00	---	14.55	14.09	14.42	14.90	15.96	15.65
28	16.31	16.08	15.51	14.94	15.01	---	14.63	14.01	14.50	14.99	16.02	15.74
29	16.35	15.71	15.51	14.99	15.06	---	14.63	13.97	14.57	15.08	16.04	15.69
30	16.36	15.66	15.51	15.03	---	15.53	---	14.03	14.64	15.14	16.05	15.74
31	16.40	---	15.44	15.08	---	15.14	---	14.03	---	15.15	16.10	---
MAX	16.40	16.45	15.78	15.44	15.15	15.54	15.03	15.23	14.64	15.40	16.10	16.26
CAL YR 2003		LOW 16.83										
WTR YR 2004		LOW 16.45										



394257082362900. Local Number, F-6

LOCATION.—Latitude 39°42'57", longitude 82°36'29", Fairfield County, Hydrologic Unit 05030204, near Hocking River at Lancaster, Ohio. Owner: City of Lancaster.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused water table well, diameter 12 in., depth 108 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 820 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

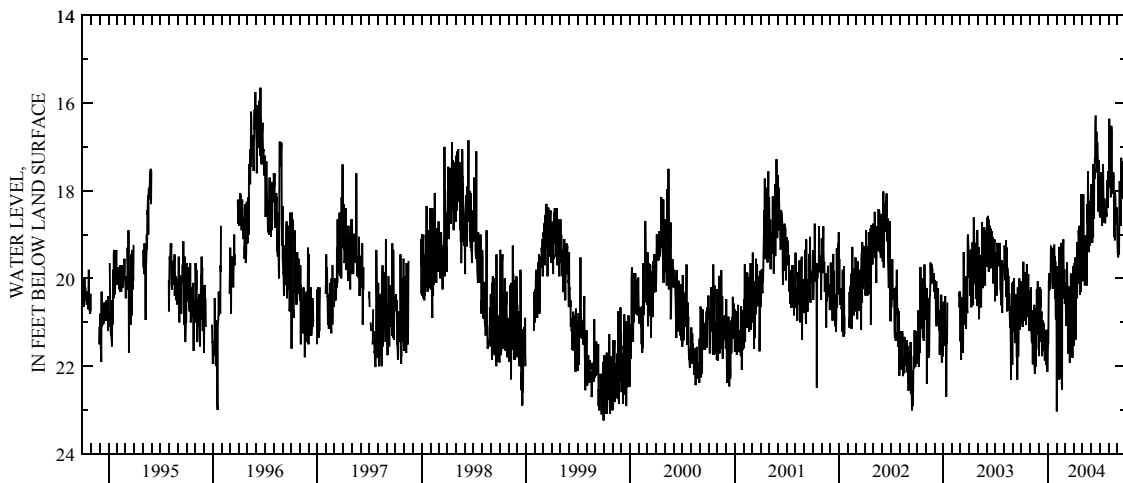
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—June 1978 to current year.

EXREMES FOR PERIOD OF RECORD.—Maximum daily low, 27.45 ft below land-surface datum, Aug. 17, 1988; minimum daily low, 15.65 ft below land-surface datum, June 16, 1996.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.18	20.33	20.78	21.89	20.54	20.58	21.45	19.23	18.25	18.54	17.55	19.00
2	20.13	20.99	21.77	21.51	23.03	20.40	21.53	19.49	17.85	18.59	17.90	19.43
3	20.78	20.20	20.88	21.48	20.81	20.09	21.11	18.53	17.91	18.61	17.33	19.50
4	20.78	21.08	20.33	21.20	19.72	20.45	19.65	20.06	18.35	18.45	16.36	19.50
5	21.11	21.20	20.20	20.10	20.24	21.08	20.47	18.08	19.19	18.02	17.93	19.15
6	20.93	21.41	20.66	19.88	20.13	20.85	20.43	20.00	18.27	17.58	17.69	19.32
7	20.58	21.47	20.24	20.28	20.22	20.78	19.52	19.67	18.25	17.60	17.50	19.45
8	19.62	21.00	21.44	20.15	20.45	20.66	21.39	19.88	19.06	17.81	17.37	18.42
9	20.78	21.22	20.76	20.22	22.31	19.64	20.09	19.81	17.39	18.80	18.15	17.78
10	20.70	21.96	20.90	20.18	20.33	20.15	20.01	20.16	18.47	18.44	16.98	18.54
11	20.46	21.05	20.76	20.04	19.28	20.33	20.24	19.20	18.63	18.44	16.52	18.22
12	19.85	20.72	21.77	19.35	22.28	21.71	19.94	19.10	17.49	18.47	16.64	18.68
13	20.96	21.18	21.05	19.28	20.60	20.42	20.45	19.02	17.73	17.40	17.86	18.80
14	20.20	20.93	21.15	19.29	20.43	20.18	19.17	19.79	17.27	18.20	17.65	17.33
15	20.18	20.60	20.96	19.40	19.43	20.51	19.62	19.36	17.37	18.63	17.64	17.25
16	20.11	21.99	21.65	19.45	20.15	21.12	20.11	19.77	16.49	18.72	18.06	18.14
17	21.05	22.17	21.00	19.72	21.24	20.76	19.59	20.16	16.29	18.20	17.82	18.15
18	20.90	21.18	21.08	19.31	19.19	21.92	18.90	18.92	17.11	18.20	17.58	17.99
19	20.60	21.22	21.05	20.24	22.37	21.44	19.00	18.30	17.04	18.68	17.67	17.50
20	19.67	22.01	21.38	19.36	22.53	21.32	19.04	18.74	16.65	18.74	18.92	17.93
21	20.33	20.69	21.66	19.31	19.94	21.11	18.80	17.55	17.58	18.72	19.05	17.33
22	20.75	21.62	21.87	19.90	20.04	19.89	18.86	19.25	17.30	18.40	18.86	17.63
23	20.87	21.20	21.66	19.95	19.31	21.29	20.37	18.99	16.89	18.59	19.13	17.64
24	20.25	20.25	21.71	19.23	19.35	19.97	20.22	19.40	17.25	18.50	18.03	18.54
25	19.90	20.55	21.18	20.20	19.11	20.76	19.52	19.19	18.47	18.59	18.12	17.73
26	20.88	21.06	21.38	19.49	20.09	21.08	20.31	18.25	18.36	18.14	18.51	18.12
27	20.27	20.06	21.97	20.47	20.46	21.48	19.61	19.25	17.47	17.95	18.77	18.03
28	20.96	20.46	21.17	19.61	19.88	21.81	18.08	18.59	18.25	17.76	18.74	17.11
29	21.20	21.29	22.01	20.87	19.79	20.75	19.44	18.61	17.30	18.30	18.57	18.20
30	20.49	20.85	21.66	20.93	---	20.28	19.15	18.22	17.81	18.38	18.53	17.30
31	20.42	---	22.13	20.78	---	19.72	---	18.06	---	17.99	18.38	---
MAX	21.20	22.17	22.13	21.89	23.03	21.92	21.53	20.16	19.19	18.80	19.13	19.50
CAL YR 2003	LOW 22.70											
WTR YR 2004	LOW 23.03											



394544082271000. Local Number, F-1

LOCATION.—Latitude 39°45'44", longitude 82°27'10", Fairfield County, Hydrologic Unit 05030204, near the west edge of West Rushville, Ohio. Owner: State of Ohio.

AQUIFER.—Sandstone of Mississippian Age.

WELL CHARACTERISTICS.—Drilled observation well, diameter 6 in., depth 108 ft, cased. Depth 84 ft prior to water year 2003

INSTRUMENTATION.—Type F continuous recorder.

DATUM.—Elevation of land-surface datum is 980 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 8.02 ft above land-surface datum.

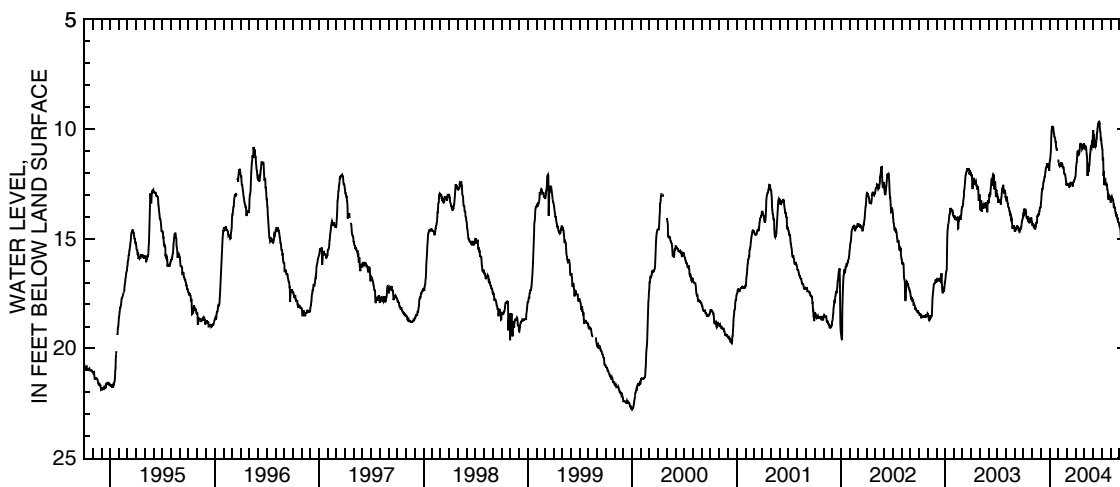
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—March 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 22.80 ft below land-surface datum, Dec. 31, 1999 - Jan. 1, 2000; minimum daily low, 7.27 ft below land-surface datum, May 5-6, 1962.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.92	14.24	13.46	11.64	11.39	12.50	12.15	10.80	10.14	10.67	13.26	14.39
2	13.95	14.42	13.35	11.45	11.58	12.53	11.92	10.85	10.06	10.74	13.35	14.45
3	13.89	14.34	13.23	11.40	11.61	12.53	11.78	10.77	10.85	10.88	13.28	14.46
4	13.64	14.30	13.07	11.34	11.67	12.56	11.54	10.76	10.53	10.92	13.10	14.49
5	13.75	14.39	12.89	11.07	11.70	12.56	11.51	10.76	10.23	11.43	13.07	14.63
6	13.88	14.42	12.77	10.76	11.66	12.51	11.39	10.83	10.41	11.30	13.19	14.94
7	13.80	14.39	12.78	10.41	11.61	12.51	11.10	10.83	10.50	11.40	13.19	14.85
8	13.67	14.42	12.74	10.11	11.72	12.63	11.03	10.85	10.58	12.14	13.19	14.67
9	13.67	14.48	12.60	9.96	11.67	12.63	11.01	11.01	10.73	11.94	13.28	14.50
10	13.83	14.46	12.50	9.91	11.64	12.62	11.12	11.16	10.80	12.56	13.25	14.50
11	13.82	14.58	12.39	9.86	11.51	12.53	11.12	11.28	10.76	12.26	13.28	14.49
12	14.00	14.55	12.36	9.98	11.60	12.50	11.16	11.79	10.67	12.48	13.38	14.35
13	14.07	14.49	12.36	9.95	11.61	12.60	11.13	12.14	10.53	12.24	13.59	14.22
14	14.00	14.45	12.18	9.96	11.61	12.57	11.10	11.85	10.42	12.27	13.53	14.13
15	14.12	14.35	12.17	10.06	11.61	12.51	11.01	11.55	10.17	12.41	13.59	14.03
16	14.04	14.24	12.12	10.17	11.79	12.48	10.88	11.87	10.14	12.56	13.59	13.97
17	14.00	14.30	11.97	10.22	11.76	12.50	10.71	11.94	9.99	12.56	13.64	13.92
18	14.10	14.21	11.94	10.35	11.76	12.50	10.70	11.78	9.87	12.56	13.75	13.89
19	14.25	13.95	11.79	10.38	11.76	12.44	10.64	11.67	9.76	12.53	13.83	13.80
20	14.16	14.00	11.78	10.42	11.85	12.47	10.74	11.61	9.75	12.60	13.83	13.65
21	14.09	13.95	11.73	10.50	12.03	12.60	10.74	11.36	9.67	12.75	13.98	13.50
22	14.12	13.86	11.67	10.61	12.03	12.60	10.76	11.15	9.66	12.77	13.88	13.37
23	14.30	13.95	11.57	10.61	12.05	12.47	10.71	11.04	9.76	12.89	14.01	13.32
24	14.16	13.89	11.60	10.79	12.08	12.41	10.91	10.83	9.75	13.04	14.04	13.22
25	14.25	13.85	11.72	10.92	12.09	12.44	10.89	10.73	9.95	13.22	14.06	13.20
26	14.22	13.75	11.72	10.92	12.20	12.38	10.80	10.82	10.06	13.07	14.13	13.20
27	14.18	13.74	11.66	11.00	12.29	12.35	10.74	10.85	10.17	13.10	14.12	13.26
28	14.09	13.62	11.63	---	12.38	12.33	10.91	10.65	10.53	13.07	14.24	13.20
29	14.04	13.55	11.72	---	12.57	12.27	10.80	10.52	10.40	13.17	14.24	13.20
30	14.15	13.60	11.87	---	---	12.24	10.64	10.67	10.50	13.15	14.26	13.19
31	14.21	---	11.90	---	---	12.20	---	10.29	---	13.20	14.33	---
MAX	14.30	14.58	13.46	11.64	12.57	12.63	12.15	12.14	10.85	13.22	14.33	14.94
CAL YR 2003	LOW 16.89											
WTR YR 2004	LOW 14.94											



395053082361900. Local Number, F-5

LOCATION.—Latitude 39°50'53", longitude 82°36'19", Fairfield County, Hydrologic Unit 05060001, Gaylord Paper Company, Baltimore, Ohio. Owner: Crown Zellerbach, Gaylord Paper Division.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 12 in., depth 180 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 850 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 3.5 ft above land-surface datum.

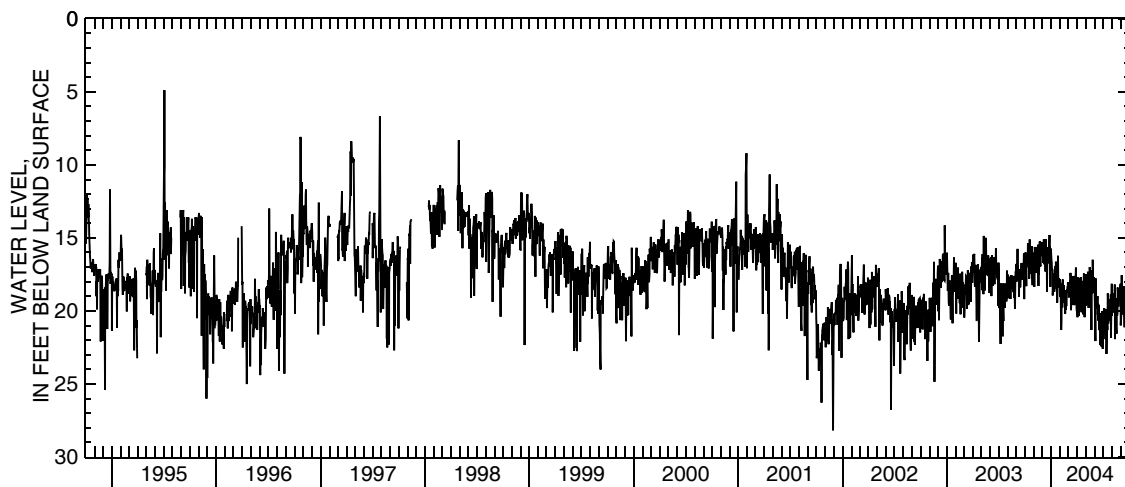
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—June 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 34.50 ft below land-surface datum, Sept. 13, 1984; minimum daily low, 0.98 ft above land-surface datum, Nov. 7, 1979.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.36	16.25	16.00	15.78	17.84	18.57	19.92	17.47	17.99	21.06	20.34	20.99
2	17.24	16.14	16.26	16.49	19.05	18.90	20.43	17.72	18.66	21.35	19.25	20.39
3	16.00	18.36	15.83	16.72	18.14	19.08	17.76	19.36	19.36	20.94	20.10	18.70
4	16.32	16.77	16.72	17.18	18.56	18.77	17.76	18.72	22.07	20.01	19.04	17.55
5	16.81	15.63	15.81	17.18	21.32	18.12	18.65	19.36	17.78	19.81	20.00	18.77
6	18.31	16.80	15.12	17.22	20.60	18.17	19.26	18.25	17.93	20.90	19.61	18.57
7	16.74	16.47	15.17	18.95	18.68	17.94	18.08	19.53	19.85	20.85	18.81	19.68
8	16.88	17.01	16.81	18.15	18.38	18.70	20.34	18.05	19.68	20.87	19.94	18.42
9	16.74	16.68	15.39	17.99	19.77	17.40	18.54	17.33	19.13	21.93	19.92	18.30
10	16.68	17.42	15.27	17.65	18.17	18.22	17.76	19.05	19.61	19.89	20.09	20.28
11	16.35	16.43	15.96	17.43	17.85	19.95	17.97	19.79	18.99	20.36	18.21	18.63
12	15.38	15.63	17.31	18.68	19.34	19.34	18.95	17.91	20.27	21.02	21.93	18.33
13	16.08	16.08	15.10	17.61	18.92	17.64	19.43	19.49	19.52	22.95	20.70	19.90
14	17.04	15.90	15.18	17.85	18.24	17.75	17.70	19.31	20.00	21.50	19.14	21.12
15	16.31	15.99	17.11	16.95	18.66	19.58	19.40	17.01	20.69	20.52	19.32	19.68
16	17.81	15.48	16.74	17.55	19.45	18.54	20.09	17.43	19.58	21.33	21.15	20.51
17	17.00	17.16	16.16	17.19	19.14	18.50	18.78	19.15	20.82	18.80	21.57	20.78
18	15.12	18.30	18.69	16.64	18.95	19.41	18.30	19.77	21.33	18.99	20.10	19.68
19	15.81	16.14	15.87	18.00	20.20	18.93	19.55	17.91	20.15	20.88	20.31	19.40
20	16.94	17.52	15.63	18.50	18.97	17.61	17.95	18.81	20.20	20.36	20.16	19.64
21	15.84	16.06	15.92	17.73	19.92	17.93	18.24	21.32	22.34	19.44	18.40	20.70
22	16.40	15.25	16.74	19.44	18.61	19.61	18.65	18.51	21.00	19.61	18.75	21.29
23	17.13	15.80	16.14	18.75	19.68	18.89	20.25	17.22	20.22	20.70	19.72	24.32
24	17.47	16.91	16.04	17.54	19.20	18.68	17.73	18.68	21.18	19.32	19.40	20.78
25	15.96	16.92	15.95	16.23	18.56	18.90	17.45	18.78	22.43	19.22	18.84	20.42
26	15.59	15.78	14.81	18.22	18.74	17.95	19.34	16.50	20.75	19.52	18.77	19.58
27	17.52	15.40	16.44	17.76	18.36	17.42	20.43	18.63	20.01	19.98	19.40	19.40
28	18.24	15.42	15.60	18.00	18.35	17.04	19.34	18.78	21.03	18.87	18.53	20.64
29	16.25	15.47	18.35	18.39	18.05	18.47	19.22	17.94	22.50	21.83	18.47	21.20
30	17.11	15.33	15.72	18.20	---	19.77	19.67	17.69	22.59	20.16	18.45	21.00
31	16.02	---	16.16	18.20	---	20.04	---	17.85	---	18.15	18.15	---
MAX	18.31	18.36	18.69	19.44	21.32	20.04	20.43	21.32	22.59	22.95	21.93	24.32
CAL YR 2003	LOW 22.26											
WTR YR 2004	LOW 24.32											



Ground-Water Records—Fayette County

393153083322000. Local Number, FA-1

LOCATION.—Latitude 39°31'53", longitude 83°32'20", Fayette County, Hydrologic Unit 05060003, Burnett-Perill Road about 6 mi west of Washington Court House, Ohio. Owner: Martha Slagle.

AQUIFER.—Limestone of Silurian Age.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 5 in., depth 78 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval. Satellite telemeter at site.

DATUM.—Elevation of land-surface datum is 1,010 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 3.30 ft above land-surface datum.

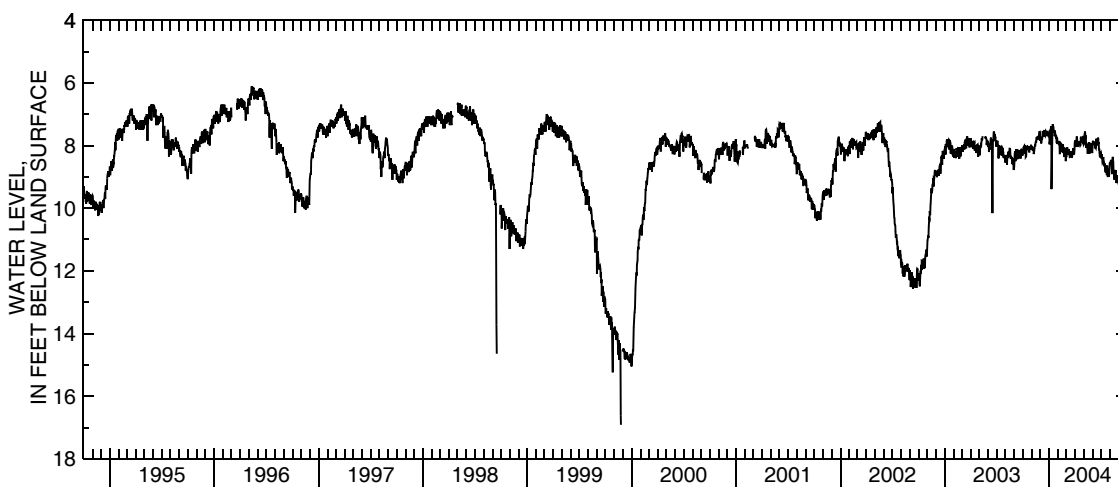
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—February 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 16.92 ft below land-surface datum, Nov. 25, 1999; minimum daily low, 3.26 ft below land-surface datum, Apr. 28, 1964.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.21	8.08	7.85	7.57	7.88	8.34	7.84	7.69	8.12	8.36	8.56	9.24
2	8.17	8.04	7.83	7.63	7.91	8.34	8.01	7.97	7.88	8.37	8.55	9.16
3	8.17	8.07	7.77	7.96	7.86	8.29	8.04	7.94	7.87	8.41	8.55	9.58
4	8.06	8.07	7.78	7.88	7.88	8.13	8.00	7.65	7.89	8.27	8.51	9.68
5	8.04	8.16	7.93	7.91	7.97	8.06	8.01	7.62	7.98	8.42	8.46	9.37
6	8.23	8.11	7.85	7.67	7.86	8.28	7.83	7.55	7.95	8.54	8.55	9.30
7	8.23	8.11	7.77	7.48	8.03	8.26	7.71	7.62	7.96	8.53	8.53	9.24
8	8.08	8.14	7.78	7.42	8.27	8.24	7.74	7.78	7.88	8.51	8.73	9.12
9	8.02	8.27	7.66	7.38	8.14	8.16	7.84	7.68	7.93	8.37	8.91	9.10
10	8.03	8.18	7.54	9.39	8.17	8.12	7.97	8.07	8.05	8.58	8.53	9.32
11	8.00	8.09	7.58	8.88	8.05	8.15	7.99	8.00	8.04	8.55	8.36	9.27
12	8.37	8.02	7.60	7.91	7.93	8.24	8.03	7.99	8.06	8.61	8.52	9.19
13	8.34	8.00	7.73	7.46	7.94	8.33	7.94	8.07	8.08	8.66	8.50	9.02
14	8.04	8.00	7.56	7.32	8.02	8.36	7.93	7.98	7.90	8.57	8.84	9.16
15	8.07	7.92	7.58	7.45	8.20	8.35	7.88	8.26	7.78	8.68	8.84	9.03
16	8.09	7.88	7.53	7.39	8.11	8.18	7.93	8.24	7.94	8.71	8.93	8.96
17	8.06	7.87	7.55	7.44	8.22	8.21	7.91	8.19	7.91	8.86	9.10	9.00
18	8.07	7.74	7.55	7.56	8.08	8.29	7.91	8.02	7.93	8.63	8.79	9.00
19	8.03	7.76	7.54	7.58	7.96	8.18	7.99	7.93	7.88	8.86	8.82	9.24
20	8.05	7.75	7.64	7.51	8.08	8.26	7.98	8.10	7.84	8.81	8.78	9.10
21	8.07	7.72	7.67	7.70	8.20	8.39	7.76	7.90	7.75	8.95	8.86	8.94
22	8.06	7.82	7.64	7.65	8.24	8.32	7.72	8.26	7.93	8.92	8.85	9.29
23	8.07	7.80	7.56	7.63	8.37	8.17	7.87	8.07	7.90	8.64	9.02	9.13
24	8.22	7.75	7.60	7.68	8.09	8.23	7.78	8.12	8.12	8.79	9.20	8.99
25	8.09	7.78	7.56	7.73	8.07	8.22	7.86	7.99	8.12	9.00	9.05	9.22
26	8.08	7.72	7.58	7.71	8.27	8.08	7.89	8.14	8.22	8.89	9.16	9.64
27	8.06	7.71	7.66	7.75	8.09	8.29	7.78	8.00	8.34	8.81	9.13	9.50
28	8.03	7.57	7.67	7.92	8.33	8.25	7.73	7.92	8.33	8.83	9.09	9.29
29	8.05	7.57	7.59	7.77	8.50	8.25	7.86	8.17	8.22	8.99	8.95	9.12
30	8.12	7.56	7.68	7.78	---	8.13	7.74	8.18	8.21	8.91	9.06	8.95
31	8.06	---	7.58	7.95	---	7.93	---	8.24	---	8.67	8.97	---
MAX	8.37	8.27	7.93	9.39	8.50	8.39	8.04	8.26	8.34	9.00	9.20	9.68
CAL YR 2003		LOW 10.16										
WTR YR 2004		LOW 9.68										



Ground-Water Records—Franklin County

394956083002700. Local Number, FR-18

LOCATION.—Latitude 39°49'56", longitude 83°00'27", Franklin County, Hydrologic Unit 05060001, south of State Route 665 at Shadeville, Ohio. Owner: City of Columbus.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled test water table well, diameter 6 in., depth 86.4 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 690 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 3.80 ft above land-surface datum.

REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water.

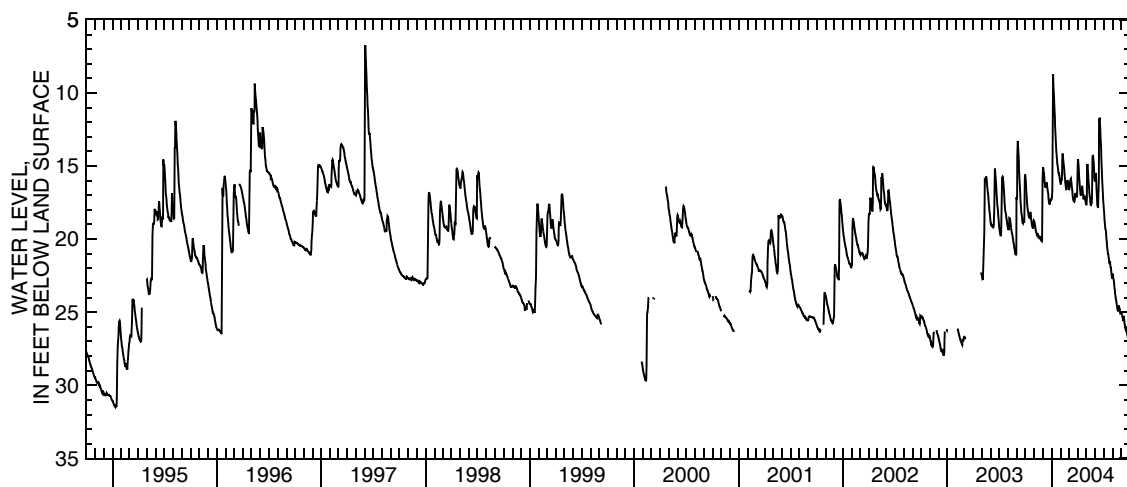
PERIOD OF RECORD.—November 1985 to March 1986 periodic, continuous thereafter.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 33.15 ft below land-surface datum, Feb. 19-22, 1992; minimum daily low, 6.74 ft below land-surface datum, June 4, 1997.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.61	18.79	15.35	17.24	16.20	16.59	14.78	17.69	16.02	17.80	22.37	25.06
2	15.95	18.88	15.09	17.12	16.26	16.61	14.52	17.62	16.01	18.09	22.40	25.12
3	16.34	18.98	15.16	16.67	16.08	16.60	14.70	17.17	15.47	18.36	22.57	25.22
4	16.68	19.10	15.44	15.64	15.94	16.36	14.94	15.12	15.63	18.63	22.67	25.30
5	17.00	19.22	15.48	12.60	15.94	16.08	15.26	14.86	16.07	18.89	22.81	25.39
6	17.28	19.36	15.77	8.73	15.44	15.99	15.60	14.96	16.51	19.09	22.97	25.46
7	17.52	19.46	16.00	9.30	14.62	15.90	15.95	15.34	16.95	19.31	23.15	25.55
8	17.76	19.54	16.19	9.86	14.14	15.86	16.28	15.72	17.36	19.37	23.35	25.55
9	17.96	19.63	16.38	10.31	14.28	15.95	16.56	16.00	17.72	19.55	23.52	25.24
10	18.12	19.70	16.46	10.74	14.44	16.10	16.76	16.26	17.81	19.79	23.68	25.43
11	18.24	19.74	16.36	11.18	14.63	16.29	16.92	16.50	17.81	20.05	23.86	25.59
12	18.36	19.64	16.36	11.64	14.86	16.50	17.01	16.79	17.57	20.25	24.00	25.74
13	18.47	19.64	16.23	12.20	15.06	16.70	16.86	17.08	16.91	20.47	24.14	25.86
14	18.52	19.74	16.12	12.76	15.27	16.90	16.58	17.16	15.87	20.67	24.24	25.98
15	18.52	19.80	16.19	13.27	15.50	17.10	16.56	17.41	11.99	20.83	24.36	26.10
16	18.55	19.85	16.30	13.68	15.74	17.24	16.36	17.58	11.75	21.01	24.50	26.22
17	18.46	19.89	16.52	14.01	15.95	17.34	16.39	17.69	11.74	21.03	24.62	26.26
18	18.14	19.91	16.67	14.10	16.18	17.42	16.59	17.69	12.09	21.15	24.74	26.12
19	18.21	19.84	16.79	14.41	16.38	17.44	16.82	17.56	12.52	21.33	24.86	26.22
20	18.38	19.82	16.96	14.66	16.54	17.46	16.98	17.54	12.93	21.48	24.94	26.35
21	18.55	19.86	17.17	14.86	16.59	17.39	17.18	17.16	13.35	21.64	24.82	26.47
22	18.74	19.90	17.40	15.04	16.58	17.26	17.28	16.03	13.73	21.63	24.72	26.58
23	18.91	19.94	17.56	15.22	16.36	17.03	17.16	14.43	14.31	21.53	24.54	26.70
24	19.06	19.95	17.58	15.36	16.15	16.84	17.19	14.25	14.97	21.72	24.62	26.83
25	19.18	20.02	17.60	15.50	15.96	16.95	17.18	14.31	15.54	21.94	24.72	26.96
26	19.22	20.10	17.52	15.55	16.03	17.08	17.12	14.49	16.05	21.95	24.81	27.11
27	19.24	20.14	17.36	15.54	16.18	17.08	17.20	14.79	16.49	22.07	24.94	27.24
28	19.24	20.02	17.32	15.66	16.36	17.07	17.32	15.27	16.85	22.29	25.08	27.36
29	18.95	18.02	17.40	15.86	16.51	17.08	17.52	15.77	17.19	22.51	25.07	27.40
30	18.72	15.94	17.30	16.00	---	16.92	17.61	15.99	17.51	22.69	25.06	27.52
31	18.76	---	17.30	16.14	---	16.26	---	16.02	---	22.64	25.06	---
MAX	19.24	20.14	17.60	17.24	16.59	17.46	17.61	17.69	17.81	22.69	25.08	27.52

CAL YR 2003 LOW 27.24
WTR YR 2004 LOW 27.52



395055083000600. Local Number, FR-19

LOCATION.—Latitude 39°50'55", longitude 83°00'06", Franklin County, Hydrologic Unit 05060001, adjacent to State Route 23 near Shadeville, Ohio. Owner: City of Columbus.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled observation well, diameter 6 in., depth 73 ft, present depth 72 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 741.95 ft above sea level. Measuring point: Floor of instrument shelter 2.5 ft above land-surface datum.

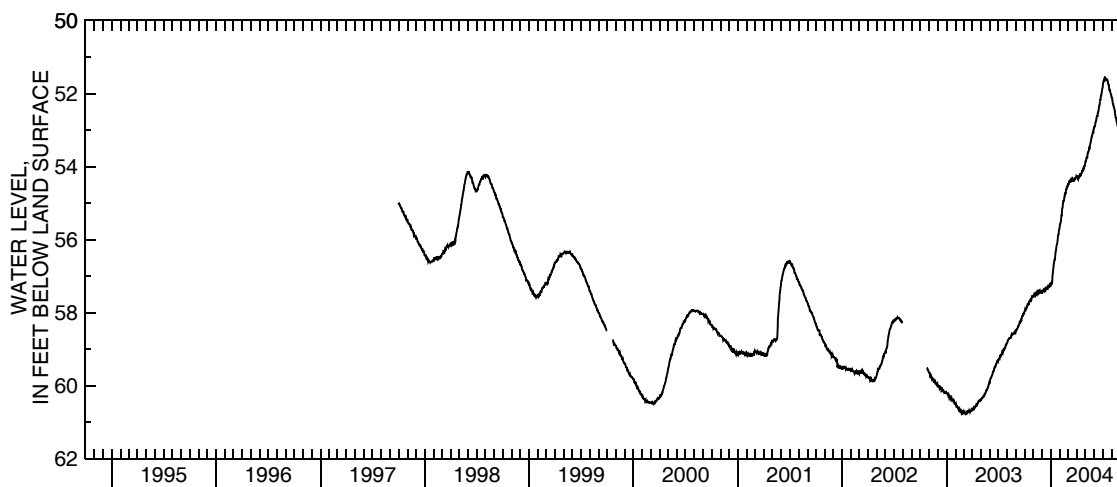
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water.

PERIOD OF RECORD.—September 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 60.77 ft below land-surface datum, Feb. 23, 2003; minimum daily low, 51.54 ft below land-surface datum, July 8, 2004.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57.97	57.54	57.48	57.23	55.66	54.47	54.27	53.86	52.93	51.76	52.12	53.29
2	57.95	57.51	57.46	57.20	55.58	54.51	54.29	53.86	52.90	51.72	52.13	53.32
3	57.90	57.50	57.43	57.18	55.57	54.50	54.27	53.85	52.90	51.67	52.14	53.35
4	57.91	57.49	57.39	57.18	55.56	54.45	54.34	53.80	52.86	51.65	52.21	53.38
5	57.92	57.52	57.39	57.19	55.49	54.39	54.35	53.75	52.81	51.65	52.28	53.41
6	57.90	57.49	57.42	57.13	55.39	54.44	54.30	53.73	52.77	51.62	52.29	53.45
7	57.88	57.49	57.39	57.00	55.34	54.41	54.25	53.78	52.75	51.59	52.33	53.49
8	57.87	57.51	57.36	56.90	55.34	54.39	54.27	53.70	52.73	51.54	52.37	53.50
9	57.84	57.49	57.34	56.82	55.21	54.41	54.29	53.63	52.68	51.60	52.38	53.59
10	57.81	57.46	57.34	56.78	55.14	54.41	54.27	53.61	52.63	51.64	52.42	53.63
11	57.80	57.43	57.42	56.69	55.11	54.36	54.24	53.61	52.61	51.63	52.46	53.66
12	57.77	57.48	57.41	56.63	55.02	54.38	54.21	53.58	52.64	51.60	52.51	53.71
13	57.77	57.50	57.41	56.59	54.99	54.42	54.21	53.54	52.54	51.60	52.57	53.75
14	57.76	57.46	57.35	56.54	54.93	54.35	54.25	53.50	52.53	51.61	52.63	53.79
15	57.79	57.42	57.37	56.54	54.95	54.36	54.24	53.51	52.49	51.62	52.66	53.81
16	57.73	57.43	57.32	56.46	54.92	54.34	54.19	53.47	52.46	51.64	52.68	53.83
17	57.70	57.44	57.33	56.37	54.86	54.32	54.18	53.42	52.39	51.64	52.69	53.90
18	57.69	57.37	57.32	56.33	54.84	54.34	54.17	53.38	52.35	51.66	52.74	53.94
19	57.69	57.43	57.32	56.30	54.74	54.41	54.13	53.34	52.32	51.70	52.80	53.98
20	57.66	57.45	57.37	56.23	54.72	54.32	54.13	53.29	52.30	51.74	52.80	54.00
21	57.65	57.43	57.31	56.17	54.74	54.37	54.10	53.26	52.22	51.76	52.88	54.05
22	57.64	57.41	57.28	56.13	54.72	54.40	54.11	53.22	52.18	51.78	52.90	54.08
23	57.65	57.40	57.29	56.11	54.63	54.37	54.09	53.20	52.18	51.90	52.95	54.12
24	57.66	57.47	57.29	56.07	54.63	54.35	54.09	53.16	52.08	51.91	52.99	54.15
25	57.63	57.44	57.30	55.99	54.62	54.37	54.03	53.14	52.07	51.90	53.02	54.21
26	57.60	57.42	57.30	55.89	54.56	54.32	54.03	53.10	52.01	51.90	53.07	54.24
27	57.56	57.41	57.25	55.87	54.56	54.32	53.99	53.06	51.98	51.96	53.09	54.24
28	57.53	57.43	57.22	55.85	54.56	54.32	53.99	53.09	51.91	52.00	53.12	54.31
29	57.57	57.47	57.21	55.77	54.52	54.31	53.96	53.07	51.88	52.02	53.16	54.34
30	57.57	57.42	57.29	55.72	---	54.27	53.91	52.98	51.84	52.04	53.22	54.37
31	57.55	---	57.24	55.70	---	54.28	---	52.93	---	52.09	53.26	---
MAX	57.97	57.54	57.48	57.23	55.66	54.51	54.35	53.86	52.93	52.09	53.26	54.37
CAL YR 2003		LOW 60.77										
WTR YR 2004		LOW 57.97										



400101083021800. Local Number, FR-10

LOCATION.—Latitude 40°01'01", longitude 83°02'18", Franklin County, Hydrologic Unit 05060001, Kenny and Ackerman Roads, Columbus, Ohio. Owner: Ohio State University.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled test artesian well, diameter 4 in., depth 75 ft, cased.

INSTRUMENTATION.—Type F continuous recorder.

DATUM.—Elevation of land-surface datum is 775 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 4.00 ft above land-surface datum.

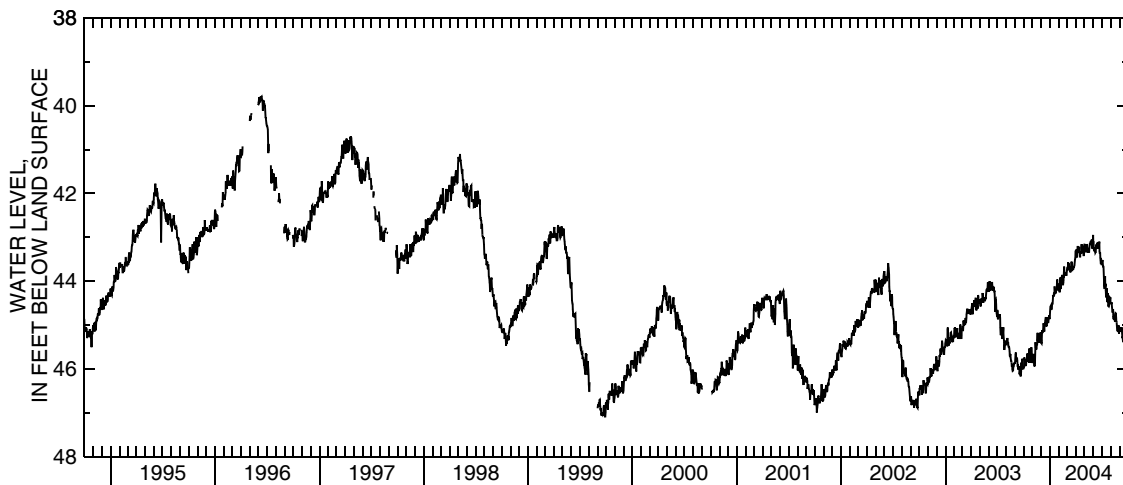
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—March 1944 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 48.20 ft below land-surface datum, Oct. 7, 1954; minimum daily low, 37.76 ft below land-surface datum, Apr. 13, 1951.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45.99	45.87	45.35	44.85	44.21	43.73	43.31	43.17	43.10	43.64	44.51	45.12
2	45.96	45.75	45.41	44.69	44.21	43.74	43.29	43.17	43.11	43.56	44.51	45.09
3	45.95	45.74	45.42	44.58	44.15	43.76	43.29	43.20	43.26	43.53	44.51	45.11
4	45.74	45.68	45.35	44.57	44.24	43.71	43.35	43.26	43.32	43.52	44.48	45.14
5	45.80	45.66	45.12	44.55	44.24	43.57	43.46	43.17	43.28	43.67	44.55	45.14
6	45.82	45.75	45.17	44.64	43.92	43.62	43.41	43.19	43.23	43.67	44.63	45.12
7	45.86	45.75	45.17	44.64	44.04	43.62	43.26	43.34	43.29	43.68	44.67	45.09
8	45.92	45.93	45.12	44.58	44.18	43.62	43.20	43.25	43.35	43.91	44.72	45.05
9	45.92	45.93	45.03	44.52	44.10	43.70	43.34	43.16	43.34	44.09	44.64	45.09
10	45.89	45.80	44.96	44.52	43.94	43.74	43.34	43.19	43.28	44.13	44.76	45.18
11	45.84	45.56	45.00	44.51	43.92	43.68	43.34	43.25	43.17	44.18	44.87	45.30
12	45.78	45.39	45.12	44.32	43.91	43.71	43.34	43.31	43.22	43.89	44.79	45.27
13	45.84	45.51	45.15	44.34	43.91	43.80	43.22	43.35	43.17	44.12	44.84	45.39
14	45.65	45.51	44.97	44.34	43.86	43.73	43.31	43.31	43.14	44.06	44.87	45.29
15	45.71	45.56	44.94	44.31	43.98	43.70	43.35	43.28	43.25	44.21	44.88	45.20
16	45.77	45.47	44.90	44.32	44.09	43.64	43.46	43.31	43.19	44.37	44.93	45.11
17	45.77	45.45	44.84	44.31	44.03	43.56	43.35	43.35	43.11	44.18	44.76	44.97
18	45.77	45.38	44.84	44.12	43.98	43.61	43.35	43.26	43.19	44.16	44.73	45.05
19	45.77	45.18	44.85	44.22	43.80	43.77	43.35	43.19	43.22	44.32	44.74	45.24
20	45.86	45.36	45.02	44.27	43.67	43.73	43.38	43.16	43.26	44.48	44.83	45.35
21	45.54	45.32	45.02	44.27	43.77	43.68	43.16	43.16	43.16	44.39	44.92	45.12
22	45.66	45.41	44.88	44.19	43.85	43.74	43.26	43.11	43.10	44.27	44.94	45.15
23	45.68	45.36	44.84	44.21	43.83	43.73	43.26	43.10	43.32	44.42	45.10	45.15
24	45.86	45.38	44.84	44.19	43.80	43.68	43.34	43.10	43.38	44.57	45.12	45.06
25	45.78	45.38	44.88	44.21	43.85	43.70	43.23	43.11	43.35	44.58	45.12	45.02
26	45.77	45.29	44.94	43.98	43.80	43.67	43.20	43.10	43.47	44.43	45.15	45.01
27	45.68	45.29	44.94	43.98	43.85	43.64	43.29	43.05	43.55	44.36	45.10	44.95
28	45.51	45.18	44.88	44.13	43.88	43.61	43.41	43.10	43.53	44.37	45.00	44.90
29	45.56	45.26	44.78	44.10	43.85	43.50	43.41	43.26	43.59	44.46	45.14	44.94
30	45.69	45.17	44.85	44.06	---	43.47	43.35	43.19	43.62	44.42	45.20	44.99
31	45.75	---	44.85	44.18	---	43.32	---	42.95	---	44.37	45.12	---
MAX	45.99	45.93	45.42	44.85	44.24	43.80	43.46	43.35	43.62	44.58	45.20	45.39
CAL YR 2003	LOW 46.17											
WTR YR 2004	LOW 45.99											



Ground-Water Records—Gallia County

383638082103300. Local Number, G-2

LOCATION.—Latitude 38°36'38", longitude 82°10'33", Gallia County, Hydrologic Unit 05090101, 5.9 mi east of Crown City, Ohio. Owner: State of Ohio.

AQUIFER.—Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.—Drilled test water-table well, diameter 12 in., depth 65 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 552 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

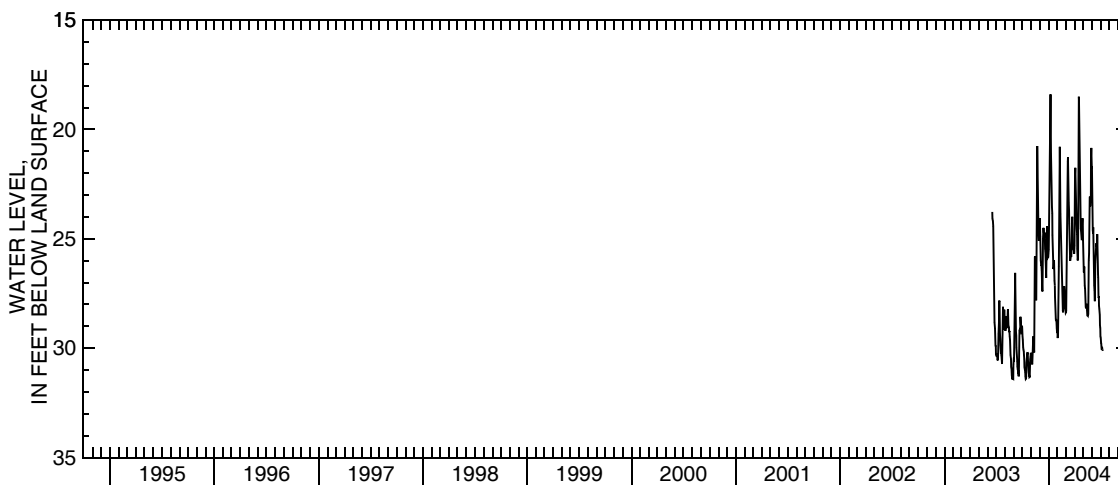
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—June 1975 to September 1982 continuous, periodic October 1982 to June 2003, continuous thereafter.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 33.94 ft below land-surface datum, Sept. 22, 1983; minimum daily low 16.43 ft below land-surface datum, Mar. 8, 1979.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29.08	30.26	24.05	25.68	29.23	28.37	25.32	25.54	21.75	29.45	---	---
2	29.44	30.60	24.48	25.49	29.54	28.34	23.93	26.05	22.67	29.53	---	---
3	29.62	30.66	24.90	24.73	29.36	28.29	22.09	26.53	23.81	29.75	---	---
4	29.96	30.70	25.33	24.04	28.40	27.49	21.76	26.50	24.60	29.78	---	---
5	30.08	30.74	25.98	22.77	26.95	26.13	22.39	26.27	24.77	30.00	---	---
6	30.15	30.40	26.24	21.20	26.27	25.27	22.75	26.64	24.48	29.99	---	---
7	30.30	29.94	26.20	19.56	24.41	23.03	23.34	27.14	25.44	30.01	---	---
8	30.49	29.46	26.46	18.40	22.36	21.47	24.11	27.28	26.10	30.07	---	---
9	30.86	29.77	27.01	19.85	20.80	21.28	24.54	27.57	27.12	30.12	---	---
10	30.94	29.98	27.37	21.11	21.64	21.97	24.78	28.11	27.38	---	---	---
11	31.10	30.06	27.40	21.99	23.09	22.52	25.46	28.18	27.85	---	---	---
12	31.28	30.19	26.55	23.05	23.87	23.36	25.99	28.16	27.46	---	---	---
13	31.40	27.77	24.98	23.55	24.33	23.72	25.83	28.01	26.08	---	---	---
14	31.37	25.84	24.50	23.84	25.15	24.31	23.30	28.01	25.62	---	---	---
15	31.30	25.80	24.71	24.84	25.78	25.03	20.39	28.25	25.47	---	---	---
16	30.65	26.85	24.72	25.23	26.58	25.84	18.51	28.49	25.21	---	---	---
17	30.50	27.24	24.93	25.84	27.19	26.00	18.69	28.49	25.24	---	---	---
18	30.23	27.81	24.71	26.38	27.40	25.88	20.04	28.51	25.35	---	---	---
19	30.24	27.78	24.82	26.31	27.89	25.80	21.69	28.44	25.24	---	---	---
20	30.23	25.38	25.45	25.97	28.27	25.79	22.39	27.28	24.79	---	---	---
21	30.55	22.21	25.60	26.30	28.36	25.79	23.37	26.01	25.50	---	---	---
22	30.71	20.76	26.17	26.92	28.01	25.10	23.91	25.67	26.62	---	---	---
23	30.83	21.07	26.59	27.14	27.32	24.28	24.53	24.36	26.78	---	---	---
24	31.12	22.55	26.79	27.65	27.21	23.99	24.65	23.10	27.66	---	---	---
25	31.26	23.34	26.30	28.31	27.21	24.48	24.77	23.09	27.66	---	---	---
26	31.33	24.17	25.20	28.65	27.33	24.98	25.06	23.48	28.06	---	---	---
27	31.31	24.77	24.42	28.75	27.71	25.32	25.02	23.48	28.20	---	---	---
28	30.80	25.08	24.72	28.69	28.14	25.43	24.33	23.37	28.48	---	---	---
29	30.50	25.05	25.04	28.76	28.20	25.52	24.06	21.27	28.95	---	---	---
30	30.39	24.21	25.85	29.08	---	25.61	25.08	20.85	29.07	---	---	---
31	30.21	---	25.83	29.30	---	25.68	---	21.75	---	---	---	---
MAX	31.40	30.74	27.40	29.30	29.54	28.37	25.99	28.51	29.07	30.12	---	---
CAL YR 2003	LOW 31.42											
WTR YR 2004	LOW 31.40											



Ground-Water Records—Greene County

394217083594100. Local Number, GR-12

LOCATION.—Latitude 39°42'17", longitude 83°59'41", Greene County, Hydrologic Unit 05090202, at Glen Thompson Preserve near Trebein, Ohio. Owner: State of Ohio.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled observation well, diameter 6 in., depth 75 ft, cased to 70 ft.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 790 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

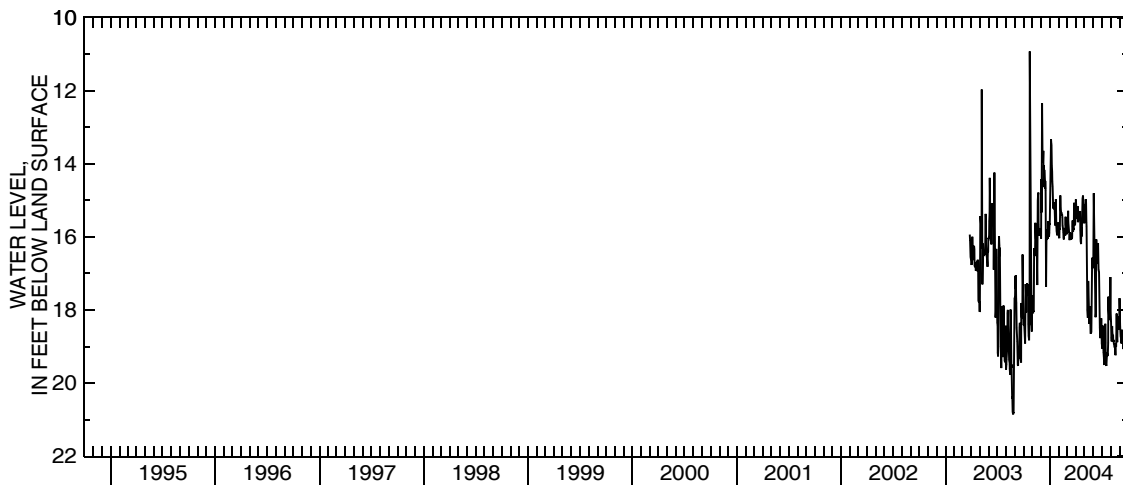
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water.

PERIOD OF RECORD.—March 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 20.86 ft below land-surface datum, Aug. 25, 2003; minimum daily low, 10.93 ft above land-surface datum, Oct. 23, 2003.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.42	17.60	16.05	15.66	15.90	15.93	14.98	15.63	16.81	18.91	18.06	17.68
2	18.40	17.98	14.43	15.20	16.02	15.69	15.12	15.49	15.75	19.01	18.32	18.13
3	18.37	18.09	15.33	14.86	16.04	15.87	15.27	15.11	14.81	19.06	18.76	18.46
4	18.50	18.03	14.10	14.39	15.77	15.73	15.37	15.19	15.41	18.67	18.86	18.56
5	18.67	18.04	12.35	13.33	15.81	15.29	15.49	15.01	16.23	18.43	18.84	18.72
6	18.92	18.05	12.91	13.46	15.23	15.59	15.49	14.97	16.83	19.05	18.45	18.79
7	18.46	16.50	13.89	13.49	14.87	15.71	15.16	15.06	17.38	19.16	18.60	18.92
8	17.29	16.31	13.97	14.05	15.21	15.88	15.27	15.61	17.99	19.28	18.68	18.86
9	17.43	16.48	13.65	14.22	15.36	15.91	15.60	15.71	18.20	19.49	18.71	18.57
10	17.64	16.53	14.64	14.48	15.32	16.09	15.52	17.39	18.09	19.50	18.87	18.54
11	18.07	15.62	14.05	14.63	15.39	16.01	15.53	18.00	16.71	19.34	18.82	18.58
12	17.63	15.76	14.53	15.14	15.41	15.88	15.46	18.07	16.07	18.90	18.91	18.75
13	17.27	16.03	14.17	15.22	15.37	15.93	15.47	18.22	16.49	18.38	18.93	18.97
14	17.33	16.15	14.37	15.05	15.47	16.01	15.42	17.23	16.74	18.93	19.01	19.07
15	17.55	15.94	14.69	15.23	15.69	16.07	15.32	17.23	16.72	19.24	19.02	18.81
16	17.30	16.05	14.47	15.16	15.78	15.96	15.32	17.67	16.67	19.49	19.06	19.02
17	17.63	16.97	14.73	15.25	15.89	16.01	15.82	18.18	16.37	19.53	19.24	19.07
18	18.39	17.32	16.47	15.15	16.01	16.06	16.12	18.38	16.17	19.42	19.23	18.94
19	18.71	16.11	17.37	15.58	16.07	16.01	16.20	18.16	16.51	19.17	18.93	19.02
20	18.83	15.01	16.16	15.69	15.82	15.72	15.75	17.91	16.90	19.24	19.00	19.13
21	18.43	14.85	15.79	15.46	15.80	15.55	15.91	17.92	16.96	19.26	18.46	19.11
22	18.39	14.79	15.99	14.97	15.79	15.85	15.99	18.36	17.40	19.20	18.10	18.95
23	10.93	15.66	16.01	15.45	15.91	15.81	15.50	18.63	17.69	18.90	18.82	18.88
24	12.37	15.97	16.05	15.69	15.96	15.76	15.10	18.63	18.49	17.64	18.88	18.86
25	16.31	15.77	16.04	15.84	15.45	15.80	14.95	18.60	18.75	17.98	18.33	18.83
26	16.85	15.84	15.66	15.95	15.66	15.07	14.87	18.46	18.77	18.22	18.18	18.64
27	17.45	15.90	15.57	15.83	15.75	15.35	15.15	17.91	18.72	18.18	18.24	17.91
28	17.82	15.85	15.98	15.95	15.67	15.51	15.23	16.57	18.41	17.64	18.40	19.05
29	18.39	15.90	15.97	15.67	15.81	15.68	15.31	16.62	18.23	18.20	18.54	19.10
30	18.59	15.90	15.89	15.61	---	15.57	15.62	16.86	18.59	18.28	18.36	18.27
31	18.03	---	15.63	15.77	---	15.46	---	16.73	---	17.10	18.40	---
MAX	18.92	18.09	17.37	15.95	16.07	16.09	16.20	18.63	18.77	19.53	19.24	19.13
CAL YR 2003	LOW 20.86											
WTR YR 2004	LOW 19.53											



394411083561300. Local Number, GR-1

LOCATION.—Latitude 39°44'11", longitude 83°56'13", Greene County, Hydrologic Unit 05090202, along Massies Creek near U.S. 68 north of Xenia, Ohio.

Owner: City of Xenia.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 30 in., depth 77 ft, cased.

INSTRUMENTATION.—Digital recorder, 60-minute punch.

DATUM.—Elevation of land-surface datum is 818.88 ft above sea level. Measuring point: Floor of instrument shelter 4.50 ft above land-surface datum.

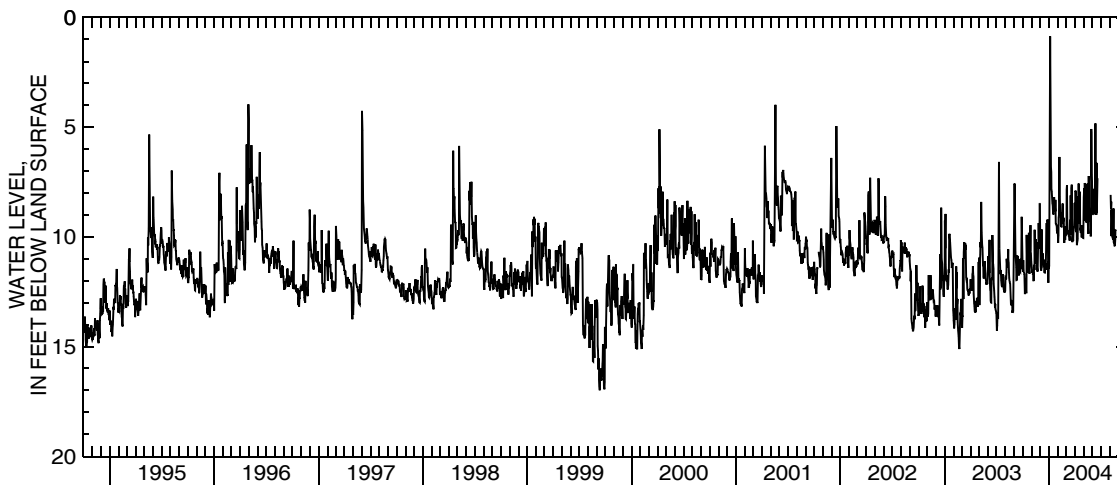
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—August 1944 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 21.60 ft below land-surface datum, July 7, 1966; minimum daily low, 0.65 ft above land-surface datum, Aug. 3, 1958.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.45	11.22	9.56	11.46	9.64	9.79	9.19	9.41	8.85	---	---	10.47
2	11.59	11.39	10.29	11.32	10.28	9.83	9.48	8.20	8.00	---	---	9.67
3	11.06	11.59	11.33	9.74	9.93	7.85	7.89	7.77	8.99	---	---	8.58
4	11.33	11.64	11.46	3.18	9.13	7.65	7.94	9.05	8.12	---	8.09	8.56
5	11.61	11.54	11.54	0.86	8.99	9.19	9.79	7.55	7.81	---	8.72	8.69
6	11.69	11.73	11.43	4.46	7.75	9.41	8.23	7.59	8.24	---	8.40	10.43
7	11.70	11.60	9.66	4.99	6.36	9.88	9.79	9.26	8.38	---	9.97	10.68
8	12.21	11.99	11.07	6.82	8.17	9.84	10.38	7.83	8.57	---	8.78	9.17
9	12.61	12.02	11.11	7.05	8.93	9.69	10.25	7.62	8.66	---	9.73	8.75
10	12.47	11.28	10.75	7.84	8.88	9.94	10.17	9.05	8.97	---	8.90	10.39
11	11.95	11.51	10.93	7.93	8.95	10.00	10.09	9.35	7.97	---	10.07	10.57
12	11.94	9.68	11.19	8.36	9.49	9.96	8.15	9.01	4.83	---	9.56	10.39
13	12.57	10.91	11.26	8.48	9.52	10.12	9.03	8.88	7.92	---	10.14	10.48
14	12.54	10.79	11.23	8.56	9.53	10.17	7.57	8.07	8.81	---	8.71	9.88
15	9.91	11.04	11.04	8.76	9.40	9.23	9.04	7.58	8.99	---	10.25	10.65
16	10.80	10.11	11.62	8.87	9.35	9.76	9.28	9.32	6.63	---	10.27	9.83
17	10.79	11.22	11.63	8.98	8.89	8.11	9.39	9.77	8.90	---	10.40	10.50
18	11.01	11.07	11.37	8.81	8.48	9.91	7.94	9.86	8.09	---	10.40	10.64
19	10.79	11.04	11.23	8.19	9.33	9.46	9.71	7.23	7.33	---	10.36	10.75
20	11.58	11.30	11.24	8.53	9.27	7.78	9.59	8.44	---	---	10.10	10.49
21	11.64	11.46	11.51	8.38	9.13	7.62	9.81	8.84	---	---	9.70	10.95
22	11.00	11.58	10.81	8.61	9.20	10.22	9.77	9.21	---	---	9.71	11.37
23	9.82	11.51	9.88	8.84	10.28	10.24	9.75	9.21	---	---	9.73	11.26
24	11.54	10.25	9.37	8.31	10.18	10.09	9.84	9.26	---	---	---	11.84
25	11.69	10.52	10.63	9.40	9.53	9.99	10.03	9.03	---	---	---	11.29
26	10.85	9.37	10.63	9.44	9.93	10.18	9.48	9.98	---	---	---	10.88
27	10.64	10.41	9.21	9.45	10.14	9.73	9.78	9.93	---	---	---	10.67
28	9.47	10.52	9.48	9.50	9.88	9.68	9.47	5.08	---	---	---	9.37
29	10.70	9.21	11.99	9.70	9.89	9.52	10.04	5.24	---	---	---	9.34
30	10.78	8.47	12.09	9.84	---	8.93	10.05	7.17	---	---	---	9.27
31	11.13	---	11.14	9.56	---	8.45	---	7.90	---	---	---	---
MAX	12.61	12.02	12.09	11.46	10.28	10.24	10.38	9.98	8.99	---	10.40	11.84
CAL YR 2003		LOW 15.12										
WTR YR 2004		LOW 12.61										



394425083551100. Local Number, GR-10

LOCATION.—Latitude 39°44'25", longitude 83°55'11", Greene County, Hydrologic Unit 05090202, along Massies Creek north of Xenia, Ohio. Owner: City of Xenia.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 6 in., depth 100 ft, cased.

INSTRUMENTATION.—Digital recorder, 60-minute punch.

DATUM.—Elevation of land-surface datum is 835 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter at land-surface datum.

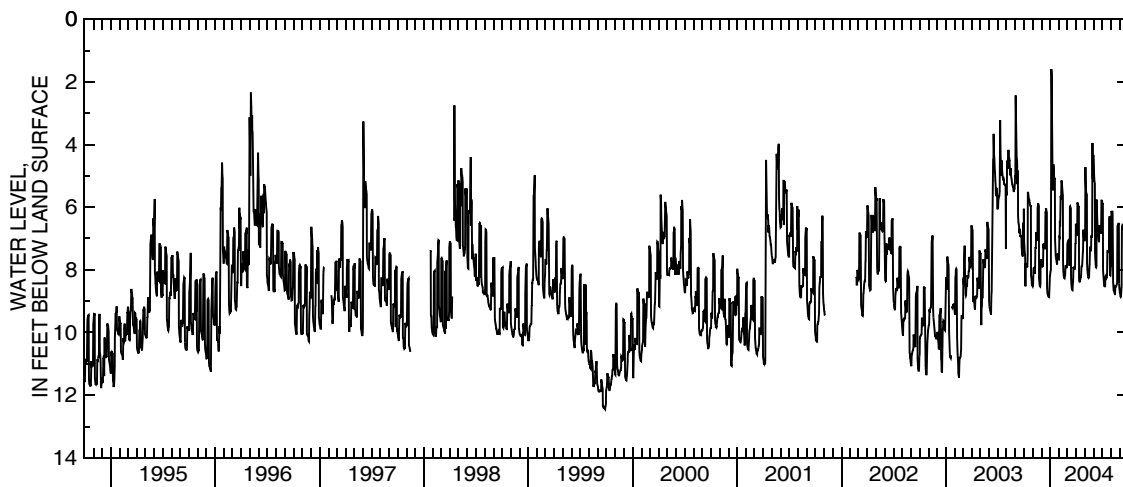
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—March 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 20.40 ft below land-surface datum, Nov. 5, 1977; minimum daily low, 0.15 ft below land-surface datum, Feb. 1, 1982.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.05	8.53	7.66	8.17	7.60	7.17	6.64	7.06	4.51	5.79	7.89	8.73
2	7.13	8.45	7.77	8.07	6.96	7.14	6.78	6.97	4.70	5.90	6.12	8.76
3	7.27	8.04	7.84	8.00	6.97	7.10	6.84	4.72	4.94	5.90	6.15	8.85
4	7.42	7.95	7.90	5.13	6.44	7.10	6.91	5.14	5.17	8.00	6.16	8.86
5	7.53	7.94	7.90	1.59	6.61	7.08	5.85	5.36	5.25	8.18	6.15	8.80
6	8.53	7.97	7.87	1.76	6.19	7.05	5.89	5.50	7.44	8.32	6.15	8.58
7	7.80	8.02	7.87	4.22	5.64	7.06	5.90	5.56	7.67	8.38	6.26	8.56
8	7.85	8.09	7.17	4.75	5.77	7.85	5.92	5.61	7.81	8.52	8.40	6.68
9	7.90	8.12	7.28	5.15	5.17	7.87	5.98	7.79	7.92	8.53	8.55	6.63
10	7.90	7.30	7.28	5.35	5.17	5.98	5.99	7.98	7.93	8.53	8.65	6.58
11	7.90	7.30	7.16	5.46	5.23	5.97	8.26	8.11	7.87	8.53	8.65	6.61
12	7.90	7.29	7.30	4.63	5.32	6.00	8.37	8.15	5.76	8.23	8.67	6.66
13	7.92	6.80	7.32	4.78	5.46	6.05	8.40	8.24	6.21	8.20	8.72	6.66
14	7.52	6.92	7.32	4.82	5.63	8.24	8.34	8.24	6.51	8.18	8.78	6.69
15	5.54	7.00	6.17	5.00	7.71	8.45	8.18	8.25	6.73	8.23	8.78	6.72
16	5.54	7.03	6.17	5.08	8.05	8.56	8.23	8.22	6.80	8.26	8.53	6.72
17	5.63	7.08	6.13	5.09	8.17	8.59	8.24	7.88	6.81	8.23	8.54	6.71
18	5.69	6.00	6.03	7.01	8.24	8.64	8.17	7.84	6.89	8.21	8.54	6.70
19	5.76	5.97	6.11	7.32	8.26	8.65	7.92	7.53	7.08	7.43	8.52	6.73
20	5.78	5.87	6.18	7.53	8.27	8.55	7.89	7.26	7.12	7.44	8.48	6.75
21	5.86	5.92	8.54	7.61	8.22	8.35	7.89	7.37	6.57	7.44	8.47	6.77
22	5.88	5.96	8.73	7.65	8.18	7.91	7.90	7.38	6.62	7.37	8.45	6.78
23	5.94	8.27	8.79	7.70	7.95	7.94	7.73	7.38	6.70	7.43	6.62	6.74
24	5.97	8.36	8.80	7.76	7.88	7.95	7.43	6.90	6.73	7.43	6.59	6.68
25	5.97	8.52	8.76	7.83	7.88	7.90	7.37	6.95	6.76	7.38	6.59	6.71
26	8.18	8.53	8.82	7.47	7.87	7.96	6.72	6.97	6.80	6.37	6.53	8.90
27	8.24	8.54	8.86	7.51	7.92	7.97	6.87	6.87	6.84	6.29	6.53	9.06
28	8.34	8.42	8.87	7.51	7.92	7.94	6.96	3.95	5.79	8.06	6.53	9.16
29	8.47	7.76	8.63	7.59	7.89	7.17	7.04	5.05	5.79	8.17	8.43	9.24
30	8.49	7.77	8.51	7.66	---	7.16	7.06	5.18	5.82	8.18	8.58	9.27
31	8.52	---	8.19	7.67	---	6.53	---	4.34	---	7.87	8.67	---
MAX	8.53	8.54	8.87	8.17	8.27	8.65	8.40	8.25	7.93	8.53	8.78	9.27
CAL YR 2003		LOW 11.44										
WTR YR 2004		LOW 9.27										



Ground-Water Records—Hamilton County**391039084291500. Local Number, H-11**

LOCATION.—Latitude 39°10'39", longitude 84°29'15", Hamilton County, Hydrologic Unit 05090203, 5.6 mi north of Riverfront Stadium in Cincinnati, Ohio.
Owner: Procter and Gamble Company.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled test artesian well, diameter 6 in., depth 148 ft, cased.

INSTRUMENTATION.—Biyearly measurement with chalked tape by Ohio Department of Natural Resources personnel.

DATUM.—Elevation of land-surface datum is 539 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 2.23 ft above land-surface datum.

REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—August 1939 to October 1982 continuous, periodic thereafter.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 129.72 ft below land-surface datum, Oct 25, 1948; minimum measured low, 40.40 ft below land-surface datum, Apr. 29, 2004.

WATER LEVEL,
IN FEET BELOW LAND-SURFACE DATUM
INSTANTANEOUS OBSERVATION
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water level
10-22-2003	40.75
04-29-2004	40.40

391101084172100. Local Number, H-3

LOCATION.—Latitude 39°11'01", longitude 84°17'21", Hamilton County, Hydrologic Unit 05090202, southeast of Miami, Ohio. Owner: Village of Indian Hills.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled test water table well, diameter 4 in., depth 60 ft, cased.

INSTRUMENTATION.—Digital recorder, 60-minute punch.

DATUM.—Elevation of land-surface datum is 532.22 ft above sea level. Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

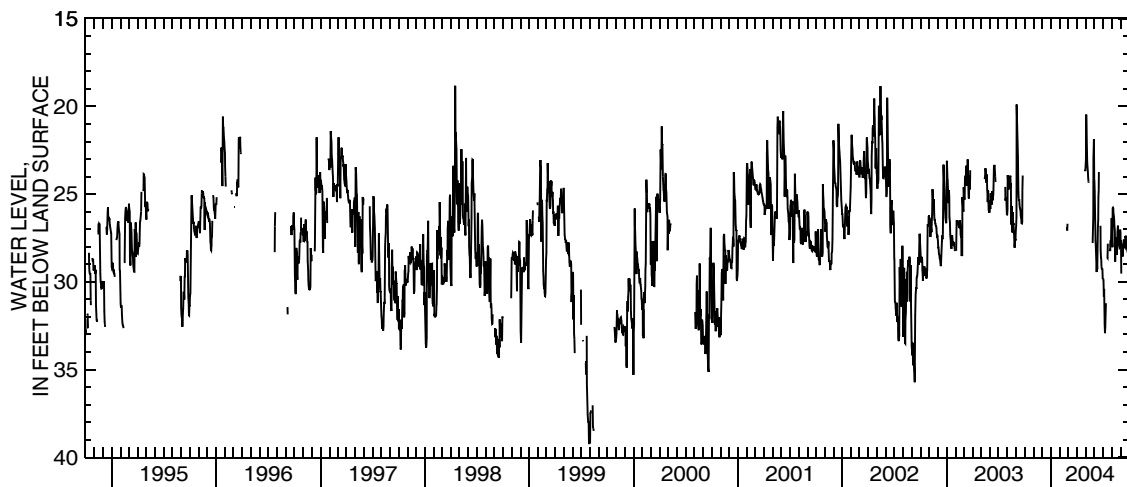
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—August 1952 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 39.20 ft below land-surface datum, July 29-31, 1999; minimum daily low, 15.60 ft below land-surface datum, Feb. 28, 1962.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	23.57	24.25	---	26.42	27.84
2	---	---	---	---	---	---	---	23.05	24.86	29.81	27.69	27.62
3	---	---	---	---	---	---	---	20.47	25.80	29.94	28.03	29.53
4	---	---	---	---	---	---	---	21.08	26.67	30.85	25.80	---
5	---	---	---	---	---	---	---	21.89	27.67	30.41	25.77	---
6	---	---	---	---	---	---	---	22.46	27.99	31.55	25.82	27.87
7	---	---	---	---	---	---	---	23.13	28.69	32.38	26.08	27.99
8	---	---	---	---	---	---	---	23.47	29.23	32.92	26.28	28.55
9	---	---	---	---	---	---	---	23.67	29.44	32.59	26.51	27.95
10	---	---	---	---	---	---	---	24.06	28.97	32.25	26.79	27.82
11	---	---	---	---	---	---	---	24.28	29.29	31.22	27.00	27.78
12	---	---	---	---	---	---	---	24.35	28.39	---	27.20	27.59
13	---	---	---	---	---	---	---	---	26.83	---	28.85	27.76
14	---	---	---	---	---	---	---	---	26.47	---	27.48	27.96
15	---	---	---	---	---	---	---	---	25.17	---	27.54	28.01
16	---	---	---	---	---	---	---	---	24.76	28.61	27.67	28.04
17	---	---	---	---	---	---	---	---	23.74	28.64	27.81	27.40
18	---	---	---	---	---	---	---	---	---	27.83	28.47	27.49
19	---	---	---	---	---	---	---	---	---	---	28.04	27.37
20	---	---	---	---	---	---	---	---	---	---	27.67	27.47
21	---	---	---	---	---	---	---	---	---	---	27.17	27.66
22	26.22	---	---	---	---	---	---	---	26.81	---	26.80	28.06
23	---	---	---	---	---	---	---	---	28.19	28.17	27.16	28.08
24	---	---	---	---	---	---	---	---	28.61	28.19	27.26	28.21
25	---	---	---	---	---	---	---	---	28.75	28.17	27.87	28.27
26	---	---	---	---	26.87	---	---	27.79	29.10	28.18	27.60	28.35
27	---	---	---	---	27.08	---	---	27.13	29.31	27.89	27.93	28.47
28	---	---	---	---	26.69	---	---	26.29	---	27.63	28.06	28.86
29	---	---	---	---	---	---	23.61	22.94	29.23	28.00	28.03	29.59
30	---	---	---	---	---	---	23.69	21.87	29.85	27.22	27.03	29.17
31	---	---	---	---	---	---	---	24.18	---	26.37	27.19	---
MAX	26.22	---	---	---	27.08	---	23.69	27.79	29.85	32.92	28.85	29.59
CAL YR 2003											LOW 28.52	
WTR YR 2004											LOW 32.92	



391201084281600. Local Number, H-10

LOCATION.—Latitude 39°12'01", longitude 84°28'16", Hamilton County, Hydrologic Unit 05090203, Section Road, Cincinnati, Ohio. Owner: National Distillers.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 8 in., depth 170 ft, cased.

INSTRUMENTATION.—Digital recorder—60-minute punch.

DATUM.—Elevation of land-surface datum is 544.7 ft above sea level. Measuring point: Floor of instrument shelter 8.13 ft above land-surface datum.

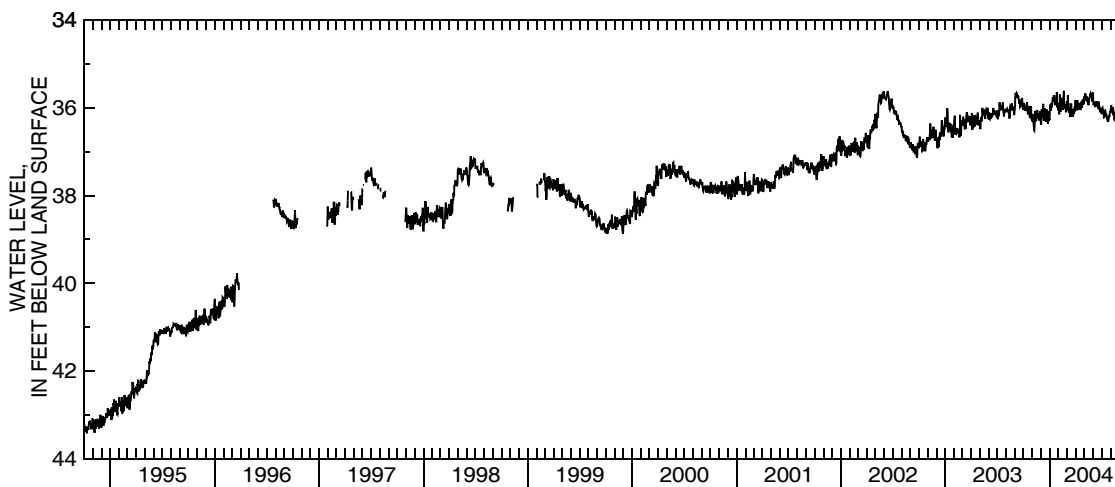
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—June 1943 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 121.58 ft below land-surface datum, Nov. 3, 10, 1950; minimum daily low, 35.61 ft below land-surface datum, Feb. 20, 2004.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36.02	36.31	36.33	36.28	36.06	35.86	35.84	35.74	35.69	36.07	36.11	36.38
2	36.05	36.25	36.39	36.09	35.98	36.03	35.84	35.78	35.84	36.07	36.04	36.32
3	35.97	36.24	36.33	35.98	36.05	36.07	35.85	35.79	35.94	36.01	35.98	36.29
4	35.89	36.15	36.21	35.99	36.15	35.91	35.98	35.78	35.92	36.00	35.94	36.34
5	35.93	36.28	36.03	35.93	36.02	35.72	36.06	35.67	35.89	36.10	36.06	36.32
6	35.99	36.35	36.23	36.06	35.70	35.92	35.98	35.71	35.87	36.11	36.10	36.25
7	36.02	36.41	36.19	36.01	35.96	35.89	35.82	35.82	35.93	36.03	36.08	36.24
8	36.07	36.51	36.10	35.89	36.09	35.97	35.89	35.83	35.98	36.13	36.12	36.23
9	36.02	36.52	36.05	35.92	35.83	36.07	35.99	35.73	35.97	36.20	36.10	36.39
10	35.99	36.36	35.91	35.98	35.80	36.11	36.02	35.77	35.90	36.22	35.99	36.46
11	36.00	36.15	36.19	35.83	35.84	36.00	36.02	35.81	35.85	36.21	36.05	36.43
12	36.01	36.07	36.28	35.75	35.87	36.12	36.00	35.80	35.92	36.11	36.08	36.40
13	36.05	36.31	36.29	35.78	35.89	36.21	35.89	35.80	35.87	36.08	36.17	36.41
14	35.88	36.29	36.06	35.77	35.77	36.04	36.00	35.78	35.87	36.07	36.23	36.40
15	36.05	36.19	36.18	35.82	35.97	36.08	36.05	35.90	35.94	36.11	36.27	36.38
16	36.07	36.18	36.02	35.85	36.05	35.93	35.99	35.94	35.96	36.14	36.28	36.34
17	36.15	36.24	36.07	35.78	35.99	35.90	36.01	35.88	35.94	36.14	36.19	36.37
18	36.13	36.07	36.03	35.71	35.98	36.03	36.05	35.82	35.97	36.16	36.09	36.52
19	36.10	36.07	36.15	35.85	35.75	36.20	35.97	35.80	35.99	36.20	36.18	36.57
20	36.13	36.19	36.32	35.94	35.61	36.03	35.95	35.76	36.00	36.24	36.15	36.53
21	35.96	36.16	36.30	35.88	35.93	36.13	35.86	35.74	35.86	36.26	36.22	36.52
22	36.02	36.14	36.14	35.89	35.99	36.20	35.93	35.69	35.93	36.24	36.22	36.53
23	36.12	36.14	36.04	35.91	35.92	36.16	35.97	35.67	35.97	36.24	36.22	36.51
24	36.23	36.27	36.15	35.91	36.00	36.08	36.00	35.70	35.99	36.32	36.25	36.46
25	36.19	36.27	36.25	35.91	36.00	36.15	35.81	35.72	36.00	36.27	36.27	36.49
26	36.20	36.18	36.36	35.64	35.97	36.07	35.83	35.70	36.05	36.21	36.26	36.51
27	36.10	36.15	36.30	35.88	36.07	36.08	35.84	35.66	36.10	36.16	36.29	36.40
28	35.96	36.08	36.17	35.99	36.10	36.03	35.87	35.77	36.07	36.21	36.21	36.47
29	36.09	36.22	36.08	35.89	36.01	36.04	35.92	35.85	36.11	36.19	36.25	36.50
30	36.17	36.07	36.27	35.94	---	35.93	35.85	35.75	36.12	36.13	36.33	36.55
31	36.23	---	36.26	36.02	---	35.84	---	35.65	---	36.08	36.36	---
MAX	36.23	36.52	36.39	36.28	36.15	36.21	36.06	35.94	36.12	36.32	36.36	36.57
CAL YR 2003		LOW 36.68										
WTR YR 2004		LOW 36.57										



391214084470100. Local Number, H-1

LOCATION.—Latitude 39°12'14", longitude 84°47'01", Hamilton County, Hydrologic Unit 05080003, Kilby Road 4 mi southeast of Harrison, Ohio. Owner: Robert Weber.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled test water-table well, diameter 6 in., depth 124 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval. Satellite telemeter at site.

DATUM.—Elevation of land-surface datum is 500 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 2.70 ft above land-surface datum.

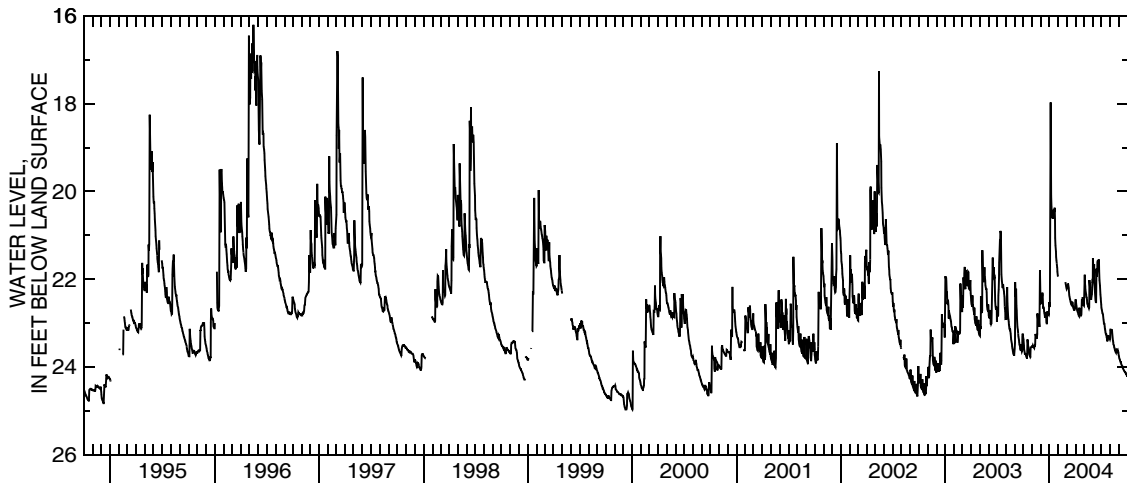
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—February 1948 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 25.95 ft below land-surface datum, Oct. 26 and 27, 1988; minimum daily low, 14.00 ft below land-surface datum, Jan. 22, 1959.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.33	23.53	22.56	22.63	---	22.22	22.46	22.49	21.52	22.65	23.15	23.79
2	23.37	23.53	22.57	22.60	---	22.20	22.49	22.20	21.72	22.70	23.15	23.82
3	23.51	23.51	22.41	22.07	---	22.19	22.55	21.90	21.76	22.75	23.18	23.84
4	23.60	23.52	22.41	20.74	---	22.15	22.61	22.07	21.72	22.77	23.21	23.87
5	23.64	23.54	22.40	17.97	---	22.11	22.66	22.16	21.66	22.78	23.14	23.89
6	23.68	23.54	22.38	19.54	---	22.11	22.68	22.24	22.08	22.81	23.18	23.89
7	23.72	23.56	22.31	20.10	---	22.16	22.71	22.31	22.22	22.85	23.20	23.90
8	23.69	23.57	22.36	20.35	---	22.20	22.74	22.36	22.34	22.92	23.28	23.94
9	23.71	23.54	22.59	20.51	---	22.27	22.77	22.41	22.39	23.00	23.36	23.95
10	23.73	23.52	22.67	20.58	---	22.36	22.79	22.42	22.48	23.02	23.40	23.97
11	23.75	23.52	22.63	20.58	---	22.39	22.81	22.47	22.54	23.02	23.44	23.98
12	23.78	23.49	22.68	20.62	---	22.44	22.83	22.54	22.53	23.09	23.49	24.00
13	23.80	23.25	22.74	20.59	---	22.47	22.84	22.57	21.76	23.13	23.51	24.02
14	23.80	23.30	22.78	20.47	---	22.49	22.67	22.61	21.84	23.16	23.55	24.03
15	23.72	23.31	22.82	20.42	---	22.52	22.67	22.62	21.94	23.20	23.56	24.05
16	23.37	23.32	22.86	20.45	---	22.56	22.73	22.62	21.82	23.25	23.59	24.06
17	23.46	23.34	22.86	20.46	---	22.57	22.76	22.66	21.61	23.26	23.62	24.08
18	23.52	23.34	22.75	20.45	---	22.59	22.79	22.67	21.57	23.26	23.64	24.09
19	23.57	23.25	22.81	20.37	---	22.57	22.82	22.64	21.61	23.34	23.66	24.10
20	23.61	22.78	22.88	20.62	---	22.53	22.83	22.02	21.64	23.36	23.68	24.12
21	23.66	22.89	22.98	21.06	---	22.53	22.82	22.15	21.55	23.40	23.65	24.12
22	23.70	22.94	23.01	21.23	---	22.55	22.80	22.24	21.59	23.40	23.60	24.12
23	23.73	22.95	23.01	21.37	---	22.61	22.46	22.33	21.81	23.36	23.58	24.14
24	23.76	23.01	22.80	21.49	---	22.64	22.48	22.40	22.02	23.28	23.65	24.16
25	23.78	22.93	22.73	21.57	---	22.67	22.49	22.44	22.14	23.32	23.68	24.16
26	23.77	23.02	22.81	21.64	22.07	22.70	22.41	22.47	22.23	23.34	23.65	24.16
27	23.54	23.09	22.83	21.68	22.13	22.70	22.47	22.40	22.35	23.36	23.63	24.20
28	23.55	21.80	22.80	21.74	22.16	22.70	22.55	22.34	22.43	23.32	23.67	24.22
29	23.55	22.08	22.81	21.83	22.19	22.68	22.59	22.18	22.50	23.35	23.67	24.18
30	23.55	22.41	22.77	21.93	---	22.67	22.60	22.07	22.58	23.37	23.73	24.12
31	23.53	---	22.52	21.94	---	22.58	---	22.08	---	23.34	23.76	---
MAX	23.80	23.57	23.01	22.63	22.19	22.70	22.84	22.67	22.58	23.40	23.76	24.22
CAL YR 2003	LOW 23.80											
WTR YR 2004	LOW 24.22											



391341084275300. Local Number, H-8

LOCATION.—Latitude 39°13'41", longitude 84°27'53", Hamilton County, Hydrologic Unit 05090203, Vine and Water Streets, Wyoming, Ohio. Owner: City of Wyoming.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 8 in., depth 194 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 576.2 ft above sea level. Measuring point: Top of platform 3.30 ft above land-surface datum.

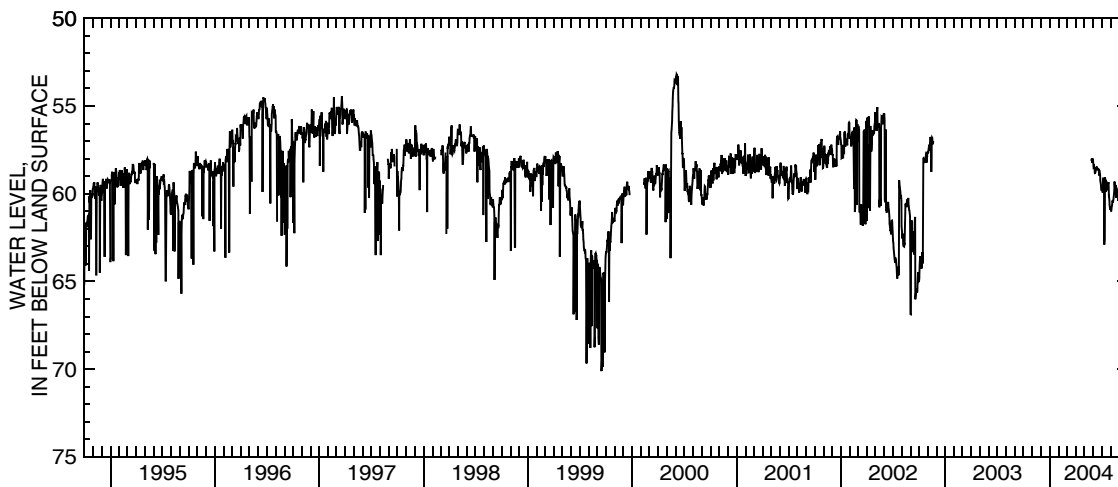
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—July 1938 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 148.86 ft below land-surface datum, Dec. 1, 1948; minimum daily low, 53.19 ft below land-surface datum, June 4, 2000.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	58.14	59.83	60.71	60.00
2	---	---	---	---	---	---	---	---	58.33	59.68	60.91	60.08
3	---	---	---	---	---	---	---	---	58.47	59.75	61.01	60.23
4	---	---	---	---	---	---	---	---	58.42	59.93	60.96	60.33
5	---	---	---	---	---	---	---	---	58.50	59.90	60.71	60.30
6	---	---	---	---	---	---	---	---	58.59	59.09	60.66	60.23
7	---	---	---	---	---	---	---	---	58.81	59.21	60.46	60.71
8	---	---	---	---	---	---	---	---	58.80	59.40	60.38	59.75
9	---	---	---	---	---	---	---	---	58.79	59.38	60.46	60.05
10	---	---	---	---	---	---	---	---	58.68	62.90	60.46	60.13
11	---	---	---	---	---	---	---	---	58.51	62.59	60.33	60.00
12	---	---	---	---	---	---	---	---	58.55	59.12	60.25	59.47
13	---	---	---	---	---	---	---	---	58.49	59.06	60.00	59.52
14	---	---	---	---	---	---	---	---	58.50	59.34	59.75	59.60
15	---	---	---	---	---	---	---	---	58.59	59.90	59.30	59.75
16	---	---	---	---	---	---	---	---	58.59	59.54	59.55	60.33
17	---	---	---	---	---	---	---	---	58.53	59.32	59.80	60.10
18	---	---	---	---	---	---	---	---	58.63	59.34	59.78	59.50
19	---	---	---	---	---	---	---	---	58.61	59.60	59.50	59.17
20	---	---	---	---	---	---	---	---	58.61	59.80	60.25	59.32
21	---	---	---	---	---	---	---	---	58.57	59.77	60.05	59.07
22	---	---	---	---	---	---	---	---	58.96	59.57	59.83	59.07
23	---	---	---	---	---	---	---	---	58.66	59.35	59.75	59.15
24	---	---	---	---	---	---	---	---	58.89	59.41	59.78	58.92
25	---	---	---	---	---	---	---	---	58.94	59.35	59.83	58.54
26	---	---	---	---	---	---	---	58.13	59.25	60.20	60.10	57.99
27	---	---	---	---	---	---	---	58.00	59.37	60.18	60.25	58.39
28	---	---	---	---	---	---	---	58.15	59.48	60.38	60.41	58.04
29	---	---	---	---	---	---	---	58.24	59.64	60.61	60.15	58.22
30	---	---	---	---	---	---	---	57.99	59.71	60.91	59.83	58.52
31	---	---	---	---	---	---	---	58.10	---	60.78	59.83	---
MAX	---	---	---	---	---	---	---	58.24	59.71	62.90	61.01	60.71
WTR YR 2004	LOW 62.90											



391442084262900. Local Number, H-7

LOCATION.—Latitude 39°14'42", longitude 84°26'29", Hamilton County, Hydrologic Unit 05090203, at Evendale, Ohio. Owner: General Electric Corp.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled test artesian well, diameter 6 in., depth 180 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 555.40 ft above sea level. Measuring point: Floor of instrument shelter 7.78 ft above land-surface datum.

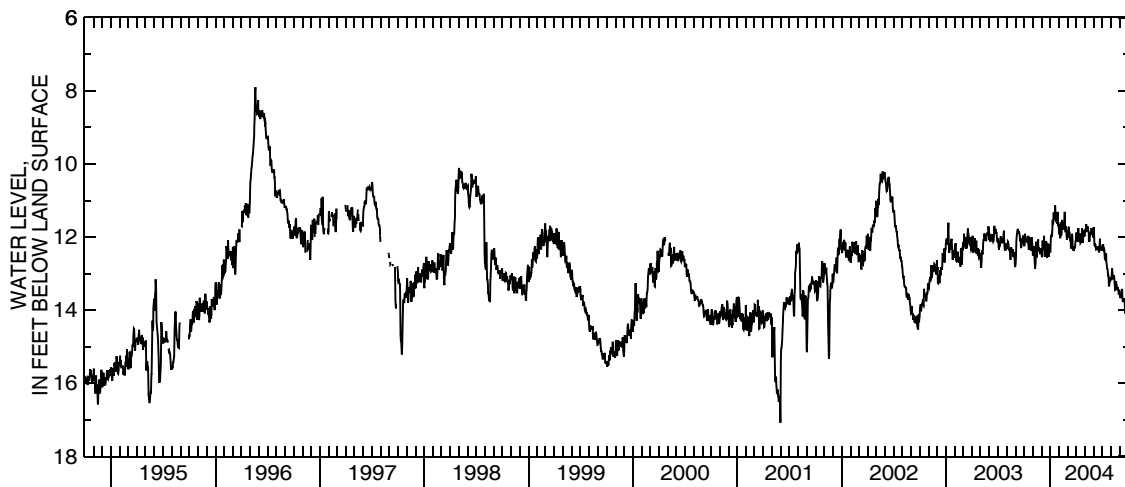
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—April 1941 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 101.09 ft below land-surface datum, Jan. 29, 1964; minimum daily low, 7.90 ft below land-surface datum, May 20, 1996.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.23	12.49	12.46	12.42	11.93	11.82	11.90	11.84	11.75	12.32	13.16	13.67
2	12.23	12.49	12.55	12.23	11.90	11.87	11.92	11.79	11.95	12.33	13.10	13.64
3	12.20	12.38	12.53	11.97	11.73	12.02	11.92	11.84	12.18	12.30	12.93	13.60
4	11.91	12.25	12.39	11.96	12.01	11.94	12.04	11.84	12.22	12.19	12.85	13.65
5	11.97	12.35	12.10	11.93	12.01	11.72	12.13	11.65	12.21	12.34	12.97	13.63
6	12.03	12.49	12.33	12.00	11.60	11.83	12.11	11.67	12.18	12.36	13.08	13.54
7	12.04	12.66	12.35	11.95	11.71	11.86	11.87	11.83	12.23	12.29	13.10	13.44
8	12.11	12.82	12.27	11.73	11.97	11.89	11.76	11.86	12.31	12.39	13.14	13.44
9	12.10	12.86	12.08	11.53	11.87	11.95	12.05	11.75	12.34	12.53	13.13	13.62
10	12.06	12.72	11.97	11.66	11.59	12.10	12.11	11.71	12.33	12.61	13.05	13.76
11	12.10	12.36	12.22	11.63	11.53	12.06	12.06	11.77	12.25	12.62	13.07	13.78
12	12.09	12.13	12.49	11.33	11.58	12.11	12.05	11.81	12.32	12.53	13.16	13.75
13	12.12	12.53	12.54	11.41	11.64	12.31	11.90	11.85	12.32	12.45	13.29	13.73
14	11.97	12.56	12.35	11.41	11.58	12.24	12.05	11.87	12.26	12.47	13.40	13.71
15	12.13	12.47	12.22	11.42	11.63	12.15	12.16	12.07	12.32	12.65	13.45	13.72
16	12.21	12.33	12.14	11.50	11.79	12.03	12.14	12.13	12.36	12.73	13.44	13.69
17	12.33	12.39	12.14	11.49	11.75	11.91	12.10	12.09	12.33	12.81	13.34	13.73
18	12.35	12.29	12.14	11.14	11.74	12.00	12.15	11.96	12.35	12.86	13.21	13.98
19	12.24	12.07	12.26	11.42	11.58	12.34	12.07	11.93	12.40	12.89	13.29	14.09
20	12.26	12.31	12.56	11.56	11.31	12.33	11.98	11.94	12.40	12.99	13.33	14.04
21	12.03	12.34	12.57	11.57	11.61	12.32	11.77	11.93	12.25	13.05	13.41	13.96
22	12.04	12.34	12.35	11.48	11.81	12.38	11.96	11.87	12.05	13.05	13.44	13.99
23	12.15	12.33	12.18	11.59	11.79	12.35	12.08	11.78	12.18	13.18	13.37	13.99
24	12.34	12.38	12.23	11.59	11.70	12.27	12.16	11.78	12.22	13.33	13.39	13.96
25	12.35	12.47	12.40	11.63	11.83	12.30	12.03	11.79	12.26	13.33	13.44	13.98
26	12.37	12.37	12.52	11.31	11.83	12.30	11.86	11.79	12.33	13.22	13.49	14.02
27	12.30	12.37	12.52	11.39	11.99	12.27	11.82	11.77	12.37	13.10	13.54	13.95
28	12.01	12.30	12.39	11.68	12.07	12.24	11.91	11.88	12.31	13.16	13.53	13.84
29	12.09	12.38	12.21	11.68	12.02	12.10	11.98	12.01	12.32	13.21	13.44	13.99
30	12.24	12.30	12.38	11.65	---	12.09	11.95	11.99	12.35	13.12	13.50	14.08
31	12.39	---	12.39	11.84	---	11.88	---	11.73	---	13.10	13.61	---
MAX	12.39	12.86	12.57	12.42	12.07	12.38	12.16	12.13	12.40	13.33	13.61	14.09
CAL YR 2003		LOW 12.86										
WTR YR 2004		LOW 14.09										



391608084254400. Local Number, H-6

LOCATION.—Latitude 39°16'08", longitude 84°25'44", Hamilton County, Hydrologic Unit 05090203, in Glendale, Ohio. Owner: City of Glendale.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 8 in., depth 167 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 570.65 ft above sea level. Measuring point: Floor of instrument shelter 4.05 ft above land-surface datum.

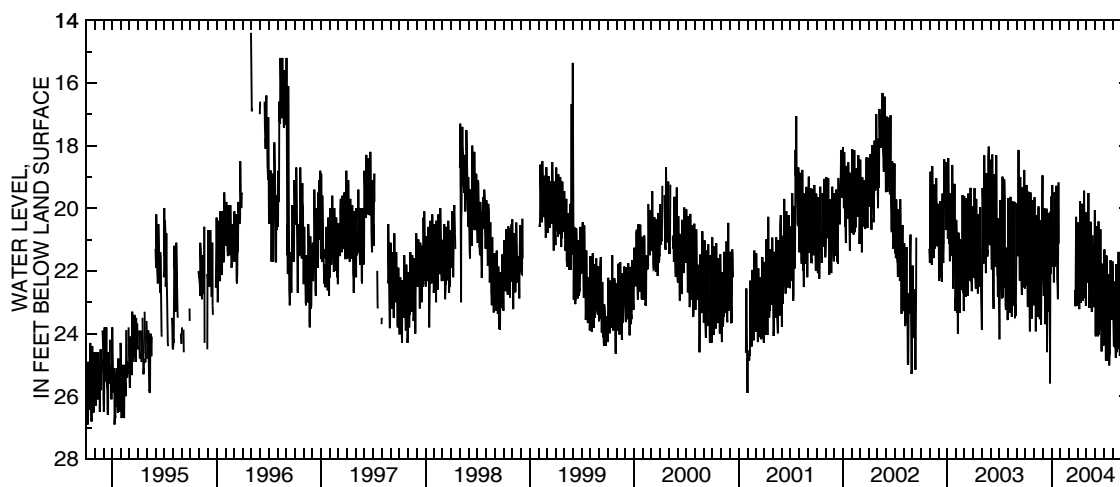
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—July 1938 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 84.10 ft below land-surface datum, Oct. 14, 1960; minimum daily low, 14.40 ft below land-surface datum, Apr. 30, 1996.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.81	22.26	21.62	19.62	---	---	23.11	20.81	21.77	24.38	21.69	24.59
2	22.14	19.65	21.65	21.21	---	---	22.83	20.13	23.07	24.27	21.96	24.03
3	22.41	22.20	22.29	20.76	---	---	20.46	20.73	24.02	22.65	23.24	24.48
4	20.16	22.28	22.41	19.26	---	---	22.36	21.84	24.09	21.32	23.34	23.13
5	19.26	22.61	22.80	20.03	---	---	22.53	21.75	22.61	21.96	23.82	21.60
6	20.99	22.17	22.41	21.87	---	---	22.84	21.80	20.58	22.83	24.41	21.22
7	22.47	23.93	20.00	21.63	---	---	23.22	22.38	22.49	23.54	23.01	22.92
8	21.96	21.83	20.81	21.62	---	---	22.90	21.18	23.27	24.08	22.34	22.86
9	22.28	20.22	23.27	22.37	---	---	20.88	19.52	23.63	24.86	23.61	24.53
10	23.15	22.46	23.67	21.83	---	---	19.77	21.78	23.36	23.34	24.45	25.05
11	21.66	23.13	23.70	19.49	---	---	21.69	23.04	24.09	21.51	24.38	23.75
12	19.47	22.82	23.19	20.11	---	---	22.17	23.18	22.74	23.18	24.35	21.66
13	20.87	22.83	22.25	21.87	---	---	23.02	22.85	20.42	24.02	24.78	23.64
14	22.55	23.47	20.01	21.56	---	---	22.47	23.16	22.32	24.54	23.09	24.50
15	22.43	22.10	21.69	21.27	---	---	22.47	22.62	24.05	24.87	21.78	24.77
16	22.95	19.94	24.59	21.81	---	---	20.89	20.43	23.18	24.75	23.54	25.63
17	23.93	21.59	23.31	21.06	---	---	19.86	20.84	23.63	24.53	24.59	25.11
18	22.31	23.01	22.82	19.28	---	---	21.07	22.77	23.87	22.11	24.30	23.81
19	19.50	22.37	23.30	21.04	---	---	22.95	22.71	22.49	23.76	24.27	22.08
20	20.79	22.71	22.32	21.96	---	---	22.59	22.85	20.67	24.75	24.42	23.30
21	23.19	23.54	20.15	22.28	---	---	22.27	23.31	22.68	25.02	22.72	24.77
22	23.33	21.95	21.20	22.46	---	22.62	22.87	22.28	23.30	24.63	21.39	24.93
23	22.77	20.39	22.35	22.90	---	22.69	20.95	20.87	24.35	24.63	22.79	25.22
24	23.52	21.45	21.80	21.20	---	22.86	19.44	22.04	24.57	23.30	24.27	25.70
25	21.75	23.72	20.28	19.18	---	23.13	20.44	22.83	24.36	21.66	24.47	24.42
26	19.75	23.03	25.19	21.13	---	21.76	22.05	23.16	22.95	22.77	24.17	22.68
27	20.61	21.59	25.59	---	---	20.27	22.32	22.20	21.77	23.46	24.71	24.02
28	22.50	21.41	20.11	---	---	21.40	22.54	22.58	23.04	23.25	23.55	25.38
29	22.49	20.69	21.02	---	---	22.47	22.71	22.85	23.61	22.92	21.60	25.71
30	22.83	18.95	22.08	---	---	22.86	23.12	21.39	24.03	23.57	23.70	25.33
31	23.10	---	20.70	---	---	22.92	---	20.06	---	22.13	24.75	---
MAX	23.93	23.93	25.59	22.90	---	23.13	23.22	23.31	24.57	25.02	24.78	25.71
CAL YR 2003		LOW 25.59										
WTR YR 2004		LOW 25.71										



391733084392400. Local Number, H-2

LOCATION.—Latitude 39°17'33", longitude 84°39'24", Hamilton County, Hydrologic Unit 05080002, East Miami River Road 1.5 mi south of Ross, Ohio.
 Owner: Lee Wilhelm.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled test water table well, diameter 6 in., depth 89 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 534.21 ft above sea level. Measuring point: Floor of instrument shelter 8.97 ft above land-surface datum.

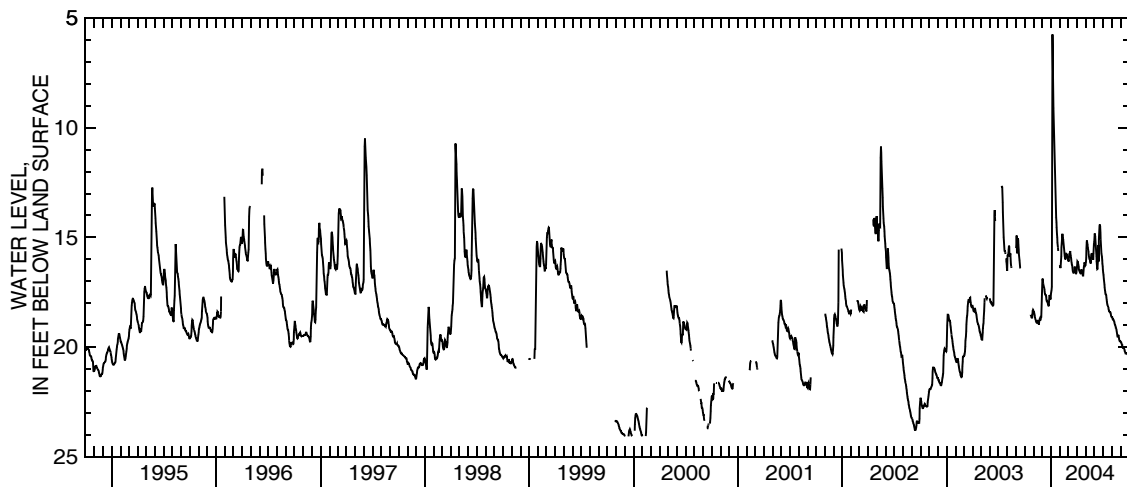
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—August 1952 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 24.37 ft below land-surface datum, Sept. 13 and 14, 24 and 25, 1972; minimum daily low 2.63 ft below land-surface datum, June, 16, 1958. (Water level above land surface but could not be measured during Jan. 1959 flood.)

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
 DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	18.38	17.18	17.61	16.28	16.02	16.35	16.26	15.08	16.47	18.63	19.75
2	---	18.40	16.92	17.50	16.36	16.08	16.20	16.14	14.82	16.61	18.63	19.77
3	---	18.45	16.88	17.42	16.40	16.08	16.10	15.93	14.85	16.72	18.68	19.80
4	---	18.50	16.97	17.25	16.34	15.92	16.14	15.54	14.96	16.89	18.74	19.85
5	---	18.56	17.11	9.48	16.08	15.76	16.23	15.23	15.14	17.04	18.75	19.89
6	---	18.65	17.20	5.75	15.87	15.74	16.26	15.15	15.36	17.16	18.75	19.92
7	---	18.70	17.24	6.20	15.45	15.69	16.35	15.24	15.62	17.28	18.77	19.98
8	---	18.77	17.30	7.01	15.15	15.63	16.47	15.33	15.87	17.40	18.81	20.01
9	---	18.80	17.39	8.17	14.87	15.75	16.53	15.48	16.10	17.50	18.83	20.04
10	---	18.83	17.49	9.11	14.84	15.83	16.56	15.57	16.31	17.58	18.89	20.04
11	---	18.89	17.58	9.93	14.93	15.90	16.59	15.66	16.45	17.61	18.96	20.04
12	---	18.90	17.61	10.83	15.03	16.00	16.62	15.78	16.44	17.65	18.97	20.04
13	---	18.90	17.63	11.54	15.10	16.14	16.65	15.87	16.06	17.75	19.00	20.09
14	---	18.84	17.64	12.14	15.27	16.22	16.65	15.95	15.62	17.85	19.06	20.13
15	---	18.81	17.73	12.59	15.42	16.28	16.56	16.00	15.35	17.94	19.11	20.16
16	---	18.83	17.84	13.10	15.56	16.38	16.47	16.02	16.10	18.03	19.17	20.22
17	---	18.83	17.90	13.47	15.71	16.49	16.49	16.08	15.08	18.09	19.22	20.28
18	---	18.87	17.90	13.75	15.83	16.58	16.53	16.16	14.79	18.14	19.28	20.30
19	---	18.95	17.94	14.10	15.93	16.62	16.61	16.19	14.48	18.18	19.36	20.30
20	---	18.95	17.97	14.30	15.99	16.62	16.62	16.06	14.42	18.22	19.45	20.30
21	---	18.86	17.99	14.55	15.99	16.61	16.71	15.81	14.49	18.31	19.52	20.28
22	18.53	18.74	18.05	14.84	15.92	16.52	16.74	15.76	14.79	18.36	19.52	20.28
23	18.56	18.70	18.11	15.01	15.79	16.41	16.74	15.76	15.08	18.38	19.47	20.27
24	18.60	18.77	18.11	15.24	15.76	16.34	16.56	15.81	15.36	18.40	19.45	20.31
25	18.65	18.77	17.99	15.45	15.77	16.36	16.36	15.87	15.60	18.42	19.53	20.34
26	18.66	18.70	17.76	15.62	15.81	16.47	16.29	15.96	15.74	18.42	19.61	20.34
27	18.65	18.66	17.63	---	15.87	16.61	16.14	15.99	15.87	18.45	19.68	20.36
28	18.48	18.63	17.69	---	15.90	16.65	16.16	16.02	16.04	18.48	19.72	20.36
29	18.35	18.29	17.79	---	15.93	16.65	16.23	15.75	16.20	18.53	19.74	20.37
30	18.30	17.65	17.84	---	---	16.58	16.28	15.32	16.32	18.60	19.74	20.37
31	18.33	---	17.76	---	---	16.49	---	15.21	---	18.63	19.74	---
MAX	18.66	18.95	18.11	17.61	16.40	16.65	16.74	16.26	16.45	18.63	19.74	20.37
CAL YR	2003											
WTR YR	2004											
LOW	20.37											



391817084393300. Local Number, H-4

LOCATION.—Latitude 39°18'17", longitude 84°39'33", Hamilton County, Hydrologic Unit 05080002, 0.7 mi southwest of Ross, Ohio. Owner: Southwestern Ohio Water Company.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled test water table well, diameter 6 in., depth 100 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 541.57 ft above sea level. (Levels by Miami Conservancy District.) Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

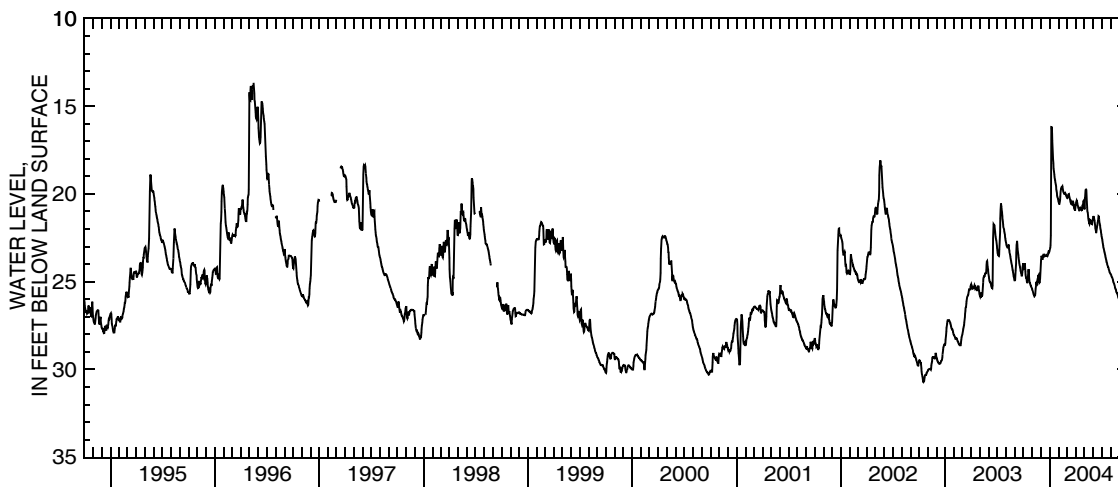
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—December 1954 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 32.23 ft below land-surface datum, Dec. 5, 1971; minimum daily low, 11.60 ft below land-surface datum, June 16, 1958.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.94	25.47	23.97	23.21	20.47	20.22	20.64	20.84	21.38	22.41	24.56	26.07
2	24.14	25.53	23.76	23.12	20.52	20.24	20.51	20.84	21.26	22.52	24.59	26.10
3	24.27	25.58	23.60	23.04	20.57	20.25	20.43	20.47	21.30	22.64	24.63	26.15
4	24.26	25.62	23.52	22.92	20.57	20.22	20.37	20.20	21.38	22.72	24.68	26.19
5	24.09	25.68	23.63	22.37	20.45	20.13	20.43	19.92	21.47	22.83	24.72	26.24
6	23.94	25.73	23.75	17.36	20.34	20.04	20.46	19.77	21.51	22.94	24.75	26.24
7	24.15	25.79	23.72	16.19	20.15	20.01	20.54	19.74	21.66	23.03	24.80	26.28
8	24.42	25.74	23.58	16.20	19.90	20.00	20.64	19.77	21.81	23.13	24.86	26.37
9	24.62	25.71	23.52	16.55	19.75	20.09	20.72	20.00	21.95	23.22	24.90	26.42
10	24.78	25.79	23.47	16.95	19.68	20.16	20.79	20.45	22.08	23.27	24.95	26.46
11	24.81	25.76	23.47	17.30	19.64	20.22	20.84	20.75	22.19	23.34	25.02	26.48
12	24.84	25.67	23.46	17.70	19.61	20.31	20.88	20.97	22.19	23.42	25.07	26.49
13	24.97	25.41	23.57	18.02	19.59	20.40	20.94	21.08	22.07	23.46	25.11	26.52
14	25.05	25.19	23.57	18.24	19.56	20.49	20.94	21.27	21.92	23.54	25.17	26.55
15	25.05	25.01	23.55	18.54	19.64	20.54	20.90	21.39	21.84	23.61	25.23	26.60
16	24.83	25.14	23.54	18.74	19.72	20.55	20.82	21.50	21.78	23.72	25.29	26.64
17	24.60	25.16	23.54	18.90	19.83	20.57	20.78	21.59	21.66	23.79	25.35	26.67
18	24.42	25.07	23.52	19.04	19.90	20.60	20.78	21.66	21.53	23.85	25.41	26.70
19	24.29	24.92	23.49	19.14	19.95	20.61	20.82	21.71	21.39	23.93	25.44	26.72
20	24.47	24.84	23.52	19.23	20.00	20.46	20.85	21.68	21.27	23.99	25.52	26.76
21	24.72	24.75	23.52	19.32	20.00	20.49	20.90	21.48	21.29	24.06	25.59	26.81
22	24.92	24.65	23.52	19.47	19.99	20.47	20.93	21.50	21.44	24.14	25.63	26.81
23	25.05	24.63	23.54	19.56	19.94	20.46	20.91	21.51	21.60	24.15	25.65	26.81
24	25.08	24.89	23.55	19.74	19.93	20.51	20.75	21.53	21.71	24.21	25.68	26.85
25	25.19	24.99	23.51	19.83	19.97	20.69	20.61	21.60	21.81	24.26	25.73	26.90
26	25.22	25.07	23.42	19.95	20.01	20.78	20.66	21.69	21.93	24.32	25.79	26.97
27	25.23	25.04	23.34	20.09	20.06	20.72	20.57	21.71	22.02	24.36	25.85	27.02
28	25.29	24.84	23.28	20.16	20.13	20.76	20.42	21.72	22.11	24.41	25.89	27.06
29	25.31	24.62	23.28	20.22	20.16	20.91	20.37	21.62	22.22	24.47	25.95	27.11
30	25.35	24.27	23.31	20.28	---	20.91	20.64	21.48	22.31	24.51	25.98	27.13
31	25.41	---	23.28	20.40	---	20.79	---	21.42	---	24.54	26.01	---
MAX	25.41	25.79	23.97	23.21	20.57	20.91	20.94	21.72	22.31	24.54	26.01	27.13
CAL YR 2003		LOW 28.63										
WTR YR 2004		LOW 27.13										



Ground-Water Records—Hardin County

404218083503700. Local Number, HN-1

LOCATION.—Latitude 40°42'18", longitude 83°50'37", Hardin County, Hydrologic Unit 05060001, at grain elevator in Alger. Owner: Village of Alger.

AQUIFER.—Limestone of Silurian Age.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 6 in., depth 40 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 975 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 1.5 ft above land-surface datum.

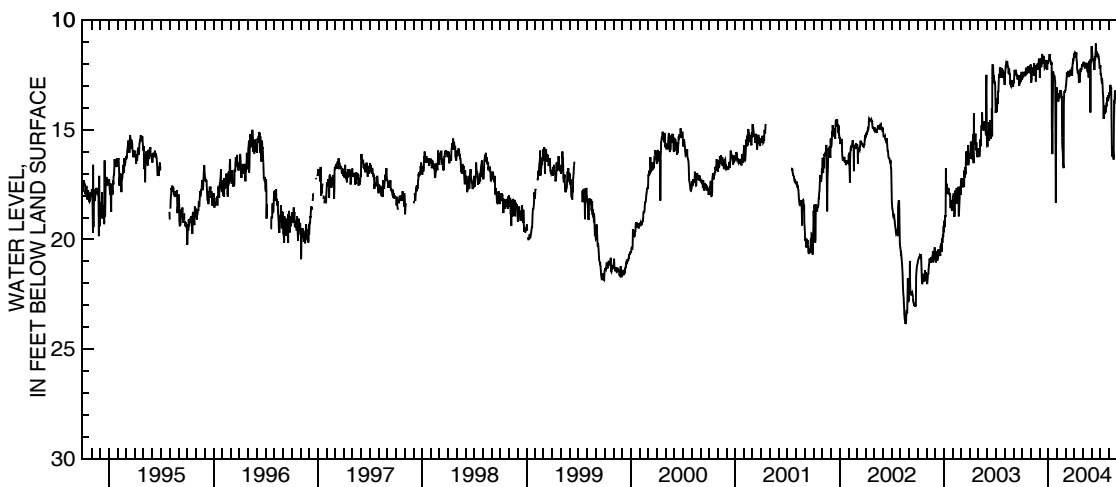
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—April 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 23.90 ft below land-surface datum, Aug. 7, 1991;
minimum daily low, 5.77 ft below land-surface datum, Feb. 24, 1949.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.66	12.03	12.11	11.94	13.22	13.19	11.51	12.02	11.51	12.05	13.32	13.46
2	12.65	12.85	12.62	11.85	13.59	12.96	11.61	11.96	11.46	12.50	13.32	13.32
3	12.50	12.67	12.05	11.85	13.68	12.99	11.57	11.90	11.57	12.44	13.34	13.31
4	12.54	12.39	11.87	11.78	13.55	12.74	11.55	12.02	11.76	12.50	13.44	13.31
5	12.45	12.24	11.87	11.55	13.71	12.59	11.72	11.91	11.84	12.78	12.95	13.22
6	12.51	12.21	11.75	11.78	13.35	12.39	11.52	11.96	11.78	12.89	13.28	13.28
7	12.47	12.23	12.15	11.79	13.38	12.54	11.60	12.15	11.90	12.67	13.22	13.17
8	12.44	12.42	12.08	11.85	13.58	12.51	11.46	12.20	12.08	12.84	13.08	13.20
9	12.48	12.35	11.73	11.87	13.40	12.44	11.86	12.09	12.15	13.10	14.48	13.04
10	12.38	12.53	11.55	11.94	13.34	12.47	11.93	12.06	12.27	13.37	15.71	13.38
11	12.51	12.26	11.63	12.03	13.25	12.50	12.21	12.14	12.09	13.46	16.22	13.34
12	12.56	11.96	11.69	11.92	13.19	12.32	12.36	12.02	11.66	14.50	16.04	13.49
13	12.47	12.09	11.82	14.99	13.25	12.59	12.35	12.06	11.82	14.06	15.89	13.82
14	12.17	12.47	11.97	15.18	13.19	12.56	12.38	11.94	11.42	13.97	15.75	13.41
15	12.33	12.15	11.75	16.11	13.28	12.53	12.47	12.02	11.07	13.90	15.90	13.37
16	12.38	12.17	11.63	14.26	13.50	12.26	12.56	12.20	11.45	14.24	16.36	13.55
17	12.32	12.53	12.00	12.69	13.47	12.42	12.84	12.38	11.57	14.28	15.32	13.50
18	12.35	12.80	11.96	12.35	15.35	12.47	12.72	12.17	11.43	14.22	13.73	13.47
19	12.38	12.23	12.20	12.47	15.83	12.47	12.84	12.05	11.57	14.19	13.75	13.70
20	12.29	12.06	12.18	12.60	15.96	12.27	12.77	12.14	11.60	14.16	13.55	13.94
21	12.11	12.18	11.97	12.67	16.16	12.35	12.40	12.62	11.69	14.03	13.25	13.60
22	12.21	12.14	11.90	12.53	16.62	12.33	12.24	11.87	11.54	13.85	13.25	13.68
23	12.20	12.15	11.81	12.66	16.75	12.17	12.24	11.90	11.67	13.86	13.46	13.95
24	12.24	11.97	11.94	12.74	13.80	12.53	12.36	12.41	11.64	13.77	13.22	13.86
25	12.27	12.26	11.90	12.78	13.35	12.21	12.23	11.87	11.76	13.51	13.25	13.75
26	12.29	12.20	12.00	16.91	13.26	12.00	12.23	11.81	11.72	13.65	13.51	13.98
27	12.42	12.23	11.97	18.33	13.25	11.87	12.06	14.21	11.92	13.70	13.55	14.40
28	12.05	11.85	12.26	14.21	13.31	11.88	12.05	11.79	12.21	13.43	14.76	13.97
29	12.08	11.79	11.84	13.25	13.22	11.81	12.12	11.92	12.08	13.51	15.20	13.85
30	12.12	11.75	11.94	13.07	---	11.67	12.05	11.88	12.18	13.55	13.83	13.95
31	12.06	---	11.99	13.13	---	11.54	---	11.19	---	13.46	13.60	---
MAX	12.66	12.85	12.62	18.33	16.75	13.19	12.84	14.21	12.27	14.50	16.36	14.40
CAL YR 2003	LOW 19.45											
WTR YR 2004	LOW 18.33											



Ground-Water Records—Hocking County

393200082235300. Local Number, HK-1

LOCATION.—Latitude 39°32'00", longitude 82°23'53", Hocking County, Hydrologic Unit 05060002, at railroad yards southeast edge of Logan, Ohio. Owner: Chessie System.

AQUIFER.—Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.—Drilled unused water table well, diameter 6 in., depth 88 ft, cased.

INSTRUMENTATION.—Electronic data logger,60-minute log interval.

DATUM.—Elevation of land-surface datum is 710 ft above sea level (from topographic map). Measuring point: Top of gage platform 4.90 ft above land-surface datum.

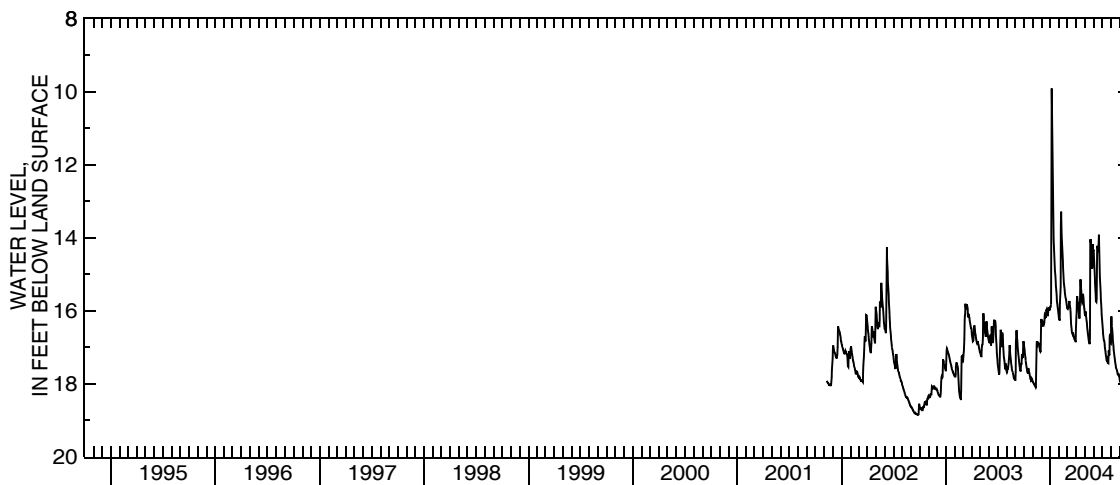
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—August 1962 to November 1982 continuous, December 1982 to October 2001 periodic, continuous thereafter.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 21.35 ft below land-surface datum, Dec. 21 and 22, 1967; minimum daily low, 9.11 ft below land-surface datum, Apr. 22, 1964.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.94	17.95	16.23	15.89	16.23	15.94	16.18	16.10	14.33	16.33	16.33	17.92
2	17.02	17.96	16.28	15.89	16.25	15.95	16.03	16.14	14.54	16.44	16.15	17.94
3	17.09	17.97	16.34	15.83	16.25	15.93	15.74	16.07	14.75	16.54	16.30	17.97
4	17.17	17.99	16.38	15.78	15.81	15.92	15.60	16.02	14.93	16.63	16.43	18.01
5	17.23	18.01	16.41	14.30	15.51	15.90	15.68	16.12	15.11	16.71	16.55	18.03
6	17.29	18.02	16.41	9.92	15.35	15.87	15.75	16.19	15.28	16.78	16.67	18.06
7	17.36	18.04	16.30	10.83	13.66	15.78	15.79	16.28	15.44	16.81	16.79	18.08
8	17.43	18.05	16.31	11.79	13.29	15.73	15.80	16.34	15.59	16.83	16.89	18.06
9	17.49	18.06	16.36	12.49	13.63	15.81	15.95	16.42	15.74	16.92	16.97	15.64
10	17.55	18.08	16.37	13.00	13.92	15.87	16.06	16.51	15.76	17.00	17.06	13.47
11	17.59	18.10	16.32	13.40	14.13	15.93	16.17	16.57	15.66	17.06	17.14	13.98
12	17.64	18.09	16.13	13.76	14.33	16.03	16.21	16.63	15.14	17.11	17.21	14.43
13	17.68	17.35	16.10	14.05	14.49	16.22	16.17	16.72	14.26	17.17	17.28	14.81
14	17.70	16.91	16.12	14.27	14.65	16.36	15.73	16.80	14.22	17.24	17.34	15.14
15	17.70	16.83	16.15	14.54	14.83	16.45	15.14	16.83	14.26	17.30	17.39	15.40
16	17.57	16.86	16.18	14.75	14.98	16.53	15.17	16.85	14.31	17.36	17.44	15.63
17	17.62	16.89	16.17	14.90	15.14	16.59	15.30	16.90	14.39	17.37	17.49	15.68
18	17.65	16.93	15.98	14.95	15.25	16.63	15.41	16.91	14.19	17.24	17.54	14.78
19	17.69	16.91	15.96	15.04	15.35	16.65	15.53	16.75	13.92	17.30	17.59	14.37
20	17.71	16.91	16.02	15.20	15.43	16.63	15.62	14.05	14.27	17.37	17.61	14.62
21	17.75	16.89	16.05	15.32	15.51	16.62	15.73	14.10	14.57	17.43	17.62	14.88
22	17.79	16.92	16.09	15.46	15.57	16.65	15.79	14.09	14.85	17.44	17.65	15.13
23	17.84	16.94	16.13	15.58	15.63	16.68	15.77	14.15	15.08	17.09	17.69	15.35
24	17.88	17.01	16.13	15.71	15.66	16.72	15.54	14.43	15.31	17.11	17.74	15.54
25	17.90	17.04	15.96	15.79	15.69	16.76	15.55	14.68	15.50	17.20	17.75	15.72
26	17.92	17.09	15.91	15.85	15.74	16.79	15.63	14.85	15.67	17.22	17.71	15.87
27	17.91	17.12	15.92	15.91	15.82	16.81	15.74	14.82	15.82	16.75	17.75	16.00
28	17.86	17.10	15.95	15.96	15.87	16.82	15.85	14.63	15.95	16.63	17.77	16.14
29	17.87	16.62	15.96	16.03	15.91	16.84	15.95	14.17	16.09	16.77	17.80	16.26
30	17.90	16.25	15.99	16.12	---	16.84	16.04	14.34	16.21	16.87	17.83	16.39
31	17.93	---	15.91	16.20	---	16.54	---	14.37	---	16.88	17.87	---
MAX	17.93	18.10	16.41	16.20	16.25	16.84	16.21	16.91	16.21	17.44	17.87	18.08
CAL YR 2003		LOW 18.42										
WTR YR 2004		LOW 18.10										



Ground-Water Records—Knox County

402344082300700. Local Number, K-1

LOCATION.—Latitude 40°23'44", longitude 82°30'07", Knox County, Hydrologic Unit 05040003, in city park, Mt. Vernon, Ohio. Owner: City of Mt. Vernon.
 AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused water table well, diameter 8 in., depth 90 ft, cased.

INSTRUMENTATION.—Digital recorder, 60-minute punch.

DATUM.—Elevation of land-surface datum is 1,000 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 3.50 ft above land-surface datum.

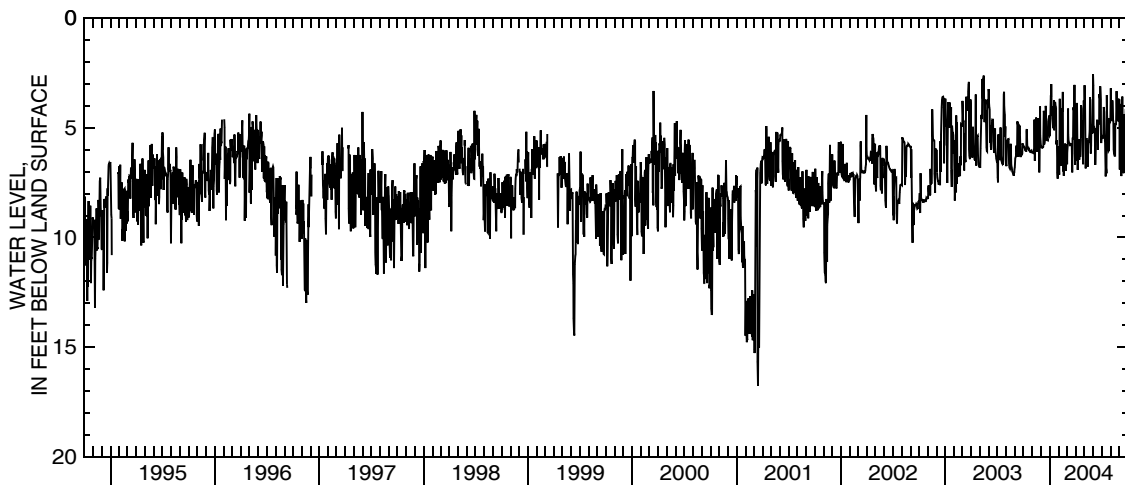
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—April 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 20.74 ft below land-surface datum, July 14, 1988; minimum daily low, 1.43 ft below land-surface datum, Apr. 29, 1950.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.81	6.13	5.78	5.34	5.86	5.77	6.52	4.02	2.57	5.46	3.90	3.70
2	5.85	6.12	5.88	5.31	6.37	6.67	5.24	3.06	3.08	5.38	3.20	6.90
3	5.86	6.11	5.90	4.57	7.03	6.10	5.28	3.69	5.15	5.40	4.25	4.26
4	5.88	6.09	5.90	4.26	7.14	5.80	3.87	3.81	5.13	5.35	4.45	6.13
5	5.94	6.13	5.87	3.53	3.68	4.13	3.98	5.87	5.02	5.44	4.60	6.89
6	5.98	6.14	5.88	3.60	6.17	5.31	4.01	6.86	5.04	5.45	4.67	5.74
7	6.01	6.17	5.90	3.01	6.52	5.59	6.05	6.18	5.19	5.43	3.75	6.83
8	6.03	6.19	5.89	4.43	5.92	5.65	6.92	5.66	5.79	4.05	3.82	7.21
9	6.05	4.63	5.88	4.35	6.54	5.71	6.25	5.47	6.70	4.20	4.44	3.91
10	6.06	6.51	5.86	4.02	6.04	5.75	5.76	6.19	6.11	4.28	4.64	6.90
11	6.06	5.85	4.23	4.59	6.73	5.72	5.61	6.71	5.51	5.17	4.70	3.58
12	5.16	5.27	4.36	4.85	5.20	5.75	5.54	5.57	5.25	5.56	5.98	6.57
13	5.06	5.80	5.76	4.97	4.11	5.81	5.86	6.77	5.09	5.62	6.17	6.90
14	5.53	4.53	5.67	4.97	4.20	5.78	6.46	6.16	4.88	6.44	6.22	5.91
15	5.83	4.67	5.00	5.03	4.26	5.80	5.59	5.77	4.64	7.22	6.27	7.07
16	5.91	6.09	4.84	3.75	3.37	5.78	5.53	5.67	5.00	6.82	6.28	5.77
17	5.95	5.54	5.22	5.12	6.99	5.75	6.33	5.65	6.02	6.93	6.28	7.06
18	5.96	5.29	4.00	4.49	6.37	5.76	5.98	5.54	5.45	7.08	4.83	4.38
19	6.00	5.67	4.22	4.93	7.19	6.57	5.57	5.35	4.92	3.51	4.84	5.63
20	6.01	5.91	5.61	3.82	6.68	7.04	3.98	5.14	4.84	4.45	4.84	6.61
21	5.98	4.58	5.06	3.91	5.86	5.50	4.06	3.61	4.80	4.59	4.57	6.87
22	6.02	6.10	5.42	4.06	5.81	5.44	4.14	4.80	4.84	4.63	3.33	4.64
23	6.07	6.07	5.54	4.08	6.41	5.54	5.43	4.92	3.47	4.72	3.87	4.14
24	6.10	5.40	5.56	5.73	5.72	4.07	5.08	6.18	3.62	5.91	4.34	4.54
25	6.11	5.30	5.58	5.73	6.43	4.19	4.66	5.82	3.68	6.04	4.53	4.55
26	6.10	7.04	4.97	5.58	5.82	4.23	6.20	5.27	3.11	6.02	4.61	3.32
27	6.06	5.21	4.72	6.28	6.96	4.22	6.67	5.19	3.46	5.97	4.67	4.44
28	6.04	4.03	4.61	7.05	6.24	3.05	4.45	5.21	3.73	4.56	4.67	4.64
29	6.09	5.35	4.55	7.32	5.91	6.18	3.76	5.26	5.66	4.68	3.67	4.75
30	6.11	5.61	4.45	6.26	---	6.70	4.01	3.72	5.66	4.74	4.14	4.76
31	6.11	---	5.26	5.93	---	5.92	---	3.69	---	4.71	4.30	---
MAX	6.11	7.04	5.90	7.32	7.19	7.04	6.92	6.86	6.70	7.22	6.28	7.21
CAL YR 2003	LOW 8.32											
WTR YR 2004	LOW 7.32											



402747082374300. Local Number, K-4

LOCATION.—Latitude 40°27'47", longitude 82°37'43", Knox County, Hydrologic Unit 05040003, near Fredericktown, Ohio. Owner: Delco Water Company.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused observation well, diameter 6 in., depth 151 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 1,085 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 1.5 ft above land-surface datum.

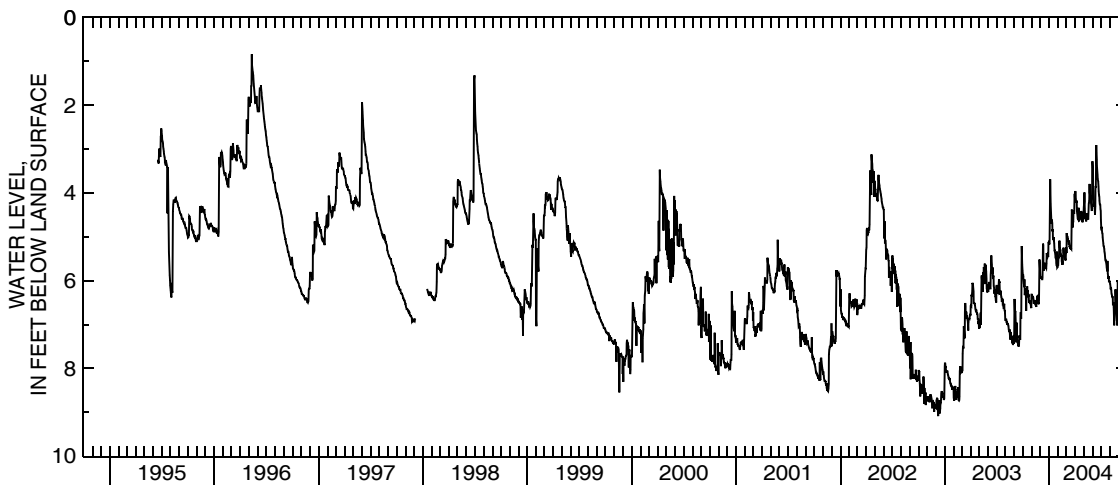
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water.

PERIOD OF RECORD.—June 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 9.09 ft below land-surface datum, Dec. 9, 2002; minimum daily low 0.84 ft below land-surface datum, May 12, 1996.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.81	6.32	5.87	5.16	5.63	5.24	4.14	4.52	3.28	4.61	6.03	6.44
2	5.91	6.32	5.91	5.16	5.66	5.37	3.96	4.32	3.42	4.80	6.08	6.51
3	5.90	6.38	5.96	5.16	5.46	4.92	3.99	4.20	3.74	4.79	6.14	6.59
4	5.97	6.36	5.94	4.73	5.49	5.10	4.13	3.99	3.89	4.79	6.20	6.59
5	6.06	6.38	5.93	3.69	5.43	4.98	4.22	4.35	3.96	4.92	6.15	6.66
6	6.15	6.35	5.93	4.04	5.15	5.04	4.17	4.41	4.08	4.93	6.23	6.71
7	5.97	6.39	5.93	4.25	5.09	5.04	4.22	4.58	4.32	5.01	6.29	6.80
8	6.33	6.44	5.99	4.43	5.25	5.10	4.41	4.50	4.23	5.09	6.32	6.71
9	6.27	6.51	5.94	4.59	5.31	5.13	4.48	4.59	4.35	5.15	6.38	6.68
10	6.32	6.51	5.77	4.71	5.31	5.18	4.53	4.65	4.50	5.21	6.38	6.74
11	6.26	6.47	5.16	4.61	5.40	5.09	4.59	4.58	4.31	5.22	6.36	6.75
12	6.18	6.45	5.19	4.69	5.39	5.16	4.61	4.47	3.87	5.28	6.56	6.86
13	6.69	6.51	5.76	4.88	5.46	5.24	4.44	4.53	3.87	5.34	6.50	6.98
14	6.30	6.50	5.76	4.83	5.43	5.22	4.34	4.50	2.91	5.37	6.54	6.93
15	6.33	6.50	5.64	5.02	5.55	5.27	4.65	4.53	3.09	5.42	6.61	6.89
16	6.15	6.51	5.73	5.06	5.64	5.19	4.43	4.59	3.24	5.51	7.02	6.98
17	6.15	6.60	5.61	5.07	5.55	5.27	4.46	4.59	3.38	5.54	6.71	6.92
18	6.24	6.51	5.61	5.01	5.63	5.27	4.53	4.50	3.49	5.54	6.68	7.02
19	6.24	6.48	5.66	5.15	5.46	5.28	4.59	4.25	3.59	5.60	6.68	6.99
20	6.33	6.42	5.72	5.31	5.37	4.84	4.58	4.23	3.68	5.64	6.66	7.16
21	6.36	6.36	5.70	5.31	5.25	4.38	4.59	4.18	3.74	5.70	6.20	7.14
22	6.35	6.35	5.72	5.36	5.37	4.50	4.53	3.80	3.86	5.75	6.50	7.16
23	6.47	6.44	5.61	5.40	5.40	4.53	4.41	3.99	3.96	5.79	6.68	7.20
24	6.51	6.50	5.37	5.48	5.40	4.79	4.46	4.09	4.05	5.55	6.76	7.20
25	6.45	6.53	5.40	5.49	5.40	4.64	4.46	4.09	4.09	5.84	6.92	7.22
26	6.48	6.54	5.45	5.52	5.45	4.67	4.48	4.17	4.18	5.93	6.94	7.28
27	6.53	6.45	5.46	5.60	5.51	4.41	4.67	4.22	4.26	5.96	7.02	7.28
28	6.50	5.69	5.43	5.67	5.54	4.41	4.56	4.29	4.27	5.90	6.38	7.35
29	6.54	5.52	5.46	5.34	5.51	4.48	4.59	4.32	4.37	6.02	5.99	7.35
30	6.60	5.67	5.13	5.70	---	4.08	4.59	4.41	4.41	6.02	6.14	7.40
31	6.63	---	5.12	5.69	---	4.02	---	3.57	---	6.00	6.26	---
MAX	6.69	6.60	5.99	5.70	5.66	5.37	4.67	4.65	4.50	6.02	7.02	7.40
CAL YR 2003		LOW 8.74										
WTR YR 2004		LOW 7.40										



403136082363100. Local Number, K-5

LOCATION.—Latitude 40°27'47", longitude 82°37'43", Knox County, Hydrologic Unit 05040003, at Kokosing Wildlife Area near Bellville. Owner: State of Ohio.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled observation well, diameter 6 in., depth 132 ft, cased to 122 ft.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 1,135 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 2.00 ft above land-surface datum.

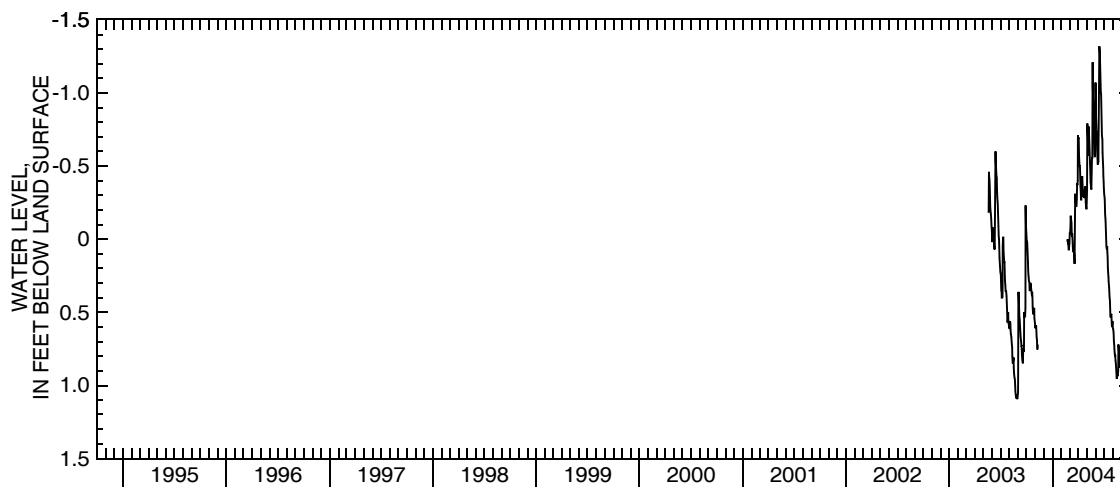
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water.

PERIOD OF RECORD.—May 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 1.17 ft below land-surface datum, Sept. 30, 2004; minimum daily low 1.32 ft above land-surface datum, June 15, 2004

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-0.04	0.61	---	---	---	0.03	-0.69	-0.26	-1.07	-0.35	0.60	0.86
2	0.01	0.59	---	---	---	-0.04	-0.69	-0.33	-0.95	-0.31	0.61	0.87
3	0.02	0.60	---	---	---	-0.04	-0.69	-0.79	-0.84	-0.28	0.62	0.87
4	0.05	0.59	---	---	---	-0.07	-0.57	-0.75	-0.79	-0.26	0.64	0.89
5	0.11	0.64	---	---	---	-0.16	-0.50	-0.70	-0.75	-0.17	0.70	0.91
6	0.16	0.67	---	---	---	-0.14	-0.50	-0.65	-0.69	-0.14	0.72	0.92
7	0.21	0.69	---	---	---	-0.13	-0.49	-0.57	-0.61	-0.12	0.75	0.94
8	0.25	0.75	---	---	---	-0.11	-0.44	-0.77	-0.54	-0.04	0.78	0.95
9	0.26	0.75	---	---	---	-0.05	-0.36	-0.74	-0.51	0.01	0.80	0.90
10	0.29	0.72	---	---	---	-0.02	-0.32	-0.65	-0.53	0.05	0.79	0.93
11	0.30	---	---	---	---	-0.04	-0.27	-0.58	-0.53	0.07	0.83	0.93
12	0.35	---	---	---	---	0.02	-0.27	-0.54	-0.81	0.05	0.85	0.95
13	0.35	---	---	---	---	0.08	-0.33	-0.48	-0.92	0.09	0.89	0.96
14	0.34	---	---	---	---	0.05	-0.41	-0.44	-1.17	0.13	0.92	0.97
15	0.30	---	---	---	---	0.09	-0.43	-0.39	-1.32	0.19	0.95	0.97
16	0.31	---	---	---	---	0.07	-0.38	-0.36	-1.28	0.23	0.95	0.97
17	0.34	---	---	---	---	0.08	-0.35	-0.34	-1.25	0.26	0.94	0.97
18	0.34	---	---	---	---	0.10	-0.33	-0.42	-1.17	0.29	0.93	1.03
19	0.37	---	---	---	---	0.17	-0.31	-0.52	-1.06	0.33	0.93	1.05
20	0.39	---	---	---	---	0.06	-0.29	-0.56	-1.01	0.38	0.90	1.06
21	0.36	---	---	---	---	-0.31	-0.31	-0.55	-0.99	0.40	0.72	1.06
22	0.40	---	---	---	---	-0.25	-0.28	-1.21	-0.87	0.42	0.74	1.08
23	0.46	---	---	---	0.02	-0.26	-0.33	-1.04	-0.79	0.50	0.78	1.09
24	0.50	---	---	---	0.00	-0.26	-0.31	-0.91	-0.71	0.53	0.82	1.09
25	0.51	---	---	---	0.03	-0.22	-0.34	-0.85	-0.68	0.53	0.84	1.10
26	0.51	---	---	---	0.03	-0.23	-0.36	-0.77	-0.59	0.52	0.85	1.12
27	0.48	---	---	---	0.07	-0.27	-0.29	-0.73	-0.54	0.51	0.88	1.11
28	0.47	---	---	---	0.07	-0.38	-0.25	-0.64	-0.49	0.56	0.87	1.12
29	0.54	---	---	---	0.05	-0.37	-0.21	-0.58	-0.43	0.59	0.78	1.15
30	0.56	---	---	---	---	-0.40	-0.21	-0.56	-0.39	0.60	0.82	1.17
31	0.58	---	---	---	---	-0.71	---	-0.79	---	0.56	0.85	---
MAX	0.58	0.75	---	---	0.07	0.17	-0.21	-0.26	-0.39	0.60	0.95	1.17
CAL YR 2003	LOW 1.09											
WTR YR 2004	LOW 1.17											



Ground-Water Records—Licking County

395717082454200. Local Number, LI-5

LOCATION.—Latitude 39°57'17", longitude 82°45'42", Licking County, Hydrologic Unit 05060001, at Ohio Department of Agriculture near Reynoldsburg, Ohio.

Owner: State of Ohio.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled observation well, diameter 6 in., depth 124 ft, cased to 113 ft.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 1,020 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 4.00 ft above land-surface datum.

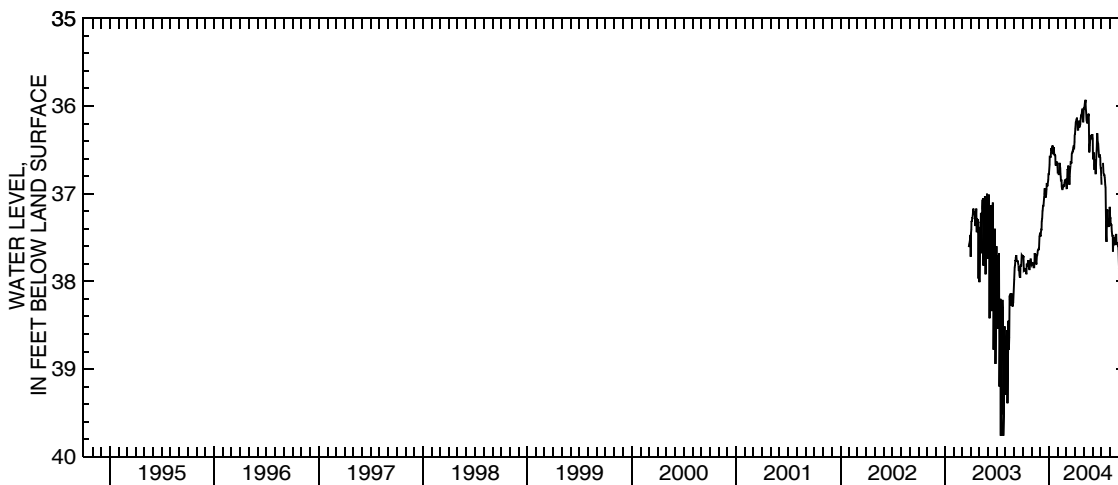
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water.

PERIOD OF RECORD.—March 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 39.76 ft below land-surface datum, July 16 and 25, 2003; minimum daily low, 35.93 ft below land-surface datum, May 8, 2004.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37.70	37.81	37.48	36.78	36.76	36.83	36.32	36.12	36.34	36.71	37.15	37.71
2	37.72	37.80	37.48	36.72	36.76	36.94	36.26	36.03	36.37	36.81	37.28	37.85
3	37.72	37.78	37.48	36.67	36.74	36.94	36.24	36.03	36.54	36.90	37.28	37.91
4	37.71	37.80	37.44	36.58	36.78	36.93	36.18	36.01	36.61	---	37.35	38.00
5	37.87	37.80	37.41	36.58	36.78	36.81	36.16	35.98	36.58	---	37.35	38.00
6	37.86	37.79	37.41	36.59	36.68	36.72	36.15	35.96	36.53	---	37.36	38.01
7	37.85	37.82	37.32	36.58	36.65	36.73	36.14	35.96	36.67	---	37.36	38.02
8	37.87	37.84	37.28	36.53	36.67	36.68	36.14	35.93	36.73	36.65	37.43	38.00
9	37.88	37.84	37.20	36.48	36.71	36.70	36.19	36.01	36.69	36.73	37.48	37.86
10	37.88	37.84	37.19	36.50	36.77	36.73	36.19	36.08	36.62	36.77	37.48	37.92
11	37.88	37.78	37.14	36.50	36.81	36.71	36.27	36.16	36.61	36.78	37.48	38.04
12	37.87	37.68	37.14	36.46	36.85	36.90	36.27	36.17	36.77	36.79	37.66	38.04
13	37.91	37.70	37.14	36.46	36.85	36.89	36.20	36.19	36.77	36.79	37.59	37.99
14	37.91	37.71	37.09	36.46	36.85	36.80	36.18	36.19	36.58	36.82	37.51	38.04
15	37.81	37.71	37.02	36.54	36.92	36.71	36.18	36.15	36.54	36.84	37.50	38.04
16	37.81	37.75	37.00	36.54	36.95	36.68	36.24	36.11	36.48	36.90	37.55	37.99
17	37.82	37.80	36.94	36.54	36.95	36.64	36.24	36.11	36.40	36.93	37.58	37.96
18	37.82	37.80	37.01	36.47	36.94	36.64	36.22	36.10	36.31	37.12	37.58	37.92
19	37.79	37.74	37.02	36.54	36.92	36.65	36.21	36.09	36.36	37.48	37.56	37.93
20	37.80	37.70	37.04	36.56	36.92	36.65	36.18	36.24	36.41	37.55	37.56	37.94
21	37.76	37.70	37.04	36.56	36.90	36.54	36.14	36.53	36.43	37.40	37.48	38.00
22	37.79	37.68	37.01	36.56	36.91	36.53	36.13	36.51	36.48	37.29	37.47	38.02
23	37.85	37.65	36.95	36.57	36.91	36.53	36.10	36.45	36.51	37.18	37.47	38.05
24	37.86	37.64	36.89	36.66	36.87	36.51	36.12	36.39	36.58	37.23	37.54	38.05
25	37.86	37.64	36.89	36.68	36.86	36.51	36.09	36.37	36.58	37.35	37.57	38.04
26	37.84	37.63	36.91	36.63	36.84	36.48	36.04	36.34	36.55	37.38	37.57	38.04
27	37.80	37.63	36.91	36.64	36.86	36.46	36.04	36.34	36.57	37.37	37.57	38.05
28	37.77	37.53	36.88	36.65	36.86	36.46	36.08	36.36	36.59	37.37	37.56	38.12
29	37.74	37.49	36.84	36.65	36.85	36.47	36.18	36.37	36.67	37.36	37.59	38.12
30	37.78	37.47	36.78	36.65	---	36.41	36.18	36.37	36.71	37.36	37.60	38.12
31	37.80	---	36.78	36.70	---	36.33	---	36.32	---	37.28	37.64	---
MAX	37.91	37.84	37.48	36.78	36.95	36.94	36.32	36.53	36.77	37.55	37.66	38.12
CAL YR 2003		LOW 39.76										
WTR YR 2004		LOW 38.12										



395830082291700. Local Number, LI-6

LOCATION.—Latitude 39°58'30", longitude 82°29'17", Licking County, Hydrologic Unit 05040006, on State Route 79 north of Hebron, Ohio. Owner: State of Ohio.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled observation well, diameter 6 in., depth 133 ft, cased to 122 ft.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 895 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

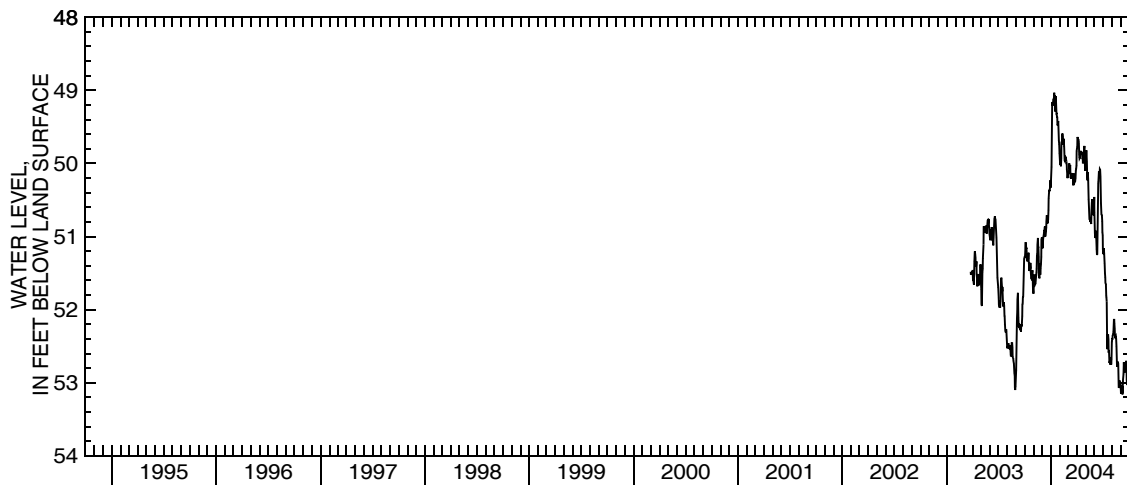
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water.

PERIOD OF RECORD.—March 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 53.16 ft below land-surface datum, Sept. 7, 2004; minimum daily low, 49.03 ft below land-surface datum, Jan. 12, 2004.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51.28	51.78	51.09	50.28	49.93	50.13	49.80	50.07	50.67	51.17	52.44	53.04
2	51.28	51.67	51.15	50.17	50.02	50.12	49.77	49.96	50.81	51.24	52.40	53.15
3	51.21	51.58	51.15	50.05	49.94	50.13	49.64	49.83	50.95	51.21	52.40	53.12
4	51.09	51.52	51.10	49.76	50.00	50.12	49.66	49.82	51.02	51.16	52.35	53.12
5	51.09	51.56	51.02	49.20	50.04	50.00	49.68	49.93	50.99	51.23	52.34	53.08
6	51.17	51.63	51.00	49.16	49.93	50.07	49.67	49.98	50.92	51.33	52.33	53.05
7	51.15	51.65	50.97	49.21	49.71	50.04	49.70	50.17	50.98	51.37	52.30	53.16
8	51.22	51.64	50.91	49.18	49.70	50.02	49.73	50.23	51.09	51.50	52.14	53.13
9	51.31	51.58	50.92	49.13	49.65	50.14	49.88	50.12	51.17	51.56	52.14	52.98
10	51.34	51.53	50.88	49.12	49.59	50.20	49.93	50.21	51.25	51.64	52.19	52.93
11	51.32	51.49	50.86	49.10	49.64	50.18	49.92	50.37	51.24	51.66	52.26	52.88
12	51.28	51.44	51.00	49.03	49.70	50.13	49.88	50.49	51.02	51.81	52.34	52.72
13	51.31	51.26	50.98	49.08	49.74	50.21	49.84	50.58	50.59	51.83	52.39	52.83
14	51.22	51.23	50.93	49.07	49.66	50.13	49.84	50.71	50.27	51.89	52.37	52.86
15	51.32	51.11	50.88	49.17	49.70	50.20	49.84	50.76	50.25	52.29	52.36	52.85
16	51.39	51.02	50.79	49.29	49.77	50.14	49.87	50.76	50.17	52.54	52.40	52.79
17	51.45	51.15	50.72	49.27	49.88	50.18	49.86	50.80	50.12	52.50	52.50	52.79
18	51.47	51.15	50.72	49.08	49.96	50.20	49.84	50.79	50.12	52.35	52.60	52.76
19	51.36	51.28	50.76	49.22	49.97	50.29	49.90	50.74	50.15	52.35	52.76	52.72
20	51.44	51.53	50.82	49.32	49.94	50.30	49.93	50.79	50.08	52.41	52.78	52.70
21	51.36	51.56	50.79	49.32	49.91	50.14	49.93	50.83	50.09	52.59	52.72	52.71
22	51.47	51.56	50.77	49.36	49.92	50.22	50.00	50.63	50.18	52.55	52.72	52.96
23	51.50	51.37	50.64	49.37	49.96	50.21	49.97	50.54	50.32	52.68	52.74	53.02
24	51.57	51.52	50.48	49.48	49.97	50.22	49.97	50.49	50.54	52.73	52.88	53.02
25	51.58	51.51	50.41	49.46	50.01	50.25	49.92	50.56	50.64	52.70	53.07	52.98
26	51.57	51.43	50.36	49.42	50.08	50.24	49.78	50.64	50.70	52.75	53.06	52.94
27	51.49	51.38	50.38	49.47	50.14	50.20	49.76	50.64	50.71	52.71	53.03	52.78
28	51.46	51.28	50.34	49.63	50.20	50.10	49.83	50.70	50.79	52.65	53.06	52.74
29	51.56	51.04	50.23	49.69	50.16	50.07	50.05	50.70	50.94	52.66	52.97	52.76
30	51.71	51.01	50.25	49.74	---	50.03	50.10	50.64	50.98	52.75	53.02	52.81
31	51.75	---	50.33	49.86	---	49.83	---	50.46	---	52.68	53.04	---
MAX	51.75	51.78	51.15	50.28	50.20	50.30	50.10	50.83	51.25	52.75	53.07	53.16
CAL YR 2003	LOW 53.10											
WTR YR 2004	LOW 53.16											



400848082251100. Local Number, LI-4

LOCATION.—Latitude 40°08'48", longitude 82°25'11", Licking County, Hydrologic Unit 05040006, near St. Louisville, Ohio. Owner: City of Newark.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled observation well, diameter 6 in., depth 79 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 885 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 4.00 ft above land-surface datum.

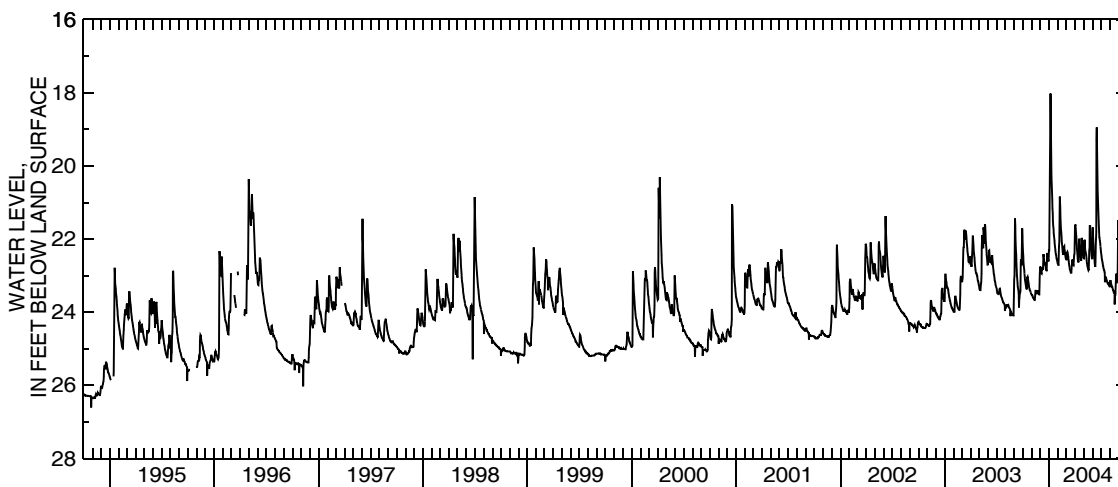
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water.

PERIOD OF RECORD.—August 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 29.15 ft below land-surface datum, Oct. 8 1992; minimum daily low, 18.02 ft below land-surface datum, Jan. 6, 2004.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.14	23.52	22.77	22.31	22.68	22.56	21.65	22.52	22.13	22.35	23.30	21.75
2	22.34	23.54	22.77	22.31	22.71	22.56	21.62	22.53	21.68	22.41	23.16	21.99
3	22.47	23.54	22.83	21.99	22.71	22.49	21.62	22.43	21.84	22.47	23.12	22.19
4	22.64	23.55	22.89	21.63	22.55	22.37	21.75	22.02	22.02	22.53	23.18	22.35
5	22.74	23.58	22.94	20.10	22.19	22.35	21.92	22.05	22.19	22.59	23.22	22.47
6	22.85	23.60	22.95	18.02	22.08	22.37	22.01	22.17	22.34	22.64	23.24	22.59
7	22.94	23.61	22.86	18.75	21.38	22.41	22.14	22.31	22.44	22.68	23.27	22.70
8	23.03	23.63	22.79	19.38	20.84	22.49	22.26	22.34	22.56	22.72	23.30	22.76
9	23.10	23.64	22.83	19.90	21.14	22.56	22.37	22.37	22.67	22.76	23.31	22.76
10	23.16	23.66	22.83	20.30	21.39	22.61	22.46	22.44	22.72	22.80	23.34	22.49
11	23.21	23.67	22.82	20.61	21.59	22.67	22.55	22.53	22.76	22.83	23.37	22.38
12	23.25	23.67	22.53	20.93	21.72	22.72	22.62	22.59	22.64	22.86	23.39	22.47
13	23.30	23.60	22.41	21.15	21.80	22.76	22.64	22.67	22.16	22.89	23.40	22.56
14	23.36	23.47	22.50	21.30	21.93	22.82	22.56	22.71	21.80	22.92	23.42	22.65
15	23.36	23.42	22.61	21.51	22.05	22.85	22.13	22.77	19.29	23.18	23.46	22.71
16	23.19	23.42	22.68	21.65	22.19	22.88	21.99	22.80	18.95	23.04	23.47	22.77
17	23.04	23.45	22.71	21.72	22.28	22.91	22.13	22.83	19.45	23.04	23.47	22.82
18	23.03	23.45	22.64	21.84	22.35	22.92	22.23	22.85	19.94	23.06	23.79	22.82
19	23.10	23.49	22.67	21.96	22.41	22.94	22.35	22.83	20.39	23.07	23.55	22.58
20	23.15	23.49	22.74	22.05	22.43	22.85	22.43	22.59	20.73	23.12	23.54	22.58
21	23.19	23.43	22.79	22.13	22.38	22.72	22.52	22.31	21.03	23.13	23.49	22.67
22	23.24	23.40	22.85	22.20	22.22	22.61	22.58	22.26	21.30	23.15	23.19	22.74
23	23.30	23.42	22.86	22.28	22.20	22.56	22.58	21.65	21.51	23.18	22.95	22.80
24	23.34	23.47	22.86	22.35	22.29	22.64	22.19	21.65	21.68	23.21	22.98	22.86
25	23.37	23.47	22.56	22.40	22.32	22.68	21.97	21.83	21.95	23.22	23.06	22.91
26	23.40	23.51	22.38	22.46	22.37	22.71	22.05	22.02	21.96	23.22	23.12	22.94
27	23.42	23.52	22.44	22.52	22.43	22.72	22.19	22.20	22.04	23.24	23.18	22.97
28	23.43	23.52	22.50	22.55	22.49	22.61	22.26	22.35	22.13	23.25	23.21	23.00
29	23.47	23.37	22.56	22.55	22.53	22.43	22.37	22.43	22.20	23.27	22.91	23.04
30	23.49	22.94	22.61	22.59	---	22.40	22.46	22.52	22.28	23.28	21.51	23.07
31	23.51	---	22.47	22.65	---	22.13	---	22.55	---	23.30	21.48	---
MAX	23.51	23.67	22.95	22.65	22.71	22.94	22.64	22.85	22.76	23.30	23.79	23.07
CAL YR 2003		LOW 24.11										
WTR YR 2004		LOW 23.79										



Ground-Water Records—Logan County

401510083444400. Local Number, LO-3

LOCATION.—Latitude 40°15'10", longitude 83°44'44", Logan County, Hydrologic Unit 05080001, at West Liberty, Ohio. Owner: City of West Liberty
 AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled observation well, diameter 6 in., depth 71 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 1,090 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 3.5 ft above land-surface datum.

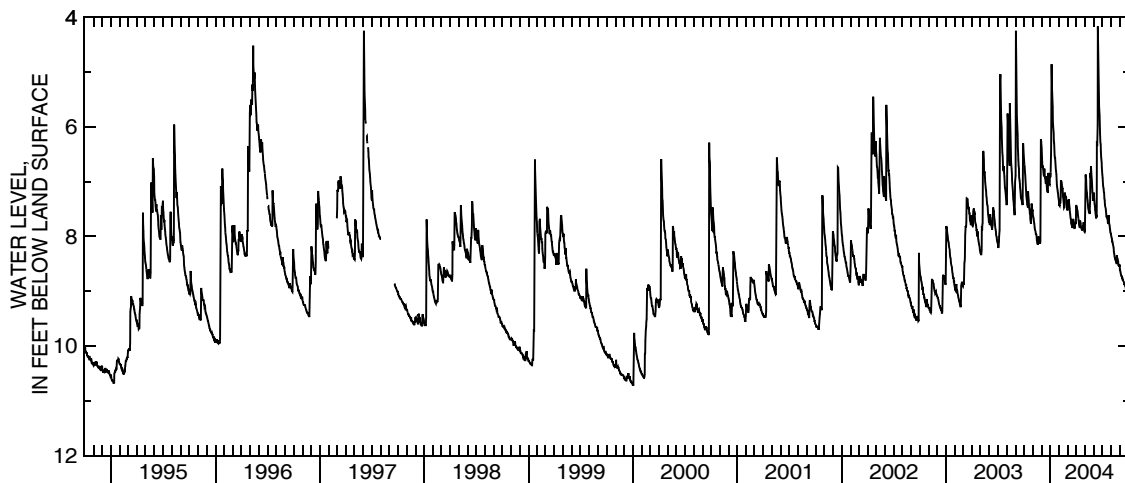
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water.

PERIOD OF RECORD.—June 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 10.71 ft below land-surface datum, Jan. 2 and 3, 2000; minimum daily low, 4.17 ft below land-surface, June 15, 2004.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.61	7.62	6.39	6.92	7.43	7.51	7.44	7.91	7.20	6.87	7.98	8.61
2	6.69	7.64	6.44	6.83	7.44	7.34	7.46	7.68	7.29	6.93	8.03	8.64
3	6.74	7.68	6.59	6.53	7.36	7.38	7.47	6.87	7.35	7.04	8.04	8.67
4	6.81	7.71	6.71	6.42	7.38	7.38	7.51	6.93	7.41	7.08	8.09	8.69
5	6.87	7.76	6.75	4.86	7.38	7.32	7.55	6.96	7.46	7.13	8.09	8.72
6	7.05	7.77	6.71	5.16	7.28	7.35	7.59	7.08	7.51	7.20	8.12	8.73
7	7.10	7.83	6.76	5.33	6.99	7.41	7.64	7.17	7.58	7.19	8.15	8.73
8	7.19	7.88	6.86	5.46	6.99	7.49	7.67	7.20	7.64	7.31	8.17	8.76
9	7.25	7.89	6.90	5.64	7.01	7.55	7.71	7.26	7.67	7.34	8.21	8.76
10	7.31	7.92	6.84	5.90	7.06	7.59	7.76	7.34	7.62	7.40	8.28	8.79
11	7.36	7.97	6.76	6.00	7.10	7.62	7.79	7.41	7.65	7.46	8.31	8.79
12	7.41	7.95	6.86	6.11	7.13	7.68	7.83	7.46	6.26	7.49	8.33	8.81
13	7.44	7.97	6.92	6.26	7.13	7.69	7.83	7.51	6.35	7.51	8.37	8.82
14	7.47	8.03	6.94	6.30	7.25	7.77	7.71	7.53	5.97	7.58	8.40	8.84
15	7.18	8.07	7.01	6.39	7.29	7.79	7.74	7.56	4.17	7.61	8.40	8.87
16	7.27	8.12	7.04	6.53	7.36	7.79	7.76	7.53	4.71	7.65	8.43	8.87
17	7.34	8.13	6.90	6.57	7.43	7.83	7.83	7.59	4.88	7.62	8.46	8.88
18	7.40	8.15	6.98	6.57	7.47	7.83	7.85	7.46	5.07	7.67	8.43	8.88
19	7.48	8.03	7.05	6.72	7.46	7.83	7.87	7.34	5.42	7.69	8.49	8.91
20	7.52	8.00	7.13	6.80	7.31	7.76	7.88	6.84	5.64	7.76	8.49	8.92
21	7.58	8.04	7.17	6.81	7.20	7.68	7.88	6.93	5.79	7.77	8.34	8.96
22	7.59	8.10	7.19	6.87	7.25	7.73	7.87	6.72	5.97	7.74	8.40	8.96
23	7.67	8.10	7.19	6.98	7.28	7.74	7.83	6.78	6.14	7.61	8.41	8.99
24	7.73	8.09	6.84	7.06	7.28	7.80	7.80	6.92	6.29	7.69	8.43	8.96
25	7.77	8.09	6.89	7.11	7.29	7.85	7.83	6.99	6.32	7.77	8.46	9.01
26	7.71	8.13	6.96	7.17	7.40	7.85	7.74	7.06	6.45	7.80	8.52	9.00
27	7.40	8.09	7.01	7.20	7.43	7.79	7.80	7.19	6.56	7.85	8.54	9.01
28	7.44	6.71	7.05	7.23	7.49	7.76	7.86	7.23	6.65	7.89	8.51	8.99
29	7.49	6.23	7.06	7.28	7.51	7.76	7.91	7.31	6.75	7.92	8.55	9.01
30	7.53	6.27	6.93	7.32	---	7.76	7.92	7.35	6.83	7.94	8.51	9.03
31	7.53	---	6.84	7.36	---	7.44	---	7.26	---	7.95	8.61	---
MAX	7.77	8.15	7.19	7.36	7.51	7.85	7.92	7.91	7.67	7.95	8.61	9.03
CAL YR 2003	LOW 9.29											
WTR YR 2004	LOW 9.03											



Ground-Water Records—Madison County

395301083272200. Local Number, M-2

LOCATION.—Latitude 39°53'01", longitude 83°27'22", Madison County, Hydrologic Unit 05060002, U.S. Highway 42 and Westmore Drive, London, Ohio.

Owner: State of Ohio

AQUIFER.—Limestone of Silurian Age.

WELL CHARACTERISTICS.—Drilled test artesian well, diameter 12 in., depth 350 ft, cased.

INSTRUMENTATION.—Digital recorder, 60-minute punch.

DATUM.—Elevation of land-surface datum is 1,035 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 1.00 ft above land-surface datum.

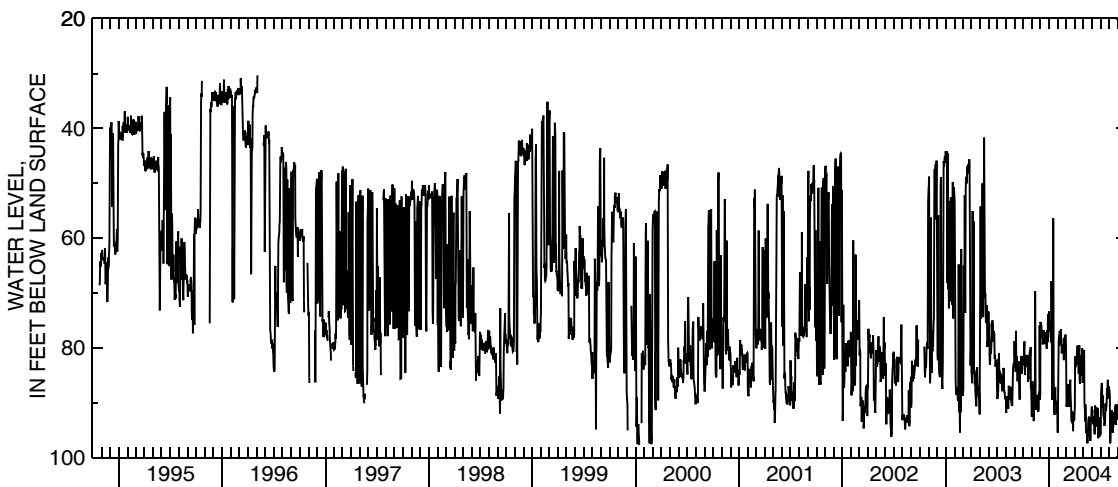
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—August 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 97.58 ft below land-surface datum, Jan. 8, 14, and 15, Feb. 26, 2000; minimum daily low, 0.55 ft above land-surface, Apr. 13, 1980.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82.88	92.57	88.30	73.39	95.48	79.95	90.68	82.72	91.80	95.80	87.97	90.69
2	81.99	90.26	75.30	75.86	92.41	89.42	81.58	83.35	91.35	95.35	87.95	91.52
3	83.15	86.13	75.78	76.66	82.03	90.77	82.67	81.35	92.95	88.24	89.03	90.77
4	81.64	89.07	75.91	77.05	78.82	90.43	83.42	80.47	92.72	87.19	97.44	89.70
5	80.34	89.09	75.96	75.39	77.83	89.31	83.31	89.74	93.59	86.40	97.23	88.32
6	78.86	86.81	77.51	76.88	79.67	89.88	83.21	90.48	93.96	86.86	94.39	88.48
7	82.84	91.07	78.24	78.09	77.25	90.67	83.02	91.28	92.49	89.52	92.96	91.26
8	84.98	93.39	76.78	77.54	76.93	89.10	81.80	93.43	93.26	90.94	93.53	82.92
9	82.34	90.72	76.97	79.07	78.66	86.68	80.62	90.38	94.99	89.28	92.95	82.54
10	82.60	88.49	79.40	67.84	79.15	90.08	80.48	94.24	95.78	88.73	91.43	82.17
11	83.52	88.97	78.13	76.81	78.05	90.15	79.61	95.26	94.63	92.10	93.85	83.08
12	83.42	91.29	76.78	89.48	76.62	90.75	83.04	95.50	90.55	92.72	94.44	84.40
13	82.82	69.70	77.51	78.38	78.19	89.43	80.00	95.07	92.51	92.78	95.48	84.99
14	81.32	86.61	78.16	87.28	78.71	87.18	82.48	96.84	90.88	93.28	94.31	87.67
15	83.19	90.10	77.28	66.64	81.01	86.36	84.73	96.88	93.72	94.25	94.58	87.42
16	82.76	91.27	77.60	56.38	79.99	85.84	81.78	97.41	94.37	93.72	92.96	86.62
17	81.79	89.67	78.72	72.48	80.46	88.07	79.56	96.13	92.40	93.42	91.83	86.71
18	81.41	89.14	78.76	86.34	80.64	89.97	86.18	93.70	93.61	91.88	93.16	88.45
19	86.26	89.87	79.37	90.02	79.79	91.52	86.58	93.26	92.96	90.19	93.28	89.26
20	85.33	90.89	77.53	92.26	79.35	92.32	85.68	92.97	90.99	91.57	92.95	87.12
21	85.62	89.52	77.24	89.05	79.56	93.45	82.44	92.55	91.16	90.83	91.79	88.48
22	83.62	88.56	77.73	88.24	82.25	91.65	82.79	94.27	95.68	90.60	90.51	87.39
23	81.89	89.01	78.77	87.20	79.59	93.56	81.44	92.69	96.52	88.37	94.03	87.08
24	81.36	91.67	80.15	89.44	78.19	93.82	85.09	93.71	96.08	87.46	93.96	87.33
25	80.56	91.19	78.38	90.53	81.05	93.02	83.34	94.96	96.03	88.37	92.96	87.67
26	81.95	89.16	76.77	89.84	80.16	95.25	81.36	97.01	94.40	86.82	90.30	89.87
27	80.68	88.03	78.96	89.92	77.92	92.70	80.12	94.30	92.71	85.85	93.15	87.98
28	79.91	89.18	73.94	90.64	77.59	92.68	80.87	93.29	93.62	89.29	92.74	87.03
29	87.42	75.91	74.38	91.96	77.81	91.83	86.40	92.95	95.10	87.36	91.06	87.94
30	87.04	89.49	76.27	90.38	---	93.31	83.68	92.01	95.74	87.21	91.73	94.77
31	89.08	---	74.86	94.54	---	92.13	---	90.73	---	87.21	91.27	---
MAX	89.08	93.39	88.30	94.54	95.48	95.25	90.68	97.41	96.52	95.80	97.44	94.77
CAL YR 2003	LOW 95.45											
WTR YR 2004	LOW 97.44											



395352083292000. Local Number, M-5A

LOCATION.—Latitude 39°53'52", longitude 83°29'20", Madison County, Hydrologic Unit 05060002, at London Correctional Institute near London, Ohio.
 Owner: State of Ohio.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled observation well, diameter 6 in., depth 116 ft, cased to 111 ft.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 1,090 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

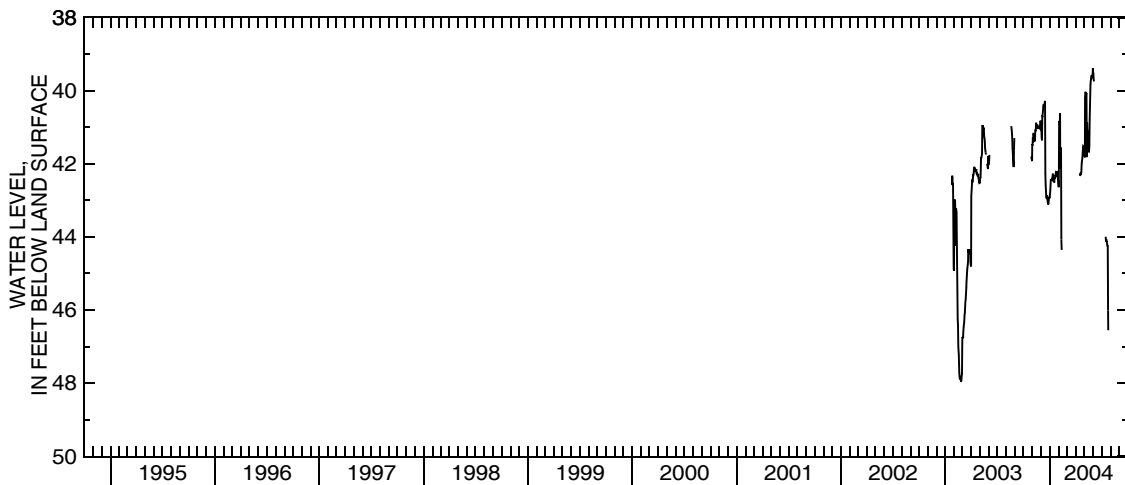
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water.

PERIOD OF RECORD.—November 2002 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 47.96 ft below land-surface datum, Feb. 25, 2003; minimum daily low, 39.39 ft below land-surface datum, May 31, 2004.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
 DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	41.49	40.86	42.93	42.62	---	---	41.78	39.47	---	---	---
2	---	41.49	41.01	42.84	42.62	---	---	41.81	39.54	---	---	---
3	---	41.28	41.06	42.72	40.83	---	---	41.81	39.68	---	---	---
4	---	41.42	41.30	42.62	40.88	---	---	40.20	39.75	---	---	---
5	---	41.18	41.36	42.45	40.88	---	---	40.07	---	---	---	---
6	---	41.18	40.70	42.45	40.62	---	---	40.03	---	---	---	---
7	---	41.24	40.70	42.45	42.14	---	---	40.10	---	---	---	---
8	---	41.37	40.60	42.42	41.55	---	---	40.08	---	---	---	---
9	---	41.39	40.50	42.41	41.67	---	---	40.07	---	---	---	---
10	---	41.36	40.43	42.42	41.61	---	---	41.82	---	---	---	---
11	---	41.24	40.37	42.35	44.07	---	---	40.88	---	---	---	---
12	---	41.09	40.44	42.27	44.36	---	---	41.03	---	---	---	---
13	---	41.09	40.46	42.35	---	---	---	41.15	---	---	---	---
14	---	40.88	40.38	42.36	---	---	---	41.30	---	---	---	---
15	---	40.93	40.29	42.47	---	---	42.33	41.54	---	44.00	---	---
16	---	41.00	40.28	42.50	---	---	42.32	41.66	---	44.13	---	---
17	---	41.04	42.27	42.50	---	---	42.27	41.67	---	44.07	---	---
18	---	41.01	42.59	42.38	---	---	42.27	41.67	---	44.12	---	---
19	---	40.93	42.75	42.41	---	---	42.29	41.49	---	44.13	---	---
20	---	41.00	42.93	42.33	---	---	42.29	40.80	---	44.21	---	---
21	---	41.01	42.93	42.35	---	---	42.23	40.52	---	44.24	---	---
22	---	41.00	42.92	42.27	---	---	42.00	39.99	---	44.25	---	---
23	---	41.00	42.87	42.29	---	---	41.93	39.84	---	46.02	---	---
24	---	41.00	42.95	42.27	---	---	41.85	39.71	---	46.56	---	---
25	---	41.01	43.05	42.29	---	---	41.79	39.68	---	---	---	---
26	---	41.01	43.10	42.20	---	---	41.64	39.60	---	---	---	---
27	---	41.03	43.10	42.23	---	---	41.57	39.59	---	---	---	---
28	---	40.95	43.08	42.35	---	---	41.52	39.59	---	---	---	---
29	41.81	40.89	42.95	42.38	---	---	41.54	39.62	---	---	---	---
30	41.87	40.82	42.93	42.41	---	---	41.73	39.60	---	---	---	---
31	41.93	---	42.93	42.53	---	---	---	39.39	---	---	---	---
MAX	41.93	41.49	43.10	42.93	44.36	---	42.33	41.82	39.75	46.56	---	---
CAL YR 2003		LOW 47.96										
WTR YR 2004		LOW 46.56										



395357083304400. Local Number, M-4

LOCATION.—Latitude 39°53'57", longitude 83°30'44", Madison County, Hydrologic Unit 05060002, 3.5 mi northwest of London, Ohio. Owner: State of Ohio.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused water table well, diameter 10 in., depth 49 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 1,112 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 4.00 ft above land-surface datum.

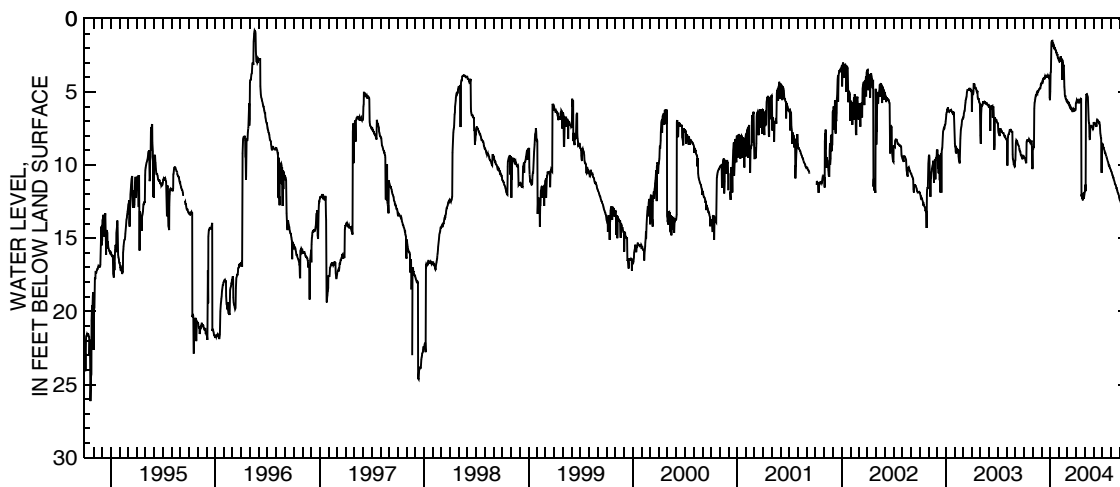
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water.

PERIOD OF RECORD.—June 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 28.6 ft below land-surface datum, Oct. 26, 1993; minimum daily low 0.50 ft above land-surface datum, May 13, 14, and 16, 1989.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.42	8.79	4.44	4.97	2.88	5.64	5.69	11.82	7.06	8.54	10.41	12.41
2	9.56	8.78	4.41	3.69	2.85	5.76	5.61	11.69	7.13	8.56	10.44	12.47
3	9.47	8.81	4.37	3.60	2.84	5.77	5.55	11.34	7.17	8.59	10.49	12.53
4	9.54	8.76	4.27	3.05	2.90	5.73	5.60	11.79	7.14	8.69	10.55	12.60
5	9.60	8.82	4.20	1.65	2.87	5.67	5.63	5.72	7.14	8.81	10.68	12.66
6	9.65	6.14	4.25	1.52	2.55	5.84	5.58	5.13	7.20	8.82	10.71	12.72
7	9.71	5.75	4.17	1.50	2.75	5.82	5.55	5.18	7.26	8.88	10.77	12.81
8	9.83	5.63	4.11	1.49	2.85	5.90	5.63	5.16	7.31	9.00	10.85	12.84
9	9.87	5.55	4.07	1.65	2.75	6.00	5.68	5.18	7.34	9.06	10.86	13.02
10	8.43	5.39	3.98	1.70	2.75	6.03	5.69	5.27	7.34	9.14	10.94	13.10
11	8.33	5.28	4.09	1.65	2.81	6.00	5.73	5.33	7.32	9.15	11.03	13.13
12	8.31	5.21	4.09	1.80	4.17	6.14	5.71	5.37	6.96	9.20	11.10	13.23
13	8.31	5.22	4.08	1.89	3.03	6.20	5.64	6.42	6.89	9.24	11.17	13.29
14	8.24	5.13	3.96	1.86	2.99	6.15	5.54	6.92	6.90	9.33	11.27	13.37
15	8.41	5.04	4.01	2.03	3.17	6.20	5.50	7.06	6.96	9.41	11.30	13.44
16	8.27	5.02	3.90	2.05	3.20	6.18	5.45	7.14	6.96	9.45	11.34	13.53
17	8.25	5.06	3.90	1.92	3.20	6.21	5.46	8.04	6.98	9.53	11.36	13.67
18	8.22	4.93	3.89	2.03	3.20	6.27	5.49	8.21	7.06	9.60	11.42	13.79
19	8.27	4.92	3.94	2.13	4.64	6.38	12.15	8.19	7.11	9.67	11.57	13.85
20	8.27	4.95	4.04	2.17	4.91	6.15	12.00	7.41	7.13	9.75	11.57	13.92
21	8.24	4.88	3.98	2.13	5.24	6.12	12.15	7.40	7.11	9.78	11.67	14.01
22	8.45	4.82	3.92	2.31	5.30	6.15	12.12	7.34	7.25	9.87	11.72	14.09
23	8.49	4.82	3.86	2.32	5.30	6.20	12.33	7.26	7.28	9.99	11.79	14.16
24	8.45	4.82	3.90	2.46	5.46	6.20	12.41	7.35	7.85	10.02	11.87	14.22
25	8.40	4.80	3.93	2.47	5.49	6.27	11.92	7.36	7.97	10.02	11.92	14.34
26	8.40	4.76	3.98	2.40	5.54	6.26	12.15	7.40	8.10	10.05	11.99	14.40
27	8.37	4.74	3.93	2.60	5.63	6.26	11.87	7.40	8.16	10.14	12.05	14.45
28	8.37	4.59	3.87	2.67	5.66	6.23	12.32	7.53	10.31	10.22	12.09	14.57
29	8.59	4.50	3.83	2.67	5.67	6.23	12.03	7.56	10.53	10.25	12.20	14.65
30	10.28	4.37	5.36	2.75	---	6.15	11.87	7.50	8.74	10.31	12.27	14.75
31	10.17	---	5.57	2.85	---	5.76	---	7.36	---	10.35	12.36	---
MAX	10.28	8.82	5.57	4.97	5.67	6.38	12.41	11.82	10.53	10.35	12.36	14.75
CAL YR 2003		LOW 10.28										
WTR YR 2004		LOW 14.75										



395740083255700. Local Number, M-3

LOCATION.—Latitude 39°57'40", longitude 83°25'57", Madison County, Hydrologic Unit 05060002, 5.2 mi north of London, Ohio. Owner: State of Ohio.

AQUIFER.—Limestone of Silurian Age.

WELL CHARACTERISTICS.—Drilled test artesian well, diameter 12 in., depth 290 ft, cased to 145 ft.

INSTRUMENTATION.—Periodic measurement with chalked tape by Ohio Department of Natural Resources personnel.

DATUM.—Elevation of land-surface datum is 1,020 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—November 1974 to October 1982 continuous, periodic thereafter.

EXTREMES FOR PERIOD OF RECORD.—Maximum measured low, 12.01 ft below land-surface datum, Dec. 18, 1991; minimum daily low, 3.93 ft below land-surface datum, Feb. 25 and Mar. 19, 1975.

WATER LEVEL,
IN FEET BELOW LAND-SURFACE DATUM
INSTANTANEOUS OBSERVATION
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water level
10-29-2003	6.21
04-15-2004	5.52
07-15-2004	6.81

Ground-Water Records—Mahoning County

410042080453800. Local Number, MA-1

LOCATION.—Latitude 41°00'42", longitude 80°45'38", Mahoning County, Hydrologic Unit, 05030103, in county fairgrounds at south edge of Canfield, Ohio.
 Owner: City of Canfield.

AQUIFER.—Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 8 in., depth 170 ft, cased to 99.5 ft.

INSTRUMENTATION.—Periodic measurement with chalked tape by Ohio Department of Natural Resources personnel.

DATUM.—Elevation of land-surface datum is 1,160 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter at land-surface datum.

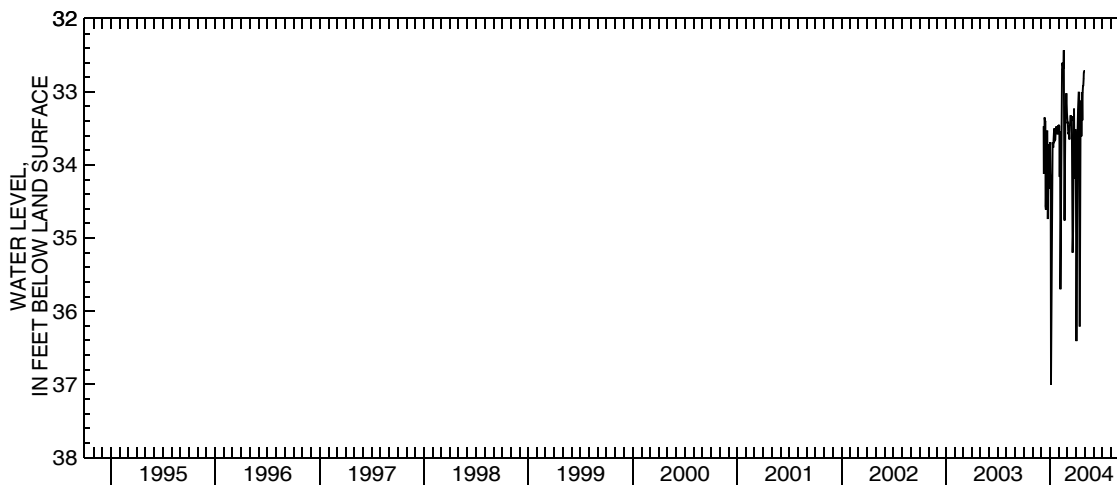
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR. Influenced by seasonal water demand at county fairgrounds.

PERIOD OF RECORD.—May 1946 to September 1982 continuous, periodic October 1982 to December 2003, continuous thereafter.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 110.75 ft below land-surface datum, Sept. 18, 1946; minimum measured low, 29.42 ft below land-surface datum, Apr. 1, 1993.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	33.69	33.46	33.37	35.25	---	---	---	---	---
2	---	---	---	34.11	33.47	33.43	36.41	---	---	---	32.75	---
3	---	---	---	34.21	34.16	33.41	35.01	---	---	---	---	---
4	---	---	---	37.01	33.92	33.52	34.34	---	---	---	---	---
5	---	---	---	36.59	33.54	33.58	33.96	---	---	---	---	---
6	---	33.53	---	34.86	35.70	33.55	33.54	---	---	---	---	---
7	---	---	---	34.24	34.66	33.58	33.36	---	---	---	---	---
8	---	---	---	33.95	33.77	33.65	33.24	---	---	---	---	---
9	---	---	33.47	33.81	33.44	33.60	33.12	---	---	---	---	---
10	---	---	34.11	33.69	33.12	33.46	33.01	---	---	---	---	---
11	---	---	34.11	33.75	32.85	33.43	33.01	---	---	---	---	---
12	---	---	33.60	33.75	32.69	33.38	34.08	---	---	---	---	---
13	---	---	33.35	33.66	32.60	33.32	36.20	---	---	---	---	---
14	---	---	33.41	33.57	32.63	33.39	36.21	---	---	---	---	---
15	---	---	33.41	33.57	32.66	33.39	34.20	---	---	---	---	---
16	---	---	34.56	33.50	32.68	33.38	33.49	---	---	---	---	---
17	---	---	34.61	33.59	32.60	33.33	33.21	---	---	---	---	---
18	---	---	33.96	33.66	32.43	33.70	33.12	---	---	---	---	---
19	---	---	33.66	33.65	32.99	34.02	33.61	---	---	---	---	---
20	---	---	33.56	33.56	34.73	35.20	33.30	---	---	---	---	---
21	---	---	33.54	33.50	34.76	34.91	33.00	---	---	---	---	---
22	---	---	33.54	33.54	33.56	33.92	33.16	---	---	---	---	---
23	---	---	34.47	33.47	33.29	33.53	33.39	---	---	---	---	---
24	---	---	34.74	33.49	33.29	33.34	33.00	---	---	---	---	---
25	---	---	34.29	33.54	33.23	33.23	32.92	---	---	---	---	---
26	---	---	33.89	33.57	33.14	33.86	32.91	---	---	---	---	---
27	---	---	33.78	33.57	33.02	34.19	32.82	---	---	---	---	---
28	---	---	33.75	33.51	33.14	33.81	32.74	---	---	---	---	---
29	---	---	33.72	33.47	33.30	33.51	32.72	---	---	---	---	---
30	---	---	34.32	33.47	---	33.70	32.72	---	---	---	---	---
31	---	---	33.90	33.46	---	33.77	---	---	---	---	---	---
MAX	---	33.53	34.74	37.01	35.70	35.20	36.41	---	---	---	32.75	---
WTR YR 2004	LOW 37.01											



Ground-Water Records—Marion County

403413083170500. Local Number, MN-4

LOCATION.—Latitude 40°34'13", longitude 83°17'05", Marion County, Hydrologic Unit 05060001, 1.9 mi southeast of New Bloomington, Ohio. Owner: State of Ohio.

AQUIFER.—Limestone of Silurian Age.

WELL CHARACTERISTICS.—Drilled test artesian well, diameter 12 in., depth drilled 290 ft, present depth 286 ft, cased to 33 ft.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 915.96 ft above sea level. Measuring point: Floor of shelter 3.00 ft above land-surface datum.

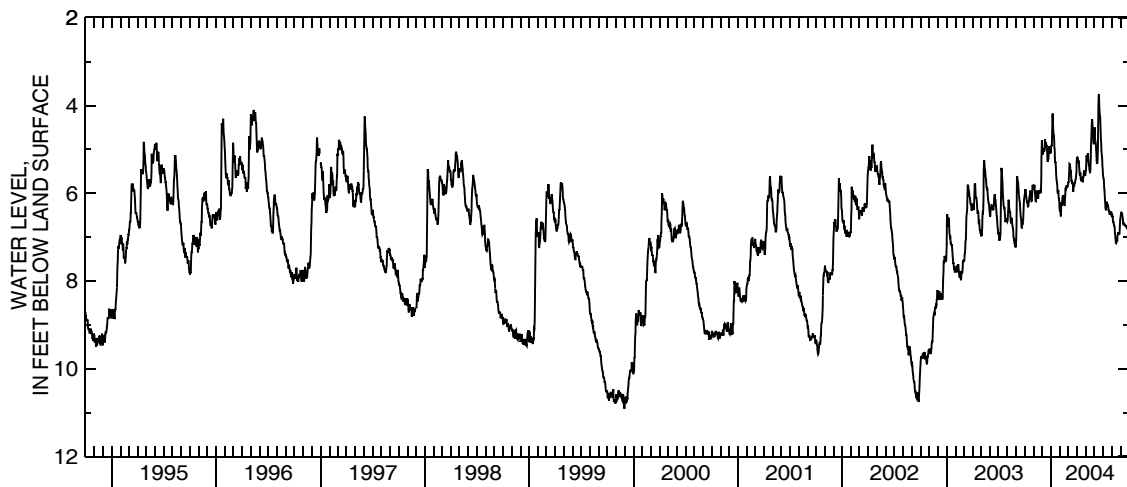
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR. Influenced by seasonal water demand for nearby wildlife refuge.

PERIOD OF RECORD.—January 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 32.57 ft below land-surface datum, Sept. 14, 1983; minimum daily low, 2.94 ft below land-surface datum, Jan. 1, 1991.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.05	5.90	4.97	5.01	6.41	5.76	5.19	5.55	4.58	5.54	6.54	6.53
2	6.00	5.85	5.09	4.92	6.39	5.75	5.18	5.49	4.50	5.63	6.51	6.48
3	5.94	5.85	5.12	4.91	6.41	5.75	5.18	5.37	4.69	5.66	6.53	6.44
4	5.90	5.81	5.06	4.91	6.51	5.63	5.21	5.16	4.80	5.69	6.53	6.44
5	5.99	5.93	4.97	4.61	6.51	5.48	5.31	5.13	4.82	5.87	6.63	6.48
6	6.08	5.97	5.04	4.26	6.23	5.33	5.27	5.15	4.88	5.93	6.66	6.48
7	6.11	6.05	5.04	4.18	6.21	5.34	5.27	5.28	5.02	6.00	6.66	6.53
8	6.17	6.17	5.04	4.34	6.29	5.40	5.28	5.22	5.15	6.15	6.71	6.56
9	6.20	6.18	5.02	4.58	6.18	5.48	5.43	5.09	5.25	6.24	6.75	6.61
10	6.20	6.12	4.97	4.65	6.09	5.55	5.49	5.18	5.33	6.33	6.74	6.69
11	6.23	6.02	4.77	4.68	6.08	5.48	5.60	5.27	5.31	6.39	6.80	6.68
12	6.29	5.94	4.86	4.82	6.09	5.63	5.58	5.30	5.30	6.29	6.89	6.68
13	6.32	6.09	4.92	4.98	6.08	5.73	5.57	5.37	4.98	6.26	6.98	6.71
14	6.26	6.11	4.84	5.00	6.05	5.70	5.66	5.39	4.48	6.19	7.05	6.71
15	6.20	6.06	4.92	5.19	6.23	5.79	5.70	5.48	4.02	6.23	7.13	6.74
16	6.18	6.06	4.91	5.30	6.26	5.75	5.69	5.52	3.75	6.27	7.14	6.71
17	6.11	6.12	4.93	5.28	6.27	5.77	5.69	5.51	3.74	6.26	7.11	6.74
18	6.08	6.03	4.97	5.39	6.27	5.82	5.71	5.45	3.93	6.29	7.06	6.74
19	6.03	5.93	5.09	5.57	6.15	5.97	5.70	5.25	4.13	6.30	7.06	6.76
20	6.06	5.99	5.27	5.69	6.03	5.88	5.71	5.01	4.23	6.36	7.10	6.76
21	5.94	5.96	5.27	5.70	5.88	5.79	5.61	4.86	4.25	6.41	6.96	6.74
22	5.99	5.96	5.21	5.76	5.90	5.84	5.75	4.67	4.46	6.38	6.94	6.76
23	6.08	5.96	5.21	5.81	5.88	5.77	5.64	4.38	4.61	6.41	6.89	6.78
24	6.15	5.97	5.13	5.96	5.82	5.75	5.63	4.31	4.79	6.47	6.92	6.76
25	6.18	6.00	4.93	6.01	5.84	5.77	5.52	4.41	4.89	6.47	6.92	6.80
26	6.17	5.93	5.06	5.92	5.82	5.73	5.48	4.52	5.04	6.42	6.92	6.84
27	6.02	5.94	5.10	5.97	5.85	5.69	5.52	4.55	5.15	6.41	6.94	6.81
28	5.84	5.67	5.06	6.12	5.85	5.66	5.54	4.77	5.24	6.45	6.92	6.84
29	5.81	5.18	5.01	6.13	5.82	5.58	5.58	4.84	5.36	6.47	6.74	6.89
30	5.85	4.79	5.09	6.17	---	5.52	5.60	4.88	5.46	6.48	6.61	6.92
31	5.84	---	5.06	6.33	---	5.27	---	4.73	---	6.47	6.57	---
MAX	6.32	6.18	5.27	6.33	6.51	5.97	5.75	5.55	5.46	6.48	7.14	6.92
CAL YR 2003	LOW 7.98											
WTR YR 2004	LOW 7.14											



403443083230400. Local Number, MN-1

LOCATION.—Latitude 40°34'43", longitude 83°23'04", Marion County, Hydrologic Unit 05060001, State Route 37 at Baptist Church in LaRue, Ohio. Owner: Village of LaRue.

AQUIFER.—Limestone of Silurian Age.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 4 in., depth 100 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 930 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 3.30 ft above land-surface datum.

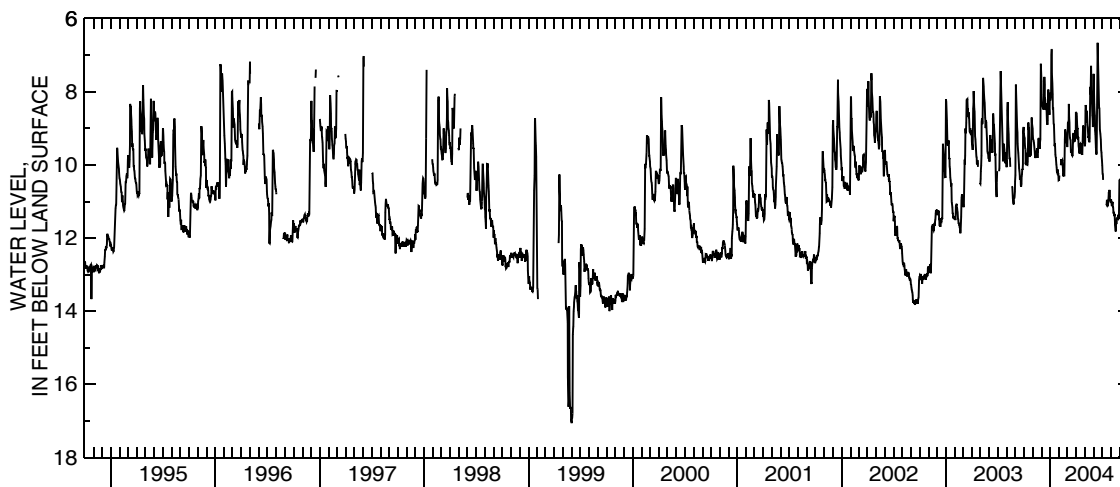
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—March 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 17.04 ft below land-surface datum, May 31 and June 1, 1999; minimum daily low, 5.67 ft below land-surface datum, Jan. 23, 1959.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.14	9.20	7.71	8.24	10.40	9.49	8.58	9.49	7.51	10.02	10.94	10.40
2	9.24	9.30	8.07	8.19	10.29	9.01	8.59	9.41	7.92	10.25	11.00	10.65
3	9.27	9.33	8.28	8.15	---	8.85	8.67	8.52	8.34	10.26	11.10	10.74
4	9.42	9.34	8.36	8.04	---	8.82	8.91	8.36	8.55	10.41	11.13	10.79
5	9.54	9.39	8.40	6.99	---	8.79	9.00	8.41	8.66	---	11.03	10.92
6	9.57	9.49	8.39	6.83	---	8.33	8.99	8.79	9.06	---	11.01	11.06
7	9.98	9.59	8.41	7.49	10.01	8.69	9.30	8.85	9.16	---	11.13	11.04
8	9.90	9.72	8.48	7.76	9.84	8.85	9.23	8.52	9.39	---	11.16	11.12
9	10.01	9.76	8.43	8.06	9.90	9.09	9.48	8.69	9.51	---	11.31	11.12
10	9.95	9.81	8.34	8.45	9.86	9.26	9.54	8.90	9.71	---	11.31	11.15
11	9.67	9.67	7.59	8.45	9.89	9.30	9.65	8.97	9.67	---	11.28	11.13
12	9.98	9.66	7.81	8.67	9.87	9.33	9.67	9.06	9.08	---	11.40	11.25
13	9.99	9.66	8.15	8.87	9.99	9.66	9.69	9.26	8.01	---	11.34	11.25
14	9.91	9.62	8.21	8.90	10.09	9.60	9.45	9.21	7.14	---	11.55	11.39
15	9.65	9.62	8.48	9.21	10.29	9.60	9.42	9.33	6.66	11.07	11.64	11.33
16	8.84	9.54	8.45	9.49	10.29	9.62	9.44	9.36	7.06	11.09	11.70	11.28
17	9.03	9.81	8.31	9.41	10.23	9.72	9.42	9.36	7.36	10.95	11.82	11.36
18	8.97	9.65	8.40	9.49	10.29	9.75	9.66	9.27	7.65	11.00	11.61	11.31
19	9.26	9.62	8.52	9.71	10.29	9.72	9.63	8.49	8.06	11.09	11.61	11.36
20	9.72	9.30	8.81	9.80	9.87	9.54	9.69	7.86	8.43	11.09	11.60	11.33
21	9.78	9.30	8.82	9.81	9.30	9.15	9.69	8.06	8.45	11.13	11.46	11.12
22	9.62	9.26	8.90	9.99	9.03	9.15	9.72	7.59	8.76	10.98	11.45	11.04
23	9.59	9.30	8.78	10.07	9.09	9.30	9.36	7.29	9.03	10.83	11.45	11.19
24	9.60	9.49	8.24	10.17	9.11	9.33	9.03	7.77	9.15	10.74	11.45	11.16
25	9.74	9.56	7.94	10.20	9.23	9.30	8.92	8.01	9.26	10.88	11.46	11.19
26	9.60	9.42	8.15	10.17	9.38	9.36	8.96	8.12	9.31	10.68	11.36	11.26
27	9.20	9.29	8.40	10.12	9.39	9.33	9.23	8.64	9.60	10.80	11.46	11.22
28	8.70	8.52	8.49	10.24	9.38	9.05	9.24	8.76	9.66	10.97	11.46	11.16
29	8.84	7.23	8.63	10.22	9.49	9.29	9.39	8.96	9.76	10.98	11.13	11.27
30	8.94	7.49	8.49	10.42	---	9.24	9.42	8.92	9.87	11.00	10.42	11.28
31	9.01	---	8.03	10.41	---	8.55	---	8.66	---	11.04	10.40	---
MAX	10.01	9.81	8.90	10.42	10.40	9.75	9.72	9.49	9.87	11.13	11.82	11.39
CAL YR 2003		LOW 11.87										
WTR YR 2004		LOW 11.82										



403601083110400. Local Number, MN-2

LOCATION.—Latitude 40°36'01", longitude 83°11'04", Marion County, Hydrologic Unit 05060001, 2 mi west of Marion, Ohio. Owner: City of Marion.

AQUIFER.—Limestone of Silurian Age.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 12 in., depth 67 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 910 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 2.00 ft above land-surface datum.

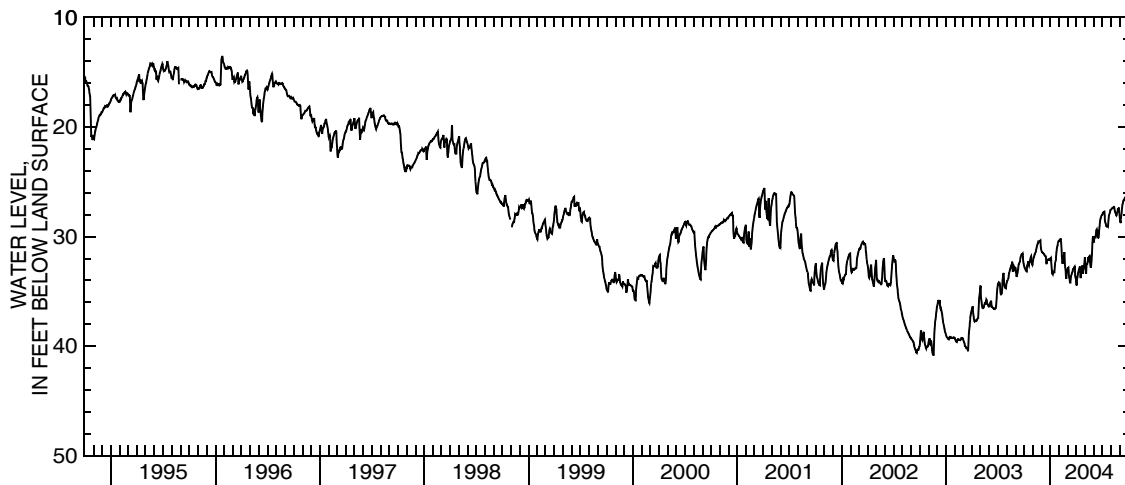
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—May 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 49.50 ft below land-surface datum, Feb. 11, 1956; minimum daily low, 7.00 ft below land-surface datum, July 12, 1987.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32.69	32.24	31.37	32.07	30.36	32.93	34.35	31.88	30.54	27.96	27.53	28.56
2	32.76	32.09	31.41	32.01	30.29	32.87	34.46	32.43	30.30	27.90	27.50	28.70
3	32.82	31.92	31.43	31.97	30.29	32.85	34.05	32.99	30.17	27.86	27.45	28.77
4	32.91	31.90	31.43	32.24	30.30	32.82	33.78	33.30	30.09	27.81	27.40	28.44
5	33.00	31.80	31.47	32.81	30.26	33.13	33.59	33.39	30.06	27.80	27.39	28.11
6	33.06	31.71	31.50	33.13	30.17	33.53	33.44	32.97	30.03	27.78	27.39	27.84
7	33.07	31.63	31.53	33.30	30.35	33.78	33.30	32.46	30.05	27.74	27.38	27.57
8	33.12	31.58	31.58	33.39	30.62	33.93	33.20	32.52	29.85	27.72	27.36	27.33
9	33.15	31.52	31.59	33.44	31.31	34.10	33.13	32.58	29.60	28.05	27.35	27.15
10	33.17	31.44	31.61	33.30	31.76	34.23	33.02	32.35	29.40	28.49	27.30	27.03
11	32.90	31.35	31.68	33.20	32.09	34.28	32.92	32.16	29.34	28.71	27.30	26.91
12	32.66	31.22	31.74	33.20	32.37	33.92	32.82	31.92	29.46	28.80	27.39	26.76
13	32.58	31.10	31.76	33.27	32.48	33.69	32.72	32.06	29.48	28.86	27.56	26.67
14	32.42	30.99	31.76	33.30	32.16	33.54	33.06	32.12	29.76	29.00	27.69	26.70
15	32.28	30.87	31.79	33.35	31.88	33.44	33.60	31.90	30.06	29.07	27.80	26.70
16	32.49	30.77	31.80	32.99	31.76	33.36	33.78	31.82	30.12	29.08	27.87	26.65
17	32.64	30.69	32.25	32.63	31.71	33.28	33.52	31.76	30.12	29.07	27.95	26.52
18	32.67	30.60	32.45	32.35	31.61	33.23	33.20	31.82	30.09	29.08	28.02	26.48
19	32.31	30.56	32.45	32.21	31.43	33.17	32.99	32.27	29.76	29.10	28.07	26.46
20	32.29	30.47	32.27	32.12	32.01	32.99	32.85	32.61	29.43	29.12	27.99	26.38
21	32.31	30.48	32.18	31.77	32.52	32.97	32.70	32.78	29.06	28.98	27.84	26.33
22	32.13	30.47	32.12	31.46	32.81	32.93	32.63	32.78	28.74	28.56	27.77	26.33
23	32.02	30.45	32.09	31.26	33.13	32.87	33.17	32.66	28.56	28.31	27.68	26.16
24	31.94	30.43	32.09	31.07	33.50	32.82	33.39	32.16	28.43	28.13	27.50	26.04
25	31.80	30.43	32.10	30.93	33.78	32.78	33.09	31.68	28.33	27.98	27.48	25.93
26	31.77	30.38	32.13	30.77	33.85	32.73	32.90	31.23	28.23	27.86	27.47	25.86
27	32.17	30.35	32.12	30.62	33.44	32.94	32.78	30.60	28.15	27.84	27.47	25.79
28	32.37	30.77	32.06	30.54	33.18	33.57	32.66	30.20	28.08	27.68	27.35	25.95
29	32.55	31.02	32.03	30.43	33.03	33.74	32.35	30.05	28.05	27.57	27.66	26.19
30	32.60	31.22	32.09	30.40	---	33.66	32.10	29.97	28.01	27.56	28.08	26.36
31	32.42	---	32.06	30.40	---	34.07	---	30.40	---	27.54	28.38	---
MAX	33.17	32.24	32.45	33.44	33.85	34.28	34.46	33.39	30.54	29.12	28.38	28.77
CAL YR 2003	LOW 40.46											
WTR YR 2004	LOW 34.46											



Ground-Water Records—Medina County

410032081422900. Local Number, MD-5

LOCATION.—Latitude 41°00'32", longitude 81°42'29", Medina County, Hydrologic Unit 05040001, near Wadsworth, Ohio. Owner: City of Wadsworth.

AQUIFER.—Sandstone of Mississippian Age.

WELL CHARACTERISTICS.—Drilled observation well, diameter 12 in., depth 237 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 1,155 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 1.5 ft above land-surface datum.

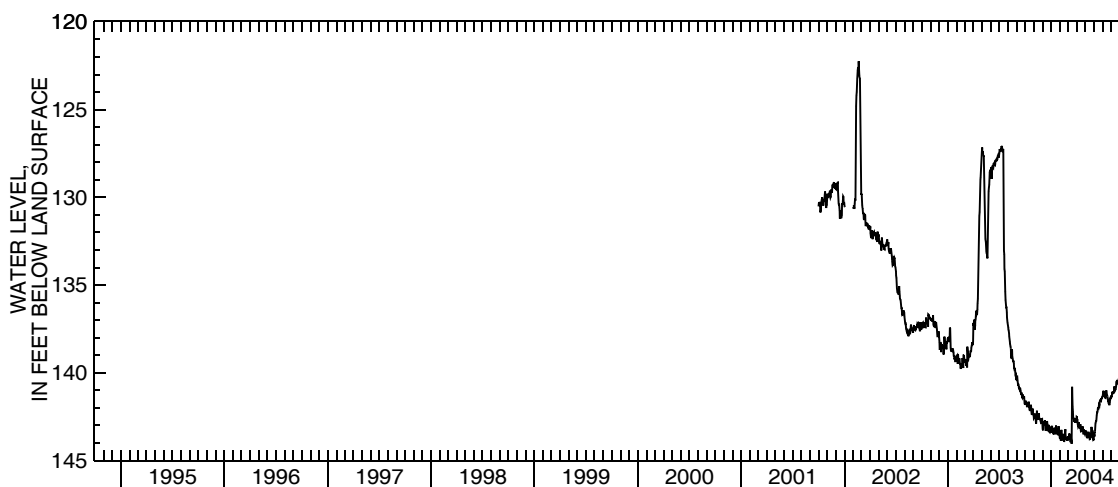
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water.

PERIOD OF RECORD.—October 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 144.06 ft below land-surface datum, Mar. 13, 2004; minimum daily low, 122.25 ft below land-surface datum, Feb. 20, 2002.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	141.79	142.60	143.06	143.40	143.78	143.63	142.53	143.30	143.54	141.32	141.39	140.37
2	141.79	142.57	143.24	143.09	143.70	143.71	142.70	143.41	143.64	141.21	141.35	140.33
3	141.78	142.44	143.29	143.03	143.49	143.80	142.70	143.44	143.40	141.18	141.15	140.22
4	141.60	142.32	143.16	143.10	143.84	143.64	142.94	143.43	143.36	141.03	141.09	140.13
5	141.76	142.46	142.76	143.24	143.84	143.46	143.09	143.41	143.07	141.33	141.18	140.11
6	141.86	142.49	142.86	143.43	143.26	143.63	143.07	143.43	142.89	141.33	141.18	140.07
7	141.89	142.64	142.92	143.41	143.58	143.63	142.85	143.73	142.77	141.09	141.14	139.89
8	141.96	142.86	142.89	143.41	143.86	143.61	142.82	143.67	142.76	141.26	141.15	139.89
9	141.91	142.91	142.83	143.48	143.72	143.88	143.06	143.43	142.66	141.36	141.14	139.91
10	141.87	142.68	142.70	143.52	143.52	143.96	143.13	143.43	142.42	141.44	140.88	140.03
11	141.89	142.32	142.91	143.40	143.60	143.82	143.14	143.54	142.28	141.45	140.78	139.98
12	141.79	142.16	143.19	143.13	143.58	143.82	143.14	143.49	142.28	141.21	140.81	139.83
13	141.84	142.56	143.31	143.33	143.58	144.06	142.94	143.52	142.20	141.12	140.88	139.80
14	141.66	142.56	142.98	143.33	143.49	142.17	143.21	143.49	142.02	141.01	140.94	139.76
15	141.90	142.53	142.98	143.36	143.81	140.81	143.34	143.70	142.02	141.12	140.97	139.71
16	142.07	142.53	142.94	143.43	143.94	141.39	143.33	143.79	142.04	141.23	140.91	139.61
17	142.13	142.68	142.76	143.41	143.82	141.91	143.31	143.78	141.96	141.32	140.79	139.35
18	142.13	142.58	142.80	143.01	143.73	142.19	143.31	143.57	141.81	141.36	140.52	139.35
19	142.11	142.31	142.95	143.29	143.37	142.64	143.22	143.63	141.84	141.48	140.49	139.44
20	142.11	142.56	143.33	143.46	143.22	142.56	143.28	143.63	141.86	141.61	140.51	139.31
21	141.83	142.62	143.31	143.46	143.57	142.64	143.06	143.64	141.66	141.66	140.55	139.05
22	141.95	142.65	143.09	143.29	143.76	142.80	143.28	143.09	141.53	141.63	140.58	138.96
23	142.16	142.65	142.98	143.31	143.78	142.77	143.36	143.17	141.59	141.69	140.46	138.93
24	142.35	142.71	143.01	143.51	143.76	142.73	143.51	143.43	141.59	141.81	140.49	138.87
25	142.36	142.79	143.24	143.52	143.83	142.80	143.37	143.43	141.61	141.81	140.43	138.59
26	142.35	142.77	143.40	143.21	143.84	142.80	143.24	143.39	141.47	141.69	140.40	137.41
27	142.20	142.77	143.41	143.04	143.84	142.76	143.34	143.37	141.51	141.50	140.34	135.95
28	142.05	142.59	143.28	143.29	143.88	142.77	143.46	143.73	141.42	141.45	140.25	136.46
29	142.30	142.76	143.09	143.39	143.80	142.66	143.52	143.84	141.39	141.47	140.17	136.80
30	142.40	142.71	143.31	143.31	---	142.66	143.44	143.82	141.38	141.39	140.25	136.92
31	142.48	---	143.33	143.66	---	142.51	---	143.46	---	141.30	140.34	---
MAX	142.48	142.91	143.41	143.66	143.94	144.06	143.52	143.84	143.64	141.81	141.39	140.37
CAL YR 2003		LOW 143.41										
WTR YR 2004		LOW 144.06										



Ground-Water Records—Mercer County

402833084375200. Local Number, MR-2

LOCATION.—Latitude 40°28'33", longitude 84°37'52", Mercer County, Hydrologic Unit 05120101, at AVCO Manufacturing Company building in Coldwater, Ohio. Owner: New Idea Farm Equipment Company

AQUIFER.—Limestone of Silurian Age.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 6 in., depth 253 ft, cased.

INSTRUMENTATION.—Digital recorder, 60-minute punch.

DATUM.—Elevation of land-surface datum is 915 ft above sea level (from topographic map). Measuring point: Top of platform 1.2 ft above land-surface datum.

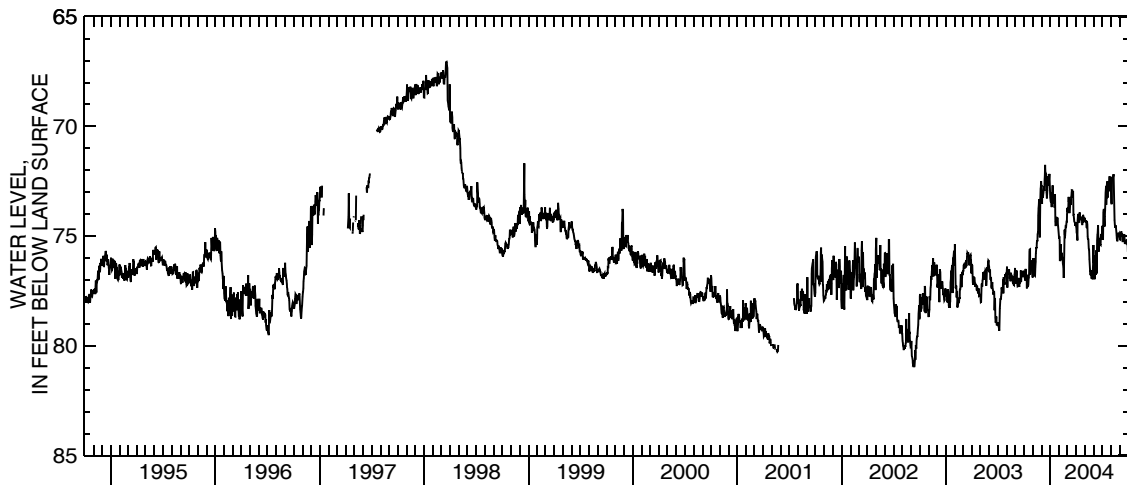
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—February 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 81.60 ft below land-surface datum, Sept. 15, 1988; minimum daily low, 60.13 ft below land-surface datum, Feb. 14, 1967.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76.62	76.49	72.72	73.24	75.11	73.71	74.59	74.19	76.23	74.53	72.51	75.16
2	76.67	76.40	72.72	73.34	75.01	73.87	74.80	74.29	75.99	75.18	73.51	75.17
3	76.78	76.00	73.53	73.46	75.21	73.88	74.79	74.37	76.12	74.91	73.51	74.99
4	76.93	76.13	72.91	73.08	76.14	73.68	75.02	74.34	76.97	75.16	72.34	74.93
5	76.77	76.64	73.08	73.30	76.07	73.21	75.20	74.32	76.27	73.92	72.34	74.82
6	77.04	76.51	73.26	73.68	75.37	73.44	74.32	74.32	75.89	73.82	72.42	74.82
7	76.50	76.71	73.20	73.00	75.88	73.33	73.99	74.60	75.99	73.76	72.39	75.01
8	77.04	76.81	73.04	73.24	76.09	73.93	74.10	74.63	75.99	74.33	72.30	74.89
9	76.91	76.82	72.92	72.69	75.78	73.95	74.30	74.34	76.77	74.56	72.22	74.96
10	76.76	76.41	72.73	73.51	75.78	73.62	74.28	74.48	75.65	74.13	72.18	75.23
11	77.39	76.18	72.95	73.47	75.92	73.43	74.34	75.01	76.71	73.81	73.53	75.23
12	76.97	75.81	72.40	73.12	76.00	73.41	74.35	75.12	75.90	73.24	73.82	74.98
13	77.03	75.51	72.30	73.31	76.03	73.57	73.92	75.14	75.20	73.02	74.27	75.10
14	77.01	75.56	71.76	73.31	76.26	73.25	74.20	75.41	74.93	72.71	74.50	75.10
15	77.32	75.32	72.16	73.10	76.30	73.18	74.23	75.59	74.91	73.58	74.55	74.98
16	77.22	75.19	72.15	73.70	76.41	73.02	74.21	75.63	74.51	73.17	74.62	74.91
17	76.91	75.24	72.22	73.48	76.91	72.91	74.22	76.05	75.00	72.66	74.54	75.17
18	76.89	74.92	72.18	73.11	76.85	72.92	74.16	76.18	75.72	72.51	74.54	75.36
19	76.69	74.81	73.00	74.34	75.72	73.23	74.17	76.58	75.39	73.23	74.78	75.33
20	75.71	74.06	73.28	74.54	74.71	73.01	74.13	76.59	75.31	73.22	74.96	75.22
21	75.61	73.72	73.14	74.50	74.94	72.95	74.34	76.78	75.08	72.95	75.11	75.22
22	75.60	73.53	72.92	74.16	74.97	74.02	74.50	76.58	75.20	72.50	75.21	75.27
23	76.76	73.32	72.27	74.13	74.77	74.02	74.34	76.56	75.37	72.71	75.21	75.19
24	76.67	73.40	72.43	74.40	74.56	74.23	74.39	76.91	75.39	72.80	74.98	75.21
25	76.58	73.79	72.55	74.41	74.58	74.34	74.03	76.91	75.41	72.67	74.86	75.24
26	76.12	75.06	72.70	74.16	74.50	74.37	74.08	76.91	75.05	72.42	74.93	75.21
27	76.25	73.31	72.62	74.34	74.34	74.41	74.16	76.79	74.90	72.28	74.98	75.22
28	76.34	72.83	72.35	74.53	74.34	74.39	74.20	76.97	75.11	72.96	74.90	75.41
29	76.43	72.80	72.16	74.62	74.01	74.53	74.29	76.57	75.16	72.54	74.88	75.71
30	76.40	72.49	72.49	74.81	---	74.37	74.17	76.25	74.99	72.43	75.02	75.61
31	76.89	---	73.05	74.98	---	74.53	---	75.41	---	72.44	75.03	---
MAX	77.39	76.82	73.53	74.98	76.91	74.53	75.20	76.97	76.97	75.18	75.21	75.71
CAL YR 2003	LOW 79.32											
WTR YR 2004	LOW 77.39											



Ground-Water Records—Miami County

395848084085500. Local Number, MI-3

LOCATION.—Latitude 39°58'48", longitude 84°08'55", Miami County, Hydrologic Unit 05080001, 2 mi northeast of Tipp City, Ohio. Owner: Fulton Fruit Farms.
 AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused water table well, diameter 5 in., depth 48 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 804.78 ft above sea level (levels by Miami Conservancy District). Measuring point: Floor of shelter 3.50 ft above land-surface datum.

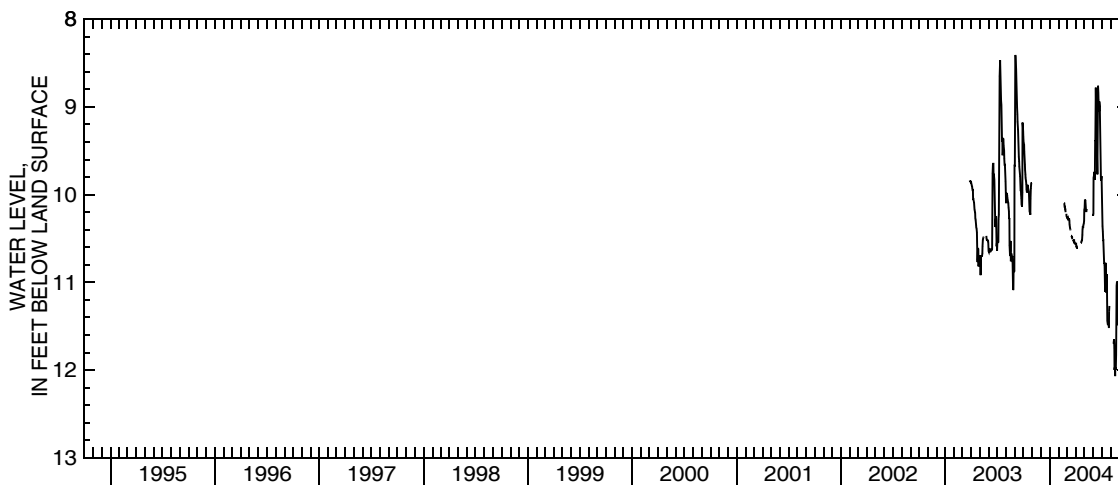
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—October 1966 to October 1982 continuous, periodic November 1982 to March 2003, continuous thereafter.

EXTREMES FOR PERIOD OF RECORD—Maximum daily low, 13.45 ft below land-surface datum, July 25, 1988; minimum daily low, 7.53 ft below land-surface datum, Feb. 25, 1975.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.34	---	---	---	---	10.26	10.56	10.17	10.24	9.79	---	11.41
2	9.41	---	---	---	---	10.26	10.56	10.16	10.22	10.00	---	11.39
3	9.43	---	---	---	---	10.27	10.59	10.06	9.81	10.18	---	11.43
4	9.51	---	---	---	---	10.28	10.59	10.07	9.78	10.36	---	11.41
5	9.59	---	---	---	---	10.27	10.61	10.07	9.74	10.42	---	11.36
6	9.66	---	---	---	---	10.28	10.61	10.10	9.79	10.52	---	11.48
7	9.72	---	---	---	---	10.28	---	10.19	9.83	10.52	---	11.40
8	9.77	---	---	---	---	10.28	---	10.19	9.39	10.65	---	11.35
9	9.81	---	---	---	---	10.27	---	10.17	9.39	10.78	---	11.55
10	9.85	---	---	---	---	10.30	---	10.18	8.78	10.78	---	11.53
11	9.89	---	---	---	---	10.34	---	---	8.97	10.81	---	11.52
12	9.94	---	---	---	---	10.38	---	---	9.15	10.96	11.70	11.50
13	9.97	---	---	---	---	10.40	---	---	9.25	11.11	11.65	11.48
14	9.97	---	---	---	---	10.41	---	---	9.44	10.84	11.75	11.60
15	9.91	---	---	---	---	---	---	---	9.59	10.78	12.00	11.57
16	9.89	---	---	---	---	10.47	---	---	9.77	11.00	11.97	11.51
17	9.94	---	---	---	---	10.47	---	---	9.64	11.10	12.07	11.50
18	9.94	---	---	---	---	10.49	---	---	8.76	11.12	11.97	11.50
19	9.96	---	---	---	---	10.49	10.55	---	8.84	10.91	12.00	11.51
20	9.97	---	---	---	10.10	10.50	10.55	---	8.92	11.29	11.83	11.65
21	10.01	---	---	---	10.10	10.50	10.54	---	9.01	11.44	11.31	11.71
22	10.13	---	---	---	10.14	---	10.53	---	9.05	11.48	11.04	11.66
23	10.19	---	---	---	10.14	10.52	10.52	---	8.94	11.48	11.00	11.59
24	10.21	---	---	---	10.17	10.53	10.46	---	8.99	11.44	11.00	11.63
25	10.23	---	---	---	10.17	10.52	10.40	---	9.10	11.47	11.17	11.60
26	10.05	---	---	---	10.20	10.52	10.36	---	9.17	11.52	11.11	11.74
27	9.93	---	---	---	---	10.54	10.38	---	9.44	11.33	11.41	11.74
28	9.88	---	---	---	10.22	10.55	10.35	---	9.82	11.27	11.49	11.74
29	9.87	---	---	---	10.25	10.56	10.33	---	9.84	---	11.20	11.71
30	9.87	---	---	---	---	10.56	10.30	---	9.80	---	11.31	11.67
31	---	---	---	---	---	10.56	---	10.23	---	---	11.42	---
MAX	10.23	---	---	---	10.25	10.56	10.61	10.23	10.24	11.52	12.07	11.74
CAL YR 2003		LOW 11.09										
WTR YR 2004		LOW 12.07										



Ground-Water Records—Montgomery County

394012084151700. Local Number, MT-55

LOCATION.—Latitude 39°40'12", longitude 84°15'17", Montgomery County, Hydrologic Unit 05080002, Elm Street in West Carrollton, Ohio. Owner: Oxford Paper Company.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused water table well, diameter 12 in., depth 84 ft, cased.

INSTRUMENTATION.—Digital recorder, 60-minute punch.

DATUM.—Elevation of land-surface datum is 717.6 ft above sea level. Measuring point: Floor of instrument shelter 0.30 ft above land-surface datum.

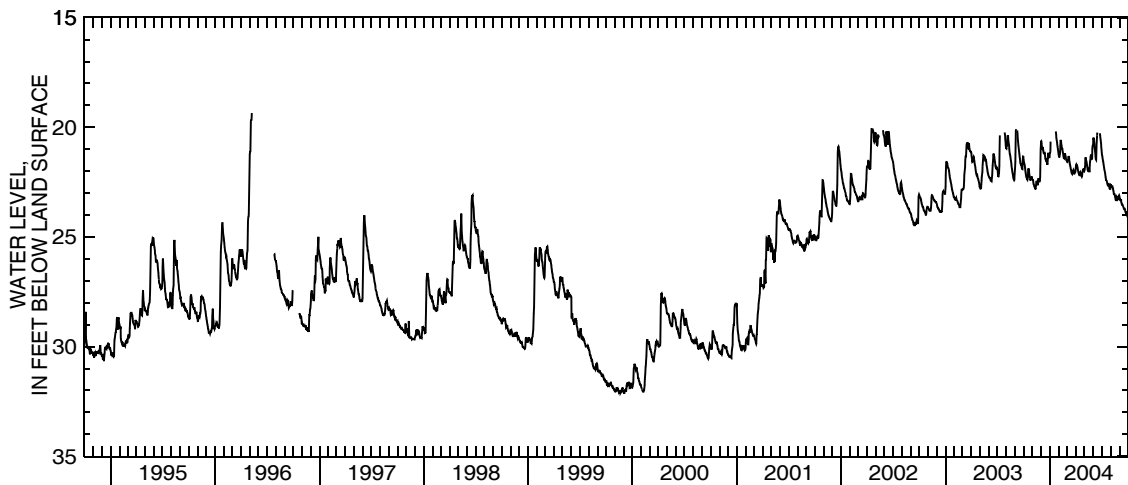
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—April 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 58.57 ft below land-surface datum, Nov. 24, 1974; minimum daily low, 19.35 ft below land-surface datum, May 9, 1996.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.45	22.39	20.64	21.20	21.24	21.57	21.81	21.96	20.55	21.17	22.62	23.19
2	21.56	22.39	20.63	21.15	21.35	21.59	21.71	21.93	20.47	21.28	22.64	23.26
3	21.63	22.43	20.74	21.11	21.35	21.58	21.69	21.79	20.56	21.33	22.71	23.33
4	21.66	22.50	20.84	20.65	21.32	21.49	21.72	21.53	20.62	21.42	22.74	23.33
5	21.71	22.58	20.95	---	21.24	21.46	21.77	21.37	20.76	21.53	22.69	23.31
6	21.87	22.62	20.97	---	21.14	21.39	21.79	21.43	20.90	21.60	22.69	23.33
7	21.96	22.66	20.90	---	20.83	21.31	21.86	21.52	21.08	21.68	22.69	23.43
8	22.05	22.71	20.99	---	20.58	21.40	21.93	21.54	21.22	21.77	22.73	23.46
9	22.13	22.72	21.08	---	20.66	21.52	22.00	21.60	21.36	21.86	22.82	23.49
10	22.20	22.76	21.13	---	20.77	21.60	22.04	21.73	21.46	21.92	22.87	23.53
11	22.27	22.81	21.19	---	20.84	21.66	22.10	21.83	21.48	22.00	22.93	23.53
12	22.28	22.81	21.19	---	20.92	21.73	22.17	21.91	21.20	22.08	23.02	23.53
13	22.37	22.71	21.17	---	20.97	21.79	22.18	21.97	20.71	22.16	23.03	23.61
14	22.39	22.60	21.16	---	20.98	21.85	22.16	22.00	20.36	22.26	23.04	23.65
15	22.34	22.52	21.31	---	21.07	21.94	22.07	22.00	20.24	22.33	23.05	23.68
16	22.21	22.44	21.41	---	21.18	22.02	22.04	21.95	---	22.41	23.15	23.71
17	21.98	22.55	21.45	---	21.28	22.05	22.06	21.99	---	22.42	23.21	23.74
18	21.90	22.59	21.44	---	21.34	22.11	22.10	22.01	---	22.43	23.27	23.74
19	21.90	22.61	21.45	---	21.41	22.13	22.19	22.01	---	22.50	23.33	23.72
20	22.03	22.61	21.47	---	21.42	22.10	22.22	21.74	---	22.56	23.33	23.78
21	22.13	22.46	21.49	---	21.36	22.06	22.24	21.55	---	22.62	23.28	23.86
22	22.23	22.36	21.63	20.19	21.26	21.96	22.25	21.49	---	22.64	23.16	23.89
23	22.33	22.32	21.71	20.32	21.18	21.95	22.21	21.34	---	22.62	23.18	23.91
24	22.39	22.44	21.67	20.48	21.29	22.01	22.06	21.25	20.27	22.63	23.26	23.94
25	22.40	22.46	21.46	20.57	21.32	22.07	21.99	21.32	20.37	22.61	23.29	23.95
26	22.39	22.47	21.21	20.71	21.38	22.12	21.92	21.40	20.46	22.68	23.26	23.93
27	22.34	22.42	21.16	20.80	21.46	22.12	21.92	21.46	20.57	22.72	23.26	23.99
28	22.28	22.30	21.24	20.88	21.49	22.10	21.95	21.41	20.76	22.77	23.22	24.04
29	22.24	21.73	21.37	20.96	21.52	22.02	22.01	20.98	20.91	22.81	23.15	24.09
30	22.30	21.03	21.40	21.06	---	22.02	22.02	20.83	21.05	22.81	23.10	24.13
31	22.36	---	21.33	21.14	---	21.94	---	20.78	---	22.80	23.14	---
MAX	22.40	22.81	21.71	21.20	21.52	22.13	22.25	22.01	21.48	22.81	23.33	24.13
CAL YR 2003		LOW 23.65										
WTR YR 2004		LOW 24.13										



394025084162800. Local Number, MT-49

LOCATION.—Latitude 39°40'25", longitude 84°16'28", Montgomery County, Hydrologic Unit 05080002, 1.2 mi west of city hall in West Carrollton, Ohio.

Owner: Metal Shredders, Inc.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled test water table well, diameter 6 in., depth 220 ft, cased.

INSTRUMENTATION.—Digital recorder, 60-minute punch.

DATUM.—Elevation of land-surface datum is 714.61 ft above sea level (levels by Miami Conservancy District). Measuring point: Floor of shelter 2.50 ft above land-surface datum.

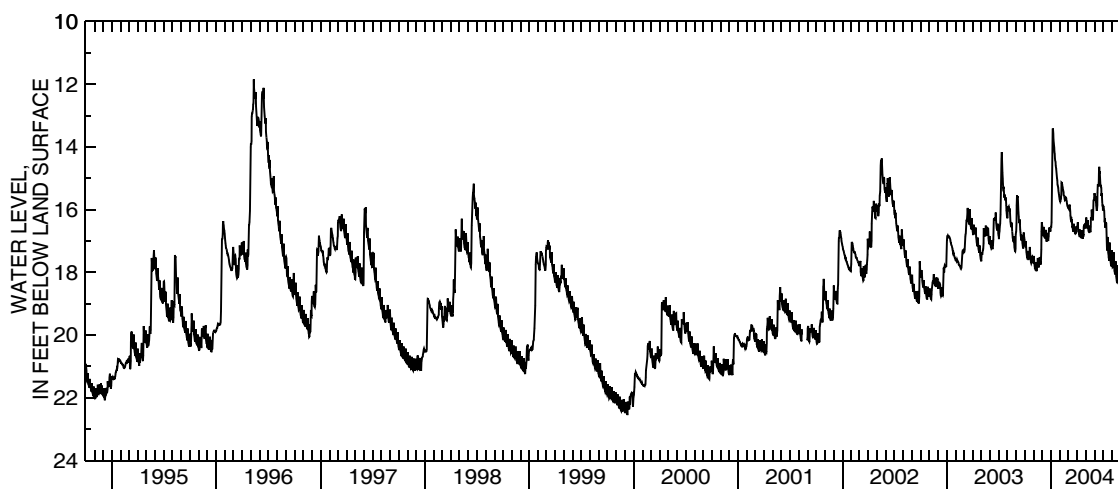
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—November 1947 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 36.30 ft below land-surface datum, Dec. 8, 1974; minimum daily low, 10.68 ft below land-surface datum, Jan. 23, 1959.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.05	17.69	16.53	16.55	15.70	15.94	16.56	16.48	15.47	16.02	17.29	18.45
2	17.13	17.47	16.63	16.55	15.75	15.96	16.57	16.44	15.51	15.89	17.69	18.51
3	17.17	17.69	16.71	16.40	15.72	15.92	16.51	16.25	15.63	15.90	17.80	18.56
4	17.17	17.75	16.75	15.97	15.68	15.90	16.40	16.34	15.70	15.97	17.79	18.15
5	17.00	17.82	16.82	14.60	15.64	15.88	16.67	16.44	15.71	16.03	17.82	18.06
6	17.28	17.84	16.82	13.62	15.50	15.84	16.68	16.49	15.58	16.30	17.86	18.04
7	17.36	17.89	16.55	13.41	15.13	15.87	16.72	16.60	15.87	16.40	17.45	18.58
8	17.43	17.88	16.80	13.43	15.14	16.06	16.75	16.52	15.95	16.27	17.36	18.64
9	17.49	17.69	16.87	13.57	15.21	16.19	16.82	16.33	16.03	16.53	17.84	18.69
10	17.54	17.89	16.89	13.75	15.26	16.29	16.81	16.61	16.01	16.58	17.97	18.76
11	17.53	17.96	16.91	13.87	15.30	16.33	16.63	16.67	15.85	16.40	18.00	18.42
12	17.32	17.92	16.73	14.02	15.35	16.23	16.86	16.70	15.46	16.44	18.05	18.27
13	17.58	17.83	16.67	14.16	15.39	16.40	16.87	16.72	15.19	16.71	18.07	18.76
14	17.58	17.79	16.67	14.22	15.44	16.30	16.80	16.72	15.25	17.04	17.68	18.81
15	17.55	17.71	16.93	14.35	15.54	16.53	16.79	16.69	15.22	17.20	17.65	18.84
16	17.42	17.54	17.00	14.45	15.57	16.52	16.82	16.50	15.13	17.24	18.14	18.90
17	17.40	17.80	17.00	14.48	15.63	16.60	16.83	16.70	14.83	17.32	18.19	18.93
18	17.40	17.80	16.74	14.59	15.66	16.66	16.66	16.72	14.63	16.87	18.26	18.80
19	17.19	17.84	16.76	14.70	15.70	16.70	16.88	16.55	14.84	17.39	18.32	18.50
20	17.44	17.81	16.83	14.81	15.69	16.63	16.90	16.24	14.78	17.42	18.32	18.94
21	17.54	17.74	16.83	14.88	15.64	16.45	16.91	16.32	15.09	17.54	17.91	19.02
22	17.60	17.72	17.00	14.99	15.61	16.60	16.93	16.27	15.27	17.56	17.77	19.07
23	17.67	17.51	16.89	15.06	15.64	16.64	16.79	16.00	15.24	17.63	18.23	19.08
24	17.70	17.67	16.85	15.19	15.71	16.70	16.80	16.25	15.27	17.23	18.31	19.13
25	17.67	17.68	16.60	15.23	15.74	16.74	16.55	16.31	15.30	17.05	18.38	19.13
26	17.51	17.75	16.60	15.30	15.79	16.78	16.49	16.29	15.56	17.54	18.39	18.74
27	17.49	17.59	16.62	15.40	15.85	16.59	16.48	16.34	15.47	17.61	18.45	19.14
28	17.53	17.27	16.65	15.46	15.90	16.54	16.60	15.93	15.79	17.70	18.04	19.24
29	17.59	16.70	16.68	15.51	15.91	16.71	16.54	15.72	15.87	17.75	17.87	19.28
30	17.64	16.40	16.70	15.58	---	16.69	16.55	15.67	15.88	17.81	18.36	19.31
31	17.69	---	16.57	15.66	---	16.60	---	15.63	---	17.68	18.36	---
MAX	17.70	17.96	17.00	16.55	15.91	16.78	16.93	16.72	16.03	17.81	18.45	19.31
CAL YR 2003		LOW 17.96										
WTR YR 2004		LOW 19.31										



394425084113200. Local Number, MT-3

LOCATION.—Latitude 39°44'25", longitude 84°11'32", Montgomery County, Hydrologic Unit 05080002, Patterson Boulevard. at Stewart Street in Dayton, Ohio.
 Owner: State of Ohio.

AQUIFER.—Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.—Drilled test water table well, diameter 6 in., depth 80 ft, cased.

INSTRUMENTATION.—Digital recorder, 60-minute punch.

DATUM.—Elevation of land-surface datum is 744 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 1.20 ft above land-surface datum.

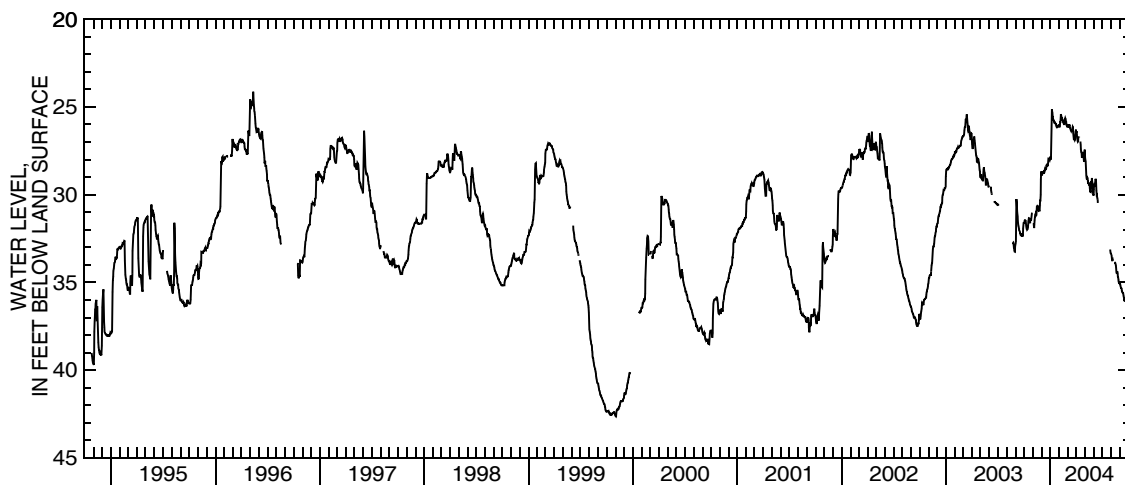
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—May 1945 to June 1974. Reactivated June 1980.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low 78.90 ft below land-surface datum, May 24, 1968, and Sept. 30, 1969; minimum daily low, 24.13 ft below land-surface datum, May 12, 1996.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
 DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31.62	---	28.76	27.84	26.13	26.12	26.44	27.66	29.70	---	33.39	35.09
2	31.58	---	28.87	27.96	26.13	26.12	26.44	27.95	29.37	---	33.49	35.18
3	31.47	31.62	28.87	27.96	26.05	26.09	26.58	28.11	29.45	---	33.65	35.28
4	31.46	31.74	28.80	27.14	25.88	25.99	26.80	28.38	29.48	---	33.75	35.30
5	31.46	31.90	28.77	25.74	25.87	26.15	26.94	28.74	29.48	---	33.75	35.31
6	31.49	31.70	28.77	25.13	25.62	26.15	26.98	28.92	29.32	---	33.71	35.36
7	31.60	31.45	28.72	25.23	25.41	26.05	26.95	29.06	29.10	---	33.76	35.48
8	31.74	31.26	28.69	25.36	25.50	26.05	26.75	29.16	29.18	---	---	35.53
9	31.84	31.17	28.77	25.54	25.62	26.17	26.71	29.02	29.30	---	---	35.58
10	31.95	31.08	28.77	25.57	25.65	26.19	26.68	29.06	29.77	---	---	35.60
11	31.96	31.15	28.72	25.72	25.66	26.25	---	29.26	30.02	---	---	35.60
12	32.00	31.18	28.65	25.77	25.76	26.29	---	29.39	30.01	---	33.88	35.61
13	31.96	31.16	28.61	25.78	25.76	26.36	---	29.31	30.16	---	33.89	35.78
14	31.88	30.87	28.50	25.90	25.80	26.38	---	29.34	30.30	---	33.89	35.88
15	31.79	30.68	28.51	25.90	25.89	26.28	26.97	29.43	30.48	---	33.89	35.96
16	31.52	30.65	28.54	25.90	25.91	26.35	27.17	29.43	---	---	33.97	36.05
17	31.40	30.69	28.51	25.89	25.99	26.35	27.40	29.48	---	---	34.06	36.06
18	31.35	30.89	28.34	25.91	25.99	26.26	27.60	29.66	---	---	34.15	36.06
19	31.36	30.90	28.31	25.98	25.99	26.14	27.69	29.77	---	---	34.41	35.95
20	31.44	30.84	28.34	25.98	25.97	26.16	27.86	29.85	---	---	34.48	35.86
21	31.59	30.69	28.32	26.03	25.71	26.48	27.86	29.86	---	---	34.48	35.91
22	31.59	30.69	28.35	26.11	25.65	26.74	27.56	29.29	---	---	34.37	35.96
23	31.40	30.91	28.32	26.17	25.73	26.85	27.65	29.29	---	---	34.48	36.06
24	31.35	30.91	28.21	26.17	25.81	26.86	27.78	29.29	---	---	34.66	36.13
25	31.45	30.60	27.95	26.10	25.85	26.86	27.75	29.05	---	---	34.73	36.20
26	31.45	30.34	27.96	26.10	25.94	26.90	27.89	29.21	---	---	34.86	36.20
27	31.22	30.34	27.95	26.03	26.07	26.85	28.08	29.34	---	---	34.98	36.11
28	31.06	30.01	27.96	26.08	26.09	26.71	28.13	29.67	---	33.12	35.02	36.20
29	31.03	29.12	28.03	26.07	26.12	26.44	27.86	29.94	---	33.20	35.01	36.21
30	---	28.68	27.99	26.10	---	26.30	27.44	30.02	---	33.34	35.07	36.07
31	---	---	27.88	26.11	---	26.39	---	30.02	---	33.36	35.07	---
MAX	32.00	31.90	28.87	27.96	26.13	26.90	28.13	30.02	30.48	33.36	35.07	36.21
CAL YR 2003		LOW 33.26										
WTR YR 2004		LOW 36.21										



394533084113800. Local Number, MT-6

LOCATION.—Latitude 39°45'33", longitude 84°11'38", Montgomery County, Hydrologic Unit 05080002, 3rd and Ludlow Street, Dayton, Ohio. Owner: City of Dayton

AQUIFER.—Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 8 in., depth 60 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 740 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 13.00 ft below land-surface datum.

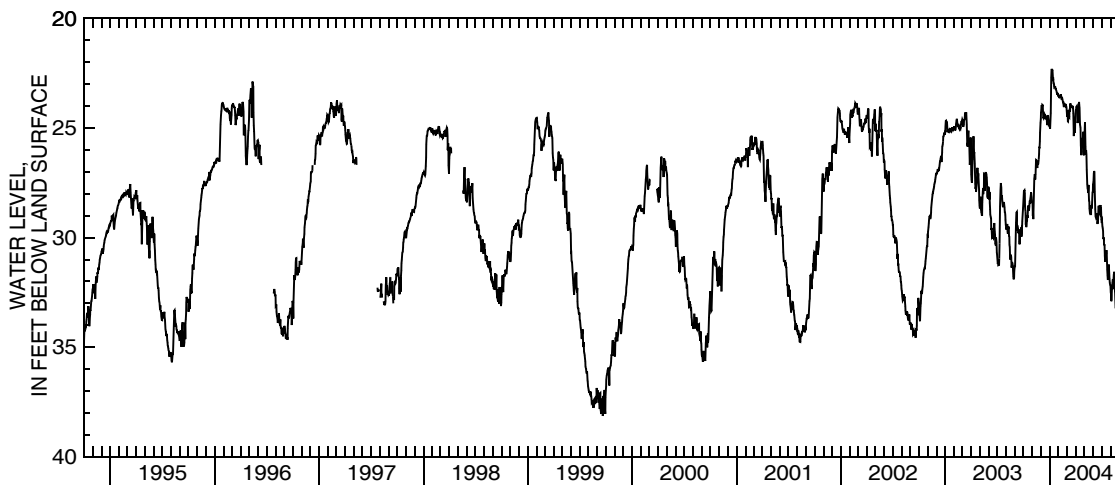
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—February 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 60.20 ft below land-surface datum, Oct. 2, 1970; minimum daily low, 21.23 ft below land-surface datum, Feb. 26, 1982.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.44	28.40	24.59	24.68	23.54	24.22	24.35	25.74	27.57	29.18	32.18	34.08
2	28.18	28.41	24.29	24.97	23.54	24.48	24.18	25.35	27.50	29.15	32.49	34.05
3	27.92	29.01	24.17	25.04	23.60	24.30	24.12	24.89	27.45	29.30	32.60	34.32
4	27.87	28.80	24.00	24.81	23.61	24.20	24.02	24.75	27.08	29.49	32.90	34.31
5	27.84	29.16	24.00	24.32	23.61	24.71	24.00	25.33	26.97	29.58	32.84	34.35
6	27.98	28.47	24.02	23.58	23.49	24.72	24.18	25.85	27.02	29.70	32.49	34.43
7	28.52	27.95	23.94	22.70	23.57	24.38	24.53	26.21	27.90	30.03	32.22	34.59
8	28.77	27.60	23.96	22.31	23.57	24.39	24.78	26.01	28.31	30.05	32.07	34.60
9	28.79	27.32	24.38	22.34	23.46	24.48	24.72	26.21	28.70	30.00	31.90	34.28
10	29.42	27.11	24.53	22.38	23.51	24.50	24.50	26.90	29.03	30.35	32.31	34.35
11	29.15	27.21	24.56	22.38	23.58	24.17	24.32	27.26	29.08	30.30	32.31	34.37
12	29.52	27.35	24.50	22.67	23.64	24.17	24.02	27.56	29.06	30.83	31.92	34.38
13	29.22	27.12	24.47	22.79	23.63	24.18	23.81	27.74	28.90	30.98	31.70	34.73
14	29.21	26.65	24.38	22.77	23.63	23.88	23.94	27.81	29.06	31.10	31.63	35.01
15	28.98	26.46	24.42	22.95	23.70	24.08	24.09	27.96	28.97	30.88	31.56	35.15
16	29.10	26.48	24.54	22.97	23.78	24.02	24.69	27.60	29.25	30.77	32.32	35.27
17	28.76	26.54	24.47	23.04	23.81	24.05	24.86	27.99	29.38	30.74	32.48	35.40
18	28.63	26.70	24.42	23.15	23.79	24.05	24.99	28.29	29.27	30.57	32.72	34.95
19	28.53	26.83	24.57	23.12	23.96	24.05	25.79	28.37	29.16	30.74	33.18	34.75
20	28.73	26.68	24.57	23.13	24.05	24.03	25.97	28.67	28.62	31.13	33.23	34.57
21	28.76	26.65	24.56	23.13	24.00	24.05	26.24	28.82	28.55	31.47	33.10	34.67
22	28.59	26.65	24.60	23.22	23.96	24.02	26.06	28.79	28.71	31.73	33.05	34.98
23	28.46	26.63	24.87	23.22	24.03	24.03	25.62	28.74	28.92	31.93	33.21	35.07
24	28.31	26.42	24.65	23.27	23.94	24.32	25.53	28.93	28.93	31.67	33.56	35.28
25	28.44	26.18	24.54	23.33	23.96	24.72	25.55	28.93	28.97	31.61	33.78	35.30
26	28.25	25.90	24.48	23.39	23.91	25.37	25.58	28.52	28.68	31.23	33.90	35.16
27	28.10	25.90	24.41	23.45	24.00	24.93	25.26	28.61	28.52	31.35	34.16	34.68
28	27.93	25.61	24.65	23.46	23.99	25.08	25.17	28.67	29.04	31.70	34.20	34.74
29	27.99	25.23	24.92	23.42	24.05	25.22	26.07	28.41	28.62	31.86	34.03	34.29
30	28.15	24.77	24.81	23.43	---	25.04	26.25	27.93	29.08	32.07	34.28	34.46
31	28.37	---	24.72	23.51	---	24.57	---	27.92	---	32.15	34.10	---
MAX	29.52	29.16	24.92	25.04	24.05	25.37	26.25	28.93	29.38	32.15	34.28	35.40
CAL YR 2003		LOW 31.90										
WTR YR 2004		LOW 35.40										



394811084095000. Local Number, MT-74

LOCATION.—Latitude 39°48'11", longitude 84°09'50", Montgomery County, Hydrologic Unit 05080002, in Dayton, Ohio. Owner: City of Dayton.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled test water table well, diameter 8 in., depth 100 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 750 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 4.0 ft above land-surface datum.

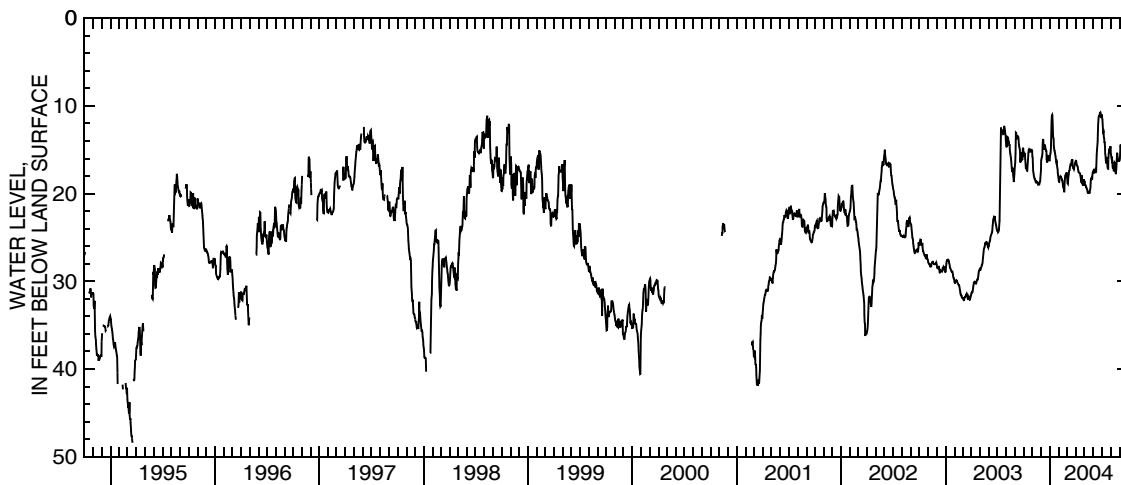
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water.

PERIOD OF RECORD.—April 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 60.50 ft below land-surface datum, Oct. 31 and Nov. 1, 1991; minimum daily low, 10.75 ft below land-surface datum, June 26, 2004.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.56	15.75	17.31	15.97	18.36	17.97	16.27	18.67	17.65	11.05	15.14	16.23
2	15.66	15.90	16.21	15.64	18.64	18.33	16.30	18.66	17.65	11.37	15.47	16.06
3	15.59	16.99	15.94	15.43	18.66	18.81	16.45	18.99	17.31	11.58	15.76	15.33
4	15.39	17.43	15.87	15.34	18.19	18.87	16.68	19.02	17.26	11.91	16.00	14.69
5	15.45	17.76	15.70	14.86	18.18	18.31	16.81	19.05	17.26	12.60	15.97	14.40
6	15.54	17.94	15.43	13.42	18.10	18.07	16.84	19.12	17.22	12.99	16.54	14.97
7	16.06	18.07	14.40	11.74	18.03	17.88	16.89	19.26	17.26	12.93	16.42	15.27
8	16.70	18.25	13.90	11.10	18.09	17.58	17.07	19.30	17.53	13.62	16.99	15.03
9	17.03	18.33	13.77	11.01	18.09	17.41	17.28	19.42	17.65	13.71	17.17	14.63
10	17.03	18.37	14.53	11.11	18.19	17.35	17.43	19.51	17.25	14.14	16.69	14.49
11	17.16	18.43	14.86	11.91	18.30	17.10	17.59	19.57	17.29	14.16	17.23	14.40
12	17.30	18.58	14.88	13.24	18.43	16.86	17.61	19.74	16.68	14.61	17.44	14.87
13	17.39	18.72	14.58	13.57	18.49	16.75	17.64	19.90	15.60	15.39	17.27	15.15
14	17.40	18.72	14.50	13.77	18.54	16.62	17.65	19.90	15.01	15.85	17.01	16.25
15	16.91	18.61	14.50	14.49	18.72	16.63	17.68	19.93	14.82	16.23	16.45	16.52
16	16.28	18.63	14.67	14.88	19.08	16.66	17.80	19.95	14.10	16.36	16.52	16.22
17	15.76	18.70	14.88	15.10	19.26	16.24	17.92	19.93	13.20	16.56	17.01	16.02
18	15.36	18.70	14.95	15.12	19.32	16.17	18.16	19.92	12.15	16.09	17.58	16.06
19	15.03	18.82	15.10	15.31	19.51	16.18	18.43	19.93	11.56	15.82	17.79	16.08
20	14.99	18.88	15.16	15.58	19.84	16.09	18.67	19.74	11.31	16.53	17.36	16.16
21	14.94	18.79	16.06	15.78	19.74	16.87	18.75	19.57	11.16	17.01	17.09	16.59
22	15.01	18.76	16.36	16.09	18.60	17.01	17.92	19.38	11.13	17.14	16.28	16.91
23	15.14	18.81	16.45	16.21	18.22	17.08	18.45	18.85	11.08	17.16	15.72	17.07
24	15.21	18.97	15.97	16.41	17.95	17.16	18.66	18.30	10.80	16.11	15.33	17.22
25	15.20	18.97	15.72	16.36	17.83	17.22	18.78	18.25	10.77	15.48	15.84	17.75
26	15.18	18.78	15.73	16.71	17.82	17.05	18.91	18.34	10.75	15.16	16.26	17.82
27	15.06	18.69	15.87	16.95	17.76	16.84	19.09	18.36	10.92	14.85	16.36	17.94
28	15.14	18.54	16.00	17.28	17.73	16.74	18.88	18.33	11.29	15.04	16.06	18.11
29	15.17	18.22	16.05	17.68	17.59	16.59	18.39	17.94	11.38	15.37	16.17	18.66
30	15.10	17.76	16.21	17.94	---	16.47	18.61	17.59	10.98	15.17	16.29	18.84
31	15.21	---	16.20	18.18	---	16.33	---	17.50	---	14.59	16.29	---
MAX	17.40	18.97	17.31	18.18	19.84	18.87	19.09	19.95	17.65	17.16	17.79	18.84
CAL YR 2003		LOW 32.15										
WTR YR 2004		LOW 19.95										



Ground-Water Records—Muskingum County

395804081593200. Local Number, MU-1A

LOCATION.—Latitude 39°58'04", longitude 81°59'32", Muskingum County, Hydrologic Unit 05040004, 2.2 mi northeast of the "Y" bridge in Zanesville, Ohio.
 Owner: City of Zanesville.

AQUIFER.—Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.—Drilled unused water table well, diameter 6 in., depth 109 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 700 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 4.48 ft above land-surface datum.

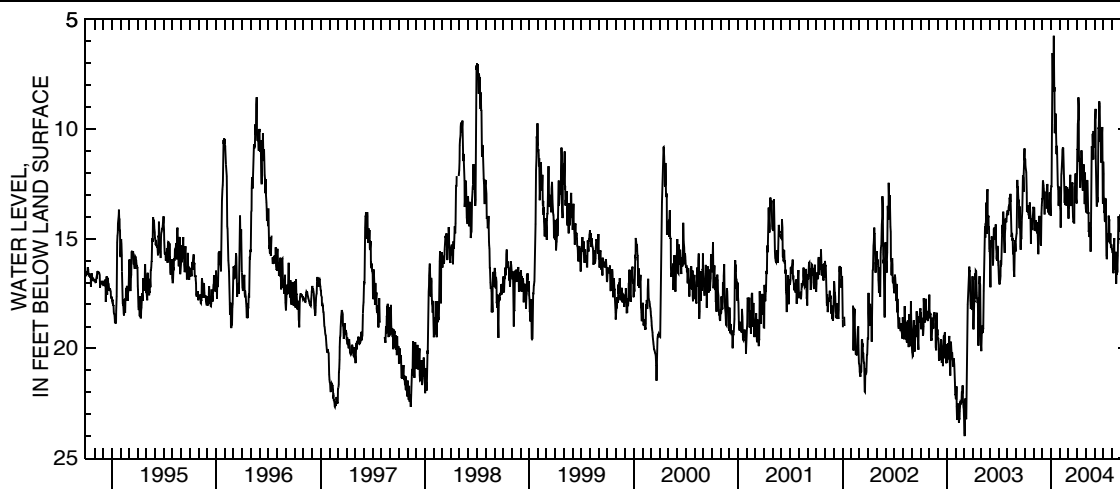
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR. Water level affected by nearby wells and by stage of the Muskingum River. Prior to water year 1978, well depth reported as 132 ft.

PERIOD OF RECORD.—June 1952 to current year. This well replaced Mu-1, which has continuous record from May 1942 to June 1952.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 37.25 ft below land-surface datum, Aug. 1 and 2, 1954; minimum daily low, 5.75 ft below land-surface datum, Jan. 11, 2004.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.42	13.55	13.15	12.74	13.28	13.22	11.82	13.22	10.23	13.41	15.47	15.23
2	11.34	13.64	13.20	12.62	13.59	14.09	10.95	13.64	10.64	11.49	15.50	15.20
3	11.39	13.58	12.67	12.62	13.70	13.46	10.95	13.79	9.54	12.05	15.62	13.67
4	11.70	13.90	12.35	11.72	14.50	13.64	9.76	13.80	9.51	13.07	15.65	14.58
5	11.81	14.65	12.45	9.75	13.53	13.11	9.56	13.22	9.08	13.83	15.44	14.31
6	11.97	14.54	12.57	6.54	12.09	12.99	8.56	12.62	11.24	13.74	16.50	14.79
7	12.45	14.39	12.71	6.75	12.03	12.74	8.96	12.32	12.24	14.15	16.58	16.25
8	12.92	14.30	12.99	7.98	11.73	12.09	11.15	12.44	12.83	14.24	15.40	16.04
9	13.79	14.16	13.85	8.12	11.28	12.72	11.49	12.72	13.53	13.82	14.97	14.88
10	13.68	14.63	13.90	6.90	10.95	12.75	11.33	13.85	13.49	13.19	15.93	13.75
11	13.47	14.63	12.85	5.75	10.88	13.26	11.78	13.80	13.11	13.20	16.41	11.69
12	13.70	14.49	---	8.30	10.88	13.51	12.67	14.69	13.25	15.09	16.06	11.54
13	13.79	14.25	---	8.09	10.85	12.92	12.21	14.61	13.34	15.75	16.34	11.72
14	13.62	14.76	---	10.20	11.30	13.40	12.20	14.35	11.99	15.93	16.28	11.67
15	13.94	14.46	13.65	9.78	11.51	12.50	11.87	14.93	9.93	15.90	15.60	12.08
16	13.70	14.96	13.02	10.17	12.39	12.44	12.05	14.24	9.98	14.90	17.06	11.85
17	14.10	15.71	12.99	9.30	13.08	13.51	10.97	14.64	9.29	14.78	16.43	12.21
18	13.86	15.57	12.69	9.42	13.37	14.00	11.87	15.56	8.74	15.05	16.64	11.82
19	13.35	14.69	12.51	10.22	12.95	14.26	12.18	15.59	8.84	15.12	16.13	11.00
20	13.79	14.16	12.56	11.15	13.41	14.24	12.41	14.34	9.00	14.60	16.55	11.31
21	13.97	14.00	13.55	10.77	13.47	14.28	12.80	13.60	10.58	13.95	16.20	10.52
22	15.00	13.97	13.37	10.82	12.62	14.28	12.67	12.20	10.09	14.24	15.78	11.10
23	15.23	14.37	13.82	11.51	12.67	12.74	12.26	10.79	10.41	14.12	14.50	11.03
24	14.13	14.28	13.55	11.78	13.49	12.62	11.97	10.91	10.98	15.15	13.98	10.64
25	14.19	14.22	13.89	12.56	13.28	12.65	11.61	11.17	11.54	15.17	14.03	11.63
26	14.06	15.24	13.80	12.78	12.98	12.75	12.35	10.22	10.17	14.88	14.67	11.39
27	14.61	15.33	13.56	13.44	12.66	12.03	12.80	10.77	10.42	14.75	14.30	12.50
28	14.54	14.49	12.89	13.50	12.96	12.92	13.43	11.39	9.91	15.25	14.13	11.33
29	14.07	13.83	13.73	13.28	12.74	13.25	11.99	10.09	12.03	15.42	14.37	11.90
30	13.88	13.47	13.79	13.00	---	13.32	12.67	10.22	13.17	15.25	13.90	11.97
31	13.58	---	13.97	12.63	---	13.40	---	10.85	---	15.33	14.06	---
MAX	15.23	15.71	13.97	13.50	14.50	14.28	13.43	15.59	13.53	15.93	17.06	16.25
CAL YR 2003		LOW 24.00										
WTR YR 2004		LOW 17.06										



Ground-Water Records—Pickaway County

393327082571600. Local Number, PK-7

LOCATION.—Latitude 39°33'27", longitude 82°57'16", Pickaway County, Hydrologic Unit 05060002, 3.1 mi south of Circleville, Ohio. Owner: State of Ohio.
 AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled test artesian well, diameter 6 in., depth drilled 172 ft, present depth 169 ft, cased to 164 ft.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 705 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter, 3.00 ft above land-surface datum.

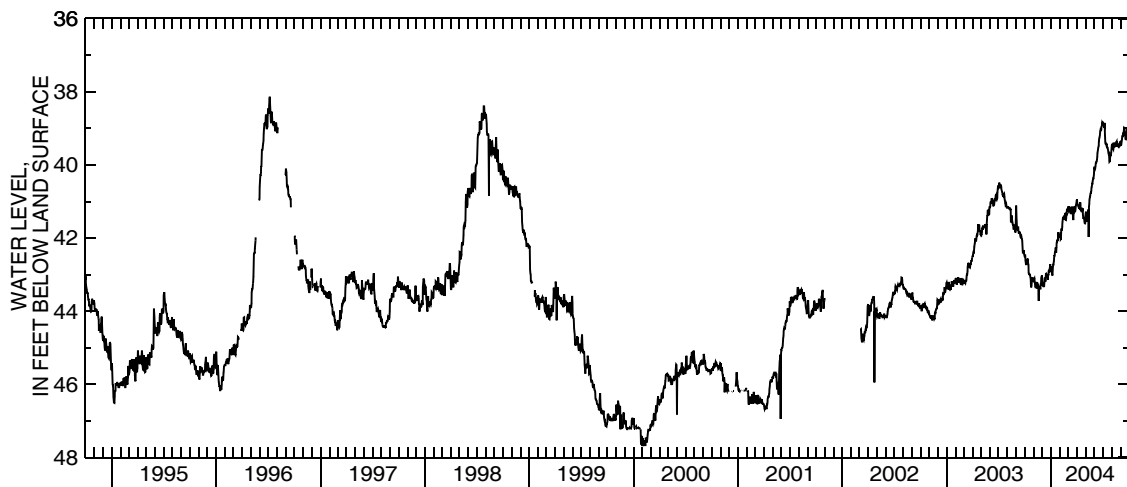
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—July 1972 to October 1982 continuous, November 1982 to April 1985 periodic, continuous thereafter.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 54.80 ft below land-surface datum, Sept. 15, 1977; minimum daily low, 38.13 ft below land-surface datum, July 7, 1996.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42.50	43.18	43.19	42.83	41.94	41.14	40.94	41.38	40.07	38.82	39.45	39.45
2	42.50	43.17	43.27	42.77	41.90	41.26	41.06	41.28	40.10	38.88	39.44	39.44
3	42.49	43.11	43.30	42.88	41.92	41.27	41.07	41.41	40.12	38.89	39.47	39.44
4	42.61	43.10	43.26	42.88	42.03	41.23	41.10	41.42	40.09	38.86	39.45	39.41
5	42.70	43.19	43.25	43.01	42.02	41.13	41.13	41.42	40.03	38.96	39.55	39.31
6	42.74	43.23	43.34	43.01	41.76	41.20	41.14	41.46	39.94	38.97	39.57	39.22
7	42.66	43.32	43.30	42.91	41.76	41.20	41.16	41.55	39.94	38.85	39.52	39.22
8	42.61	43.35	43.30	42.77	41.79	41.16	41.18	41.52	39.91	39.18	39.41	39.22
9	42.61	43.35	43.18	42.73	41.69	41.28	41.19	41.28	39.90	39.36	39.41	39.18
10	42.59	43.30	43.08	42.73	41.58	41.32	41.14	41.22	39.86	39.41	39.42	39.20
11	42.59	43.22	43.10	42.63	41.50	41.32	41.08	41.26	39.77	39.41	39.45	39.19
12	42.56	43.20	43.17	42.49	41.46	41.28	41.02	41.97	39.68	39.42	39.45	39.06
13	42.71	43.36	43.19	42.49	41.46	41.29	41.05	41.14	39.60	39.44	39.49	38.98
14	42.74	43.36	42.98	42.47	41.42	41.17	41.23	41.07	39.54	39.42	39.48	38.99
15	42.95	43.30	42.97	42.39	41.41	41.14	41.25	40.96	39.50	39.50	39.47	39.04
16	42.99	43.28	42.98	42.37	41.48	41.21	41.27	40.88	39.48	39.53	39.43	39.15
17	43.00	43.32	43.01	42.30	41.48	41.35	41.27	40.84	39.36	39.53	39.36	39.20
18	42.99	43.30	42.99	42.25	41.47	41.38	41.26	40.78	39.28	39.56	39.35	39.29
19	43.00	43.72	43.07	42.40	41.37	41.51	41.22	40.76	39.24	39.61	39.48	39.30
20	43.05	43.39	43.12	42.26	41.31	41.41	41.23	40.76	39.20	39.67	39.48	39.28
21	43.07	43.39	43.12	42.14	41.50	41.16	41.19	40.73	39.10	39.69	39.47	39.22
22	43.12	43.35	43.00	42.09	41.51	41.16	41.34	40.62	39.05	39.68	39.46	39.10
23	43.27	43.34	43.02	42.09	41.44	41.17	41.44	40.58	39.06	39.83	39.45	39.05
24	43.35	43.38	42.90	42.05	41.33	41.17	41.47	40.51	39.05	39.91	39.50	39.02
25	43.30	43.38	42.89	42.05	41.34	41.28	41.42	40.51	39.04	39.89	39.51	39.01
26	43.17	43.27	42.90	41.84	41.24	41.27	41.48	40.45	38.95	39.75	39.49	39.02
27	43.12	43.27	42.88	41.87	41.25	41.21	41.56	40.40	38.92	39.73	39.47	39.06
28	43.07	43.10	42.80	41.98	41.25	41.11	41.59	40.37	38.84	39.76	39.45	39.16
29	43.14	43.06	42.71	42.00	41.20	41.08	41.60	40.37	38.85	39.73	39.38	39.25
30	43.15	43.02	42.91	41.95	---	41.04	41.58	40.27	38.84	39.66	39.37	39.35
31	43.17	---	42.91	41.95	---	40.97	---	40.07	---	39.55	39.44	---
MAX	43.35	43.72	43.34	43.01	42.03	41.51	41.60	41.97	40.12	39.91	39.57	39.45
CAL YR 2003		LOW 43.72										
WTR YR 2004		LOW 43.72										



393402082572500. Local Number, PK-4

LOCATION.—Latitude 39°34'02", longitude 82°57'25", Pickaway County, Hydrologic Unit 05060002, 2 mi south of Circleville, Ohio. Owner: E.I. DuPont DeNemours.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled test water table well, diameter 6 in., depth 136 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 707 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 3.50 ft above land-surface datum.

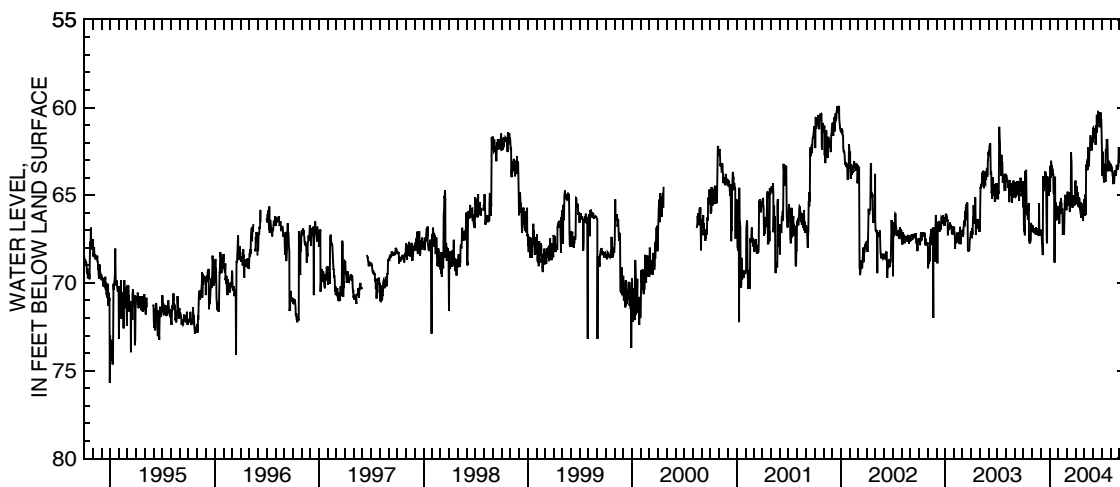
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—January 1960 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 80.15 ft below land-surface datum, Nov. 3, 1972; minimum daily low, 47.40 ft below land-surface datum, Feb. 25, 1960.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65.70	66.94	67.10	64.19	65.64	65.19	64.17	65.25	61.20	61.34	63.63	62.43
2	64.95	66.81	67.11	64.07	66.24	65.49	64.73	65.49	61.16	62.31	63.23	63.14
3	66.71	67.08	67.13	64.80	65.97	65.43	64.88	66.17	61.23	62.96	63.51	62.54
4	66.92	66.74	67.14	63.33	66.64	64.80	64.63	64.97	61.50	63.90	63.30	62.60
5	66.88	67.11	67.44	64.01	66.12	65.00	64.50	65.61	61.20	63.26	63.51	62.29
6	67.29	66.93	67.76	63.04	65.61	65.61	65.02	65.38	61.64	62.52	63.68	63.39
7	63.62	67.10	67.73	63.11	65.42	65.46	65.31	66.12	61.76	63.56	63.43	62.67
8	63.83	67.13	68.42	63.90	65.42	65.16	65.52	63.26	61.58	63.96	63.83	62.36
9	63.92	67.14	63.92	63.29	66.06	64.85	64.85	63.59	61.44	64.10	63.81	62.10
10	64.07	67.16	64.16	63.57	65.18	65.49	65.63	63.47	62.12	64.27	63.98	62.45
11	63.56	66.88	64.37	63.51	65.51	65.52	65.12	63.18	61.73	63.99	64.37	61.83
12	64.07	66.99	64.77	63.59	65.51	65.94	65.70	63.04	61.02	64.13	64.16	61.73
13	66.05	67.10	64.50	63.83	65.91	65.67	65.12	63.06	61.34	63.71	64.01	61.82
14	66.13	67.07	64.37	63.79	65.82	64.83	65.19	63.56	60.43	63.21	64.35	62.13
15	66.08	66.84	64.38	64.63	65.76	65.08	65.24	62.29	61.44	64.25	64.01	62.29
16	66.03	67.25	63.66	64.94	67.25	62.55	65.69	63.38	60.41	62.42	63.60	63.48
17	66.41	67.07	64.38	64.38	67.07	62.88	65.79	62.54	60.45	62.42	63.84	62.85
18	65.87	66.90	63.68	68.79	66.48	63.09	65.93	63.26	60.81	62.42	63.59	63.43
19	65.86	67.11	64.16	68.85	66.48	65.14	66.12	62.68	60.27	61.80	63.84	63.77
20	65.45	67.23	64.77	63.95	66.30	65.21	65.40	62.40	60.29	61.98	63.89	63.41
21	67.62	67.10	65.06	65.44	67.25	65.72	66.30	62.48	60.87	61.80	63.79	62.60
22	67.58	67.27	67.62	65.87	65.82	65.28	65.85	62.06	60.56	62.13	63.35	62.21
23	67.68	67.17	67.74	65.43	65.30	65.06	65.49	61.59	60.27	63.36	63.36	62.93
24	67.76	67.32	64.04	66.45	65.83	65.57	65.54	61.95	61.13	63.64	63.56	62.28
25	67.67	65.46	63.93	65.66	65.42	65.02	66.02	62.01	60.63	63.24	63.51	59.79
26	67.69	66.58	64.35	65.60	64.98	65.06	66.05	62.03	60.29	63.47	63.33	60.47
27	67.55	67.26	64.33	65.76	65.72	65.07	66.47	62.16	60.41	63.04	63.23	60.15
28	66.58	67.31	64.16	66.41	65.37	65.34	66.12	62.45	60.30	63.23	63.53	59.94
29	66.72	67.25	64.46	65.99	65.87	65.58	65.99	62.16	60.62	63.49	63.03	60.14
30	66.68	66.96	65.04	65.83	---	64.56	65.96	61.67	60.69	63.60	62.28	60.53
31	67.02	---	64.27	65.76	---	64.29	---	61.99	---	63.15	62.57	---
MAX	67.76	67.32	68.42	68.85	67.25	65.94	66.47	66.17	62.12	64.27	64.37	63.77
CAL YR 2003		LOW 68.42										
WTR YR 2004		LOW 68.85										



393637082572200. Local Number, PK-6A

LOCATION.—Latitude 39°36'37", longitude 82°57'22", Pickaway County, Hydrologic Unit 05060002, at Circleville, Ohio. Owner: City of Circleville.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled observation well, diameter 6 in., depth 110 ft, cased to 105 ft.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 670 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 10.00 ft above land-surface datum.

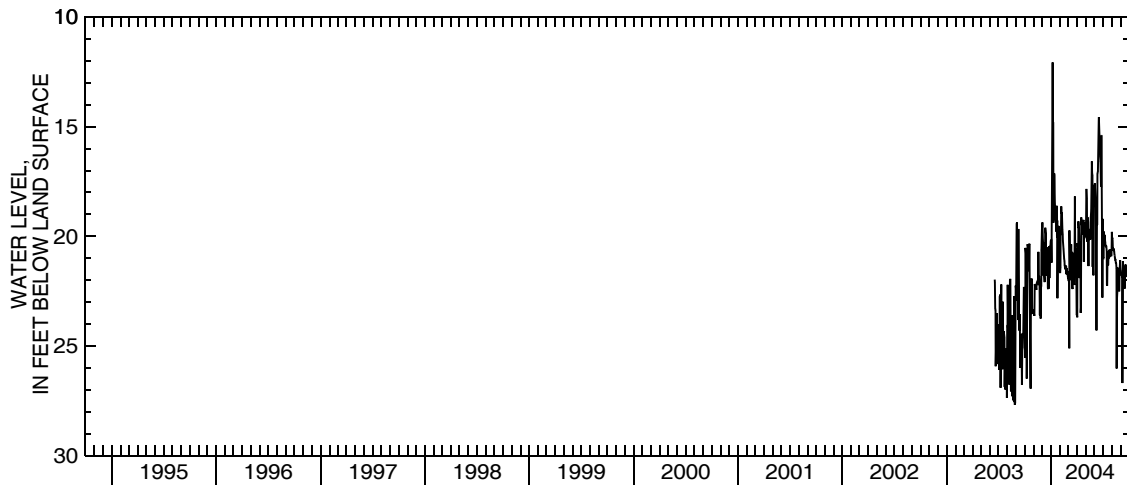
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water.

PERIOD OF RECORD.—June 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 27.65 ft below land-surface datum, Aug. 27 and 28, 2003; minimum daily low, 12.07 ft below land-surface datum, Jan. 7, 2004.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.06	23.49	19.57	20.19	21.61	21.94	23.57	19.98	17.66	19.21	19.80	21.54
2	25.18	23.51	19.37	20.18	21.67	21.92	23.70	19.92	17.71	20.98	20.10	21.65
3	25.55	23.59	19.78	21.21	21.42	21.75	20.31	18.96	17.59	20.99	20.10	21.70
4	20.53	23.63	20.15	20.34	19.81	21.63	20.65	17.85	17.87	19.78	20.22	21.78
5	20.77	22.18	20.36	16.72	19.84	25.11	20.84	18.09	18.25	20.23	20.66	21.81
6	24.79	22.24	21.80	12.56	18.64	19.74	19.32	18.26	18.69	19.93	20.63	21.89
7	21.01	22.27	20.28	12.07	18.97	21.47	19.62	20.25	20.75	19.97	20.58	26.69
8	26.49	22.33	21.78	14.79	18.90	21.57	19.59	19.13	24.29	20.13	20.60	21.69
9	22.99	22.38	21.95	14.82	19.35	21.97	19.99	19.31	20.95	20.28	20.71	21.14
10	21.08	22.39	22.09	19.39	19.69	21.82	21.91	19.35	19.48	20.38	20.81	21.57
11	20.36	22.44	20.44	18.62	19.91	21.93	20.24	21.36	19.46	20.49	20.89	21.38
12	20.43	22.14	19.61	17.14	20.19	20.37	21.63	19.67	17.16	20.43	20.98	21.45
13	20.53	22.10	19.72	17.24	20.40	22.01	21.80	19.74	17.03	20.51	21.07	21.54
14	20.58	22.14	19.89	18.13	20.58	20.71	23.49	19.95	16.49	20.66	21.07	21.57
15	21.59	22.12	21.81	18.49	20.83	22.35	23.25	20.12	15.94	22.20	21.22	22.39
16	21.56	22.13	20.51	18.70	21.03	22.38	19.14	20.10	14.73	22.25	21.24	21.69
17	20.36	22.19	20.59	18.93	21.13	22.40	19.45	20.08	14.57	20.85	21.46	21.69
18	20.34	20.71	20.53	19.25	21.31	20.88	19.52	20.14	15.13	20.68	26.03	21.29
19	24.41	22.23	20.57	19.38	21.43	20.79	19.69	19.13	15.52	21.32	22.89	21.41
20	25.46	21.85	20.79	19.80	21.49	20.79	19.79	19.07	15.95	20.97	22.58	21.53
21	26.88	21.82	22.37	18.61	21.50	22.10	19.91	18.80	16.36	21.01	21.43	21.65
22	26.95	22.17	22.41	20.08	21.34	22.21	19.93	17.87	16.60	20.92	22.36	21.75
23	23.41	23.60	20.70	19.28	21.39	22.19	19.33	16.59	17.05	20.61	22.35	21.76
24	23.49	22.25	22.39	22.83	21.73	20.07	19.25	17.14	17.70	20.90	22.41	21.83
25	21.93	22.30	20.75	19.59	21.46	18.19	21.16	17.22	17.71	20.91	22.47	21.35
26	22.01	23.75	20.45	20.88	21.49	20.66	19.37	21.40	15.40	20.87	21.56	21.86
27	23.51	22.35	21.91	19.57	21.61	20.69	19.56	17.68	20.11	20.70	22.51	21.92
28	23.51	22.27	20.51	19.53	21.71	20.56	19.71	21.53	22.34	20.59	21.58	26.68
29	23.35	20.62	20.47	21.21	21.85	20.60	19.87	21.79	22.80	20.77	21.36	21.90
30	23.39	19.69	20.49	20.01	---	22.23	20.00	18.37	20.50	20.91	21.09	22.27
31	23.49	---	20.20	20.20	---	23.60	---	18.32	---	20.84	21.46	---
MAX	26.95	23.75	22.41	22.83	21.85	25.11	23.70	21.79	24.29	22.25	26.03	26.69
CAL YR 2003		LOW 27.65										
WTR YR 2004		LOW 26.95										



394503082583800. Local Number, PK-10

LOCATION.—Latitude 39°45'03", longitude 82°58'38", Pickaway County, Hydrologic Unit 05060002, 3 mi north of Ashville, Ohio. Owner: City of Columbus.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused water table well, diameter 6 in., depth 108 ft, cased to 103 ft.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 690 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

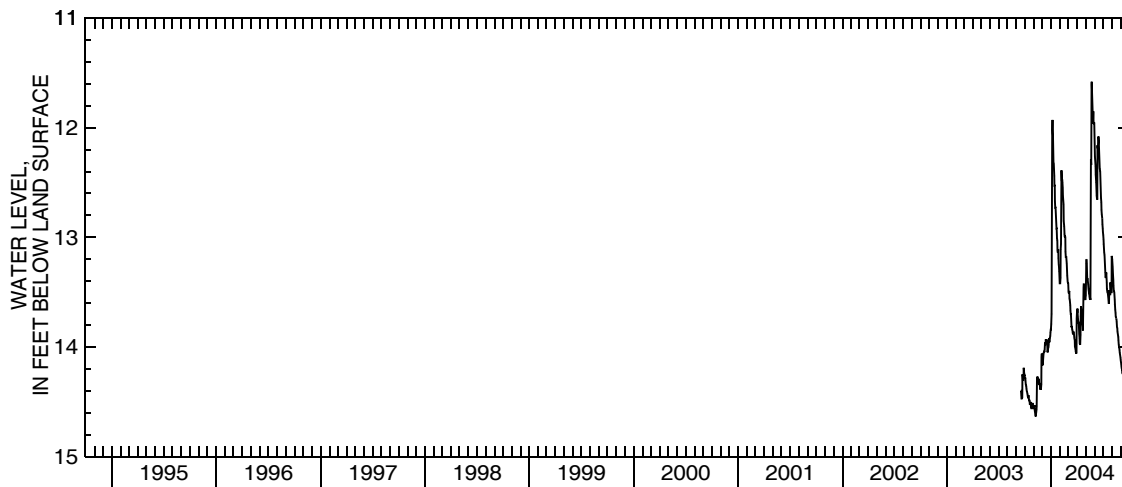
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water.

PERIOD OF RECORD.—September 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 14.63ft below land-surface datum, Nov. 8 and 9, 2003; minimum daily low, 11.58 ft below land-surface datum, May 23, 2004.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.26	14.56	14.14	13.84	13.42	13.42	13.68	13.56	12.06	12.95	13.17	14.12
2	14.29	14.55	14.16	13.79	13.42	13.49	13.68	13.53	12.16	12.98	13.20	14.14
3	14.28	14.54	14.16	13.70	13.37	13.51	13.65	13.24	12.26	13.02	13.25	14.16
4	14.31	14.53	14.14	13.39	13.11	13.50	13.72	13.20	12.31	13.06	13.27	14.18
5	14.34	14.58	14.10	12.05	13.06	13.49	13.77	13.24	12.35	13.14	13.34	14.20
6	14.36	14.59	14.06	11.93	12.78	13.56	13.78	13.28	12.43	13.16	13.39	14.21
7	14.38	14.61	14.05	12.02	12.39	13.57	13.78	13.38	12.50	13.20	13.44	14.24
8	14.40	14.63	14.04	12.08	12.48	13.62	13.82	13.38	12.57	13.27	13.49	14.24
9	14.41	14.63	14.04	12.23	12.48	13.67	13.88	13.39	12.62	13.32	13.50	14.15
10	14.42	14.60	14.02	12.32	12.50	13.70	13.92	13.43	12.65	13.36	13.53	14.18
11	14.43	14.57	13.96	12.33	12.55	13.70	13.97	13.47	12.65	13.37	13.57	14.20
12	14.45	14.54	13.98	12.44	12.62	13.76	13.98	13.48	12.16	13.32	13.61	14.24
13	14.46	14.29	13.98	12.53	12.66	13.82	13.89	13.51	12.19	13.35	13.66	14.26
14	14.44	14.28	13.93	12.53	12.70	13.81	13.72	13.52	12.13	13.41	13.69	14.27
15	14.47	14.27	13.97	12.67	12.85	13.84	13.63	13.54	12.08	13.47	13.72	14.28
16	14.48	14.29	13.94	12.73	12.90	13.85	13.66	13.56	12.12	13.49	13.74	14.29
17	14.49	14.32	13.94	12.73	12.97	13.87	13.72	13.56	12.15	13.50	13.75	14.29
18	14.49	14.30	13.94	12.76	12.99	13.88	13.76	13.57	12.24	13.50	13.77	14.22
19	14.52	14.29	13.98	12.85	12.99	13.88	13.79	12.97	12.32	13.54	13.82	14.25
20	14.52	14.34	14.05	12.92	13.00	13.86	13.80	12.29	12.37	13.57	13.83	14.26
21	14.50	14.33	14.04	12.92	13.13	13.87	13.81	12.34	12.40	13.60	13.86	14.29
22	14.52	14.34	14.01	13.01	13.18	13.91	13.85	11.61	12.51	13.60	13.88	14.31
23	14.54	14.34	14.00	13.03	13.18	13.93	13.64	11.58	12.57	13.48	13.91	14.33
24	14.56	14.38	13.98	13.12	13.20	13.94	13.46	11.72	12.64	13.52	13.94	14.34
25	14.56	14.39	13.92	13.14	13.24	14.00	13.43	11.83	12.68	13.52	13.98	14.36
26	14.56	14.38	13.95	13.11	13.28	14.01	13.43	11.89	12.75	13.52	14.00	14.37
27	14.54	14.38	13.95	13.19	13.35	14.02	13.49	11.96	12.79	13.41	14.01	14.37
28	14.51	14.34	13.92	13.25	13.39	14.04	13.52	11.85	12.83	13.46	14.03	14.40
29	14.53	14.09	13.90	13.26	13.41	14.06	13.56	11.94	12.88	13.48	14.05	14.42
30	14.54	14.06	13.87	13.31	---	14.05	13.57	11.96	12.92	13.50	14.08	14.43
31	14.56	---	13.84	13.39	---	13.74	---	11.96	---	13.50	14.10	---
MAX	14.56	14.63	14.16	13.84	13.42	14.06	13.98	13.57	12.92	13.60	14.10	14.43
CAL YR 2003		LOW 14.63										
WTR YR 2004		LOW 14.63										



394503082583801. Local Number, PK-11

LOCATION.—Latitude 39°45'03", longitude 82°58'38", Pickaway County, Hydrologic Unit 05060002, 3 mi north of Ashville, Ohio. Owner: City of Columbus.
 AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused water table well, diameter 6 in., depth 39.5 ft, cased to 34.5 ft.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 690 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

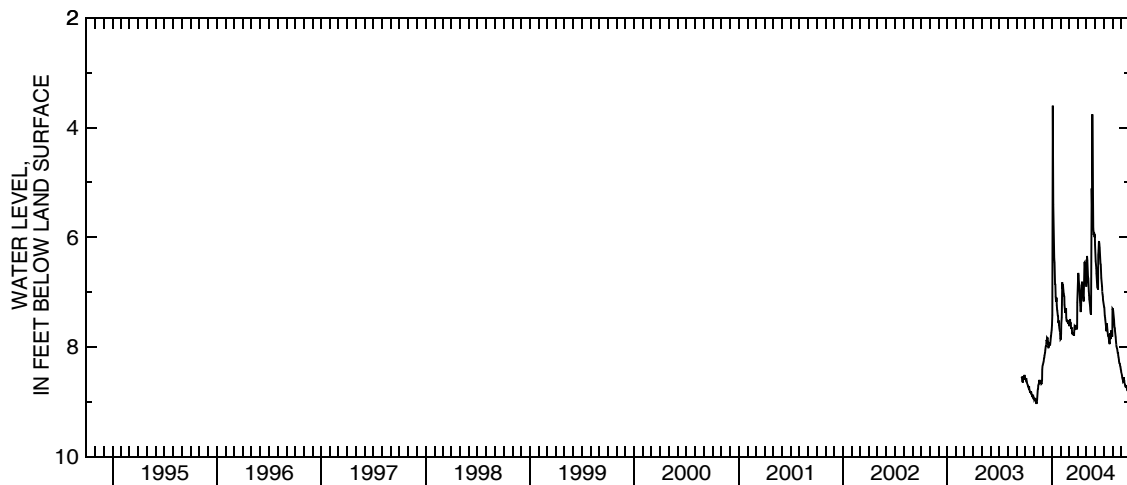
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water.

PERIOD OF RECORD.—September 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 9.04 ft below land-surface datum, Nov. 9, 2003; minimum daily low, 3.60 ft below land-surface datum, Jan. 5, 2004.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
 DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.58	8.96	8.32	7.69	7.86	7.51	6.87	6.90	6.14	7.22	7.30	8.47
2	8.60	8.95	8.31	7.60	7.85	7.59	6.74	6.82	6.28	7.26	7.31	8.50
3	8.58	8.94	8.29	7.42	7.76	7.62	6.65	6.46	6.43	7.28	7.34	8.53
4	8.57	8.93	8.26	5.77	7.58	7.56	6.70	6.34	6.50	7.34	7.36	8.56
5	8.61	8.96	8.21	3.60	7.46	7.49	6.81	6.42	6.57	7.43	7.45	8.58
6	8.64	8.98	8.19	4.78	7.20	7.56	6.84	6.54	6.66	7.47	7.51	8.60
7	8.66	9.00	8.16	5.40	6.82	7.56	6.88	6.72	6.76	7.50	7.58	8.63
8	8.68	9.02	8.13	5.75	6.94	7.57	7.01	6.75	6.86	7.58	7.65	8.62
9	8.70	9.04	8.10	6.16	6.88	7.64	7.15	6.84	6.92	7.64	7.67	8.55
10	8.71	9.01	8.06	6.39	6.88	7.67	7.24	6.98	6.94	7.70	7.71	8.60
11	8.72	8.96	7.99	6.46	6.96	7.64	7.34	7.06	6.94	7.71	7.77	8.62
12	8.74	8.92	7.98	6.70	7.02	7.71	7.36	7.13	6.32	7.57	7.82	8.66
13	8.75	8.78	7.96	6.85	7.06	7.76	7.25	7.20	6.24	7.60	7.90	8.68
14	8.72	8.76	7.87	6.86	7.08	7.74	7.05	7.26	6.09	7.68	7.96	8.70
15	8.77	8.71	7.89	7.08	7.23	7.78	6.88	7.31	6.07	7.74	8.00	8.72
16	8.80	8.68	7.83	7.16	7.30	7.74	6.81	7.38	6.12	7.79	8.02	8.73
17	8.82	8.67	7.84	7.16	7.36	7.75	6.91	7.40	6.19	7.79	8.03	8.73
18	8.82	8.64	7.84	7.10	7.38	7.78	6.97	7.40	6.31	7.80	8.05	8.70
19	8.83	8.60	7.91	7.24	7.32	7.78	7.06	5.48	6.43	7.84	8.11	8.73
20	8.84	8.63	8.01	7.32	7.29	7.70	7.08	5.11	6.48	7.90	8.11	8.75
21	8.81	8.62	8.01	7.34	7.46	7.63	7.10	5.45	6.50	7.93	8.16	8.78
22	8.84	8.62	7.99	7.42	7.52	7.64	7.17	3.76	6.66	7.95	8.19	8.79
23	8.86	8.62	7.96	7.44	7.52	7.62	6.84	4.69	6.74	7.75	8.23	8.81
24	8.89	8.65	7.94	7.55	7.53	7.60	6.58	5.29	6.84	7.82	8.26	8.82
25	8.90	8.66	7.95	7.56	7.54	7.63	6.46	5.62	6.90	7.84	8.30	8.85
26	8.91	8.67	7.97	7.52	7.51	7.64	6.45	5.83	6.99	7.84	8.31	8.86
27	8.89	8.66	7.94	7.60	7.55	7.64	6.60	5.96	7.04	7.70	8.33	8.86
28	8.87	8.60	7.88	7.66	7.58	7.66	6.72	5.90	7.08	7.74	8.36	8.88
29	8.91	8.41	7.82	7.69	7.56	7.68	6.82	5.98	7.14	7.77	8.37	8.90
30	8.92	8.34	7.80	7.74	---	7.65	6.86	5.99	7.18	7.80	8.41	8.92
31	8.94	---	7.74	7.82	---	7.19	---	5.98	---	7.80	8.44	---
MAX	8.94	9.04	8.32	7.82	7.86	7.78	7.36	7.40	7.18	7.95	8.44	8.92
CAL YR 2003		LOW 9.04										
WTR YR 2004		LOW 9.04										



394742083094800. Local Number, PK-9

LOCATION.—Latitude 39°47'42", longitude 83°09'48", Pickaway County, Hydrologic Unit 05060002, at Pickaway Correctional Institute near Orient, Ohio.

Owner: State of Ohio.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused water table well, diameter 8 in., depth 45 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 770 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 4.00 ft above land-surface datum.

REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water.

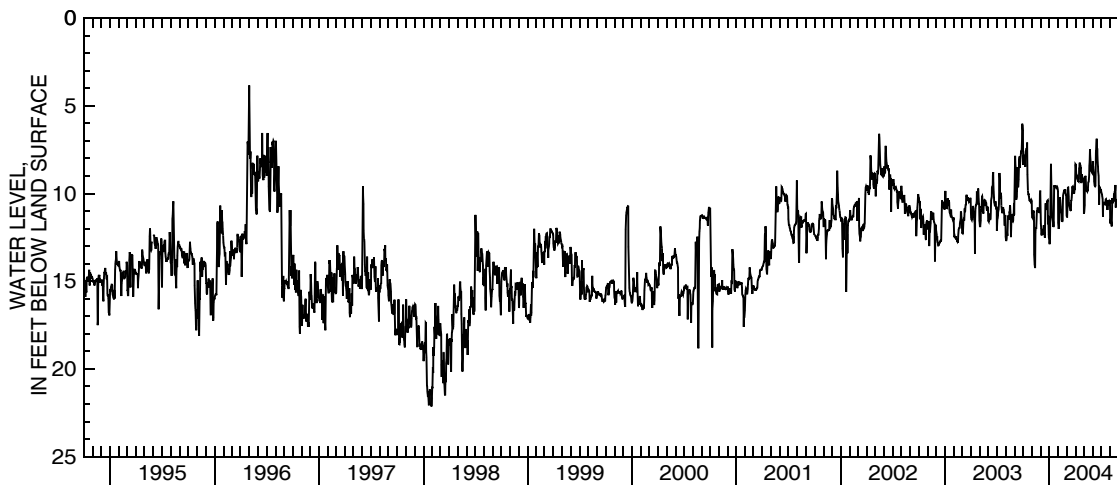
PERIOD OF RECORD.—September 1986 to current year.

REVISIONS.—Water levels published for the period July 2, 1993, to September 30, 1994, are in error. Depth to water surface values are 1 ft less than reported.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 26.10 ft below land-surface datum, Dec. 23, 1987; minimum daily low, 0.90 ft below land-surface datum, Mar. 17, 1991.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.37	11.12	11.43	12.80	11.67	11.30	8.33	11.16	8.39	9.96	11.70	12.66
2	7.86	11.36	11.72	12.90	12.02	11.34	8.36	11.06	8.48	10.01	11.45	12.18
3	7.85	11.42	12.02	12.67	11.92	11.34	8.51	10.67	8.64	10.06	11.61	11.97
4	7.88	11.27	12.30	11.46	11.61	10.77	8.88	9.14	8.78	10.14	11.60	11.81
5	7.97	11.04	12.39	9.53	11.51	10.37	8.99	9.00	8.92	10.31	11.75	11.78
6	7.94	11.04	12.18	8.31	11.06	9.67	8.99	9.03	9.30	11.34	11.88	11.76
7	7.95	10.98	12.03	9.53	10.22	9.66	9.14	9.05	9.54	10.70	11.33	11.72
8	8.48	11.37	12.23	10.32	10.38	10.14	9.16	9.53	9.57	10.59	10.28	11.64
9	7.81	13.49	12.36	10.88	10.76	10.53	9.23	9.69	9.59	10.61	10.56	11.30
10	7.59	14.03	12.17	11.17	10.94	10.64	9.21	9.83	9.56	10.59	10.46	11.39
11	7.56	14.21	12.26	11.37	11.01	10.71	9.30	9.91	8.64	10.53	10.42	10.37
12	7.47	14.21	11.82	11.54	11.00	10.77	9.33	9.80	7.68	10.53	10.38	10.09
13	7.43	12.21	12.05	11.64	11.04	10.83	9.15	9.87	7.56	10.58	10.46	10.11
14	7.41	11.97	12.32	11.60	11.22	10.95	8.58	9.81	6.89	10.61	10.02	9.99
15	7.10	11.92	12.41	11.91	11.63	10.97	8.48	9.81	8.15	10.62	10.35	10.13
16	8.92	12.02	12.51	11.85	11.52	10.95	8.24	9.36	7.43	10.34	9.89	9.30
17	9.54	11.27	11.34	10.06	10.28	10.42	8.43	9.30	7.74	10.32	9.83	8.78
18	9.83	11.00	10.71	9.53	10.11	10.40	8.58	9.21	8.21	10.38	9.86	8.74
19	10.05	10.98	10.56	9.60	10.01	10.20	8.52	8.94	8.48	10.42	9.51	8.81
20	10.05	10.94	10.70	9.57	9.93	10.06	8.61	8.43	8.74	10.52	10.80	11.17
21	10.16	10.80	10.76	9.53	9.87	9.63	9.29	8.15	9.00	10.37	10.58	9.42
22	10.29	10.88	10.83	9.63	9.87	9.60	9.41	7.49	10.29	10.94	10.35	9.09
23	10.38	10.97	10.79	9.65	9.76	9.71	9.03	7.85	10.65	10.61	10.49	9.00
24	10.38	11.06	10.46	9.67	9.89	9.83	8.91	8.21	9.86	10.64	10.31	9.03
25	10.41	11.07	10.40	9.62	9.81	9.95	9.05	8.39	9.65	10.64	10.59	9.00
26	10.35	11.03	10.38	9.60	9.81	10.02	9.11	8.63	9.66	10.49	10.52	9.06
27	10.44	11.09	11.75	9.67	10.04	9.91	9.14	8.61	9.75	10.46	10.42	8.87
28	10.37	10.94	11.28	9.67	10.09	9.99	9.23	8.66	9.80	10.49	10.74	8.92
29	10.35	10.02	12.33	9.67	10.09	9.76	9.33	8.81	9.80	10.47	10.92	8.97
30	10.40	9.84	12.54	9.75	---	9.80	9.24	8.84	9.87	10.58	10.85	8.90
31	10.44	---	12.59	9.87	---	9.18	---	8.16	---	10.38	11.22	---
MAX	10.44	14.21	12.59	12.90	12.02	11.34	9.41	11.16	10.65	11.34	11.88	12.66
CAL YR 2003		LOW 14.21										
WTR YR 2004		LOW 14.21										



Ground-Water Records—Pike County

390359083015100. Local Number, PI-2

LOCATION.—Latitude 39°03'59", longitude 83°01'51", Pike County, Hydrologic Unit 05060002, 1 mi west of Piketon, Ohio. Owner: Goodyear Atomic Corporation.

AQUIFER.—Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.—Drilled test water table well, diameter 6 in., depth 60 ft, cased.

INSTRUMENTATION.—Digital recorder, 60-minute punch.

DATUM.—Elevation of land-surface datum is 550 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter, 3.00 ft above land-surface datum.

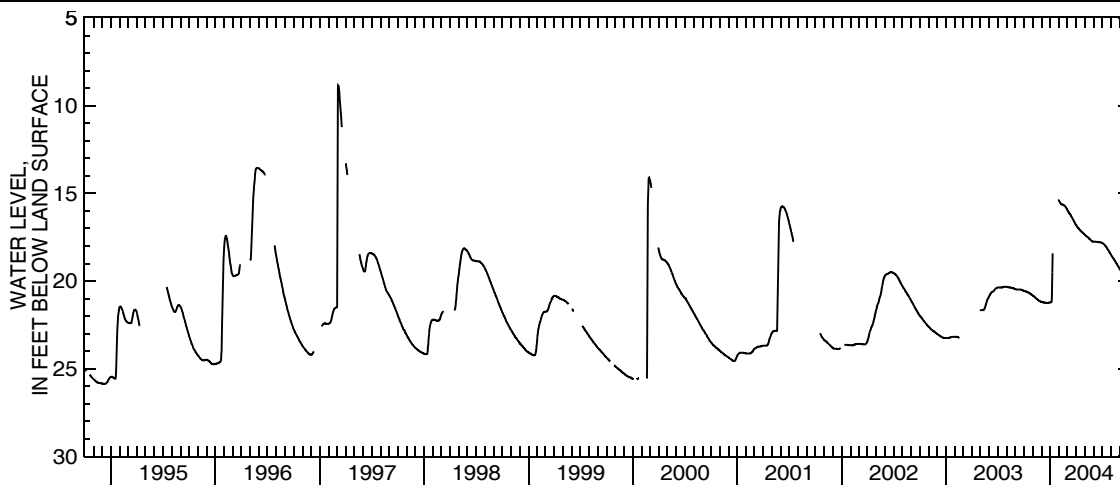
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—September 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 27.46 ft below land-surface datum, Feb. 15, 1977; minimum daily low, 8.85 ft below land-surface datum, Mar. 6, 1997.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.56	20.83	21.19	21.22	15.43	15.95	16.83	17.36	17.75	17.84	18.51	19.34
2	20.56	20.84	21.19	21.21	15.46	15.98	16.86	17.38	17.75	17.84	18.54	19.37
3	20.57	20.85	21.20	21.20	15.49	16.01	16.88	17.39	17.75	17.85	18.57	19.39
4	20.57	20.87	21.20	21.20	15.51	16.04	16.90	17.41	17.75	17.86	18.59	19.42
5	20.58	20.88	21.20	21.19	15.54	16.07	16.92	17.43	17.75	17.88	18.62	19.45
6	20.59	20.89	21.21	21.18	15.57	16.11	16.94	17.44	17.75	17.89	18.64	19.47
7	20.59	20.90	21.21	21.00	15.59	16.13	16.96	17.45	17.75	17.90	18.67	19.50
8	20.59	20.92	21.21	19.50	15.60	16.14	16.98	17.47	17.75	17.92	18.69	19.53
9	20.60	20.93	21.23	18.42	15.62	16.17	16.99	17.48	17.75	17.94	18.72	19.56
10	20.60	20.95	21.22	---	15.62	16.18	17.02	17.49	17.76	17.96	18.74	19.58
11	20.61	20.97	21.22	---	15.63	16.21	17.04	17.50	17.76	17.98	18.77	19.61
12	20.62	20.98	21.22	---	15.63	16.25	17.06	17.51	17.76	17.99	18.79	19.64
13	20.63	21.00	21.22	---	15.63	16.26	17.08	17.53	17.76	18.02	18.81	19.67
14	20.64	21.01	21.23	---	15.65	16.30	17.10	17.54	17.76	18.04	18.84	19.69
15	20.64	21.02	21.23	---	15.65	16.31	17.11	17.56	17.77	18.06	18.87	19.72
16	20.65	21.03	21.23	---	15.66	16.35	17.13	17.57	17.77	18.08	18.89	19.74
17	20.66	21.05	21.24	---	15.67	16.38	17.15	17.59	17.77	18.11	18.92	19.77
18	20.67	21.06	21.24	---	15.68	16.41	17.17	17.61	17.78	18.14	18.95	19.80
19	20.68	21.07	21.24	---	15.69	16.45	17.18	17.62	17.78	18.16	18.97	19.82
20	20.69	21.09	21.25	---	15.71	16.47	17.19	17.64	17.78	18.19	18.99	19.85
21	20.70	21.10	21.25	---	15.72	16.50	17.21	17.66	17.79	18.21	19.03	19.87
22	20.71	21.11	21.25	---	15.74	16.54	17.23	17.68	17.79	18.24	19.06	19.90
23	20.73	21.12	21.24	---	15.76	16.57	17.24	17.69	17.79	18.27	19.09	19.93
24	20.73	21.13	21.24	---	15.79	16.60	17.26	17.70	17.79	18.29	19.11	19.95
25	20.75	21.14	21.24	---	15.81	16.63	17.27	17.71	17.79	18.32	19.14	19.97
26	20.75	21.15	21.23	---	15.84	16.66	17.29	17.72	17.79	18.35	19.17	20.00
27	20.77	21.16	21.23	---	15.86	16.70	17.30	17.74	17.79	18.38	19.20	20.02
28	20.78	21.17	21.23	---	15.88	16.71	17.31	17.74	17.80	18.40	19.23	20.05
29	20.79	21.18	21.22	15.38	15.92	16.75	17.33	17.75	17.81	18.43	19.25	20.07
30	20.80	21.18	21.22	15.38	---	16.78	17.35	17.75	17.83	18.46	19.28	20.09
31	20.81	---	21.22	15.40	---	16.80	---	17.75	---	18.49	19.31	---
MAX	20.81	21.18	21.25	21.22	15.92	16.80	17.35	17.75	17.83	18.49	19.31	20.09
CAL YR 2003	LOW 23.25											
WTR YR 2004	LOW 21.25											



Ground-Water Records—Portage County

411401081025000. Local Number, PO-1

LOCATION.—Latitude 41°14'01", longitude 81°02'50", Portage County, Hydrologic Unit 05030103. Bauer Street in Windham, Ohio. Owner: Cristopher Minter.
 AQUIFER.—Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 6 in., depth 55 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval. Satellite telemeter at site.

DATUM.—Elevation of land-surface datum is 980 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 0.60 ft above land-surface datum.

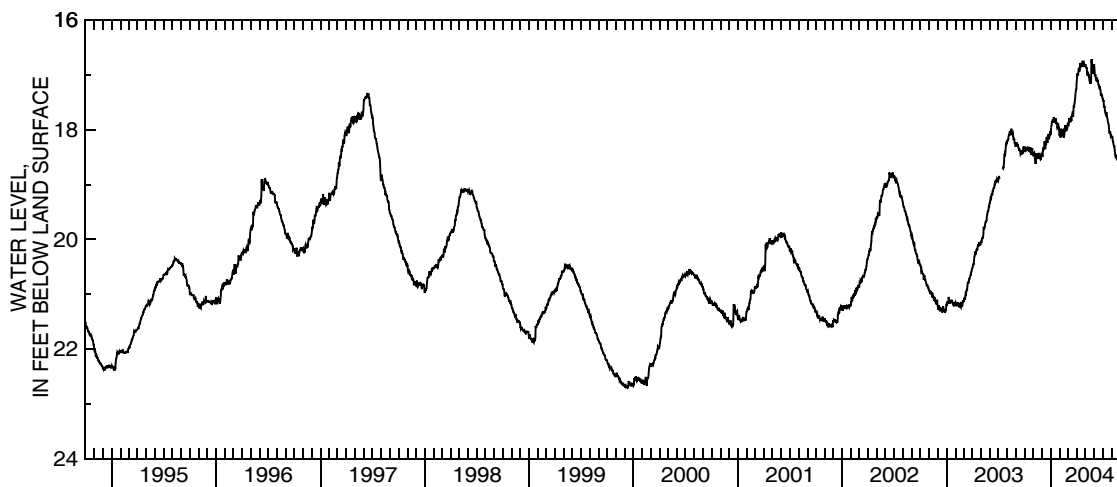
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—May 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 23.32 ft below land-surface datum, Mar. 13, 1992; minimum daily low, 14.59 ft below land-surface datum, June 24, 1947.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.36	18.48	18.46	18.07	18.11	17.87	17.09	16.80	16.86	17.44	18.13	18.68
2	18.37	18.45	18.48	17.96	18.07	17.93	17.00	16.85	16.93	17.47	18.13	18.67
3	18.36	18.43	18.48	17.93	18.13	17.92	16.97	16.86	17.01	17.47	18.13	18.67
4	18.31	18.42	18.39	17.92	18.14	17.87	16.99	16.86	17.01	17.46	18.16	18.68
5	18.35	18.48	18.35	17.85	18.11	17.79	17.01	16.88	16.99	17.58	18.22	18.70
6	18.37	18.51	18.36	17.87	17.98	17.84	16.96	16.87	17.01	17.58	18.22	18.70
7	18.36	18.55	18.35	17.84	18.13	17.84	16.90	17.01	17.07	17.57	18.25	18.71
8	18.37	18.61	18.34	17.81	18.11	17.80	16.87	16.98	17.10	17.65	18.28	18.71
9	18.37	18.62	18.31	17.85	17.99	17.85	16.93	16.94	17.11	17.68	18.30	18.66
10	18.36	18.55	18.21	17.86	18.03	17.85	16.93	16.98	17.05	17.70	18.29	18.69
11	18.36	18.47	18.30	17.77	18.03	17.78	16.92	17.01	17.10	17.72	18.35	18.68
12	18.35	18.43	18.34	17.80	18.02	17.78	16.90	17.00	17.13	17.69	18.39	18.67
13	18.37	18.52	18.34	17.84	18.01	17.84	16.78	17.02	17.10	17.69	18.44	18.68
14	18.31	18.52	18.24	17.80	18.08	17.76	16.81	17.03	17.12	17.68	18.47	18.69
15	18.36	18.48	18.25	17.86	18.14	17.75	16.86	17.09	17.17	17.74	18.49	18.68
16	18.38	18.48	18.16	17.86	18.13	17.71	16.84	17.12	17.18	17.78	18.48	18.66
17	18.40	18.53	18.14	17.80	18.08	17.68	16.82	17.11	17.19	17.80	18.47	18.62
18	18.37	18.48	18.13	17.79	18.04	17.68	16.82	17.07	17.21	17.81	18.46	18.61
19	18.40	18.42	18.19	17.87	17.98	17.76	16.80	17.16	17.25	17.86	18.51	18.65
20	18.40	18.50	18.24	17.90	17.92	17.68	16.80	17.12	17.25	17.89	18.50	18.63
21	18.32	18.48	18.20	17.87	18.02	17.56	16.74	17.10	17.21	17.90	18.50	18.61
22	18.35	18.48	18.15	17.88	18.02	17.59	16.80	16.75	17.28	17.94	18.52	18.62
23	18.40	18.48	18.09	17.89	17.97	17.53	16.80	16.71	17.29	18.03	18.54	18.62
24	18.46	18.52	18.08	17.97	17.99	17.51	16.85	16.83	17.37	18.06	18.56	18.60
25	18.44	18.54	18.14	17.96	17.99	17.48	16.78	16.82	17.37	18.06	18.57	18.60
26	18.40	18.53	18.15	17.88	17.97	17.44	16.77	16.83	17.34	18.03	18.57	18.62
27	18.36	18.53	18.14	17.93	17.98	17.34	16.81	16.83	17.37	18.05	18.58	18.60
28	18.34	18.46	18.08	17.96	17.96	17.33	16.84	16.96	17.38	18.10	18.57	18.60
29	18.42	18.46	18.02	17.96	17.91	17.27	16.84	16.98	17.41	18.12	18.60	18.63
30	18.44	18.42	18.08	18.01	---	17.25	16.83	16.89	17.44	18.11	18.64	18.67
31	18.44	---	18.07	18.10	---	17.15	---	16.80	---	18.12	18.67	---
MAX	18.46	18.62	18.48	18.10	18.14	17.93	17.09	17.16	17.44	18.12	18.67	18.71
CAL YR 2003	LOW 21.24											
WTR YR 2004	LOW 18.71											



Ground-Water Records—Preble County

394438084335900. Local Number, PR-2

LOCATION.—Latitude 39°44'38", longitude 84°33'59", Preble County, Hydrologic Unit 05080002, Stover Road, 4 mi east of Eaton, Ohio. Owner: City of Eaton.
 AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 6 in., depth 78.5 ft, cased.

INSTRUMENTATION.—Digital recorder, 60-minute punch.

DATUM.—Elevation of land-surface datum is 900 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 1.50 ft above land-surface datum.

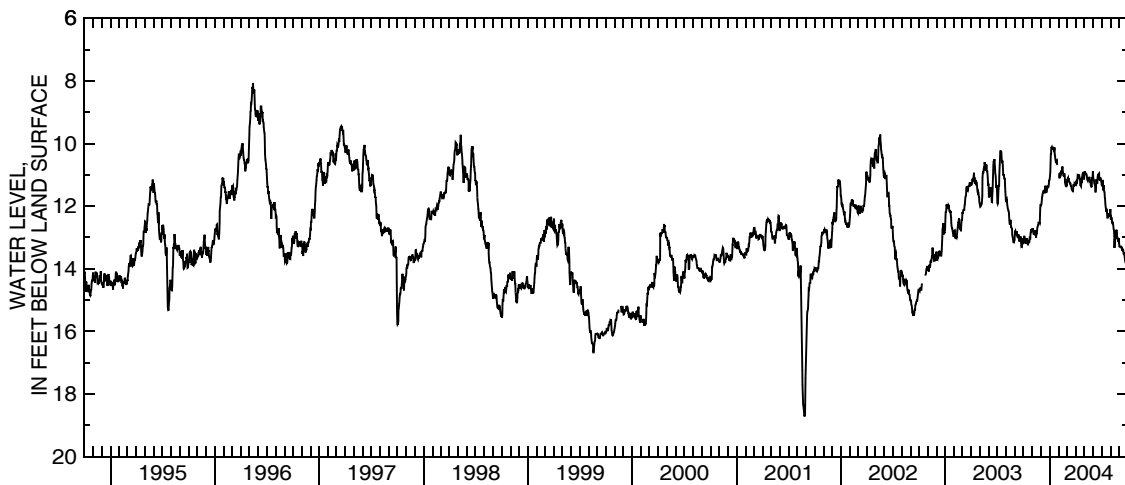
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—May 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 18.71 ft below land-surface datum, Aug. 27, 2001; minimum daily low, 7.94 ft below land-surface datum, May 4, 1975.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.16	12.75	11.98	11.14	---	11.32	11.24	11.03	10.96	11.31	12.10	13.29
2	13.07	12.71	11.98	11.03	---	11.16	11.29	10.89	11.14	11.35	12.43	13.30
3	13.04	12.76	11.94	10.91	10.95	11.24	11.30	10.93	11.15	11.35	12.40	13.31
4	12.95	12.72	11.87	10.65	11.09	11.11	11.26	10.93	11.19	11.17	12.37	13.30
5	13.00	12.84	11.74	10.36	11.09	11.09	11.29	10.97	11.28	11.24	12.40	13.29
6	13.04	12.91	11.68	10.32	10.94	11.15	11.23	10.96	11.28	11.48	12.49	13.29
7	13.05	12.88	11.65	10.14	10.96	11.11	11.16	10.96	11.29	11.48	12.55	13.31
8	13.20	12.89	11.58	10.11	10.94	11.16	11.02	10.97	11.33	11.33	12.50	13.32
9	13.17	12.87	11.56	10.17	10.97	11.19	11.03	10.99	11.54	11.49	12.59	13.32
10	13.16	12.85	11.53	10.17	10.98	11.23	11.05	11.03	11.54	11.53	12.56	13.35
11	13.17	12.78	11.49	10.15	10.94	11.24	11.03	11.14	11.40	11.57	12.65	13.41
12	13.09	12.80	11.56	10.15	10.89	11.28	11.03	11.16	11.20	11.75	12.74	13.43
13	13.10	12.92	11.56	10.20	10.89	11.28	10.99	11.19	11.14	11.76	12.79	13.36
14	13.03	13.01	11.56	10.17	10.76	11.28	11.04	11.15	11.24	11.93	12.98	13.42
15	13.11	12.94	11.57	10.21	10.76	11.36	11.14	11.16	11.26	12.03	13.34	13.42
16	13.12	12.88	11.57	10.23	10.90	11.36	11.14	11.15	11.26	12.10	13.09	13.54
17	13.25	12.87	11.35	10.21	10.94	11.36	11.32	11.16	11.04	12.18	13.09	13.48
18	13.17	12.80	11.40	10.12	11.02	11.46	11.32	11.17	11.01	12.08	13.05	13.56
19	13.17	12.67	11.54	10.36	11.04	11.48	11.36	11.06	11.01	12.17	13.01	13.59
20	13.12	12.65	11.55	10.41	11.04	11.44	11.37	11.16	11.01	12.23	12.99	13.68
21	13.14	12.62	11.55	10.48	10.95	11.52	11.24	11.18	10.96	12.37	12.78	13.72
22	13.14	12.60	11.52	10.58	11.01	11.53	11.16	11.21	10.95	12.37	12.75	13.79
23	13.01	12.53	11.45	10.60	11.12	11.52	11.18	11.22	11.10	12.26	12.87	13.82
24	13.01	12.53	11.35	10.55	11.25	11.37	11.08	11.33	11.18	12.33	12.95	13.88
25	13.02	12.53	11.40	10.55	11.30	11.30	10.98	11.37	11.09	12.32	13.02	13.96
26	12.89	12.53	11.40	10.54	11.35	11.38	10.97	11.38	11.14	12.25	13.07	14.02
27	12.82	12.55	11.40	10.66	11.37	11.35	10.92	11.37	11.13	12.25	13.11	14.05
28	12.77	12.26	11.36	10.69	11.37	11.30	11.04	11.08	11.18	12.27	13.12	14.03
29	12.74	12.06	11.29	---	11.31	11.32	11.13	11.10	11.16	12.29	13.05	13.97
30	12.79	11.94	11.19	---	---	11.35	11.13	11.09	11.24	12.19	13.02	13.97
31	12.77	---	11.18	---	---	11.28	---	10.89	---	12.11	13.14	---
MAX	13.25	13.01	11.98	11.14	11.37	11.53	11.37	11.38	11.54	12.37	13.34	14.05
CAL YR 2003	LOW 13.29											
WTR YR 2004	LOW 14.05											



Ground-Water Records—Richland County

404625082305100. Local Number, R-4

LOCATION.—Latitude 40°46'25", longitude 82°30'51", Richland County, Hydrologic Unit 05040002, at Ohio Brass Plant in Mansfield, Ohio. Owner: Ohio Brass Company

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 14 in., depth 127 ft, cased.

INSTRUMENTATION.—Digital recorder, 60-minute punch.

DATUM.—Elevation of land-surface datum is 1,150 ft above sea level (from topographic map). Measuring point: Top of platform 5.00 ft above land-surface datum.

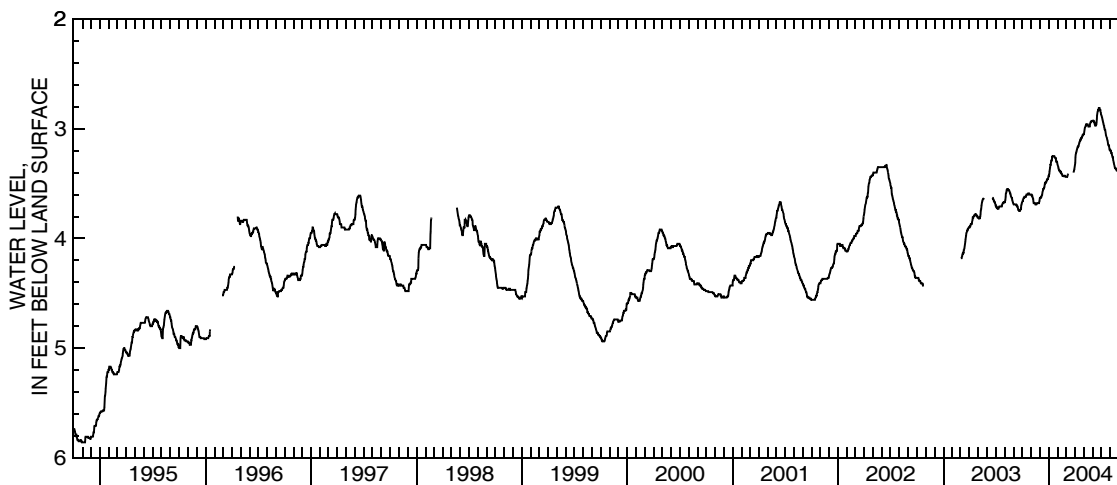
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—May 1942 to current year. (No record in 1948.)

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 60.10 ft below land-surface datum, Oct. 12, 13, 19, and 20, 1962; minimum daily low, 2.81 ft below land-surface datum, June 23-25, 2004.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.67	3.60	3.64	3.43	3.33	3.44	3.33	3.05	2.93	2.87	3.20	3.41
2	3.66	3.60	3.63	3.43	3.34	3.44	3.31	3.05	2.93	2.88	3.20	3.42
3	3.66	3.61	3.63	3.41	3.35	3.44	3.26	3.03	2.92	2.89	3.20	3.42
4	3.65	3.61	3.63	3.39	3.36	3.44	3.23	3.02	2.93	2.90	3.21	3.43
5	3.64	3.61	3.63	3.37	3.37	3.44	3.22	3.00	2.93	2.91	3.22	3.44
6	3.63	3.62	3.62	3.35	3.38	3.43	3.21	2.99	2.94	2.92	3.22	3.44
7	3.63	3.63	3.62	3.33	3.38	3.42	3.20	2.98	2.94	2.93	3.23	3.45
8	3.63	3.64	3.61	3.33	3.38	3.41	3.19	2.97	2.95	2.94	3.24	3.45
9	3.62	3.66	3.60	3.30	3.39	---	3.18	2.97	2.96	2.96	3.26	3.45
10	3.62	3.68	3.59	3.29	3.39	---	3.17	2.96	2.97	2.97	3.26	3.46
11	3.62	3.68	3.57	3.29	3.39	---	3.17	2.96	2.97	2.98	3.27	3.46
12	3.62	3.68	3.56	3.28	3.40	---	3.16	2.96	2.97	2.99	3.29	3.47
13	3.62	3.68	3.55	3.26	3.40	---	3.16	2.96	2.97	3.00	3.30	3.47
14	3.62	3.68	3.55	3.26	3.41	---	3.15	2.96	2.96	3.01	3.31	3.47
15	3.61	3.68	3.54	3.25	3.41	---	3.14	2.96	2.94	3.01	3.33	3.47
16	3.60	3.69	3.54	3.25	3.42	---	3.13	2.97	2.91	3.03	3.34	3.47
17	3.60	3.69	3.53	3.25	3.43	---	3.12	2.98	2.88	3.05	3.35	3.47
18	3.60	3.69	3.52	3.25	3.43	---	3.11	2.98	2.86	3.06	3.36	3.47
19	3.60	3.69	3.50	3.25	3.43	---	3.11	2.98	2.84	3.07	3.36	3.47
20	3.60	3.69	3.50	3.25	3.43	---	3.10	2.98	2.83	3.08	3.36	3.47
21	3.60	3.68	3.49	3.25	3.43	---	3.10	2.98	2.83	3.09	3.37	3.47
22	3.59	3.68	3.49	3.26	3.43	---	3.09	2.98	2.82	3.10	3.37	3.48
23	3.59	3.68	3.49	3.27	3.44	---	3.09	2.97	2.81	3.11	3.37	3.48
24	3.59	3.68	3.48	3.27	3.43	---	3.08	2.95	2.81	3.12	3.38	3.48
25	3.59	3.68	3.47	3.27	3.43	---	3.08	2.94	2.81	3.14	3.38	3.48
26	3.60	3.68	3.47	3.27	3.43	---	3.07	2.94	2.82	3.15	3.38	3.48
27	3.60	3.68	3.46	3.30	3.43	3.40	3.06	2.94	2.83	3.15	3.38	3.48
28	3.60	3.68	3.46	3.30	3.44	3.39	3.06	2.93	2.83	3.16	3.38	3.48
29	3.60	3.67	3.46	3.30	3.44	3.38	3.06	2.93	2.85	3.17	3.39	3.48
30	3.60	3.66	3.45	3.30	---	3.37	3.05	2.93	2.86	3.19	3.40	3.49
31	3.60	---	3.44	3.32	---	3.35	---	2.93	---	3.19	3.40	---
MAX	3.67	3.69	3.64	3.43	3.44	3.44	3.33	3.05	2.97	3.19	3.40	3.49
CAL YR 2003		LOW 4.18										
WTR YR 2004		LOW 3.69										



405753082360800. Local Number, R-3

LOCATION.—Latitude 40°57'53", longitude 82°36'08", Richland County, Hydrologic Unit 05040002, Voisard plant in Shiloh, Ohio. Owner: Voisard Corporation.
 AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 8 in., depth 150 ft, cased.

INSTRUMENTATION.—Digital recorder, 60-minute punch.

DATUM.—Elevation of land-surface datum is 1,080 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 3.17 ft above land-surface datum.

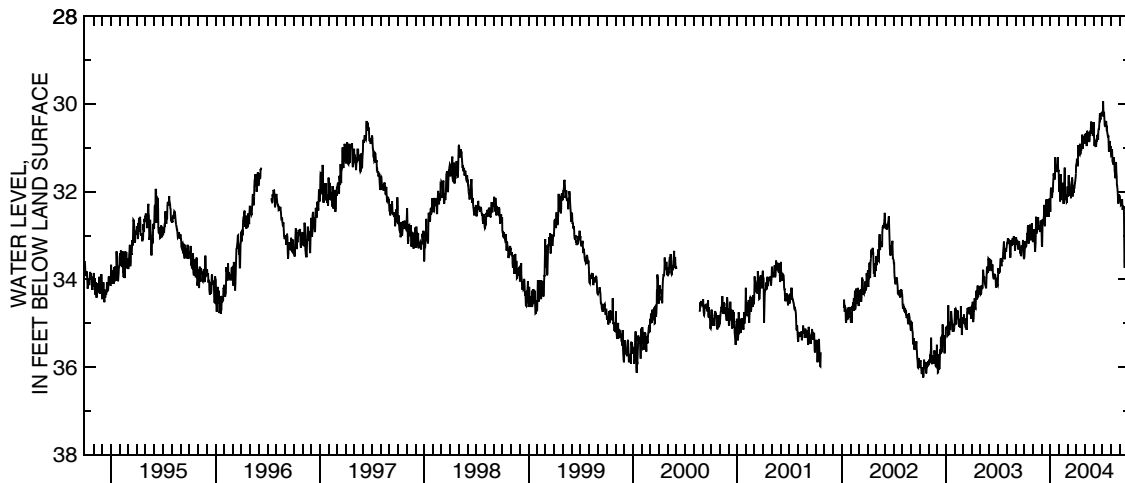
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR. Published in WDR-OH-2 prior to 1995 water year.

PERIOD OF RECORD.—April 1946 to current year. (No record in 1948.)

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 36.24 ft below land-surface datum, Oct. 13, 2002; minimum daily low, 23.68 ft below land-surface datum, June 15 and 23, 1947.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
 DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33.52	33.15	33.00	32.46	31.99	31.88	31.36	30.68	30.52	30.19	31.17	32.20
2	33.49	33.06	33.22	32.06	31.99	32.04	31.34	30.72	30.78	30.18	31.15	32.20
3	33.35	32.97	33.25	31.91	31.86	32.11	31.25	30.82	30.94	30.15	31.03	32.18
4	33.13	32.86	33.02	31.93	32.22	31.91	31.32	30.76	30.95	29.94	31.05	32.31
5	33.20	32.99	32.63	32.05	32.16	31.62	31.42	30.71	30.84	30.28	31.22	32.30
6	33.22	32.98	32.72	32.14	31.60	31.83	31.36	30.66	30.83	30.24	31.33	32.18
7	33.20	33.10	32.72	32.13	31.94	31.76	31.12	30.96	30.92	30.18	31.26	32.23
8	33.24	33.33	32.63	32.02	32.19	31.84	30.94	30.85	30.95	30.32	31.38	32.18
9	33.23	33.37	32.54	32.00	32.04	32.00	31.17	30.61	30.98	30.49	31.33	32.29
10	33.15	33.17	32.30	31.99	31.87	32.10	31.14	30.66	30.88	30.50	31.22	32.41
11	33.07	32.78	32.53	31.78	32.01	31.91	31.16	30.71	30.79	30.49	31.30	32.34
12	32.94	32.57	32.75	31.58	32.01	32.01	31.17	30.70	30.86	30.41	31.33	32.34
13	32.97	32.96	32.79	31.64	32.03	32.15	30.91	30.68	30.72	30.43	31.52	32.39
14	32.77	32.91	32.39	31.58	31.80	31.96	31.10	30.64	30.71	30.39	31.59	32.34
15	32.98	32.79	32.43	31.60	32.17	31.94	31.15	30.74	30.76	30.43	31.69	32.90
16	33.10	32.79	32.29	31.72	32.28	31.79	31.11	30.87	30.82	30.56	31.63	33.56
17	33.18	32.87	32.20	31.56	32.16	31.68	31.04	30.81	30.63	30.55	31.51	33.74
18	33.10	32.72	32.18	31.22	32.18	31.73	31.07	30.65	30.57	30.63	31.33	33.56
19	33.09	32.58	32.30	31.47	31.80	32.11	30.98	30.73	30.57	30.69	31.57	33.63
20	33.05	32.78	32.57	31.55	31.45	31.86	30.99	30.61	30.53	30.74	31.65	33.53
21	32.75	32.82	32.52	31.49	31.95	31.92	30.70	30.68	30.34	30.76	31.84	33.39
22	32.82	32.79	32.31	31.40	32.14	32.03	30.87	30.46	30.21	30.72	31.87	33.33
23	32.94	32.77	32.18	31.45	32.10	31.94	30.91	30.40	30.31	31.00	32.00	33.27
24	33.11	32.84	32.26	31.55	32.07	31.91	31.02	30.55	30.35	31.09	32.11	33.19
25	33.07	32.92	32.38	31.52	32.19	31.93	30.79	30.53	30.33	31.07	32.26	33.09
26	33.01	32.88	32.57	31.24	32.17	31.86	30.73	30.47	30.23	30.99	32.26	33.11
27	32.88	32.84	32.53	31.21	32.24	31.81	30.84	30.41	30.26	30.84	32.16	32.96
28	32.72	32.66	32.35	31.50	32.23	31.78	30.91	30.66	30.19	30.99	32.06	32.80
29	32.84	32.84	32.15	31.53	32.07	31.68	30.89	30.73	30.23	31.00	32.08	32.85
30	32.96	32.69	32.33	31.50	---	31.59	30.88	30.59	30.28	30.96	32.09	32.91
31	33.08	---	32.32	31.83	---	31.41	---	30.41	---	31.09	32.12	---
MAX	33.52	33.37	33.25	32.46	32.28	32.15	31.42	30.96	30.98	31.09	32.26	33.74
CAL YR 2003	LOW 35.28											
WTR YR 2004	LOW 33.74											



Ground-Water Records—Ross County

391341083172200. Local Number, RO-7

LOCATION.—Latitude 39°13'41", longitude 83°17'22", Ross County, Hydrologic Unit 05060003, Highland County well field, 1 mi west of Bainbridge, Ohio.

Owner: Highland County Water Company.

AQUIFER.—Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.—Drilled test water table well, diameter 6 in., depth 67 ft, cased.

INSTRUMENTATION.—Digital recorder, 60-minute punch.

DATUM.—Elevation of land-surface datum is 740 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

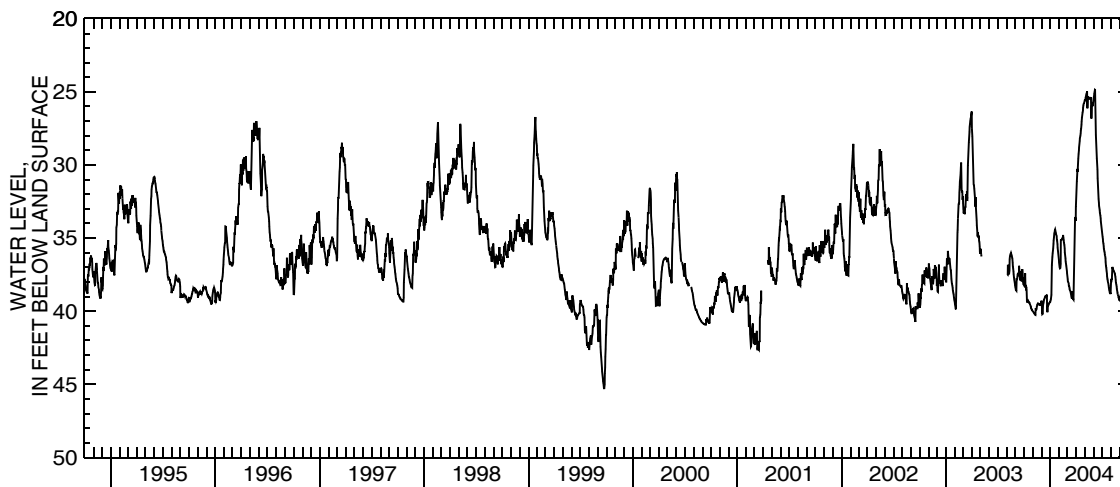
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—February 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 45.88 ft below land-surface datum, Dec. 31, 1989; minimum daily low, 20.93 ft below land-surface datum, Feb. 28, 1971.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38.15	40.02	39.28	39.37	36.68	37.62	32.23	25.55	25.45	34.72	37.92	39.03
2	38.02	40.05	39.32	39.25	36.86	37.81	31.65	25.54	25.31	34.91	37.94	38.95
3	37.69	40.07	39.70	39.18	37.05	37.96	31.13	25.52	25.12	35.07	37.81	38.89
4	37.86	40.08	40.22	39.08	37.09	38.04	30.64	25.41	25.01	35.26	37.81	38.84
5	37.41	40.12	40.20	38.89	37.05	38.11	30.26	25.29	24.86	35.37	36.97	38.81
6	38.39	40.17	39.82	38.02	36.77	38.25	30.44	25.19	24.87	35.55	37.05	38.79
7	38.31	40.20	39.59	36.84	35.13	38.29	30.07	25.09	26.31	35.74	37.12	38.78
8	38.42	40.23	39.45	36.30	35.12	38.41	29.57	25.03	27.24	35.90	37.17	38.77
9	38.38	40.24	39.36	36.03	35.11	38.48	29.25	24.97	27.94	35.99	37.20	38.74
10	38.53	40.25	39.22	35.93	35.11	38.58	29.01	26.13	28.52	36.14	37.22	38.73
11	39.23	39.79	39.15	35.73	35.08	38.63	28.79	25.53	29.07	36.22	37.27	38.71
12	39.41	39.86	39.10	35.40	35.03	38.69	28.59	25.42	29.54	36.38	37.35	38.66
13	39.24	39.87	39.06	35.17	35.01	38.81	28.35	25.36	29.95	36.63	37.39	38.77
14	39.23	39.79	38.98	34.96	34.92	38.88	28.17	25.37	30.33	36.90	37.44	38.96
15	39.28	39.66	38.97	34.69	34.79	38.99	28.01	25.42	30.91	37.04	37.53	39.08
16	39.31	39.59	38.96	34.60	34.98	39.07	27.84	25.43	31.46	37.25	37.66	39.19
17	39.36	39.56	38.97	34.44	35.14	39.15	27.66	25.45	31.93	37.42	37.86	39.23
18	39.38	39.50	38.96	34.40	35.29	38.65	27.50	25.47	32.32	37.64	38.03	38.46
19	39.42	39.46	38.92	34.50	35.49	38.88	27.25	25.49	32.58	37.78	38.19	38.65
20	39.43	39.48	38.93	34.62	35.69	39.05	27.03	25.47	32.80	37.89	38.33	38.92
21	39.46	39.49	39.77	34.66	35.99	39.18	26.76	25.40	32.95	38.01	38.48	38.92
22	39.54	39.51	40.07	34.81	36.19	39.20	26.59	25.36	33.10	38.12	38.61	38.88
23	39.60	39.53	39.78	34.87	36.38	37.99	26.41	25.72	33.27	38.26	38.72	38.83
24	39.66	39.56	39.63	35.08	36.59	36.52	26.30	26.82	33.46	38.39	38.83	38.80
25	39.70	39.57	39.59	35.22	36.74	35.57	26.08	26.15	33.64	38.51	38.93	38.77
26	39.79	39.54	39.56	35.41	36.89	34.81	25.92	25.91	33.85	38.61	39.03	38.76
27	39.83	39.54	39.49	35.66	37.07	34.18	25.79	25.82	34.05	38.68	39.11	38.75
28	39.87	39.55	39.44	35.87	37.26	33.56	25.77	25.76	34.24	38.72	39.17	38.73
29	39.93	39.49	39.42	36.07	37.42	33.66	25.67	25.98	34.32	38.74	39.22	38.74
30	39.96	39.40	39.41	36.27	---	33.83	25.63	25.72	34.52	38.84	39.24	38.76
31	39.99	---	39.40	36.48	---	32.87	---	25.53	---	38.16	39.15	---
MAX	39.99	40.25	40.22	39.37	37.42	39.20	32.23	26.82	34.52	38.84	39.24	39.23
CAL YR 2003	LOW 40.25											
WTR YR 2004	LOW 40.25											



391544083095700. Local Number, RO-6

LOCATION.—Latitude 39°15'44", longitude 83°09'57", Ross County, Hydrologic Unit 05060003, southwest of Bournesville, Ohio. Owner: State of Ohio.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled test water table well, diameter 6 in., depth 78 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 676.27 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 7.4 ft above land-surface datum.

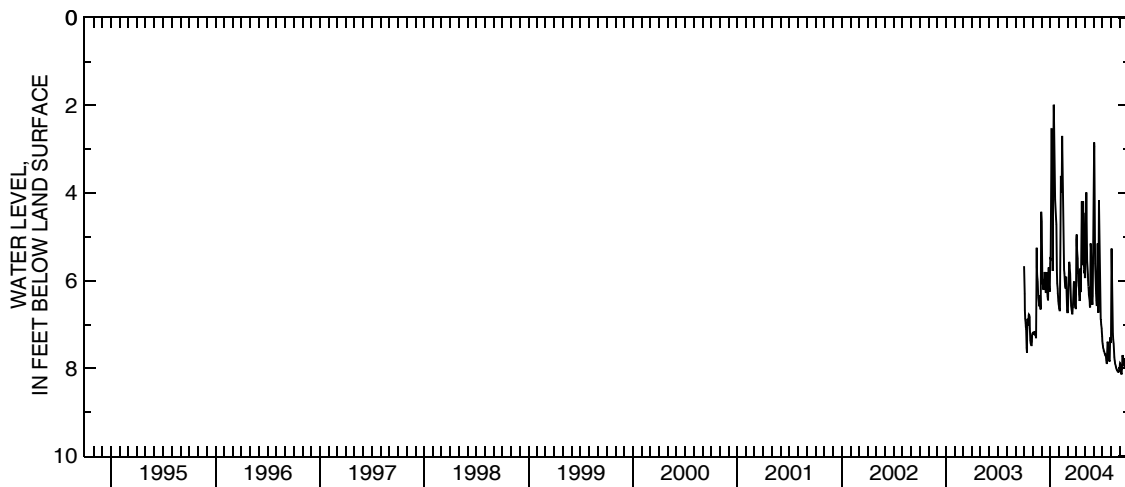
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—August 1960 to December 1975 continuous, periodic thereafter.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 8.50 ft below land-surface datum, Oct. 16, 18, 20, 1969, and Aug. 26-28, 1974; minimum daily low, 0.03 ft below land-surface datum, apr. 23, 1964.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.67	7.19	4.66	5.50	6.63	6.74	5.07	5.92	3.50	7.37	6.11	7.88
2	6.07	7.19	5.20	5.51	6.68	6.66	4.95	5.92	2.85	7.44	5.27	7.89
3	6.30	7.20	5.63	5.04	6.68	6.51	5.20	4.45	2.94	7.49	6.01	7.90
4	6.68	7.20	5.87	4.85	6.07	6.31	5.35	5.12	4.35	7.54	6.31	8.03
5	6.86	7.21	6.06	2.53	5.43	5.99	5.49	4.31	5.14	7.57	6.61	8.12
6	6.97	7.20	6.09	3.54	4.71	5.83	5.70	3.99	5.61	7.60	6.99	8.12
7	7.05	7.15	6.16	4.64	3.61	5.57	5.83	4.67	5.94	7.62	7.20	8.03
8	7.11	7.18	6.21	5.45	3.95	5.65	6.00	5.25	6.14	7.64	7.34	7.98
9	7.29	7.19	5.98	5.78	3.99	5.75	6.11	5.54	6.29	7.67	7.44	7.73
10	7.53	7.21	6.02	4.72	3.19	5.84	6.18	5.73	6.45	7.68	7.53	7.70
11	7.64	7.29	6.02	2.79	2.70	5.95	6.31	5.85	6.56	7.70	7.66	7.75
12	7.22	7.29	5.80	1.99	3.17	6.25	6.46	5.99	6.58	7.69	7.74	7.81
13	6.87	5.81	5.87	2.00	3.94	6.45	6.42	6.13	6.21	7.71	7.81	7.85
14	6.92	5.25	6.14	2.25	4.34	6.57	5.87	6.22	5.15	7.78	7.86	7.88
15	7.02	5.69	6.24	2.47	4.61	6.66	5.72	6.32	6.18	7.84	7.90	7.91
16	6.92	5.89	6.28	3.07	5.14	6.71	6.11	6.38	6.56	7.88	7.93	7.94
17	6.79	6.00	6.22	3.91	5.58	6.75	6.26	6.47	6.73	7.88	7.96	7.95
18	6.77	6.15	5.81	4.15	5.75	6.75	5.75	6.59	5.79	7.66	7.99	7.81
19	6.78	6.33	5.83	4.33	5.83	6.62	4.35	6.61	4.17	7.39	8.01	7.77
20	6.83	6.39	5.91	4.49	5.95	6.61	4.19	5.75	4.52	7.43	8.03	7.82
21	7.08	6.45	6.20	4.60	6.03	6.39	5.07	5.15	5.24	7.63	8.04	7.86
22	7.26	6.51	6.36	4.72	6.12	6.13	5.60	5.25	5.75	7.71	8.05	7.89
23	7.36	6.56	6.43	5.18	6.18	6.04	5.61	5.45	6.19	7.73	8.06	7.92
24	7.42	6.59	6.43	5.77	6.13	6.02	4.72	5.86	6.50	7.78	8.07	7.94
25	7.46	6.37	5.96	6.06	5.91	6.28	4.19	6.20	6.88	7.83	8.08	7.96
26	7.47	6.34	5.70	6.18	6.02	6.46	5.04	6.46	6.89	7.83	8.08	7.97
27	7.47	6.64	6.01	6.29	6.35	6.54	5.48	6.55	7.00	7.63	8.07	7.99
28	7.39	6.64	6.17	6.39	6.56	6.60	5.72	6.35	7.09	7.32	8.06	8.04
29	7.25	5.51	6.25	6.46	6.68	6.63	5.83	5.53	7.17	7.29	8.03	8.08
30	7.20	4.43	6.14	6.53	---	6.63	5.76	4.57	7.27	7.39	7.99	8.10
31	7.19	---	5.61	6.59	---	5.83	---	3.86	---	7.42	7.90	---
MAX	7.64	7.29	6.43	6.59	6.68	6.75	6.46	6.61	7.27	7.88	8.08	8.12
WTR YR 2004		LOW 8.12										



Ground-Water Records—Shelby County

401707084103100. Local Number, SH-5

LOCATION.—Latitude 40°17'07", longitude 84°10'31", Shelby County, Hydrologic Unit 05080001, at Sidney, Ohio. Owner: Stolle Corporation.

AQUIFER.—Limestone of Silurian Age.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 8 in., depth 300 ft, cased to 130 ft.

INSTRUMENTATION.—Digital recorder, 60-minute punch.

DATUM.—Elevation of land-surface datum is 1,028 ft above sea level (from topographic map). Measuring point: Top of platform 1.7 ft above land-surface datum.

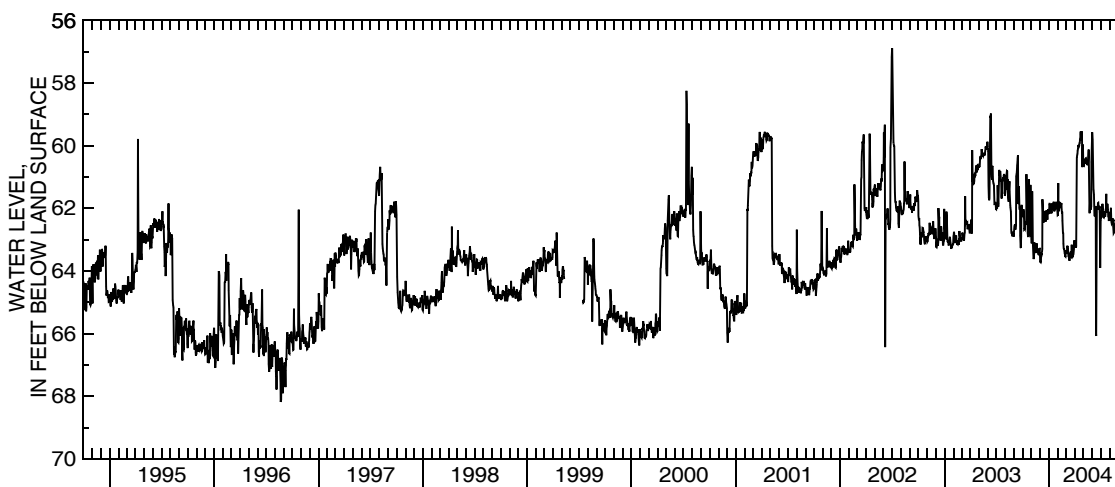
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water.

PERIOD OF RECORD.—July 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 70.22 ft below land-surface datum, Sept. 23, 1993; minimum daily low, 56.90 ft below land-surface datum, July 2, 2002.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62.25	63.08	63.54	62.16	62.23	63.34	63.22	60.61	59.58	62.33	62.28	64.11
2	62.26	63.12	63.71	62.03	62.22	63.42	63.21	60.63	59.80	62.30	62.32	62.54
3	62.22	63.09	63.73	61.86	61.20	63.45	63.12	60.64	59.99	62.17	62.40	63.85
4	62.03	61.46	63.69	61.86	62.07	63.40	63.13	60.58	61.00	61.93	62.29	64.09
5	62.10	62.56	63.50	61.93	62.10	63.20	63.26	60.48	61.40	62.04	61.99	64.25
6	62.21	63.10	63.46	62.12	61.87	63.22	63.21	60.47	61.44	62.07	62.33	64.21
7	62.67	63.36	63.47	62.16	61.80	63.23	61.45	60.58	61.56	61.86	62.44	64.28
8	62.65	63.59	63.42	61.93	62.00	63.31	60.39	60.53	62.05	62.09	62.49	64.31
9	62.66	63.62	63.30	62.08	61.95	63.43	60.31	60.42	62.24	62.24	62.47	64.38
10	62.51	63.58	61.72	62.16	61.84	63.56	60.26	60.41	62.25	62.29	62.41	64.55
11	62.43	63.33	62.09	62.13	61.85	63.43	60.17	60.46	62.06	62.30	62.48	64.60
12	62.47	63.10	62.37	61.85	61.88	63.53	60.11	60.47	62.00	62.22	62.33	64.48
13	62.52	63.35	62.47	61.91	61.88	63.68	59.98	60.49	61.93	62.19	62.57	64.40
14	62.38	63.43	62.29	61.91	61.84	63.58	60.01	60.62	66.00	62.11	62.71	64.46
15	60.92	63.41	62.18	61.96	62.03	63.54	60.03	60.56	66.08	62.17	62.79	64.43
16	61.79	63.35	62.12	62.05	62.14	63.46	60.00	60.63	62.31	62.27	62.77	64.38
17	62.37	63.43	62.12	62.02	62.14	63.41	59.93	60.55	62.01	62.21	62.72	64.24
18	62.24	63.32	62.09	61.79	62.40	63.40	59.92	60.46	62.01	62.05	62.50	64.34
19	62.79	63.12	62.18	61.99	62.76	63.56	59.80	60.13	62.05	62.00	62.54	64.49
20	62.92	63.28	62.41	62.08	62.80	63.57	59.78	60.32	62.00	61.54	62.54	64.57
21	62.77	63.34	62.41	62.10	63.13	63.17	59.55	61.22	61.84	61.92	62.37	64.69
22	61.07	63.34	62.26	61.94	63.29	63.51	59.67	62.09	61.83	62.08	62.40	63.82
23	62.34	63.34	62.13	62.01	63.30	63.59	59.74	62.16	61.91	62.14	62.31	64.38
24	62.59	63.40	62.07	61.96	63.32	63.51	59.85	61.85	61.94	61.86	62.58	64.55
25	62.42	63.47	62.18	62.04	63.44	63.55	59.67	62.00	61.98	62.06	63.22	64.60
26	62.86	63.48	62.30	61.85	63.44	63.49	59.55	62.03	61.98	62.07	63.62	64.56
27	62.89	63.46	62.37	61.79	63.54	63.46	60.61	62.02	62.15	62.26	63.83	64.55
28	62.88	63.28	62.19	62.01	63.55	63.41	60.69	61.94	63.36	62.29	63.98	64.46
29	61.26	63.29	62.03	61.99	63.48	63.30	59.97	60.53	63.91	62.41	63.97	64.38
30	62.25	63.29	62.11	61.98	---	63.03	60.48	60.23	62.40	62.14	63.89	64.41
31	62.86	---	62.16	62.15	---	63.22	---	59.88	---	62.12	64.05	---
MAX	62.92	63.62	63.73	62.16	63.55	63.68	63.26	62.16	66.08	62.41	64.05	64.69
CAL YR 2003		LOW 63.73										
WTR YR 2004		LOW 66.08										



Ground-Water Records—Stark County

404939081203800. Local Number, ST-5A

LOCATION.—Latitude 40°49'39", longitude 81°20'38", Stark County, Hydrologic Unit 05040001, off Harrisburg Road, Canton, Ohio. Owner: City of Cantont.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused water table well, diameter 12 in., depth 132 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 1,060 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 1.00 ft above land-surface datum.

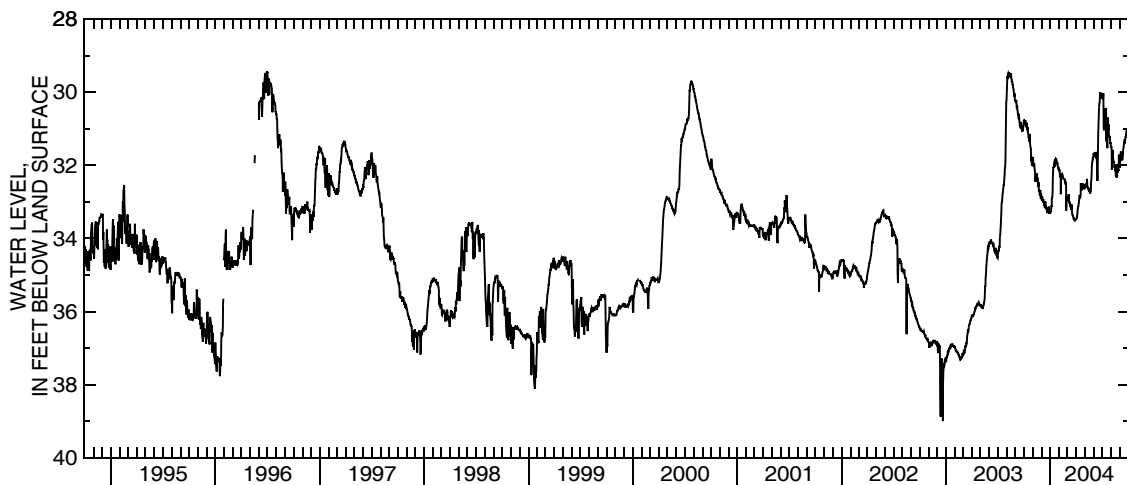
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—June 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 54.00 ft below land-surface datum, Feb. 10, 1956; minimum daily low, 26.13 ft below land-surface datum, May 18, 1964.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30.75	31.83	32.88	33.28	32.16	32.90	33.47	32.60	31.67	30.13	31.53	31.92
2	30.87	31.78	32.94	33.28	32.13	32.90	33.45	32.53	31.74	30.15	31.47	31.85
3	30.86	32.03	32.94	33.25	32.15	32.97	33.44	32.58	31.74	30.15	31.61	31.89
4	30.81	31.94	32.85	33.24	32.27	32.94	33.38	32.57	31.65	30.21	32.12	31.62
5	30.83	32.03	32.94	33.12	32.25	32.79	33.32	32.57	31.74	30.03	31.58	31.88
6	30.77	31.95	32.99	33.12	32.25	32.97	33.23	32.48	31.71	30.95	31.79	31.83
7	30.84	32.09	32.99	32.90	32.79	33.00	33.15	32.57	31.74	31.01	31.59	31.83
8	30.90	32.15	32.93	32.87	32.37	33.03	33.12	32.58	31.71	31.04	31.83	31.71
9	30.92	32.18	33.03	32.70	32.21	33.02	33.09	32.37	31.79	30.90	31.89	31.86
10	30.96	32.45	32.99	32.37	32.25	33.07	33.02	32.58	31.63	30.43	31.93	31.79
11	30.84	32.40	33.10	32.13	32.25	33.07	32.96	32.60	31.80	30.53	31.89	31.74
12	31.01	32.27	33.02	32.04	32.24	33.15	32.91	32.63	31.83	30.56	31.98	31.61
13	31.04	32.32	33.17	32.07	32.28	33.06	32.81	32.63	32.09	30.57	32.07	31.53
14	30.95	32.22	33.09	31.97	32.30	33.18	32.88	32.67	32.43	30.43	32.01	31.50
15	31.11	32.40	32.99	31.95	32.34	33.21	32.88	32.70	32.32	31.23	32.16	31.44
16	31.15	32.40	33.13	31.89	32.37	33.07	32.82	32.72	31.50	31.35	31.98	31.38
17	31.25	32.46	33.13	31.86	32.37	33.25	32.49	32.63	31.11	30.78	32.22	31.29
18	31.23	32.34	33.20	32.03	32.37	33.35	32.70	32.73	30.90	31.33	32.30	31.40
19	31.32	32.48	33.15	31.82	32.38	33.38	32.67	32.76	30.65	31.53	32.25	31.32
20	31.31	32.58	33.24	31.86	32.38	33.39	32.64	32.76	30.42	30.69	32.34	31.23
21	31.14	32.46	33.23	31.82	32.43	33.39	32.61	32.73	30.32	30.96	32.31	31.23
22	31.40	32.72	33.21	31.83	32.49	33.45	32.66	32.69	30.27	31.04	32.30	31.17
23	31.44	32.69	33.24	31.88	32.48	33.47	32.63	32.46	30.18	30.88	31.97	31.15
24	31.53	32.69	33.28	31.93	32.46	33.48	32.50	32.40	30.00	31.14	32.19	31.05
25	31.55	32.78	33.23	31.97	32.50	33.51	32.61	32.19	30.17	31.20	32.16	31.15
26	31.83	32.82	33.30	31.92	33.24	33.48	32.58	32.01	30.12	31.25	32.12	31.13
27	31.89	32.67	33.13	32.00	32.87	33.51	32.60	31.89	30.08	31.20	32.15	31.11
28	31.80	32.87	33.33	32.06	32.87	33.53	32.53	31.86	30.09	31.32	31.71	31.05
29	32.01	32.91	33.28	32.09	32.87	33.45	32.58	31.77	30.02	31.41	31.95	31.14
30	31.79	32.76	33.23	32.09	---	33.48	32.60	31.79	30.09	31.37	31.97	31.20
31	31.80	---	33.32	32.13	---	33.48	---	31.74	---	31.49	32.07	---
MAX	32.01	32.91	33.33	33.28	33.24	33.53	33.47	32.76	32.43	31.53	32.34	31.92
CAL YR 2003		LOW 37.35										
WTR YR 2004		LOW 33.53										



405211081253500. Local Number, ST-27

LOCATION.—Latitude 40°52'11", longitude 81°25'35", Stark County, Hydrologic Unit 05040001, Dresler Road near North Canton, Ohio. Owner: City of North Canton.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 8 in., depth 55 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 1,060 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 2.50 ft above land-surface datum.

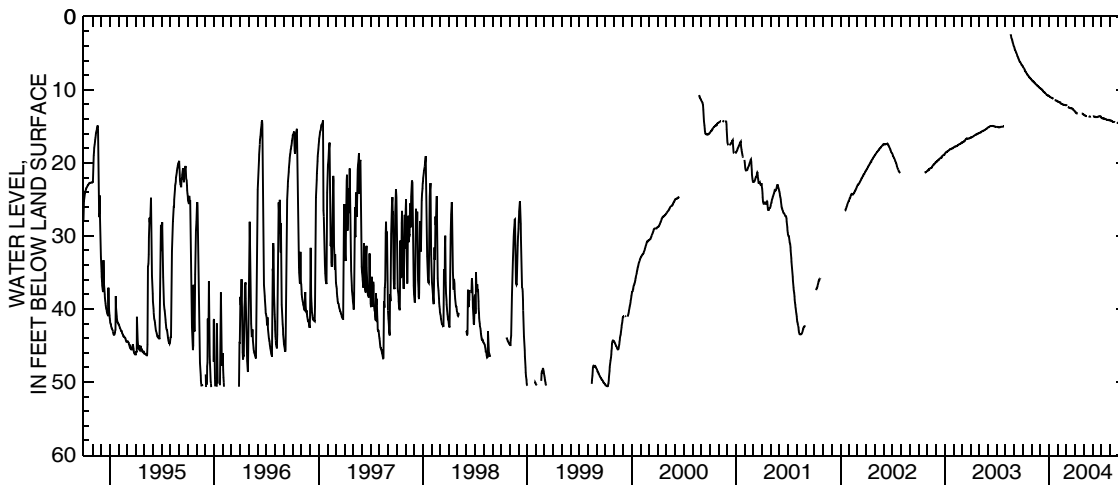
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—May 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 51.10 ft below land-surface datum, May 20, 1990; minimum daily low, 2.42 ft below land-surface datum, Aug. 19, 2003.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.80	8.66	9.81	10.89	11.64	12.17	13.00	13.40	---	13.75	14.20	14.65
2	6.92	8.70	9.84	10.92	11.64	12.17	13.07	13.41	---	13.79	14.21	14.70
3	6.96	8.76	9.87	10.94	11.67	12.21	13.11	13.49	13.70	13.86	14.21	14.70
4	7.02	8.81	9.90	10.98	11.69	---	13.14	13.51	13.67	13.89	14.24	14.72
5	7.08	8.87	9.95	11.00	11.70	---	13.20	13.51	13.67	13.92	14.24	---
6	7.16	8.87	9.96	11.04	11.72	---	13.23	13.53	13.67	13.94	14.26	---
7	7.20	8.85	9.99	11.07	11.73	12.38	13.25	13.55	13.70	13.95	14.28	---
8	7.28	8.91	10.02	11.10	11.76	12.41	13.26	13.60	13.71	13.94	14.31	---
9	7.44	8.97	10.11	11.12	11.76	12.42	13.26	13.62	13.73	13.96	14.35	---
10	7.47	9.01	10.16	11.13	11.81	12.45	13.28	13.64	13.74	13.95	14.35	---
11	7.53	9.06	10.20	11.15	11.90	12.48	---	13.64	13.74	13.95	14.40	---
12	7.62	9.11	10.23	11.16	11.94	12.48	---	13.65	13.75	13.95	14.42	---
13	7.69	9.15	10.31	11.16	11.96	12.50	---	---	13.77	13.98	14.42	---
14	7.76	9.18	10.34	11.22	11.97	12.51	---	---	13.77	14.02	14.42	---
15	7.80	9.21	10.37	11.24	11.97	12.54	---	---	13.77	14.03	14.42	14.70
16	7.89	9.26	10.40	11.27	11.97	12.54	---	---	13.75	14.05	14.42	14.69
17	7.94	9.30	10.41	---	12.02	12.54	---	---	13.75	14.05	14.42	14.67
18	7.98	9.34	10.42	---	12.03	12.57	---	---	13.75	14.05	14.43	14.67
19	8.04	9.38	10.50	---	12.05	12.57	---	13.67	13.74	14.05	14.45	14.64
20	8.09	9.42	10.53	---	12.06	12.57	---	13.70	13.73	14.09	---	14.63
21	8.16	9.45	10.56	11.45	12.08	12.59	---	13.70	13.73	14.12	---	14.60
22	8.21	9.48	10.62	11.45	12.09	12.60	---	13.70	13.68	14.14	---	14.60
23	8.25	9.53	10.68	11.46	12.09	12.62	---	13.70	13.67	14.17	---	14.58
24	8.28	9.57	10.71	11.48	12.11	12.65	---	13.71	13.65	14.18	---	14.57
25	8.33	9.60	10.74	11.49	12.12	12.71	13.29	13.71	13.65	14.18	---	14.55
26	8.40	9.63	10.76	11.51	12.12	12.77	13.27	13.70	13.65	14.16	14.46	14.54
27	8.45	9.67	10.77	11.52	12.12	12.81	13.28	---	13.65	14.15	14.50	14.52
28	8.48	9.72	10.80	11.55	12.14	12.83	13.31	---	13.68	14.14	14.57	14.52
29	8.52	9.75	10.80	11.55	12.15	12.87	13.36	---	13.71	14.16	14.57	14.55
30	8.56	9.78	10.85	11.61	---	12.92	13.40	---	13.71	14.21	14.57	14.57
31	8.61	---	10.86	11.63	---	12.95	---	---	---	14.21	14.60	---
MAX	8.61	9.78	10.86	11.63	12.15	12.95	13.40	13.71	13.77	14.21	14.60	14.72
CAL YR 2003		LOW 18.77										
WTR YR 2004		LOW 14.72										



Ground-Water Records—Tuscarawas County

403207081293800. Local Number, TU-3

LOCATION.—Latitude 40°32'07", longitude 81°29'38", Tuscarawas County, Hydrologic Unit 05040001, in the northwest part of Dover, Ohio. Owner: City of Dover.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused water table well, diameter 6 in., depth 62 ft, cased.

INSTRUMENTATION.—Monthly measurement with chalked tape by USGS personnel.

DATUM.—Elevation of land-surface datum is 880 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

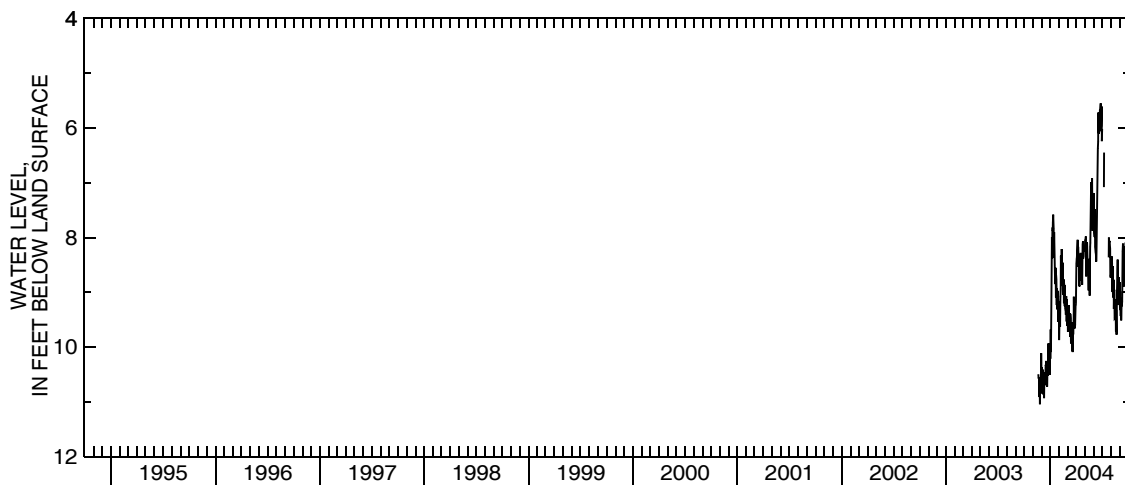
PERIOD OF RECORD.—May 1960 to October 1982 continuous, November 1982 to November 2003 periodic, continuous thereafter.

REVISIONS.—The water level reported for Jan. 31, 1993, has been revised to 9.25 ft below land-surface datum.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 19.35 ft below land-surface datum, Nov. 29, 30, and Dec. 6-8, 1962; minimum daily low, 3.2 ft below land-surface datum, July 14-15, 1969.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.15	---	10.69	10.21	9.87	9.23	8.47	8.23	7.19	---	8.69	9.32
2	---	---	10.37	9.68	9.35	9.72	8.39	8.04	7.87	---	8.34	8.98
3	---	9.45	10.43	10.09	9.28	9.25	8.36	8.01	7.92	---	8.39	9.43
4	---	---	10.44	9.76	9.63	9.24	8.24	7.98	7.99	6.38	8.47	9.10
5	---	---	10.84	8.26	9.08	9.60	8.04	8.71	7.48	---	8.99	9.51
6	---	---	10.41	7.99	8.94	9.23	8.53	8.52	8.17	7.08	8.52	9.16
7	---	---	10.86	8.39	8.33	9.60	8.17	8.52	8.26	6.45	9.00	9.25
8	---	---	10.51	7.86	8.67	9.71	8.26	8.08	8.31	---	9.09	9.17
9	---	---	10.54	7.87	8.21	9.38	8.35	8.11	8.44	---	8.77	8.81
10	---	---	10.93	7.72	8.28	9.81	8.36	8.45	8.42	---	9.30	8.25
11	---	---	10.46	7.58	8.87	9.39	8.87	8.50	7.95	---	8.97	8.11
12	---	---	10.68	7.84	8.88	9.47	8.89	8.48	7.73	---	8.95	8.64
13	---	---	10.63	8.36	8.46	9.93	8.38	8.95	7.06	---	9.47	8.38
14	---	---	10.66	7.90	8.94	9.56	8.30	8.96	6.50	---	9.46	8.89
15	---	---	10.32	8.17	9.04	9.63	8.66	8.40	6.38	---	9.13	8.52
16	---	---	10.33	8.55	8.76	9.65	8.28	8.39	6.25	---	9.22	8.60
17	---	---	10.31	8.75	9.20	10.07	8.75	9.06	5.72	---	9.71	8.77
18	---	---	10.25	8.85	8.84	9.69	8.79	8.55	6.08	---	9.32	8.17
19	---	---	10.70	8.55	8.88	10.09	8.38	8.17	6.11	---	9.76	8.37
20	---	10.49	10.32	9.09	9.25	9.55	8.47	8.10	6.07	---	9.76	8.09
21	---	10.57	10.72	8.68	8.87	9.77	8.86	7.84	6.05	---	9.05	8.21
22	---	10.55	10.29	8.76	9.29	9.50	8.44	7.28	5.67	---	8.85	8.72
23	---	10.91	10.28	9.23	9.33	9.08	8.12	6.99	6.05	8.36	8.40	8.80
24	---	10.61	10.52	8.93	9.41	9.64	8.07	7.29	5.64	8.00	8.55	8.85
25	---	11.04	9.93	9.31	9.07	9.26	8.39	7.32	5.55	8.08	9.16	8.49
26	---	10.55	10.23	8.97	9.08	9.64	8.34	6.92	6.00	8.06	8.77	8.99
27	---	10.85	10.42	9.05	9.53	9.64	8.19	7.67	5.97	8.13	9.23	8.67
28	---	10.72	10.10	9.14	9.13	9.59	8.22	7.88	5.61	8.20	8.72	9.17
29	---	10.62	10.12	9.54	9.61	9.24	8.25	7.28	6.24	8.69	9.13	8.80
30	---	10.11	10.50	9.17	---	9.21	8.23	7.83	6.02	8.73	8.81	9.24
31	---	---	9.94	9.25	---	8.90	---	7.20	---	8.67	9.27	---
TOTAL	8.15	126.47	323.73	271.50	262.08	295.27	252.05	249.71	204.70	94.83	279.25	263.46
MEAN	8.15	10.54	10.44	8.76	9.04	9.52	8.40	8.06	6.82	7.90	9.01	8.78
MAX	8.15	11.04	10.93	10.21	9.87	10.09	8.89	9.06	8.44	8.73	9.76	9.51
MIN	8.15	9.45	9.93	7.58	8.21	8.90	8.04	6.92	5.55	6.38	8.34	8.09
MED	8.15	10.59	10.43	8.76	9.07	9.59	8.36	8.10	6.32	8.11	9.00	8.80
WTR YR 2004	TOTAL 2631.20		MEAN 8.80		HIGH 5.55		LOW 11.04		MED 8.85			



403557081313600. Local Number, TU-4

LOCATION.—Latitude 40°35'57", longitude 81°31'36", Tuscarawas County, Hydrologic Unit 05040001, near Fire Department building in Strasburg, Ohio.

Owner: Village of Strasburg.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused water table well, diameter 6 in., depth 42.5 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 920 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 3.50 ft above land-surface datum.

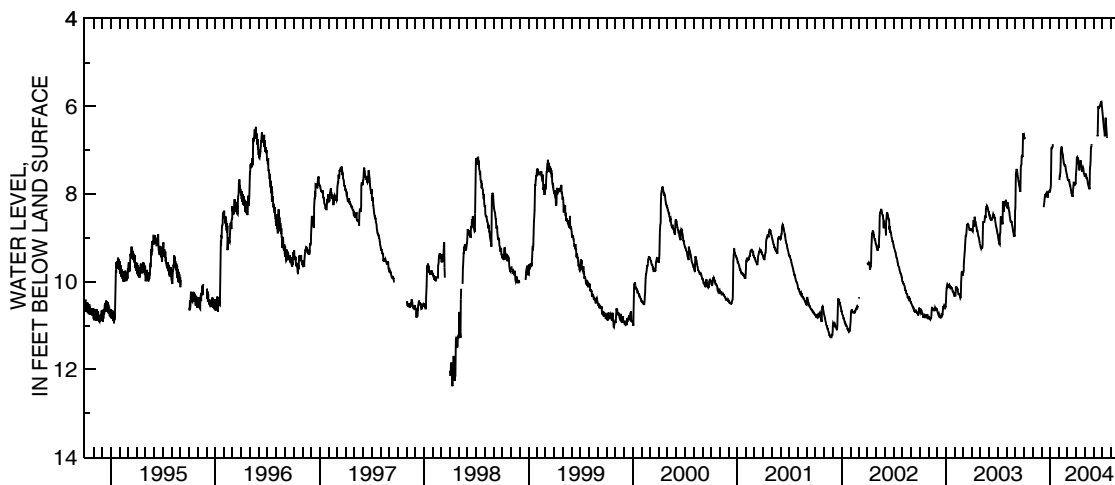
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—June 1960 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 12.38 ft below land-surface datum, Apr. 10, 1998; minimum daily low, 4.05 ft below land-surface datum, July 13, 1969.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.65	---	---	7.91	---	7.62	7.44	7.61	---	6.09	---	---
2	6.71	---	---	7.86	7.68	7.67	7.29	7.59	---	6.17	---	---
3	6.72	---	---	7.79	7.59	7.68	7.17	7.56	---	6.24	---	---
4	6.74	---	---	7.65	7.59	7.69	7.16	7.53	---	6.29	---	---
5	6.75	---	---	6.96	7.50	7.67	7.19	7.56	---	6.36	---	---
6	---	---	---	6.96	7.28	7.69	7.17	7.59	---	6.44	---	---
7	---	---	---	6.94	7.02	7.69	7.22	7.65	---	6.50	---	---
8	---	---	---	6.92	6.99	7.74	7.22	7.62	---	6.56	---	---
9	---	---	8.30	6.92	6.93	7.77	7.31	7.65	---	6.63	---	---
10	---	---	8.27	6.86	6.93	7.81	7.35	7.69	---	6.68	---	---
11	---	---	8.17	---	6.99	7.81	7.40	7.73	---	6.45	---	---
12	---	---	8.09	---	7.05	7.86	7.46	7.76	---	6.54	---	---
13	---	---	8.06	---	7.08	7.91	7.40	7.80	---	6.26	---	---
14	---	---	8.01	---	7.11	7.92	7.29	7.83	6.66	6.39	---	---
15	---	---	8.07	---	7.17	7.97	7.25	7.85	6.68	6.50	---	---
16	---	---	8.04	---	7.23	7.97	7.23	7.86	6.38	6.60	---	---
17	---	---	8.00	---	7.28	8.03	7.28	7.89	6.00	6.69	---	---
18	---	---	7.98	---	7.31	8.04	7.32	7.86	6.02	6.72	---	---
19	---	---	7.97	---	7.35	8.06	7.35	7.41	6.05	---	---	---
20	---	---	8.01	---	7.34	7.97	7.38	7.36	6.03	---	---	---
21	---	---	8.01	---	7.35	7.88	7.41	7.25	6.00	---	6.72	---
22	---	---	8.07	---	7.35	7.80	7.49	6.96	6.00	---	---	---
23	---	---	8.07	---	7.36	7.74	7.41	6.93	5.99	---	---	---
24	---	---	8.03	---	7.41	7.74	7.41	6.90	5.96	---	---	---
25	---	---	7.95	---	7.46	7.80	7.40	6.86	5.93	---	---	---
26	---	---	7.95	---	7.49	7.80	7.43	---	5.91	---	---	---
27	---	---	7.95	---	7.53	7.79	7.50	---	5.91	---	---	---
28	---	---	7.94	---	7.56	7.76	7.53	---	5.90	---	---	---
29	---	---	7.97	---	7.59	7.76	7.56	---	5.94	---	---	---
30	---	---	7.95	---	---	7.76	7.59	---	6.02	---	---	---
31	---	---	7.92	---	---	7.58	---	---	---	---	---	---
MAX	6.75	---	8.30	7.91	7.68	8.06	7.59	7.89	6.68	6.72	6.72	---
CAL YR 2003	LOW 10.46											
WTR YR 2004	LOW 8.30											



403653081321800. Local Number, TU-1

LOCATION.—Latitude 40°36'53", longitude 81°32'18", Tuscarawas County, Hydrologic Unit 05040001, 1.3 mi north of Strasburg, Ohio. Owner: Ray Libert.
 AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused water table well, diameter 4 in., depth 23 ft, cased.

INSTRUMENTATION.—Type F continuous recorder.

DATUM.—Elevation of land-surface datum is 928.24 ft above sea level. Measuring point: Floor of instrument shelter 0.90 ft above land-surface datum.

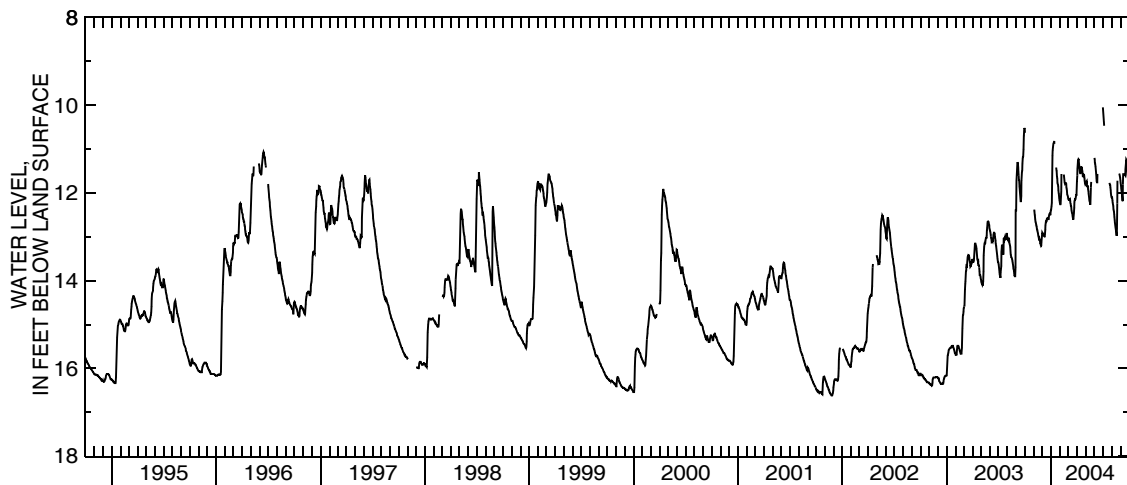
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—July 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 16.62 ft below land-surface datum, Nov. 24-26, 2001; minimum daily low, 6.64 ft below land-surface datum, July 14, 1969.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
 DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.54	---	12.91	12.40	12.22	12.12	11.73	11.81	11.20	10.05	12.10	11.77
2	10.63	---	12.92	12.37	12.26	12.15	11.61	11.80	11.23	10.15	12.12	11.83
3	---	12.38	12.93	12.31	12.26	12.16	11.45	11.79	11.31	10.25	12.17	11.90
4	---	12.41	12.92	12.23	12.24	12.16	11.29	11.74	11.34	10.36	12.22	11.93
5	---	12.49	12.96	11.73	12.12	12.15	11.24	11.73	11.40	10.47	12.26	12.04
6	---	12.52	12.96	11.15	11.96	12.15	11.23	11.80	11.48	---	12.30	12.10
7	---	12.60	12.97	11.04	11.57	12.14	11.24	11.87	11.56	---	12.37	12.17
8	---	12.66	12.99	10.96	---	12.19	11.30	11.83	11.66	---	12.42	12.19
9	---	12.68	13.00	10.90	---	12.24	11.37	11.86	11.73	---	12.49	11.81
10	---	12.72	13.00	10.87	---	12.26	11.45	11.93	11.76	---	12.55	11.55
11	---	12.75	12.94	10.84	---	12.30	11.52	11.97	11.76	---	12.62	---
12	---	12.77	12.84	10.82	---	12.31	11.55	12.02	11.57	---	12.67	---
13	---	12.83	12.74	10.88	---	12.40	11.55	12.08	---	---	12.73	---
14	---	12.84	12.65	---	---	12.44	11.53	12.14	---	---	12.79	---
15	---	12.87	12.66	---	11.58	12.48	11.48	12.19	---	---	12.84	11.56
16	---	12.92	12.65	---	11.65	12.50	11.41	12.23	---	---	12.89	11.59
17	---	12.97	12.64	---	11.72	12.54	11.41	12.27	---	---	12.94	11.60
18	---	12.98	12.59	---	11.76	12.58	11.42	12.25	---	---	12.98	11.46
19	---	13.01	12.58	11.42	11.79	12.61	11.50	12.04	---	---	12.82	11.34
20	---	13.04	12.59	11.48	11.78	12.58	11.51	11.88	---	---	12.24	11.24
21	---	13.03	12.59	11.50	11.78	12.46	11.59	11.75	---	---	11.72	11.25
22	---	13.06	12.60	11.63	11.78	12.34	11.64	---	---	---	---	11.32
23	---	13.07	12.60	11.67	11.80	12.21	11.61	---	---	---	---	11.40
24	---	13.14	12.60	11.77	11.88	12.16	11.60	---	---	11.77	---	11.47
25	---	13.15	12.53	11.81	11.91	12.15	11.59	---	---	11.81	---	11.57
26	---	13.19	12.49	11.85	11.94	12.15	11.60	---	---	11.82	---	11.64
27	---	13.21	12.48	11.94	12.03	12.14	11.67	---	---	11.88	11.56	11.70
28	---	13.20	12.47	12.01	12.06	12.09	11.72	---	---	11.94	11.58	11.74
29	---	13.12	12.49	12.03	12.08	12.05	11.77	---	---	12.00	11.62	11.86
30	---	13.00	12.49	12.12	---	12.05	11.80	---	---	12.06	11.66	11.94
31	---	---	12.42	12.17	---	11.91	---	---	---	12.10	11.72	---
MAX	10.63	13.21	13.00	12.40	12.26	12.61	11.80	12.27	11.76	12.10	12.98	12.19
CAL YR 2003		LOW 16.16										
WTR YR 2004		LOW 13.21										



403823081324200. Local Number, TU-5

LOCATION.—Latitude 40°38'23", longitude 81°32'42", Tuscarawas County, Hydrologic Unit 05040001, near Strasburg, Ohio. Owner: City of Canton.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused water table well, diameter 6 in., depth 100 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 937.93 ft above sea level. Measuring point: Floor of instrument shelter 4.00 ft above land-surface datum.

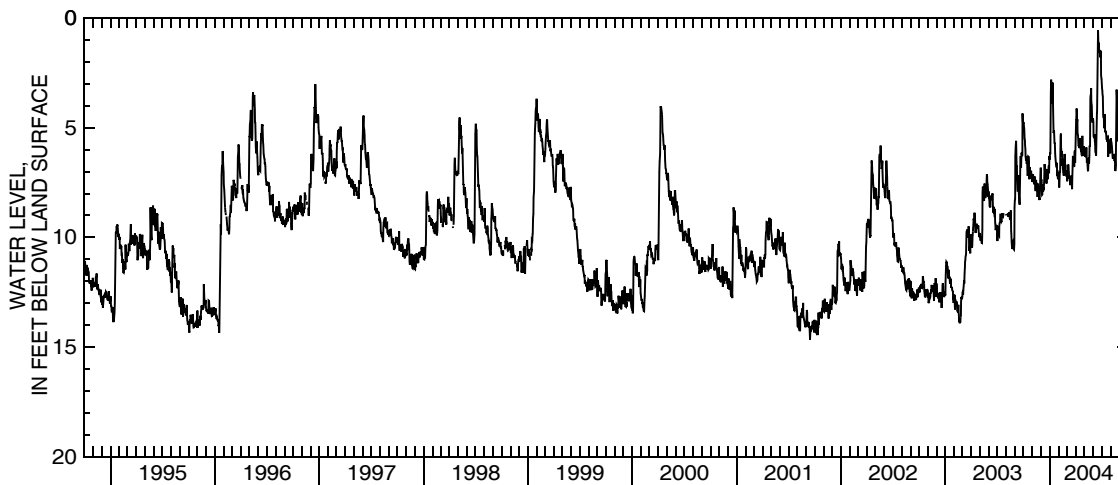
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—June 1960 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 14.67 ft below land-surface datum, Sept. 14, 2001; minimum daily low, 0.20 ft below land-surface datum, Jan. 13, 1991.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.80	7.47	6.87	6.45	7.08	6.93	5.36	5.93	4.62	2.78	5.67	5.69
2	4.76	7.25	7.55	6.18	7.08	7.44	4.65	6.24	4.74	3.20	5.48	5.76
3	5.00	7.34	7.35	6.18	7.73	6.94	4.62	6.32	5.40	3.32	5.60	5.99
4	5.07	7.13	7.59	5.79	7.69	7.06	4.13	6.06	5.45	3.49	5.66	5.94
5	5.51	7.40	8.06	3.36	7.05	6.86	4.31	5.94	5.45	3.57	5.76	5.60
6	5.58	7.49	8.04	2.81	7.02	6.68	4.73	6.26	5.30	4.39	6.02	5.81
7	5.81	7.34	7.59	3.05	6.24	6.86	4.62	6.35	5.61	4.52	6.09	6.09
8	5.97	7.59	7.67	3.56	5.36	7.06	5.25	5.90	5.75	4.53	6.33	6.32
9	6.30	7.22	7.92	3.90	5.27	7.28	5.36	6.17	6.12	4.97	6.42	5.87
10	6.51	7.44	7.73	3.68	5.90	7.28	5.66	6.59	6.18	5.02	6.30	4.48
11	6.32	7.58	7.85	2.94	6.08	7.31	5.85	6.45	6.27	4.82	6.30	4.09
12	6.61	7.79	7.51	3.48	6.33	7.46	5.81	6.54	5.49	4.39	6.41	3.92
13	6.61	7.89	7.31	4.16	6.08	7.62	5.93	6.92	4.86	5.10	6.20	4.38
14	6.54	7.38	6.66	4.83	6.74	7.26	5.79	6.99	4.34	5.21	6.29	4.92
15	6.89	7.62	6.98	5.24	6.42	7.19	5.48	6.76	4.26	5.18	6.53	4.98
16	7.19	7.79	7.29	5.13	6.83	7.40	5.55	6.38	3.02	5.24	6.41	5.42
17	6.99	7.55	6.99	5.54	6.99	7.43	5.75	6.56	1.55	5.40	6.56	5.60
18	6.32	7.56	7.16	5.72	7.05	7.56	5.94	6.65	0.56	5.54	6.98	5.16
19	6.33	7.91	6.89	5.69	7.19	7.80	6.03	6.27	1.02	5.52	6.72	4.52
20	6.61	8.16	7.41	6.18	6.68	7.34	6.02	5.82	1.34	5.63	5.58	4.61
21	7.16	7.56	7.55	6.30	6.75	6.92	6.12	5.87	1.13	5.42	4.74	4.92
22	7.35	8.04	7.04	6.57	6.20	6.29	6.24	3.65	1.56	5.40	3.27	5.01
23	6.80	7.71	6.93	6.66	6.50	6.48	6.30	3.56	1.46	6.33	3.59	5.42
24	6.96	7.77	6.93	6.69	6.99	6.39	5.37	3.49	1.49	6.27	4.25	5.79
25	7.28	8.27	7.35	6.81	6.68	6.69	5.87	3.21	1.68	6.08	4.76	5.85
26	7.32	8.24	6.96	6.60	6.94	6.75	6.02	3.80	1.74	5.57	5.12	5.66
27	7.05	8.30	7.02	7.19	7.14	6.74	6.14	4.01	1.80	5.97	5.40	5.63
28	6.96	7.56	6.78	6.94	7.10	6.14	6.26	4.59	1.49	5.76	5.63	6.00
29	7.20	7.28	6.71	7.22	7.23	6.05	5.85	4.62	2.60	5.55	5.19	5.85
30	7.13	6.83	7.08	7.35	---	6.60	5.96	4.77	2.75	5.85	5.15	6.21
31	7.17	---	6.29	7.16	---	6.32	---	4.58	---	6.17	5.48	---
MAX	7.35	8.30	8.06	7.35	7.73	7.80	6.30	6.99	6.27	6.33	6.98	6.32
CAL YR 2003		LOW 13.92										
WTR YR 2004		LOW 8.30										



Ground-Water Records—Union County

401826083255200. Local Number, U-4

LOCATION.—Latitude 40°18'26", longitude 83°25'52", Union County, Hydrologic Unit 05060001, 2.6 mi southeast of Raymond, Ohio. Owner: State of Ohio.
 AQUIFER.—Limestone of Silurian Age.

WELL CHARACTERISTICS.—Drilled test artesian well, diameter 12 in., depth 350 ft, cased to 37 ft.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 1,040 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

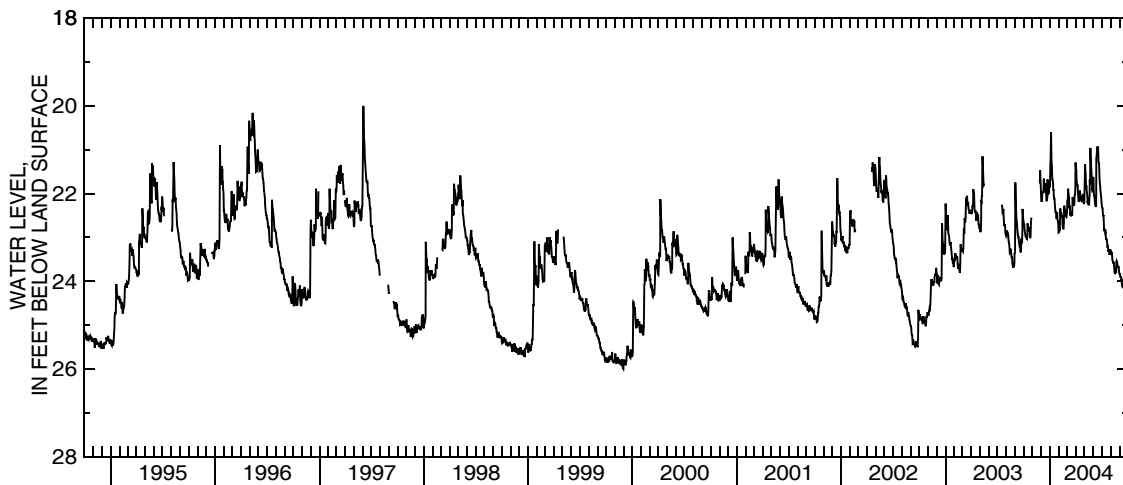
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—February 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 26.00 ft below land-surface datum, Nov. 30, 1999; minimum daily low, 19.32 ft below land-surface datum, Feb. 24, 1975.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.64	---	22.02	21.86	22.89	22.43	21.38	22.16	21.62	22.26	23.34	23.84
2	22.71	---	22.14	21.72	22.88	22.16	21.47	21.89	21.80	22.32	23.34	23.85
3	22.71	---	22.19	21.29	22.77	22.17	21.47	21.33	21.97	22.34	23.36	23.85
4	22.72	---	22.17	21.27	22.85	22.13	21.71	21.45	22.04	22.34	23.33	23.90
5	22.83	---	22.10	20.60	22.83	21.89	21.81	21.53	22.07	22.49	23.37	23.90
6	22.91	---	21.95	21.02	22.58	21.99	21.81	21.63	22.11	22.52	23.42	23.91
7	22.94	---	21.96	21.26	22.34	22.01	21.81	21.84	22.22	22.49	23.51	23.96
8	22.98	---	21.97	21.36	22.49	22.10	21.86	21.81	22.28	22.64	23.54	23.96
9	22.98	---	21.97	21.60	22.46	22.26	22.02	21.89	22.29	22.86	23.57	24.05
10	22.97	---	21.92	21.68	22.43	22.34	22.10	21.99	22.29	22.85	23.55	24.09
11	22.97	---	21.66	21.69	22.49	22.28	22.19	22.07	22.26	22.82	23.58	24.08
12	23.03	---	21.89	21.78	22.52	22.40	22.16	22.22	21.17	22.83	23.58	24.09
13	23.04	---	21.93	21.92	22.52	22.50	22.07	22.17	21.15	22.89	23.66	24.14
14	22.97	---	21.87	21.92	22.53	22.44	21.96	22.16	20.97	22.88	23.73	24.14
15	22.68	---	21.97	22.04	22.72	22.52	21.95	22.25	20.93	22.97	23.81	24.14
16	22.72	---	21.95	22.13	22.79	22.49	21.97	22.25	21.05	23.04	23.82	24.09
17	22.79	---	21.77	22.10	22.80	22.44	22.07	22.25	21.00	23.04	23.81	24.11
18	22.79	---	21.81	22.16	22.80	22.46	22.13	22.16	20.93	23.04	23.75	24.21
19	22.83	---	21.96	22.32	22.67	22.50	22.13	22.04	21.14	23.09	23.78	24.26
20	22.86	---	22.16	22.41	22.40	22.31	22.16	21.68	21.29	23.18	23.81	24.26
21	22.76	---	22.16	22.41	22.28	22.08	22.07	21.80	21.32	23.24	23.57	24.26
22	22.82	---	22.13	22.43	22.41	22.20	22.20	20.96	21.50	23.21	23.54	24.29
23	22.91	---	22.08	22.44	22.43	22.20	22.10	21.14	21.63	23.24	23.57	24.29
24	23.00	---	21.68	22.53	22.37	22.19	22.13	21.36	21.77	23.33	23.60	24.30
25	23.00	---	21.86	22.58	22.43	22.28	22.04	21.44	21.81	23.30	23.69	24.35
26	22.97	---	21.99	22.43	22.43	22.25	22.01	21.56	21.92	23.27	23.66	24.41
27	22.62	21.77	22.02	22.49	22.52	22.22	22.08	21.63	21.97	23.33	23.70	24.35
28	22.55	21.47	21.99	22.61	22.53	22.05	22.14	21.86	22.07	23.40	23.67	24.33
29	---	21.59	21.96	22.62	22.49	22.01	22.22	21.93	22.13	23.36	23.67	24.33
30	---	21.72	21.80	22.65	---	21.87	22.22	21.92	22.22	23.33	23.76	24.33
31	---	---	21.83	22.76	---	21.29	---	21.77	---	23.27	23.82	---
MAX	23.04	21.77	22.19	22.76	22.89	22.52	22.22	22.25	22.29	23.40	23.82	24.41
CAL YR 2003	LOW 23.81											
WTR YR 2004	LOW 24.41											



402010083321900. Local Number, U-5

LOCATION.—Latitude 40°20'10", longitude 83°32'19", Union County, Hydrologic Unit 05060001, east of East Liberty, Ohio. Owner: Honda of America.

AQUIFER.—Limestone of Silurian Age.

WELL CHARACTERISTICS.—Drilled observation well, diameter 6 in., depth 145 ft, cased to 98 ft.

INSTRUMENTATION.—Type F continuous recorder.

DATUM.—Elevation of land-surface is 1085 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 4 ft. above land-surface datum.

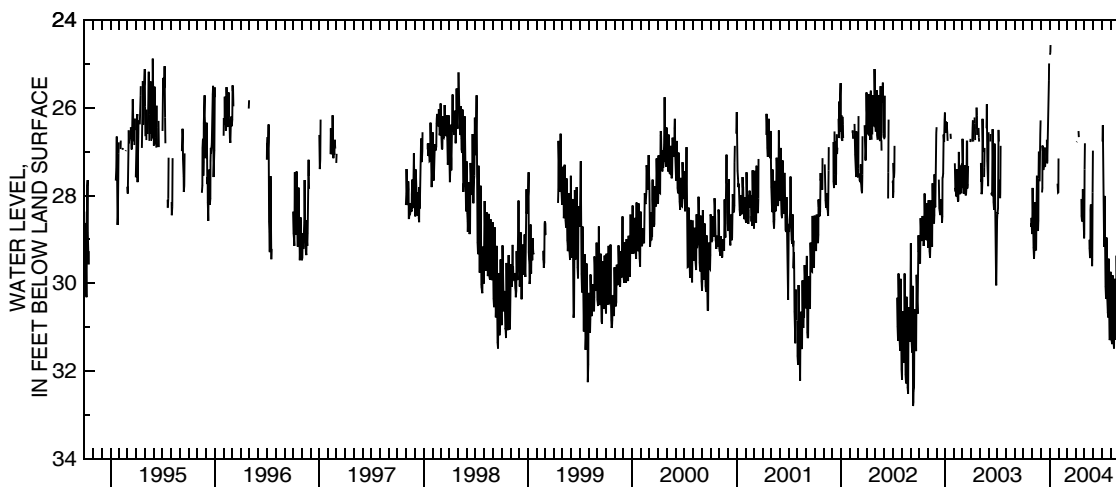
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water.

PERIOD OF RECORD.—September 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 33.25 ft below land-surface datum, Oct. 10, 1991; minimum daily low, 23.06 ft below land-surface datum, Apr. 29, 1993.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	28.79	---	---	27.16	---	---	28.88	---	---	29.74	30.64
2	---	27.83	---	24.79	---	---	---	27.41	---	---	30.59	30.70
3	---	28.17	---	24.73	---	---	---	26.81	---	---	30.77	31.30
4	---	28.57	---	24.57	---	---	26.78	---	---	26.77	31.27	30.93
5	---	28.94	27.93	---	---	---	26.77	---	---	26.40	31.33	29.40
6	---	29.19	27.83	---	---	---	---	---	---	27.45	31.39	28.65
7	---	29.44	26.86	---	---	---	---	---	---	28.26	30.96	29.67
8	---	29.25	26.96	---	---	---	---	---	---	28.83	29.82	30.25
9	---	28.15	26.96	---	---	---	---	---	---	29.17	30.36	30.57
10	---	28.53	27.42	---	---	---	---	---	---	29.12	30.79	30.82
11	---	28.49	27.36	---	---	---	26.53	---	---	28.01	31.12	30.33
12	---	28.68	27.07	---	---	---	26.67	---	---	28.38	31.35	29.03
13	---	29.24	27.08	---	---	---	---	---	---	29.16	31.49	30.42
14	---	29.24	27.05	---	---	---	---	---	---	29.66	31.05	30.98
15	---	28.94	26.91	---	---	---	---	---	---	30.08	29.90	31.64
16	---	27.89	27.35	---	---	---	---	---	---	30.36	30.56	31.33
17	---	27.55	27.21	---	---	---	---	---	---	30.16	30.85	31.34
18	---	28.22	---	---	---	---	---	---	---	28.96	31.01	30.82
19	---	28.48	---	---	---	---	---	29.01	---	29.44	31.29	29.49
20	---	28.68	---	---	---	---	---	29.20	---	29.98	31.09	30.18
21	---	28.81	---	---	---	---	28.08	29.43	---	30.37	30.66	30.42
22	---	28.58	26.73	---	---	---	28.47	29.28	---	30.66	29.37	30.61
23	---	27.62	27.27	---	---	---	28.59	28.33	---	30.78	29.72	30.65
24	---	27.00	27.20	---	---	---	28.55	28.21	---	30.64	30.26	30.60
25	---	---	26.56	---	---	---	28.19	28.63	---	29.44	30.30	30.34
26	---	---	26.09	---	---	---	27.86	29.00	---	29.81	30.68	29.82
27	---	27.68	25.84	---	---	---	28.35	29.25	---	30.38	30.88	29.60
28	28.51	27.18	25.58	---	---	---	28.48	29.61	---	30.75	30.48	30.02
29	28.72	26.60	25.37	27.73	---	---	28.76	29.46	26.79	31.30	29.11	30.14
30	28.63	26.29	24.99	27.94	---	---	28.98	27.94	---	31.27	29.78	30.24
31	28.88	---	---	27.93	---	---	---	26.98	---	31.01	30.50	---
MAX	28.88	29.44	27.93	27.94	27.16	---	28.98	29.61	26.79	31.30	31.49	31.64
CAL YR 2003		LOW 30.05										
WTR YR 2004		LOW 31.64										



Ground-Water Records—Vinton County

391452082282900. Local Number, V-1

LOCATION.—Latitude 39°14'52", longitude 82°28'29", Vinton County, Hydrologic Unit 05090101, State Highway garage in McArthur, Ohio. Owner: Vinton County School Board.

AQUIFER.—Sandstone of Mississippian Age.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 6 in., depth 218 ft, cased.

INSTRUMENTATION.—Digital recorder, 60-minute punch.

DATUM.—Elevation of land-surface datum is 730 ft above sea level (from topographic map). Measuring Point: Top of platform 2.50 ft below land-surface datum.

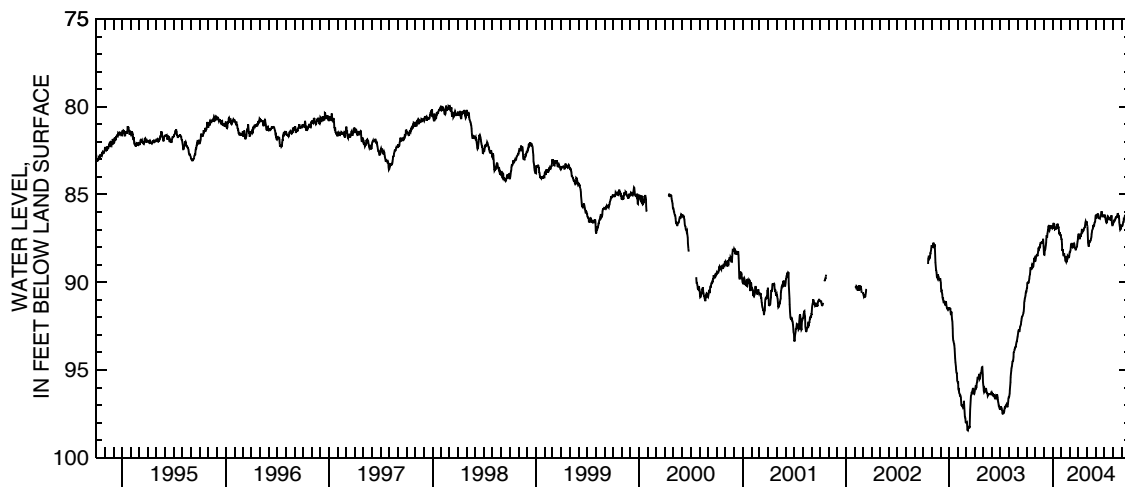
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—September 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 98.45 ft below land-surface datum, Mar. 7, 2003; minimum daily low, 49.55 ft below land-surface datum, Mar. 20, 1963.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90.50	88.80	88.33	86.94	87.55	88.36	87.30	86.53	86.20	86.25	86.70	86.83
2	90.35	88.74	88.43	86.92	87.56	88.25	87.27	86.76	86.15	86.19	86.65	86.78
3	90.31	88.63	88.44	86.76	87.82	88.30	87.23	86.82	86.33	86.18	86.54	86.77
4	90.04	88.55	88.35	86.67	88.16	88.18	87.31	86.99	86.33	86.20	86.55	86.75
5	90.03	88.48	88.12	86.62	88.22	88.02	87.50	87.52	86.26	86.29	86.51	86.70
6	90.00	88.45	88.12	86.78	88.12	87.86	87.55	87.76	86.15	86.38	86.55	86.59
7	90.00	88.45	88.10	86.85	88.22	87.91	87.45	87.93	86.12	86.42	86.49	86.56
8	90.01	88.49	87.90	86.92	88.46	87.76	87.38	87.93	86.12	86.55	86.46	86.55
9	89.98	88.51	87.73	86.85	88.45	87.80	87.38	87.80	86.13	86.62	86.43	86.40
10	89.90	88.36	87.53	86.96	88.40	87.92	87.37	87.72	86.13	86.61	86.34	86.42
11	89.80	88.27	87.32	86.95	88.40	87.91	87.28	87.69	86.19	86.56	86.31	86.36
12	89.64	88.07	87.40	86.86	88.51	87.94	87.25	87.69	86.33	86.45	86.30	86.24
13	89.54	88.04	87.46	86.95	88.55	88.02	87.01	87.64	86.35	86.34	86.29	86.21
14	89.32	88.09	87.24	86.95	88.55	88.01	87.01	87.62	86.33	86.24	86.33	86.24
15	89.15	88.02	87.06	86.86	88.72	87.84	87.07	87.55	86.35	86.25	86.27	86.29
16	89.20	87.98	87.00	86.91	88.80	87.80	87.11	87.50	86.37	86.27	86.24	86.21
17	89.26	88.06	86.81	86.91	88.82	87.79	87.09	87.41	86.31	86.37	86.14	86.15
18	89.30	88.01	86.80	86.67	88.85	87.83	87.09	87.27	86.28	86.39	86.09	85.84
19	89.15	87.78	86.86	86.71	88.78	88.01	87.06	87.15	86.25	86.37	86.17	86.17
20	89.13	87.78	87.03	86.84	88.60	88.03	87.05	87.05	86.19	86.39	86.25	86.37
21	88.95	87.79	87.05	86.90	88.61	88.05	86.93	86.99	86.10	86.40	86.21	86.51
22	88.96	87.76	86.94	86.82	88.69	88.14	86.92	86.93	85.95	86.36	86.26	86.49
23	89.03	87.75	86.88	86.97	88.64	88.14	86.88	86.77	86.02	86.36	86.35	86.46
24	89.11	87.68	86.74	87.16	88.49	88.08	86.86	86.76	86.16	86.44	86.58	86.40
25	89.10	87.79	86.84	87.28	88.52	88.04	86.76	86.77	86.22	86.44	86.81	86.35
26	89.01	87.74	86.90	87.18	88.53	88.03	86.62	86.79	86.21	86.30	86.93	86.33
27	88.82	87.75	86.93	87.19	88.55	87.98	86.53	86.75	86.21	86.18	87.00	86.30
28	88.66	87.61	86.83	87.31	88.56	87.83	86.56	86.61	86.20	86.47	86.97	86.18
29	88.62	87.52	86.77	87.31	88.53	87.70	86.60	86.60	86.24	86.63	86.81	86.22
30	88.76	87.94	86.87	87.31	---	87.59	86.58	86.55	86.23	86.75	86.76	86.22
31	88.80	---	86.89	87.44	---	87.41	---	86.31	---	86.75	86.77	---
MAX	90.50	88.80	88.44	87.44	88.85	88.36	87.55	87.93	86.37	86.75	87.00	86.83
CAL YR 2003		LOW 98.45										
WTR YR 2004		LOW 90.50										



392016082272400. Local Number, V-100

LOCATION.—Latitude 39°20'16", longitude 82°27'24", Vinton County, Hydrologic Unit 05090101, 6 mi north of McArthur, Ohio. Owner: State of Ohio.

AQUIFER.—Sandstone of Mississippian Age.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 6 in., depth 211 ft, cased to 180 ft.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 770 ft above sea level (from topographic map). Measuring Point: Top of platform 3.00 ft below land-surface datum.

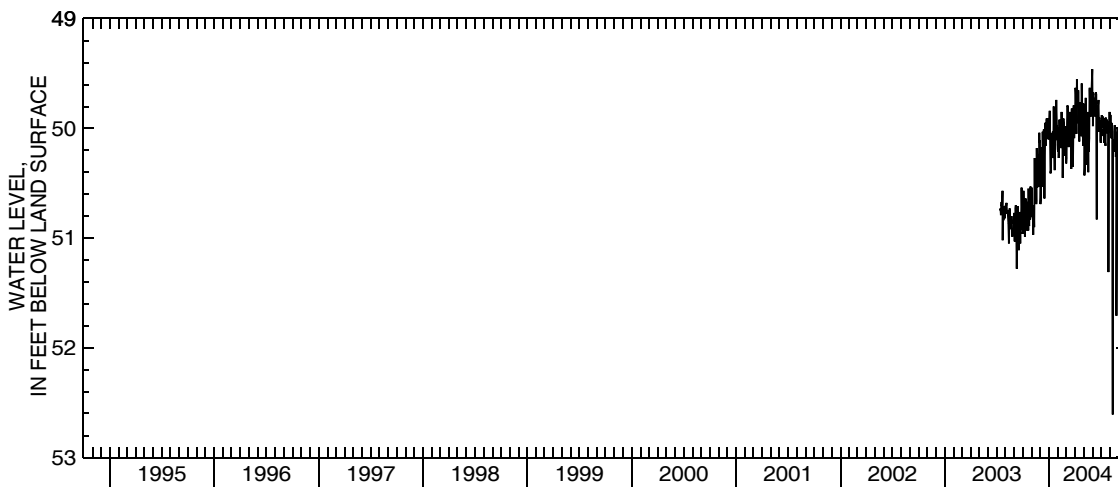
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water.

PERIOD OF RECORD.—March 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 52.61 ft below land-surface datum, Aug. 11, 2004; minimum daily low, 49.46 ft below land-surface datum, May 31, 2004.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50.95	50.56	50.30	50.09	50.19	50.32	49.84	49.78	49.73	49.97	49.93	50.47
2	50.96	50.54	50.69	49.94	50.21	50.27	49.77	49.78	49.67	49.93	49.95	50.42
3	50.79	50.81	50.64	49.88	49.99	50.19	49.63	49.95	49.98	49.99	49.98	50.39
4	50.57	50.74	50.56	49.84	50.27	50.02	49.68	50.43	49.79	49.88	49.88	50.05
5	50.67	50.70	50.37	50.25	50.11	49.80	50.00	50.36	49.72	49.96	50.09	50.05
6	50.93	50.73	50.18	50.41	50.02	49.79	50.05	50.10	49.73	49.98	50.05	50.04
7	50.91	50.97	50.17	50.39	49.92	49.80	49.89	50.07	49.82	49.89	49.98	50.36
8	50.94	50.72	50.52	50.38	50.05	50.07	49.55	49.88	49.80	49.94	49.95	50.22
9	50.99	50.72	50.53	50.05	50.14	50.07	49.70	49.72	49.89	50.07	50.03	50.14
10	50.89	50.90	50.03	50.09	50.16	50.17	49.67	50.24	49.81	50.02	52.38	50.37
11	50.66	50.47	50.27	50.05	50.18	50.09	49.70	50.33	49.69	50.02	52.61	49.95
12	50.64	50.27	50.35	50.26	50.07	50.03	49.65	50.04	49.69	50.13	50.11	49.93
13	50.82	50.60	50.26	50.16	50.05	49.95	49.67	50.27	49.67	50.07	50.10	50.24
14	50.73	50.58	50.01	50.03	49.85	49.85	49.95	50.26	49.69	49.91	50.12	50.19
15	50.78	50.38	50.41	50.21	49.98	50.15	49.96	49.85	49.78	50.11	50.15	50.12
16	50.93	50.30	50.64	50.27	50.17	49.86	50.12	49.91	50.83	50.14	50.17	50.21
17	50.82	50.69	50.22	49.97	50.18	49.94	49.76	50.40	49.82	50.16	50.09	49.81
18	50.67	50.66	50.08	49.80	50.45	49.96	49.80	50.07	49.93	49.90	49.97	49.82
19	50.70	50.18	49.95	49.94	50.16	50.37	50.05	50.21	49.85	49.95	50.21	49.88
20	50.93	50.40	50.16	50.15	49.92	49.89	50.03	50.16	49.89	50.04	50.04	50.17
21	50.55	50.54	50.13	50.38	49.91	49.82	49.90	50.09	49.78	50.00	50.04	50.24
22	50.79	50.27	50.02	50.00	49.95	50.12	50.03	49.65	49.74	49.92	50.26	50.21
23	50.88	50.26	49.93	50.11	50.05	50.24	50.07	49.63	49.84	49.97	50.13	50.37
24	50.89	50.34	49.91	49.91	50.21	50.20	49.73	49.84	50.03	50.04	51.71	50.17
25	50.64	50.53	49.99	49.95	50.13	50.35	49.59	49.88	49.90	50.04	50.60	49.87
26	50.59	50.25	50.06	49.74	50.21	50.04	49.83	49.85	49.95	49.94	50.23	49.88
27	50.83	50.24	50.09	49.82	50.25	49.83	49.85	49.89	49.96	51.31	50.18	50.11
28	50.53	50.04	49.97	49.93	50.05	49.79	50.08	49.65	49.94	49.97	49.99	50.48
29	50.70	50.13	49.91	50.01	49.98	50.09	50.07	49.68	50.11	50.04	50.10	50.18
30	50.72	50.11	50.10	49.97	---	49.99	50.16	49.59	50.13	50.03	50.25	50.06
31	50.73	---	50.08	50.15	---	49.87	---	49.46	---	49.85	50.37	---
MAX	50.99	50.97	50.69	50.41	50.45	50.37	50.16	50.43	50.83	51.31	52.61	50.48
CAL YR 2003		LOW 51.28										
WTR YR 2004		LOW 52.61										



Ground-Water Records—Warren County

392119084142000. Local Number, W-6

LOCATION.—Latitude 39°21'19", longitude 84°14'20", Warren County, Hydrologic Unit 05090202, southeast of Kings Mills, Ohio Owner: State of Ohio.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled observation well, diameter 6 in., depth 48 ft., cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 619 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

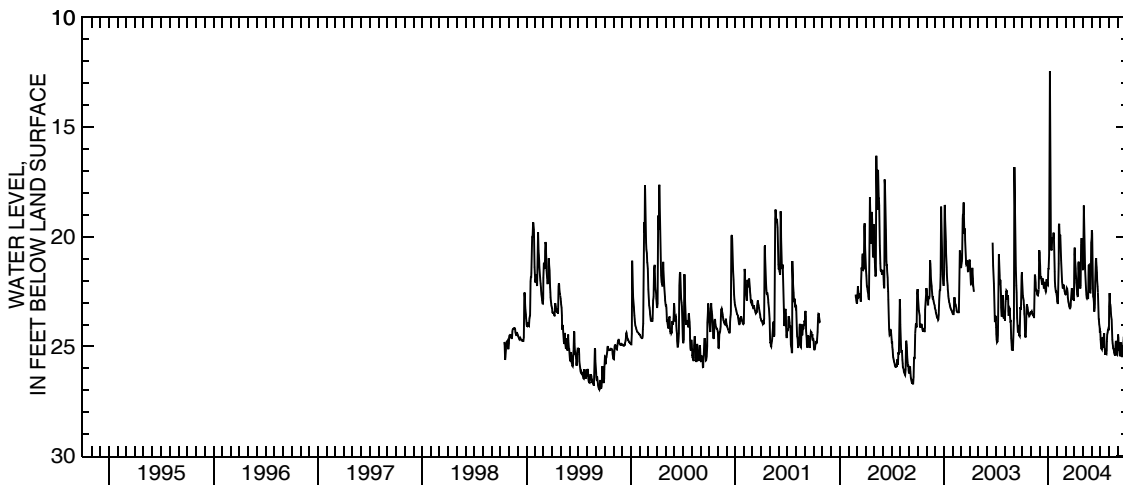
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water.

PERIOD OF RECORD.—October 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 26.97 ft below land-surface datum, Sept. 13, 1999; minimum daily low, 12.45 ft below land-surface datum, Jan. 6, 2004.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.94	23.45	20.73	21.46	22.94	22.63	20.81	21.49	19.71	24.33	23.18	24.46
2	22.21	23.44	21.05	21.45	23.03	22.61	20.50	21.43	19.84	24.68	22.57	24.61
3	22.56	23.40	21.34	21.05	23.03	22.51	20.81	19.49	20.68	24.91	22.83	24.95
4	22.70	23.44	21.69	20.83	22.31	22.47	21.14	18.58	21.44	25.09	23.06	25.14
5	22.79	23.50	21.88	16.23	21.63	22.43	21.43	19.23	22.26	25.11	23.11	25.14
6	22.91	23.53	21.87	12.45	21.23	22.35	21.66	19.94	22.75	25.14	23.25	25.16
7	23.08	23.55	21.82	15.53	19.51	22.38	21.89	20.63	22.81	25.06	23.45	25.45
8	23.22	23.57	21.99	17.95	19.41	22.57	22.09	21.11	23.00	24.62	23.64	25.42
9	23.52	23.59	22.13	19.28	20.03	22.77	22.29	21.50	23.39	24.61	23.79	25.09
10	23.66	23.63	22.18	20.10	20.03	22.89	22.46	21.89	23.39	24.97	23.99	24.81
11	24.16	23.67	22.14	20.59	19.91	22.95	22.61	22.19	23.24	25.05	24.40	25.07
12	24.50	23.67	21.93	20.59	19.95	23.01	22.70	22.42	23.07	24.91	24.68	25.02
13	24.59	22.63	21.93	20.47	20.29	23.10	22.69	22.64	22.07	24.53	24.85	25.06
14	24.39	22.04	22.11	20.17	20.70	23.18	22.39	22.79	21.41	24.41	24.98	25.41
15	24.03	21.73	22.24	20.02	21.07	23.25	21.23	22.81	21.09	24.70	25.09	25.49
16	23.49	21.81	22.33	20.05	21.49	23.27	21.14	22.77	20.98	25.09	25.14	25.34
17	23.20	22.10	22.33	20.06	21.81	23.27	21.46	22.70	21.19	25.17	25.16	25.46
18	23.09	22.38	22.10	20.06	22.05	23.22	21.77	22.80	21.39	25.38	25.29	25.31
19	23.16	22.45	22.06	19.81	22.20	23.15	22.04	22.80	21.65	25.23	25.35	24.94
20	23.25	22.41	22.20	20.01	22.33	22.93	22.22	22.17	21.97	25.13	25.39	24.67
21	23.34	22.50	22.34	20.64	22.33	22.74	22.33	21.31	22.27	25.34	25.39	24.55
22	23.45	22.55	22.45	21.20	22.21	22.46	22.36	21.29	22.55	25.35	25.21	24.79
23	23.52	22.53	22.51	21.59	22.21	22.34	22.23	21.64	22.95	25.18	24.89	25.26
24	23.57	22.67	22.49	22.01	22.26	22.47	20.75	22.01	23.37	24.77	24.75	25.55
25	23.61	22.68	22.01	22.27	22.30	22.62	20.29	22.32	23.75	24.45	24.79	25.74
26	23.63	22.59	21.93	22.44	22.41	22.75	20.06	22.53	23.77	24.36	25.12	25.87
27	23.60	22.57	22.01	22.50	22.49	22.83	20.23	22.54	23.99	24.31	25.28	25.93
28	23.50	22.41	22.09	22.50	22.55	22.83	20.68	22.36	24.14	24.23	25.38	25.73
29	23.49	21.41	22.21	22.54	22.61	22.89	21.21	21.19	24.37	24.20	25.39	25.38
30	23.49	20.61	22.22	22.63	---	22.89	21.49	20.27	24.32	24.23	25.15	25.45
31	23.45	---	21.73	22.77	---	21.91	---	20.07	---	24.23	24.73	---
MAX	24.59	23.67	22.51	22.77	23.03	23.27	22.70	22.81	24.37	25.38	25.39	25.93
MIN	21.94	20.61	20.73	12.45	19.41	21.91	20.06	18.58	19.71	24.20	22.57	24.46
CAL YR 2003		HIGH 16.83		LOW 25.17								
WTR YR 2004		HIGH 12.45		LOW 25.93								



392517084181700. Local Number, W-7

LOCATION.—Latitude 39°25'17", longitude 84°18'17", Warren County, Hydrologic Unit 05090202, at Lebanon Correctional Institute, Lebanon, Ohio. Owner: State of Ohio.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 3 in., depth 40 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 665 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 3.50 ft above land-surface datum.

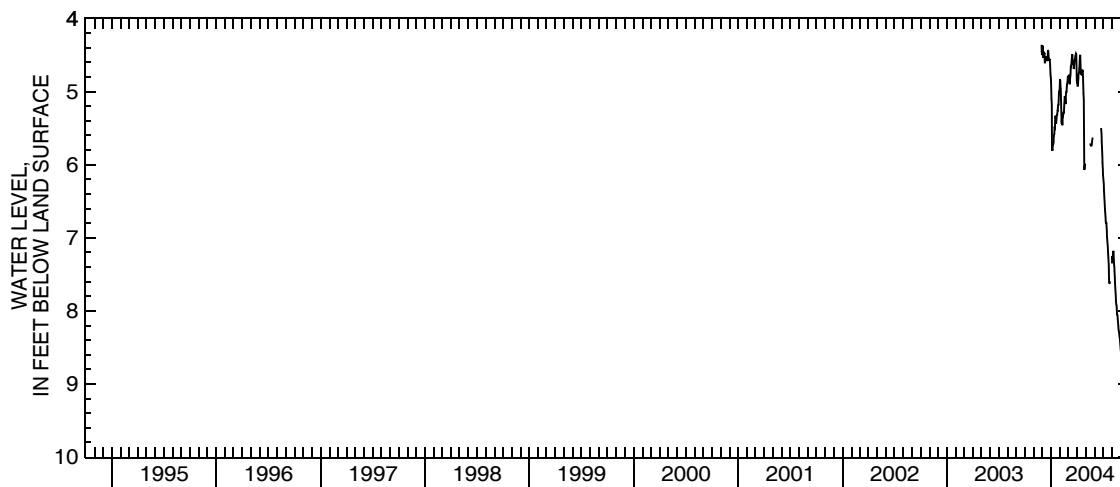
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water.

PERIOD OF RECORD.—December 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 9.46 ft below land-surface datum, Sept. 30, 2004; minimum daily low, 4.36 ft below land-surface datum, Nov. 28, 2003.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	4.49	4.84	4.83	4.84	4.89	---	---	6.14	7.35	8.54
2	---	---	4.39	5.10	4.85	4.85	4.91	---	---	6.21	7.25	8.57
3	---	---	4.37	5.18	4.95	4.77	4.93	---	---	6.26	7.28	8.58
4	---	---	4.43	5.77	4.96	4.83	4.90	---	---	6.35	7.30	8.62
5	---	---	4.54	5.81	5.17	4.89	4.82	---	---	6.43	7.19	8.64
6	---	---	4.48	5.79	5.41	4.89	4.76	---	---	6.49	7.19	8.66
7	---	---	4.47	5.74	5.44	4.83	4.75	---	---	6.53	7.26	8.71
8	---	---	4.48	5.72	5.35	4.79	4.74	---	---	6.63	7.36	8.70
9	---	---	4.48	5.71	5.46	4.76	4.65	---	---	6.72	7.40	8.77
10	---	---	4.60	5.61	5.36	4.66	4.55	---	---	6.77	7.46	8.83
11	---	---	4.60	5.59	5.35	4.66	4.51	---	---	6.81	7.54	8.87
12	---	---	4.53	5.58	5.34	4.62	4.51	---	---	6.79	7.62	8.91
13	---	---	4.52	5.48	5.29	4.54	4.63	---	---	6.83	7.72	8.94
14	---	---	4.56	5.49	5.29	4.53	4.74	---	---	6.91	7.80	8.96
15	---	---	4.53	5.46	5.28	4.49	4.76	---	---	6.99	7.87	8.99
16	---	---	4.54	5.33	5.17	4.57	4.77	---	---	7.06	7.91	9.00
17	---	---	4.55	5.37	5.11	4.58	4.77	5.71	---	7.12	7.93	8.95
18	---	---	4.58	5.44	5.06	4.63	4.73	5.73	---	7.18	7.97	9.04
19	---	---	4.56	5.42	5.09	4.61	4.71	5.74	---	7.25	8.05	9.10
20	---	---	4.50	5.36	5.17	4.69	4.71	5.74	---	7.33	8.06	9.13
21	---	---	4.43	5.32	5.13	4.66	4.72	5.74	---	7.37	8.11	9.17
22	---	---	4.45	5.33	5.01	4.60	4.81	5.72	---	7.61	8.16	9.20
23	---	---	4.51	5.26	5.00	4.57	5.03	5.70	---	7.63	8.21	9.22
24	---	---	4.57	5.26	5.00	4.56	5.10	5.66	5.50	7.59	8.25	9.24
25	---	---	4.57	5.19	4.93	4.55	5.34	5.63	5.58	---	8.28	9.29
26	---	---	4.55	5.18	4.90	4.50	6.07	---	5.68	---	8.30	9.31
27	---	---	4.57	5.18	4.87	4.49	6.05	---	5.78	---	8.35	9.32
28	---	4.36	4.61	5.08	4.80	4.48	6.02	---	5.88	---	8.37	9.37
29	---	4.45	4.71	5.00	4.79	4.49	6.00	---	5.98	---	8.40	9.41
30	---	4.49	4.77	5.00	---	4.67	6.01	---	6.06	---	8.46	9.46
31	---	---	4.81	4.92	---	4.82	---	---	---	---	8.51	---
MAX	---	4.49	4.81	5.81	5.46	4.89	6.07	5.74	6.06	7.63	8.51	9.46
WTR YR 2004		LOW 9.46										



392517084181701. Local Number, W-8

LOCATION.—Latitude 39°25'17", longitude 84°18'17", Warren County, Hydrologic Unit 05090202, at Lebanon Correctional Institute, Lebanon, Ohio. Owner: State of Ohio.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 3 in., depth 228 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 665 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 3.50 ft above land-surface datum.

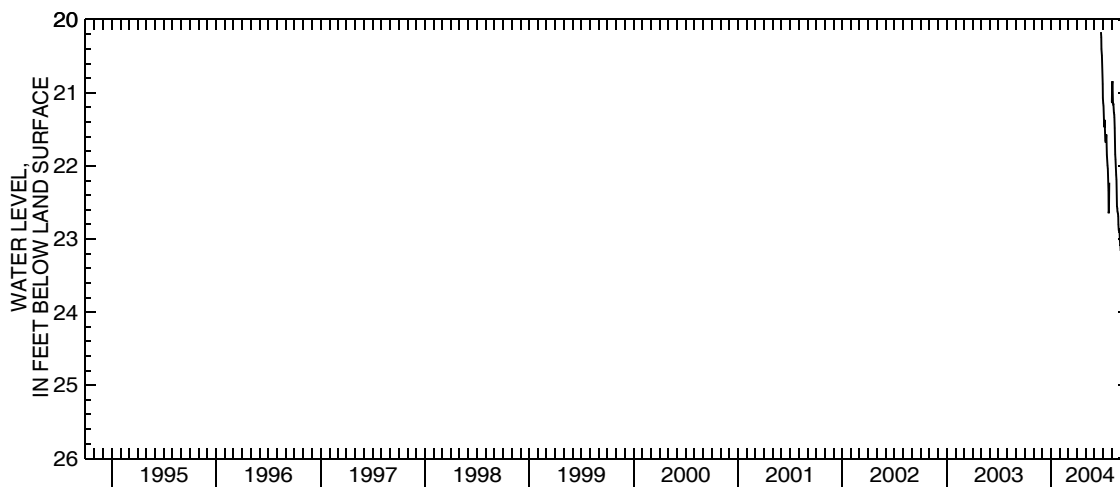
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water.

PERIOD OF RECORD.—July 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 25.00 ft below land-surface datum, Sept. 30, 2004; minimum daily low, 20.17 ft below land-surface datum, June 24, 2004.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	21.07	21.13	23.15
2	---	---	---	---	---	---	---	---	---	21.14	20.88	23.15
3	---	---	---	---	---	---	---	---	---	21.18	20.84	23.15
4	---	---	---	---	---	---	---	---	---	21.32	20.95	23.15
5	---	---	---	---	---	---	---	---	---	21.46	21.13	23.19
6	---	---	---	---	---	---	---	---	---	21.46	21.16	23.22
7	---	---	---	---	---	---	---	---	---	21.37	21.16	23.36
8	---	---	---	---	---	---	---	---	---	21.53	21.27	23.33
9	---	---	---	---	---	---	---	---	---	21.65	21.30	23.68
10	---	---	---	---	---	---	---	---	---	21.67	21.34	23.86
11	---	---	---	---	---	---	---	---	---	21.67	21.48	23.83
12	---	---	---	---	---	---	---	---	---	21.58	21.66	23.83
13	---	---	---	---	---	---	---	---	---	21.58	21.84	23.93
14	---	---	---	---	---	---	---	---	---	21.72	21.91	23.97
15	---	---	---	---	---	---	---	---	---	21.85	22.01	24.04
16	---	---	---	---	---	---	---	---	---	21.92	22.12	24.00
17	---	---	---	---	---	---	---	---	---	21.99	22.19	24.08
18	---	---	---	---	---	---	---	---	---	22.04	22.26	24.22
19	---	---	---	---	---	---	---	---	---	22.18	22.55	24.22
20	---	---	---	---	---	---	---	---	---	22.34	22.58	24.18
21	---	---	---	---	---	---	---	---	---	22.65	22.62	24.29
22	---	---	---	---	---	---	---	---	---	22.62	22.65	24.32
23	---	---	---	---	---	---	---	---	---	22.23	22.69	24.39
24	---	---	---	---	---	---	---	---	20.17	---	22.80	24.47
25	---	---	---	---	---	---	---	---	20.24	---	22.87	24.61
26	---	---	---	---	---	---	---	---	20.40	---	22.87	24.61
27	---	---	---	---	---	---	---	---	20.49	---	22.90	24.68
28	---	---	---	---	---	---	---	---	20.63	---	22.90	24.89
29	---	---	---	---	---	---	---	---	20.74	---	23.01	24.93
30	---	---	---	---	---	---	---	---	20.88	21.13	23.08	25.00
31	---	---	---	---	---	---	---	---	---	21.13	23.08	---
MAX	---	---	---	---	---	---	---	---	20.88	22.65	23.08	25.00
WTR YR 2004	LOW 25.00											



392712084191700. Local Number, W-5

LOCATION.—Latitude 39°27'12", longitude 84°19'17", Warren County, Hydrologic Unit 05080002, Union Road, 2 mi east of Monroe, Ohio. Owner: Bob Proeschel.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 12 in., depth 121 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 660 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 3.50 ft above land-surface datum.

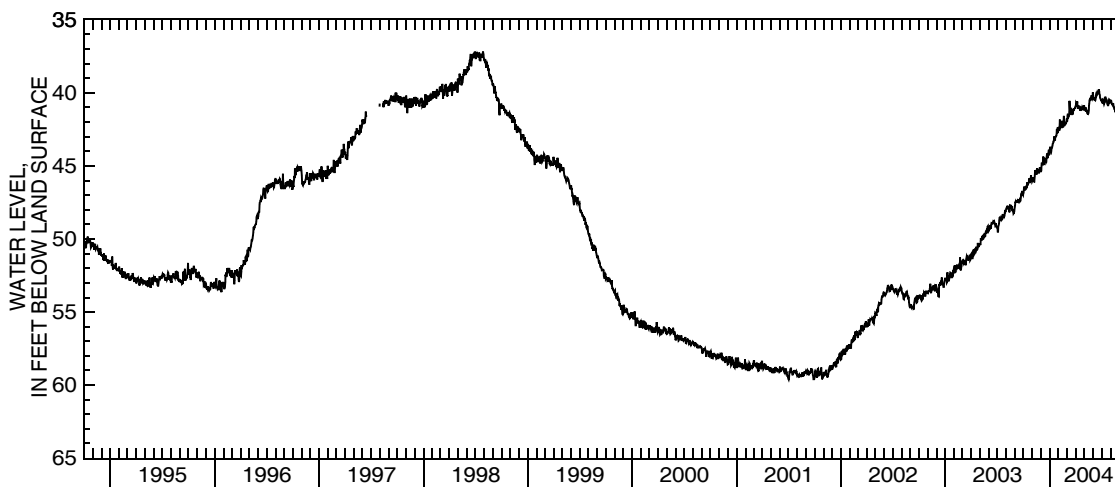
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—March 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 59.64 ft below land-surface datum, July 2, 2001; minimum daily low, 17.55 ft below land-surface datum, May 4, 1975.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46.91	46.07	45.39	44.21	42.60	41.78	40.92	40.85	40.10	40.57	40.63	41.46
2	46.85	45.99	45.39	43.88	42.51	41.91	40.89	41.07	40.32	40.60	40.60	41.45
3	46.61	45.93	45.33	43.77	42.44	41.91	40.71	41.19	40.46	40.50	40.55	41.42
4	46.43	45.80	45.03	43.70	42.62	41.60	40.78	41.10	40.46	40.47	40.56	41.39
5	46.55	45.89	44.78	44.04	42.35	41.45	40.88	41.00	40.38	40.70	40.71	41.34
6	46.64	45.92	44.97	44.09	41.84	41.72	40.70	41.09	40.37	40.70	40.78	41.31
7	46.64	46.04	44.90	44.03	42.20	41.67	40.60	41.30	40.44	40.43	40.78	41.43
8	46.62	46.10	44.81	43.82	42.35	41.66	40.92	41.24	40.52	40.63	40.85	41.42
9	46.57	46.10	44.60	43.77	42.30	41.58	41.09	41.18	40.53	40.74	40.83	41.52
10	46.46	45.71	44.37	43.76	42.11	41.32	41.03	41.28	40.44	40.78	40.73	41.60
11	46.43	45.30	44.85	43.61	42.11	40.57	41.04	41.34	40.22	40.68	40.78	41.54
12	46.52	45.38	44.91	43.46	42.12	40.91	40.97	41.40	40.16	40.46	40.91	41.57
13	46.49	45.56	44.90	43.50	42.05	41.39	40.89	41.43	40.00	40.38	41.03	41.60
14	46.14	45.47	44.51	43.37	41.93	41.45	41.06	41.43	40.00	40.28	41.09	41.63
15	46.29	45.29	44.51	43.37	42.36	41.42	41.09	41.45	40.14	40.31	41.13	41.63
16	46.31	45.50	44.52	43.31	42.35	41.09	41.07	41.37	40.10	40.43	41.19	41.58
17	46.28	45.59	44.67	43.13	42.29	41.09	41.18	41.22	39.98	40.53	41.13	41.67
18	46.22	45.18	44.58	42.99	42.18	41.32	41.19	40.89	40.02	40.50	40.97	41.81
19	46.17	45.29	44.48	43.23	41.99	41.52	41.19	40.73	40.03	40.57	41.27	41.84
20	46.11	45.41	44.75	43.23	41.60	41.31	41.15	40.52	39.98	40.67	41.30	41.87
21	45.92	45.38	44.73	43.07	42.09	41.46	40.97	40.50	39.78	40.75	41.25	41.84
22	45.92	45.32	44.34	43.04	42.17	41.45	41.03	40.41	39.88	40.78	41.21	41.90
23	46.11	45.23	44.16	42.99	42.07	41.39	41.12	40.40	39.95	40.86	41.45	41.81
24	46.19	45.51	44.36	42.98	42.11	41.16	41.13	40.49	40.13	40.91	41.48	41.90
25	46.07	45.45	44.42	42.90	42.07	41.24	40.97	40.46	40.20	40.78	41.55	42.03
26	45.98	45.26	44.48	42.51	42.03	41.12	41.00	40.37	40.35	40.65	41.57	42.05
27	45.82	45.20	44.32	42.62	42.11	41.12	41.09	40.18	40.43	40.55	41.51	42.02
28	45.65	45.12	44.10	42.78	42.06	41.09	41.12	40.37	40.46	40.59	41.36	41.93
29	45.82	45.29	43.91	42.42	41.99	41.06	41.21	40.40	40.52	40.57	41.24	41.97
30	45.92	45.11	44.28	42.41	---	41.06	41.10	40.28	40.52	40.62	41.32	42.05
31	45.99	---	44.22	42.57	---	40.97	---	39.98	---	40.59	41.43	---
MAX	46.91	46.10	45.39	44.21	42.62	41.91	41.21	41.45	40.53	40.91	41.57	42.05
CAL YR 2003		LOW 52.99										
WTR YR 2004		LOW 46.91										



Ground-Water Records—Washington County

392553081281600. Local Number, WA-2

LOCATION.—Latitude 39°25'53", longitude 81°28'16", Washington County, Hydrologic Unit 05040004, near county fairgrounds north of Marietta, Ohio. Owner: City of Marietta.

AQUIFER.—Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.—Drilled unused water table well, diameter 8 in., depth, 50 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval. Satellite telemeter at site.

DATUM.—Elevation of land-surface datum is 605 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

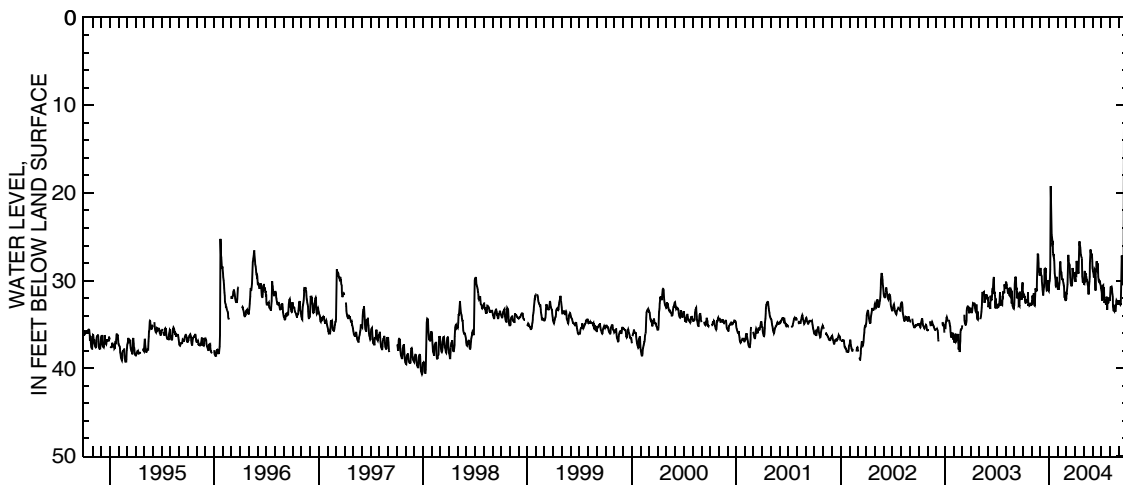
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR. New well was drilled adjacent to WA-2 in water year 2003. Site identification remains unchanged.

PERIOD OF RECORD.—August 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 42.30 ft below land-surface datum, Feb. 7 and 8, 1992; minimum daily low, 10.25 ft below land-surface datum, Sept. 20, 2004.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31.23	32.81	28.87	30.61	31.04	32.15	29.85	30.05	28.57	30.88	32.23	32.27
2	31.44	32.45	28.56	30.16	30.90	31.49	30.18	30.40	28.75	31.15	31.57	32.43
3	31.55	32.49	29.23	30.02	30.82	31.48	29.52	30.41	29.01	31.40	30.83	32.51
4	31.82	31.72	29.24	29.75	31.05	30.90	29.26	29.17	29.17	32.14	30.74	32.56
5	31.81	32.26	29.43	28.74	30.55	30.45	29.31	28.92	29.53	32.28	30.74	32.71
6	31.75	32.24	29.54	24.56	30.26	29.91	27.77	29.07	29.67	30.93	30.70	32.76
7	31.90	32.06	30.17	19.24	29.13	28.80	27.85	29.29	29.22	30.59	30.83	32.68
8	31.77	31.47	30.53	22.00	28.31	27.08	28.15	29.28	28.72	30.53	30.96	32.69
9	32.25	31.94	31.04	23.90	27.82	27.54	28.10	29.40	28.77	32.15	31.51	31.40
10	32.53	32.30	31.21	24.78	28.14	27.83	28.15	29.91	29.69	30.82	31.57	28.79
11	32.60	32.85	31.69	25.07	28.79	28.06	28.47	29.83	31.15	30.75	31.87	27.16
12	32.25	32.88	31.21	25.39	29.09	28.14	29.15	30.04	29.30	32.43	32.98	27.41
13	32.14	31.63	31.04	25.83	29.08	28.25	29.14	30.08	28.80	32.55	33.33	29.26
14	32.38	30.89	30.77	25.78	29.48	28.97	28.03	30.27	28.97	32.37	33.31	29.63
15	32.49	31.02	30.19	26.78	29.76	29.63	26.15	30.51	27.99	32.30	33.43	30.19
16	32.25	31.06	28.70	27.13	29.91	30.09	25.52	30.59	27.80	32.42	33.48	30.47
17	32.27	30.96	28.67	27.03	29.77	30.28	25.99	31.47	28.87	32.59	32.79	30.50
18	32.25	31.15	28.87	27.34	30.01	30.50	26.05	31.58	28.96	32.75	33.33	25.75
19	31.37	31.12	28.94	27.74	30.19	30.66	26.22	31.51	28.83	32.08	33.49	11.09
20	32.87	29.91	28.58	28.75	30.30	30.59	26.53	30.73	28.07	31.84	33.48	10.25
21	32.73	28.23	29.09	29.16	30.49	30.51	27.01	30.12	29.56	31.93	33.41	17.26
22	32.88	26.93	30.63	29.67	30.63	29.98	27.11	29.59	29.89	33.34	32.92	19.94
23	32.56	27.13	31.01	29.93	31.54	28.57	27.36	28.05	30.07	32.57	32.37	22.05
24	32.87	27.13	31.12	30.57	31.91	28.75	27.46	27.12	30.21	32.35	32.26	23.45
25	32.84	28.01	31.09	30.69	31.97	29.04	27.58	26.45	30.20	32.36	32.34	24.90
26	32.73	28.90	30.19	30.67	31.30	29.17	29.56	26.76	30.05	32.59	32.42	25.81
27	32.67	29.03	30.32	29.58	32.24	29.06	29.81	27.13	30.12	32.41	32.51	26.34
28	32.72	29.33	30.45	29.80	32.35	29.23	30.17	27.16	30.41	32.11	32.77	26.94
29	32.76	29.42	29.96	29.93	31.82	29.37	30.20	27.14	30.53	31.94	32.45	27.46
30	32.80	29.27	31.15	30.28	---	29.83	29.93	27.11	30.63	32.15	32.61	27.89
31	32.76	---	31.20	30.87	---	29.88	---	27.87	---	32.35	32.63	---
MAX	32.88	32.88	31.69	30.87	32.35	32.15	30.20	31.58	31.15	33.34	33.49	32.76
CAL YR 2003		LOW 38.15										
WTR YR 2004		LOW 33.49										



Ground-Water Records—Wayne County

404655081553100. Local Number, WN-8

LOCATION.—Latitude 40°46'55", longitude 81°55'31", Wayne County, Hydrologic Unit 05040003, OARDC-OSU Experiment Station near Wooster, Ohio.

Owner: State of Ohio.

AQUIFER.—Shale of Mississippian Age.

WELL CHARACTERISTICS.—Drilled test water table well, diameter 6 in., depth 141 ft, cased to 31.5 ft.

INSTRUMENTATION.—Digital recorder, 60-minute punch.

DATUM.—Elevation of land-surface datum is 1,040 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 3.50 ft above land-surface datum.

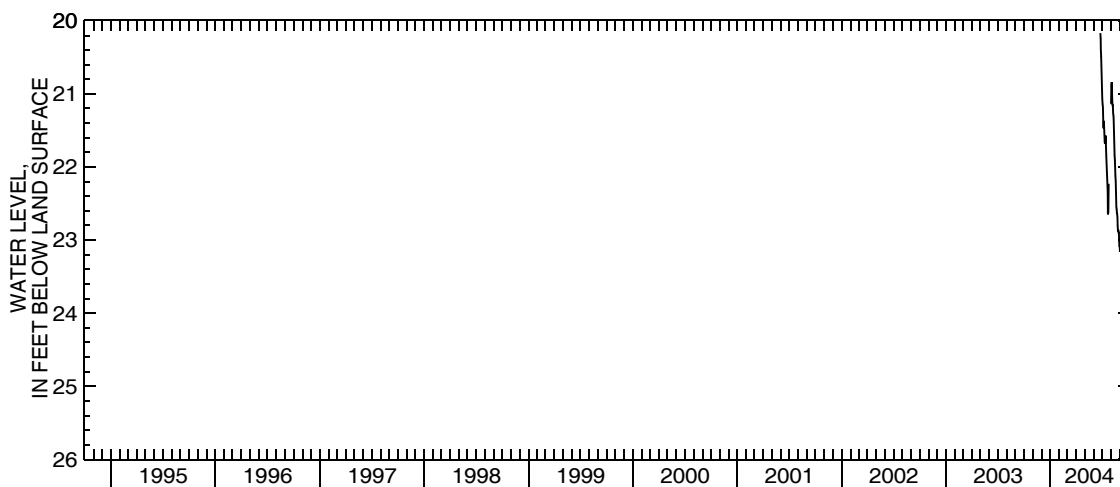
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water.

PERIOD OF RECORD.—December 2002 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 37.63 ft below land-surface datum, Dec. 26, 2002; minimum daily low, 30.28 ft below land-surface datum, June 17 and 21, 2004.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33.54	33.97	34.42	32.89	32.64	32.93	31.37	31.35	31.26	30.88	32.83	33.59
2	33.52	33.91	34.49	32.62	32.57	33.09	31.23	31.41	31.45	30.91	32.79	33.55
3	33.47	33.89	34.48	32.49	32.54	33.14	31.11	31.40	31.62	30.92	32.77	33.52
4	33.34	33.82	34.32	32.51	32.72	33.00	31.06	31.32	31.62	30.92	32.87	33.53
5	33.42	34.02	34.10	32.00	32.72	32.84	31.14	31.31	31.53	31.16	33.05	33.55
6	33.47	34.05	34.15	31.99	32.26	33.03	31.09	31.34	31.56	31.16	33.09	33.51
7	33.46	34.15	34.11	31.85	32.43	33.02	30.95	31.64	31.65	31.15	33.15	33.52
8	33.49	34.29	34.05	31.79	32.62	32.99	30.99	31.57	31.73	31.33	33.24	33.52
9	33.47	34.31	33.98	31.83	32.45	33.15	31.17	31.43	31.72	31.43	33.27	33.42
10	33.44	34.13	33.83	31.87	32.43	33.19	31.23	31.51	31.66	31.47	33.19	33.45
11	33.46	33.92	33.89	31.77	32.56	33.04	31.25	31.62	31.63	31.51	33.32	33.38
12	33.44	33.90	33.97	31.75	32.62	33.12	31.25	31.64	31.61	31.44	33.39	33.30
13	33.48	34.25	33.99	31.85	32.64	33.28	31.06	31.68	31.34	31.52	33.53	33.31
14	33.34	34.24	33.63	31.83	32.59	33.07	31.11	31.70	31.16	31.56	33.61	33.29
15	33.49	34.17	33.71	31.94	32.93	33.08	31.18	31.85	30.95	31.70	33.68	33.26
16	33.55	34.19	33.58	31.98	33.03	33.00	31.10	31.90	30.51	31.82	33.68	33.18
17	33.60	34.31	33.45	31.91	32.90	32.91	31.09	31.86	30.28	31.90	33.64	33.16
18	33.55	34.20	33.42	31.78	32.89	32.96	31.11	31.78	30.30	31.96	33.57	33.20
19	33.57	34.18	33.48	31.99	32.67	33.19	31.10	31.82	30.38	32.06	33.64	33.22
20	33.57	34.35	33.70	32.10	32.60	32.98	31.15	31.78	30.39	32.18	33.65	33.12
21	33.37	34.32	33.64	32.08	32.85	32.66	31.05	31.82	30.28	32.23	33.45	33.06
22	33.47	34.35	33.42	32.04	32.96	32.59	31.24	31.44	30.43	32.26	33.44	33.04
23	33.64	34.36	33.30	32.06	32.93	32.44	31.19	30.95	30.52	32.53	33.39	33.02
24	33.79	34.52	33.24	32.26	32.95	32.36	31.31	31.01	30.64	32.63	33.44	32.95
25	33.75	34.56	33.29	32.28	33.00	32.36	31.18	31.00	30.67	32.61	33.46	32.97
26	33.71	34.52	33.37	31.99	32.99	32.28	31.19	30.97	30.70	32.55	33.47	33.00
27	33.61	34.50	33.28	32.06	33.04	32.20	31.33	31.00	30.77	32.53	33.49	32.94
28	33.51	34.32	33.09	32.24	33.09	32.10	31.43	31.34	30.78	32.65	33.46	32.93
29	33.75	34.36	32.92	32.27	33.00	31.89	31.47	31.43	30.82	32.70	33.44	33.02
30	33.86	34.23	33.03	32.27	---	31.84	31.44	31.35	30.88	32.70	33.52	33.12
31	33.88	---	32.96	32.56	---	31.53	---	31.15	---	32.76	33.57	---
MAX	33.88	34.56	34.49	32.89	33.09	33.28	31.47	31.90	31.73	32.76	33.68	33.59
WTR YR 2004		LOW 34.56										



404802081583100. Local Number, WN-2A

LOCATION.—Latitude 40°48'02", longitude 81°58'31", Wayne County, Hydrologic Unit 05040003, by Killbuck Creek near Wooster, Ohio. Owner: City of Wooster.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled test water table well, diameter 6 in., depth 65 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 855 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 6.00 ft above land-surface datum.

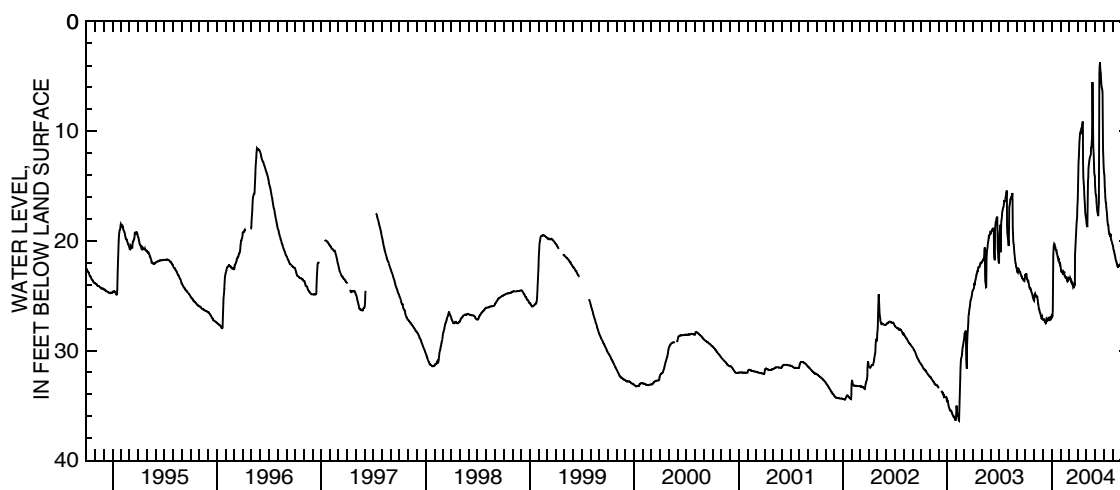
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR. New well ws drilled adjacent to WN-2A in water year 2003. Site identification remains unchanged.

PERIOD OF RECORD.—July 1951 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 37.95 ft below land-surface datum, June 23, 1988; minimum daily low, 2.35 ft below land-surface datum, Jan. 28, 1952.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.23	25.36	27.20	26.79	22.39	23.39	16.21	18.12	14.89	13.28	20.36	19.25
2	23.29	24.94	27.21	26.77	22.46	23.46	15.18	18.46	15.32	13.76	20.43	18.81
3	23.22	24.87	27.22	26.86	22.73	23.52	13.96	18.62	15.78	13.97	20.49	18.39
4	22.95	24.83	27.22	26.84	22.83	23.53	12.76	18.63	15.87	14.21	20.77	17.55
5	23.23	24.95	27.18	26.30	22.84	23.39	12.37	18.76	16.05	15.12	20.90	17.06
6	23.38	24.96	27.17	24.23	22.67	23.43	11.88	15.70	16.39	15.54	20.91	16.64
7	23.47	25.01	27.31	21.33	22.72	23.45	11.10	14.57	16.84	16.01	21.04	16.22
8	23.52	25.09	27.36	20.43	22.89	23.59	10.71	14.13	17.14	16.51	21.23	16.15
9	23.64	25.10	27.38	20.38	22.82	23.72	10.22	13.40	17.31	16.57	21.29	16.15
10	23.68	25.09	27.38	20.27	22.90	23.80	10.21	13.11	17.53	16.92	21.40	16.00
11	23.67	25.07	27.53	20.31	22.99	23.74	10.11	12.88	17.68	17.14	21.55	15.66
12	23.85	25.08	27.50	20.50	23.01	23.85	10.14	12.73	17.68	17.44	21.70	15.39
13	23.93	25.44	27.34	20.60	23.01	23.93	9.91	12.43	16.99	17.60	21.80	15.26
14	24.08	25.72	27.17	20.60	22.81	23.99	9.77	12.32	16.57	18.11	21.87	15.12
15	24.24	25.73	27.21	20.80	23.17	24.04	9.77	12.26	9.00	18.38	21.99	14.90
16	24.34	25.98	27.15	20.86	23.19	24.00	9.50	12.19	4.74	18.55	22.03	14.66
17	24.34	26.19	27.23	20.79	23.30	24.24	9.26	12.10	4.03	18.58	22.16	14.32
18	24.47	26.26	27.24	20.87	23.34	24.16	9.25	11.53	3.72	18.79	22.29	14.18
19	24.40	26.29	27.23	21.10	23.36	24.20	9.13	11.50	4.35	19.13	22.39	13.75
20	24.48	26.45	27.15	21.23	23.26	23.89	12.87	11.10	4.54	19.29	22.39	13.41
21	24.56	26.56	27.20	21.28	23.34	24.04	14.20	10.64	4.71	19.39	22.34	13.02
22	24.62	26.62	27.23	21.51	23.47	24.01	14.71	8.85	5.26	19.37	22.27	15.74
23	24.76	26.63	27.26	21.51	23.54	21.28	15.07	5.53	5.66	19.52	22.26	16.81
24	24.83	26.83	27.25	21.69	23.64	20.61	15.87	9.06	6.07	19.61	22.25	17.26
25	24.89	26.85	26.93	21.64	23.72	20.13	16.12	10.39	6.15	19.37	22.23	17.77
26	24.95	27.01	27.14	21.67	23.70	19.64	16.52	11.42	6.20	19.80	22.22	17.76
27	25.14	26.99	27.18	21.81	23.62	18.99	17.10	12.21	6.50	19.81	22.18	18.27
28	25.18	26.92	27.18	22.03	23.34	18.56	17.50	13.27	9.76	19.96	22.25	18.55
29	25.33	27.13	26.94	22.13	23.35	18.13	17.79	13.78	11.62	20.07	22.34	18.67
30	25.41	27.12	27.12	22.06	---	17.89	17.92	14.00	12.55	20.13	22.35	19.01
31	25.46	---	27.07	22.13	---	17.11	---	14.12	---	20.26	19.87	---
MAX	25.46	27.13	27.53	26.86	23.72	24.24	17.92	18.76	17.68	20.26	22.39	19.25
CAL YR 2003		LOW 36.42										
WTR YR 2004		LOW 27.53										



405745081510200. Local Number, WN-7

LOCATION.—Latitude 40°57'45", longitude 81°51'02", Wayne County, Hydrologic Unit 05040001, along Steele Ditch near Sterling, Ohio. Owner: City of Rittman.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 8 in., depth 123 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 965 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 5.00 ft above land-surface datum.

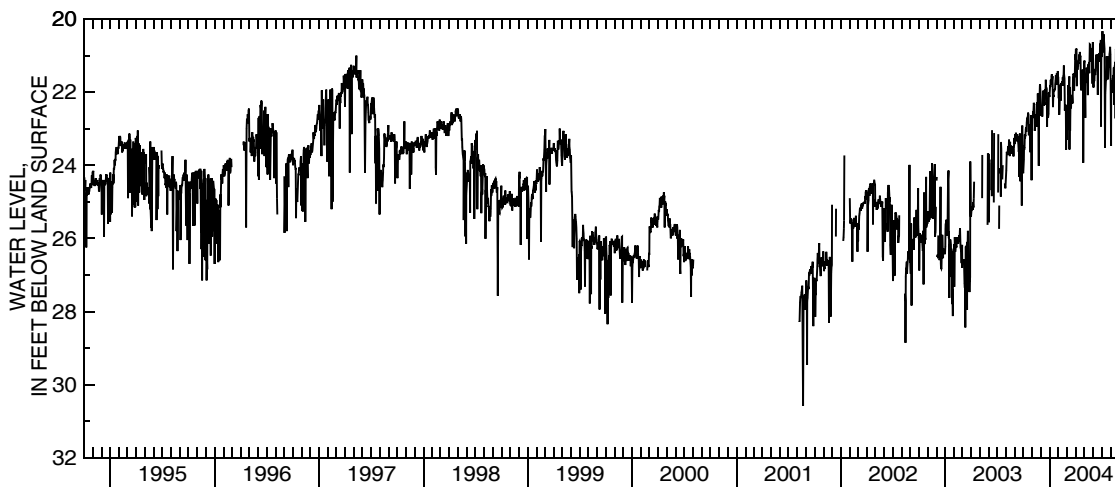
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—November 1978 to March 1979 periodic, continuous thereafter.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 33.50 ft below land-surface datum, Aug. 19, 1993; minimum daily low, 5.38 ft below land-surface datum, Jan. 17, 1980.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.22	22.67	22.64	22.13	21.60	22.43	21.11	21.22	21.77	20.94	20.97	21.69
2	24.02	22.71	22.52	21.96	22.17	23.31	20.82	21.14	21.83	21.03	22.80	21.95
3	23.84	22.67	22.58	21.81	21.80	22.74	20.85	21.75	21.87	20.73	23.47	21.63
4	23.51	22.53	22.65	21.86	22.62	23.04	20.81	21.93	21.80	20.33	21.69	21.59
5	23.52	22.56	22.44	21.66	22.35	22.98	21.84	22.70	21.69	20.52	22.02	21.44
6	23.16	22.52	22.44	21.80	22.02	21.81	21.20	21.81	21.68	20.91	21.78	22.10
7	23.28	22.29	22.67	21.69	22.20	22.04	21.17	21.60	21.36	20.60	21.84	22.02
8	23.18	22.35	22.25	21.57	21.80	22.05	21.39	21.69	21.51	20.69	21.89	21.80
9	23.18	22.32	21.96	21.51	22.23	21.99	21.18	21.75	21.53	20.42	21.62	21.87
10	23.00	23.06	21.97	21.68	21.75	21.57	21.30	21.33	21.41	20.60	21.68	21.71
11	22.97	22.89	22.07	21.56	21.81	23.57	21.20	21.44	21.09	20.82	21.53	21.84
12	23.09	22.61	22.22	22.17	21.75	21.86	21.22	21.42	21.02	21.54	21.68	20.99
13	22.83	22.68	22.37	22.41	21.78	23.06	21.05	21.38	20.97	23.52	21.33	21.06
14	22.70	22.71	22.28	22.07	21.71	22.41	20.97	22.08	21.05	22.04	22.35	21.12
15	22.82	22.72	22.35	22.13	21.83	22.44	21.14	21.26	21.15	21.95	21.54	21.20
16	22.68	22.95	21.93	21.93	21.59	22.40	20.90	21.24	21.08	21.78	21.27	21.35
17	22.65	22.58	22.01	21.97	21.74	22.25	21.05	21.36	21.03	21.56	21.32	21.09
18	22.56	22.28	22.02	21.96	21.56	22.28	21.00	21.35	22.07	21.67	21.17	22.11
19	22.62	22.31	21.66	21.93	21.54	22.16	21.77	21.48	20.97	21.02	22.72	21.02
20	23.18	22.41	21.90	21.92	21.27	22.07	21.84	21.21	21.00	21.40	20.82	21.42
21	23.04	22.04	21.87	21.78	21.50	22.31	21.95	20.69	21.17	21.26	20.88	21.29
22	23.01	22.32	21.93	21.68	21.63	21.77	21.83	20.70	20.94	21.60	21.18	21.26
23	23.03	22.32	22.95	21.54	22.50	21.62	21.66	21.06	21.12	21.32	21.90	21.22
24	22.89	24.02	22.49	21.66	22.35	21.53	21.78	21.02	21.15	21.65	21.97	21.15
25	23.64	22.19	22.37	21.69	22.41	21.53	21.71	21.12	20.93	21.32	22.02	21.20
26	23.28	22.11	22.58	21.48	22.37	21.48	21.38	21.17	20.70	21.14	22.11	21.18
27	22.95	22.13	22.70	21.75	22.37	21.96	21.54	20.99	20.70	21.03	22.17	20.99
28	22.64	21.83	22.59	21.80	23.58	21.53	23.93	20.82	20.57	21.32	21.95	20.90
29	22.86	21.78	22.01	21.53	22.71	21.59	21.71	20.82	22.94	20.96	22.08	20.99
30	24.41	22.02	22.08	21.42	---	21.24	21.53	21.77	21.05	20.90	21.80	20.75
31	22.88	---	22.10	21.59	---	20.97	---	20.63	---	20.76	21.78	---
MAX	24.41	24.02	22.95	22.41	23.58	23.57	23.93	22.70	22.94	23.52	23.47	22.11
CAL YR 2003		LOW 28.44										
WTR YR 2004		LOW 24.41										



405805081462300. Local Number, WN-6

LOCATION.—Latitude 40°58'05", longitude 81°46'23", Wayne County, Hydrologic Unit 05040001, Salt Street, Rittman, Ohio. Owner: Tenneco, Inc.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 8 in., depth 180 ft, cased.

INSTRUMENTATION.—Digital recorder, 60-minute punch.

DATUM.—Elevation of land-surface datum is 960 ft above sea level (from topographic map). Measuring point: Floor of instrument shelter 2.30 ft above land-surface datum.

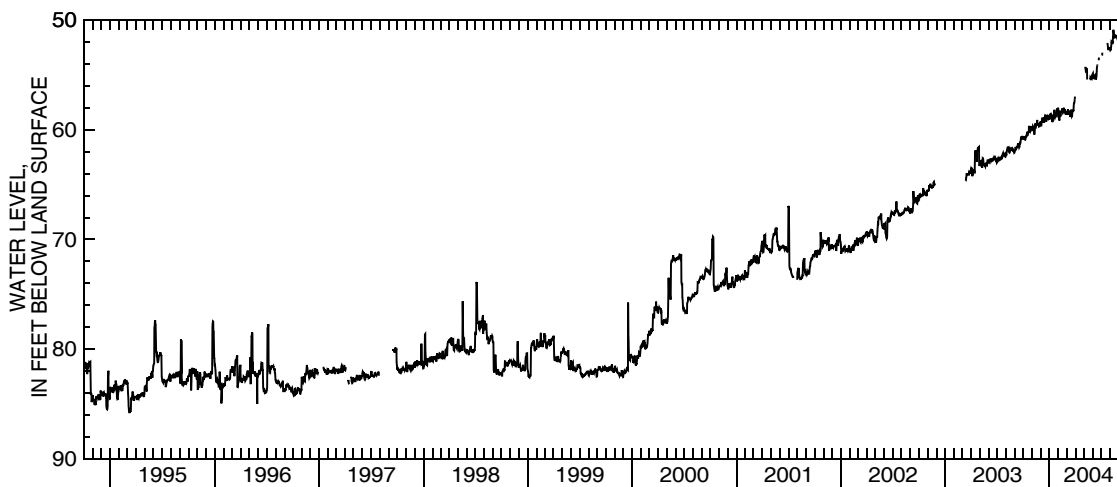
REMARKS.—Station operated by Ohio Department of Natural Resources (ODNR), Division of Water. Some historical records not published by the USGS are available from ODNR.

PERIOD OF RECORD.—May 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 93.15 ft below land-surface datum, Sept. 3-4, 1971; minimum daily low, 50.88 ft below land-surface datum, Aug. 12, 2004.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60.77	60.10	59.44	59.08	58.27	58.34	---	---	54.83	---	52.74	51.62
2	60.77	60.03	59.61	58.70	58.88	58.53	---	---	55.11	53.22	52.69	51.53
3	60.76	59.82	59.67	58.55	58.80	58.62	---	---	55.26	53.17	52.51	51.40
4	60.62	59.67	59.52	58.59	59.09	58.44	---	---	55.31	52.97	52.43	51.53
5	60.79	59.74	59.12	58.57	59.09	58.14	---	54.25	55.12	---	51.97	51.48
6	60.87	59.85	59.19	58.69	58.50	58.37	---	54.39	55.09	---	52.03	51.36
7	60.90	60.06	59.16	58.61	58.53	58.34	---	54.69	55.13	---	52.05	52.11
8	60.91	60.36	59.09	58.96	58.79	58.24	---	54.66	55.09	---	52.00	52.16
9	60.84	60.44	59.02	58.61	58.57	58.57	---	54.50	55.10	---	52.03	52.46
10	60.69	60.22	58.89	58.76	58.32	58.58	---	54.43	55.04	---	51.55	52.65
11	60.65	59.80	58.96	59.30	58.29	58.35	---	54.46	55.36	---	51.33	52.66
12	60.54	59.44	59.10	59.02	58.27	58.57	---	55.42	55.37	---	50.88	52.68
13	60.55	59.64	59.36	59.10	58.24	58.72	---	---	55.16	---	51.31	52.75
14	60.25	59.71	59.00	59.09	58.06	58.84	---	---	54.66	---	51.66	52.57
15	60.25	59.58	58.88	58.90	58.29	58.68	---	---	54.27	---	51.61	52.53
16	60.32	59.48	58.79	58.85	58.41	58.50	---	---	54.15	---	51.57	---
17	60.37	59.50	58.68	58.80	58.34	58.17	---	---	54.05	---	51.55	---
18	60.32	59.36	58.70	58.19	58.33	58.29	---	---	---	---	51.38	---
19	60.20	59.09	58.84	58.76	58.16	58.74	---	---	---	---	51.39	---
20	60.18	59.38	59.21	58.87	57.98	58.71	---	---	---	---	51.46	---
21	59.72	59.47	59.20	58.82	58.19	58.24	---	---	53.66	---	51.46	---
22	59.72	59.52	58.98	58.67	58.36	58.38	---	55.42	53.41	52.07	51.46	---
23	59.87	59.53	58.81	58.70	58.30	58.29	---	55.28	---	52.45	51.57	---
24	60.11	59.59	58.62	58.72	58.15	58.25	---	55.33	---	52.67	51.62	---
25	60.17	59.69	58.72	58.74	58.29	58.30	---	55.28	---	52.66	51.49	---
26	60.12	59.67	58.94	58.35	58.41	57.61	---	55.16	---	52.57	51.45	---
27	59.90	59.67	58.96	58.06	58.47	57.57	---	55.14	---	52.45	51.47	---
28	59.64	59.38	58.86	58.35	58.64	57.54	---	55.23	---	52.60	51.49	---
29	59.79	59.38	58.71	58.34	58.50	57.26	---	55.29	---	52.63	51.53	---
30	59.91	59.26	58.99	58.19	---	56.97	---	55.21	---	52.67	51.60	---
31	59.97	---	59.00	57.99	---	---	---	54.86	---	52.66	51.63	---
MAX	60.91	60.44	59.67	59.30	59.09	58.84	---	55.42	55.37	53.22	52.74	52.75
CAL YR 2003	LOW 64.58											
WTR YR 2004	LOW 60.91											



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Conversion Factors

Multiply	By	To obtain
Length		
inch (in.)	25.4×10^{-1}	millimeter (mm)
	22.54×10^{-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)
acre	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}	meter (dm ³)
cubic foot (ft 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 (2,000 lb)	9.072×10^{-1}	megagram (Mg) or metric ton

Temperature in degrees Celsius (°C) may be converted to degrees Fahrenheit (°F) as follows:

$$^{\circ}\text{F} = (1.8 \times ^{\circ}\text{C}) + 32$$

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